UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

MAY 3 0 1984

Report Nos.: 50-325/84-11 and 50-324/84-11

Licensee: Carolina Power and Light Company
411 Fayetteville Street
Raleigh, NC 27602

Docket Nos.: 50-325 and 50-324

License Nos.: DPR-71 and DPR-62

Facility Name: Brunswick 1 and 2

Inspection at Brunswick site near Southport, North Carolina

Inspectors: J R Decker 5/25/84
T. R. Decker Date Signed

J R Decker Jr 5/25/84
A. L. Cunningham Date Signed

Accompanying Personnel: L. H. Munson, L. F. Munson, W. D. McConnell, F. N. Carlson

Approved by: W. E. Cline 5/30/84
W. E. Cline, Section Chief Date Signed
Division of Radiation Safety and Safeguards

SUMMARY

Inspection on May 7-9, 1984

Areas Inspected

This routine, unannounced inspection involved 132 inspector-hours on site in the area of an emergency preparedness exercise.

Results

Of the areas inspected, no violations or deviations were identified.

REPORT DETAILS

1. Key Persons Contacted

Licensee Employees

*C. Dietz, Plant General Manager
*P. Howe, Vice President, Brunswick Nuclear Project
*A. Cheatham, Manager, Environmental and Radiation Control
*J. Holder, Manager, Outage Planning
*B. Hinkley, Manager, Technical Support
*R. Indelicato, Emergency Planning Specialist
*B. Furr, Vice President, Operations, Training and Technical Services
*M. Harris, Manager, News Service
*W. Novak, Corporate Emergency Preparedness
*R. Connelly, Corporate Emergency Preparedness
*K. Enzor, Director, Regulatory Compliance
*B. McFeaters, Corporate Meteorologist
*H. Goodwin, Corporate Emergency Preparedness
*G. Oliver, Director, Site Planning and Control
*V. Wagoner, Director, Planning and Scheduling

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

NRC Resident Inspector

*D. Myers, Senior Resident Inspector

*Denotes those present at the exit interview.

3. Exit Interview

The inspection scope and findings were summarized on May 9, 1984, with those present in paragraph 1 above.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Exercise Scenario

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's emergency plan 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. While no major problems with the scenario were identified during the review, some inconsistencies became apparent during the exercise. These inconsistencies detracted from the overall performance of the licensee's emergency organization. Scenario problems were discussed with management representatives following the exercise critique on May 9, 1984.

6. Assignment of Responsibility

This area was observed to determine that primary responsibilities for emergency response by the licensee have been specifically established and that adequate staff is 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 verified that the licensee had made specific assignments to the emergency organization. The inspectors observed the activation, staffing and operation of the emergency organization in the Control Room, TSC, OSC, and EOF. At each of these centers, the assignment of responsibility and staffing appeared to be consistent with the licensee's approved procedures. The inspectors had no further questions in this area.

7. Onsite Emergency Organization

The licensee's onsite emergency organization was observed to determine that the responsibilities for emergency response are unambiguously defined, that adequate staffing is provided to insure initial facility accident response in key functional areas at all times, and that the interfaces are 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. The licensee's staff appeared to respond to the exercise scenario in a concerned and professional manner. In-depth technical discussions were held in attempting to define problems. Interaction and communication was commendable. The inspectors had no further questions in this area.

8. Emergency Response Support and Resources

Arrangements for requesting and effectively using assistance resources, arrangements to accommodate State and local staff at the licensee's near-site Emergency Operations Facility, and identification of other organizations capable of augmenting the planned response 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, was not observed.

State and local agencies were exempted from participation in accordance with the FEMA rule (44 CFR 350) which allows for biennial exercises of State and local governments.

9. Emergency Classification System

This area was observed to determine that a standard emergency classification and action level scheme is in use by the nuclear facility licensee as required by 10 CFR 50.47(b)(4), 10 CFR 50, Appendix E, paragraph IV.D, 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 is consistent with that used by the States of North and South Carolina and appeared to be adequate for the classification during the simulated accident. The inspector noted an apparent reluctance on the part of the Shift Supervisor to upgrade the emergency classification and subsequently described the observation during the joint critique. In general, however, the licensee's performance in this area is acceptable and inspector followup item (83-16-02) is closed. The inspector had no further questions in this area.

10. Notification Methods and Procedures

This area was observed to determine that procedures had been established for notification by the licensee of appropriate response organizations and emergency personnel. Notification to support groups within the licensees organization appeared to be adequate and timely.

State and local agencies were relieved from participation in the exercise in accordance with FEMA rule (44 CFR 350). The inspector noted however that the licensee demonstrated the capability to notify offsite agencies of the simulated emergency condition. The inspector had no further questions.

11. Emergency Communications

This area was observed to determine that provisions exist 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 emergency organization were adequate. Radio communication with offsite monitoring teams appeared adequate. No communications related problems were identified during this exercise.

12. Public Education and Information

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.

An Emergency News Center (ENC) was established and appeared adequately equipped. News briefings were presented by the Corporate Spokesman. Inspectors attended a news briefing which was adequately prepared, presented and coordinated. The Corporate Spokesman handled audience questions in an acceptable manner. The inspector had no further questions in this area.

13. Emergency Facilities and Equipment

This area was observed to determine that adequate emergency facilities and equipment to support an emergency response are 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 the activation, staffing and operation of the emergency response facilities and evaluated equipment provided for emergency use during the exercise.

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 appeared effective. The inspector had no further questions in this area.

Technical Support Center (TSC) - The TSC was activated and staffed promptly upon notification by the Emergency Coordinator of the simulated emergency conditions leading to an Alert emergency classification. The TSC staff appeared to be knowledgeable concerning their emergency responsibilities and TSC operations proceeded smoothly. The TSC appeared to have adequate equipment for the support of the assigned staff. The inspectors had no further questions in this area.

Operations Support Center (OSC) - The OSC was staffed promptly upon activation by the Emergency Coordinator. An inspector observed that teams were formed promptly, briefed and dispatched efficiently. Emphasis on communications protocol was repeatedly provided so that the use of issued radios, telephones, and face-to-face information transfer would be thorough and proper. Hardwire communications with headset were provided at the PASS site. This inspector followup item (83-16-01) is closed.

Emergency Operations Facility (EOF) - The EOF is located on the reactor site. The facility appeared to be adequately equipped and staffed to support the simulated emergency response. Space was provided for the NRC Director of Site Operations in the TSC and EOF. This inspector followup item (83-16-03) is closed. The inspector had no further questions in this area.

14. Accident Assessment

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 are 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 includes both an engineering assessment of plant status and an assessment of radiological hazards to both 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 Site Emergency Manager concerning mitigating actions to reduce damage to plant equipment, to prevent release of radioactive materials and to terminate the emergency condition.

Radiological assessment activities were spread over several groups. A group in the TSC was effectively estimating the radiological impact in the plant based on inplant monitoring and on-site measurements. The dose assessment procedure incorporated real time meteorological parameters which were available from the onsite meteorological instruments. Default values were available for use should there be any question concerning the reliability of the meteorological instrumentation. The staff member performing the computer dose calculations appeared to be experienced and familiar with the program and verified data before entering it into the computer. Offsite dose projections were given to the Site Emergency Coordinator within fifteen minutes of the initial release. The inspector had no further questions in this area.

15. Protective Responses

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

An inspector verified that the licensee had and used emergency procedures for formulating protective action recommendations for offsite populations within the 10 mile EPZ. The licensee's protective action recommendations were consistent with Federal Guidance in NUREG 0654.

An inspector observed that protective actions were instituted for on-site emergency workers. Appropriate consideration was given to the safety of field teams under real adverse weather conditions. During the exercise, the teams were recalled due to projected high winds, severe thunderstorms and potential tornados. The inspector had no further questions in this area.

16. Radiological Exposure Control

This area was observed to determine that means for controlling radiological exposures, in an emergency, are established and implemented for emergency workers and that they include 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. The inspector had no further questions in this area.

17. Medical and Public Health Support

This area was observed to determine that arrangements are made for medical services for contaminated injured individuals as required by 10 CFR 50.47(b)(12), 10 CFR 50, Appendix E, paragraph IV.E, and specific criteria in NUREG 0654, Section II.L.

An inspector observed the emergency medical rescue activities at the accident scene, during transport of the victim from the scene, and during treatment by the staff at the J. A. Dosher Memorial Hospital. In all portions of the exercise, appropriate judgement was displayed with regard to medical practices. In the initial stages of the medical emergency drill, the inspectors noted that barriers for the contaminated area were not properly established and resulted in the unnecessary spread of contamination. None of the Health Physics (HP) technicians reporting to the injury site appeared to have survey instruments capable of detecting the levels of contamination found on the victim. Following the initial action, however, contamination control and cleanup of the injury site following the removal of the victim was very good. The HP technician that arrived at the scene of the injury took charge and provided firm direction and exhibited control of the situation. Contamination control during transport of the victim and at the hospital was good. In general, this area was found to be acceptable. The inspector had no further questions in this area.

18. Recovery and Reentry Planning

This area was observed to determine that general plans are made for recovery and re-entry as required by 10 CFR 50.47(b)(13), 10 CFR 50, Appendix E, paragraph IV.H. and specific criteria in NUREG 0654, Section II.M.

The licensee developed general plans and procedures for re-entry and recovery which addressed both existing and potential conditions. The inspector had no further questions in this area.

19. Exercise Critique

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.

The joint exercise critique was conducted following the exercise. Licensee management, key exercise participants and NRC representatives were present. The licensee discussed areas of the exercise in which items for possible improvement were identified. The inspectors determined that the critique was comprehensive and adequately addressed weaknesses identified in the licensee's emergency response program during this exercise.