



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

SEP 18 1984

Report Nos.: 50-269/84-21, 50-270/84-20, and 50-287/84-22

Licensee: Duke Power Company
422 South Church Street
Charlotte, NC 28242

Docket Nos.: 50-269, 50-270, and 50-287

License Nos.: DPR-38, DPR-47, and
DPR-55

Facility Name: Oconee Nuclear Station

Inspection Conducted: August 20-24, 1984

Inspector: J. L. Kreh 9-12-84
J. L. Kreh Date Signed

Accompanying Personnel: R. T. Hadley (Battelle Pacific Northwest Laboratories)

Approved by: W. E. Cline 9-12-84
W. E. Cline, Section Chief Date Signed
Division of Radiation Safety and Safeguards

SUMMARY

Scope: This routine, unannounced inspection entailed 66 inspector-hours in the area of emergency preparedness.

Results: No violations or deviations were identified.

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *M. S. Tuckman, Station Manager
- *T. S. Barr, Superintendent of Technical Services
- *R. T. Bond, Compliance Engineer
- *T. C. Matthews, Compliance Technical Specialist
- *J. J. McCool, QA Surveillance Supervisor
- *R. P. Rogers, Chairman, Onsite Safety Review Group
- H. W. Morgan, Shift Supervisor
- J. B. Price, Shift Supervisor
- F. E. Owens, Shift Supervisor
- D. G. Austin, Training & Safety Coordinator
- D. B. Kelly, Training Supervisor
- *C. C. Jennings, Emergency Preparedness Coordinator

NRC Resident Inspectors

- *J. C. Bryant
- *M. K. Sasser
- *L. P. King

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on August 24, 1984 with those persons indicated in paragraph 1 above.

3. Emergency Detection and Classification (82201)

This program area was inspected to determine that the licensee has and understands a standard emergency classification and action level scheme.

The inspector reviewed the licensee's classification procedures. The event classifications in the procedures were consistent with those in 10 CFR 50, Appendix E, Part IV.C. The classification procedures did not appear to contain impediments or errors which could lead to incorrect or untimely classification.

Selected emergency action levels (EALs) specified in the classification procedures were reviewed. The reviewed EALs appeared to be consistent with the initiating events specified in Appendix 1 of NUREG-0654. The inspector noted that some of the EALs were based on parameters obtainable from Control Room instrumentation.

The inspector verified by review of applicable Emergency Plan Implementing Procedures (EPIPs) that the licensee's notification procedures included criteria (based on EALs) for initiation of offsite notifications and for making protective action recommendations. The notification procedures required that offsite notifications be made promptly after declaration of an emergency.

The inspector discussed with licensee representatives coordination of EALs with State and local officials. Licensee documentation showed that the licensee had discussed EALs during July 1984 with representatives of emergency preparedness agencies for Oconee and Pickens Counties and the State of South Carolina, and that these officials agreed with the EALs used by the licensee.

Interviews were held with three Shift Supervisors to verify that they understood the relationship between core status and such core damage indicators as containment dome monitor and high-range effluent monitor. All Shift Supervisors interviewed appeared knowledgeable of the various core damage indications and their relationship to core status.

The responsibility and authority for classification of emergency events and initiation of emergency action are prescribed in the EPIPs and in the Emergency Plan (EP). Interviews with selected key members of the licensee's emergency organization revealed that these personnel understood their responsibilities and authorities in relation to accident classification, notification, and protective action recommendations.

Selected Emergency Operation Procedures (EOPs) were reviewed and discussed with licensee personnel. The EOPs provide direction to users concerning timely classification of accidents. All personnel interviewed appeared to be familiar with the classification information in the EOPs.

Walk-through evaluations involving accident classification problems were conducted with four persons designated as Emergency Coordinator in the emergency organization. All personnel interviewed promptly and properly classified the hypothetical accident situations presented to them and appeared to be familiar with appropriate classification procedures.

No violations or deviations were identified in this program area.

4. Protective Action Decision-Making (82202)

This area was inspected to determine that the licensee has 24-hour-per-day capability to assess and analyze emergency conditions and to make recommendations to protect the public and onsite workers.

The inspector discussed responsibility and authority for protective action decision-making with licensee representatives and reviewed pertinent portions of the EP and EPIPs. The plan and procedures clearly assign responsibility and authority for accident assessment and protective action decision-making. Interviews with members of the licensee's emergency

organization revealed that these personnel understood their authorities and responsibilities with respect to accident assessment and protective action decision-making.

Walk-through evaluations involving protective action decision-making were conducted with the Station Manager and 3 Shift Supervisors. Personnel interviewed appeared to be knowledgeable of appropriate onsite protective measures and aware of the range of protective action recommendations appropriate to offsite protection. Personnel interviewed were aware of the need for timeliness in making initial protective action recommendations to offsite officials. Interviewees demonstrated to the inspector that they understood that protective action recommendations must also be based on core condition and containment status even if no release is in progress.

The inspector noted a minor problem during the walk-throughs in that two of the four interviewees indicated by their actions a tendency to rely on experience and professional judgment in formulating protective action recommendations instead of following procedure RP/O/B/1000/05 ("General Emergency") in a step-by-step manner. The latter approach leads the user to the flowchart in RP/O/B/1000/06 ("Protective Action Recommendations"), which provides guidance on protective actions to be recommended to offsite authorities in a General Emergency subsequent to the initial prompt sheltering recommendation. The two aforementioned procedures were issued in substantially revised form on June 1, 1984, and, although initial training was provided at that time to designated Emergency Coordinators, the licensee agreed to emphasize stepwise use of those procedures during a future training session.

Inspector Follow-up Item (269/84-21-01, 270/84-20-01, 287/84-22-01):
Training emphasis on procedural formulation of protective action recommendations.

The inspector noted that the flowchart in RP/O/B/1000/06 used internally inconsistent terminology in the statements of the recommended protective actions for a General Emergency. Some of those statements began with "consider" (as in NUREG-0654, Appendix 1), while the others used the term "recommend" (as in IE Information Notice 83-28). The inspector pointed out that the latter document was issued to clarify the former one, and therefore "recommend" should be used consistently (even though the walk-throughs with designated Emergency Coordinators gave no evidence of procedural ambiguity). The licensee agreed to discuss this recommended change with the corporate office (the flowchart in question is generic for Duke Power's three nuclear stations).

Inspector Follow-up Item (269/84-21-02, 270/84-20-02, 287/84-22-02):
"Recommend" instead of "consider" in RP/O/B/1000/06 flowchart.

No violations or deviations were identified in this program area.

5. Notification and Communications (82203)

This area was reviewed to determine whether the licensee was maintaining a capability for notifying and communicating among licensee personnel, offsite supporting agencies and authorities, and the population within the EPZ in the event of an emergency.

The licensee notification procedures were reviewed by the inspector. The procedures were consistent with the emergency classification and EAL scheme used by the licensee. The inspector determined that the procedures made provisions for message verification.

The inspector determined by review of RP/O/B/1000/02 through /05 and AP/O/R/1000/08 ("Procedure for Response Actions for Accidents/Emergencies") and by discussion with licensee representatives that adequate procedural means existed for alerting, notifying, and activating emergency response personnel. The procedures specified when to notify and activate the onsite emergency organization, corporate support organization, and offsite agencies.

The content of initial emergency messages was reviewed and discussed with licensee representatives. The initial messages appeared to meet the guidance of NUREG-0654, Sections II.E.3 and II.E.4. Licensee representatives stated that the format and content of the initial emergency messages had been reviewed by State and local government authorities.

The licensee management control program for the prompt notification system was reviewed. Maintenance of the system had been provided for by the licensee. The inspector reviewed siren test records for the period September 1983 to June 1984. The test records showed that silent tests were conducted every two weeks (by the county), growl tests quarterly, and a complete cycle test annually as specified in NUREG-0654, Appendix 3.

Communications equipment in the Control Room, OSC, TSC, and Crisis Management Center (CMC) was inspected. Provisions exist for prompt communication among emergency response organizations, to emergency response personnel, and to the public. The installed communications systems at the emergency response facilities are consistent with system descriptions in the EP and EIPs.

The inspector conducted operability checks on selected communications equipment in the Control Room, TSC, OSC, and CMC. No problems were observed. Licensee records of communications tests for the period July 1983 to June 1984 were reviewed. The inspector noted from the records that communications tests were conducted at the frequency specified in NUREG-0654, Section II.N.2.a. Licensee records also revealed that corrective action was taken on problems identified during communication tests.

Redundancy of offsite and onsite communications links was discussed with licensee representatives. The inspector verified that the licensee had

established a backup communications system. A radio system provided backup communications with Oconee and Pickens Counties. The inspector requested and observed an unannounced communications and notifications check on the backup system. The inspector noted that the system operated properly and that the notification message used by the licensee representative followed the format prescribed in the licensee's procedures.

No violations or deviations were identified in this program area.

6. Changes to the Emergency Preparedness Program (82204)

This area was reviewed to determine if changes had been made to the program since the last routine inspection (September 1983) and to note how any changes affected the overall state of emergency preparedness.

The inspector discussed the licensee's program for making changes to the EP and EIPs. The inspector verified that changes to the EP and EIPs were reviewed and approved by management. It was noted that all such changes were submitted to NRC within 30 days of the effective date as required by 10 CFR 50.54(q) and 10 CFR 50, Appendix E, Paragraph V.

The organization and management of the emergency preparedness program were reviewed. The inspector verified that there had been no significant changes in the organization or assignment of responsibility for the ONS emergency planning staff since the last inspection. By discussion with licensee representatives, the inspector determined that there had been no significant changes in the organization and staffing of the offsite support agencies since the last inspection.

A review was conducted of the licensee's program for distribution of changes to the EP and EIPs. Licensee document control records for the period June 1983 to June 1984 showed that appropriate personnel and organizations were sent copies of plan and procedural changes as required by 10 CFR 50.47(b)(16).

No violations or deviations were identified in this program area.

7. Shift Staffing and Augmentation (82205)

This area was inspected to determine that shift staffing for emergencies is adequate in numbers and in functional capability and that administrative and physical means are available and maintained to augment the emergency organization in a timely manner.

Shift staffing levels and functional capabilities of all shifts were reviewed and found to be consistent with the guidance of Table B-1 of NUREG-0654. The licensee has established a weekly duty roster so that essential off-shift personnel are available if needed. The call-in procedure appears to be effective in meeting Table B-1 goals.

The inspector discussed staff augmentation times with licensee representatives. The inspector reviewed records of an on-shift Site Assembly drill (6-14-84) which produced activation of the TSC in less than 30 minutes and a back-shift drill (4-26-84, 8:30 p.m.) in which the TSC was fully functional within approximately 55 minutes. These augmentation times are consistent with Table B-1 guidance.

No violations or deviations were identified in this program area.

8. Training (82206)

This area was inspected to determine that emergency response personnel understand their roles and can perform their assigned functions.

The inspector reviewed the description of the training program in EP Section 0, reviewed selected lesson plans, and interviewed members of the training program staff. Based on these reviews and interviews, the inspector determined that the licensee has established a formal emergency training program.

Records of training for key members of the emergency organization for the period March 1983 to May 1984 were reviewed. The training records revealed that personnel designated as alternates or given interim responsibilities in the emergency organization had been provided with appropriate training. According to the training records, the type, amount, and frequency of training was consistent with approved procedures and the requirements of 10 CFR 50.47(b)(15) and 10 CFR 50, Appendix E, Part IV.F.

The inspector conducted walk-through evaluations with selected key members of the emergency organization. During these walk-throughs, individuals were given various hypothetical sets of emergency conditions and data and asked to respond as if an emergency actually existed. The inspector noted that the individuals demonstrated familiarity with emergency procedures and equipment. Except as noted in paragraph 4 above, no problems were observed in the areas of emergency detection and classification, notification, and protective action decision-making.

No violations or deviations were identified in this program area.

9. Licensee Audits (82210)

This area was inspected to determine that the licensee has performed an independent review or audit of the emergency preparedness program.

Records of audits of the program pursuant to 10 CFR 50.54(t) were reviewed. The records showed that an independent audit of the program was conducted by the licensee's Audit Division (a corporate group) during the period December 12, 1983 - January 6, 1984, with the results documented in Report No. NP-83-24(CM). This audit meets the 12-month frequency requirement for such audits as specified in 10 CFR 50.54(t) and in licensee procedures. The audit records showed that the interfaces with State and local governments with respect to emergency plans were evaluated. However, the inspector

noted that the auditors' checklist was lacking in specificity with respect to these overall interfaces. The inspector discussed with licensee representatives those audit elements which could result in a more thorough review of the adequacy of the interfaces with State and local support organizations. Licensee representatives stated that this matter would be referred to the corporate office for evaluation.

Inspector Follow-up Item (269/84-21-03, 270/84-20-03, 287/84-22-03): Scope of audit of interfaces with State and local support agencies.

Licensee plans and procedures required critiques following exercises and drills. Licensee documentation showed that a critique was held following the annual exercise. The record showed that 6 improvement items were discussed in the critique and recommendations for corrective action were made.

The licensee's program for follow-up action on drill and exercise findings was reviewed. Procedure PT/O/B/2000/01 provided a mechanism for implementing EP/EPIP revisions based on deficient areas identified during drills and exercises. The inspector reviewed records of corrective action taken on problems identified during the 6-21-84 exercise. Of seven items assigned by the corporate office for action by the station, five have been corrected, and the other two are to be completed by 9-30-84. Based on the inspector's review of licensee documentation, all completed corrective actions appeared to be appropriate.

No violations or deviations were identified in this program area.

10. Inspector Follow-up (92701)

- a. (Closed) Inspector Follow-up Item (IFI) 269, 270, 287/83-10-07: Reviewing procedure HP/O/B/1009/14 for changes to avoid omissions for protective action recommendations. The procedure now addresses avoidance of the possible omission of sectors due to changing wind direction.
- b. (Closed) IFI 269, 270, 287/84-04-01: Incorporation of protective action recommendation for General Emergency based on loss of physical control of facility. The appropriate recommendation has been incorporated into the flowchart in RP/O/B/1000/06 (revised 6-1-84).