



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

JUN 23 1988

Report Nos.: 50-413/88-19 and 50-414/88-19

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

Docket Nos.: 50-413 and 50-414

License Nos.: NPF-35 and NPF-52

Facility Name: Catawba Nuclear Station

Inspection Conducted: May 17-20 and June 3, 1988

Inspector: James L. Kreh 21 June 1988
J. L. Kreh Date Signed

Approved by: Thomas R. Decker 21 June 1988
T. R. Decker, Chief Date Signed
Emergency Preparedness Section
Division of Radiation Safety and Safeguards

SUMMARY

Scope: This routine, unannounced inspection was conducted in the area of emergency preparedness, and included review of the following programmatic aspects: (1) emergency plan and implementing procedures; (2) emergency facilities, equipment, instrumentation, and supplies; (3) organization and management control; (4) training; and (5) independent reviews/audits.

Results: The findings of this inspection appeared to indicate that the licensee was prepared to respond effectively to a radiological emergency involving the Catawba Nuclear Station. In the area inspected, no violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *H. Barron, Superintendent of Operations
- *M. Cote, Compliance Specialist
- J. Effinger, QA Supervisor, Audits (Corporate)
- *M. Glover, Compliance Engineer
- R. Jones, Shift Engineer
- *T. Owen, Station Manager
- *D. Simpson, Station Emergency Planner
- R. Smith, Shift Supervisor
- T. Smith, Assistant Station Emergency Planner
- *F. Wardell, Superintendent of Technical Services

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

NRC Resident Inspectors

- *K. Van Doorn
- *M. Lesser

*Attended exit interview

2. Emergency Plan and Implementing Procedures (82701)

Pursuant to 10 CFR 50.47(b)(16), 10 CFR 50.54(q), Appendix E to 10 CFR Part 50, and Section P of the licensee's Emergency Plan, this area was inspected to determine whether significant changes were made in the licensee's emergency preparedness program during the past year, and to assess the impact of any such changes on the overall state of emergency preparedness at the facility.

The inspector reviewed the licensee's system for making changes to the Emergency Plan and the Emergency Plan Implementing Procedures (EIPs). The inspector verified that licensee management approved all revisions to the Emergency Plan and EIPs issued since April 1987, and that all such changes were submitted to the NRC within 30 days of the effective date, as required. Controlled copies of the Emergency Plan and EIPs were examined in the Control Room and Technical Support Center (TSC), and were found to be current revisions.

Licensing reviews of Revision 9 (dated May 1987) and Revision 10 (dated December 1987) of the Emergency Plan were previously conducted by Regional Office staff, and determined that the changes contained in those revisions were consistent with NRC regulations. During the inspection, review of a

representative sample of the cited Plan changes indicated that they were appropriately factored into the SPPs. Other changes in the emergency preparedness program involved facilities, equipment, and personnel, and are discussed below in Paragraphs 3 and 4.

The inspector reviewed documentation, including Units 1 and 2 Control Room logs, related to the four emergency declarations made during the first quarter of 1988. All were in the Notification of Unusual Event (NOUE) class. The dates of these declarations were January 23, February 9, March 1, and March 10. The declaration on March 10 was made at 12:50 p.m. (for Unit 1 only, since Unit 2 was already shut down) following a decision at 11:30 a.m. to declare the Auxiliary Feedwater (AFW) Systems for both units inoperable. Since AFW was an engineered safety feature (ESF), the licensee invoked the emergency action level (EAL) addressing loss of ESF requiring shutdown by Technical Specifications (EAL No. 4 on page 13 of procedure RP/O/A/5000/01, "Classification of Emergency", dated February 15, 1988). Power reduction on Unit 1 commenced at 11:57 a.m. Because 53 minutes elapsed between commencement of shutdown and declaration of the emergency, the inspector tentatively identified a violation of the procedural requirement (in RP/O/A/5000/01) for "immediate action" upon recognition that plant conditions coincide with one or more of the EALs. Licensee representatives informed the inspector that the 53 minutes in question were consumed by internal discussions regarding the applicability of a footnote associated with the referenced EAL which stated, "Loss of ESF is defined to be an actual loss of function and not a loss because of failure to carry out administrative or surveillance actions [emphasis added]." Licensee representatives asserted that no actual loss of ESF had occurred, since the AFW System was conservatively assumed to have lost its assured source of water (Nuclear Service Water System) but had not lost the preferred, condensate-quality sources. In spite of this argument, the licensee ultimately decided to "conservatively" declare this condition an NOUE. During the exit meeting, the inspector identified this sequence of events as representing a violation due to untimely implementation of procedure RP/O/A/5000/01. Following detailed review and discussion of this matter at the Regional Office, a determination was made that no violation had occurred. However, the licensee agreed to revise the referenced EAL in order to reduce its ambiguity.

Inspector Follow-up Item (413, 414/88-19-01): Clarification of the EAL addressing loss of an engineered safety feature.

No violations or deviations were identified.

3. Emergency Facilities, Equipment, Instrumentation, and Supplies (82701)

Pursuant to 10 CFR 50.47(b)(8) and (9), 10 CFR 50.54(q), and Section IV.E of Appendix E to 10 CFR Part 50, this area was inspected to determine whether the licensee's emergency response facilities and other essential emergency equipment, instrumentation, and supplies were maintained in a

state of operational readiness, and to assess the impact of any changes in this area upon the emergency preparedness program.

The inspector selectively examined emergency supplies and equipment in the Control Room and TSC, and found these items to be maintained in an appropriate state of readiness. Many functional and cosmetic improvements were made in the TSC during recent months, including the following additions: partitions around the Health Physics area, plant mimics displayed on the wall, and overhead signs identifying the various working groups. The TSC became a dedicated facility as of August 1987, allowing telephones to remain in place and activated instead of being stored in cabinets. This change should significantly decrease the time required for physical preparation of the TSC prior to activation. A recent modification of the emergency PA configuration made it possible for personnel in the Operations Support Center (OSC) to hear status briefings by the Emergency Coordinator in the TSC.

A cellular telephone was obtained for use by the NPD [Nuclear Production Department] Duty Engineer (corporate) while in transit. The licensee's notification list was revised accordingly.

The licensee had recently outfitted two vans for use in environmental monitoring. These were designated (but not dedicated) emergency vehicles whose nonemergency use was controlled by Station Directive 2.1.13. The inspector examined one of these vans and noted the inclusion of various emergency supplies as well as portable radiological instruments.

All changes discussed in this paragraph were considered to improve or upgrade the licensee's emergency preparedness program.

The inspector reviewed records of the monthly, quarterly, and annual communications checks performed in accordance with procedure PT/O/B/4600/05. The completed test procedures documented identified discrepancies and subsequent corrective actions.

No violations or deviations were identified.

4. Organization and Management Control (82701)

Pursuant to 10 CFR 50.47(b)(1) and (16) and Section IV.A of Appendix E to 10 CFR Part 50, this area was inspected to determine the effects of changes in the licensee's emergency response organization and/or management control systems on the emergency preparedness program, and to verify that such changes were properly factored into the Emergency Plan and its implementing procedures.

The organization and management of the emergency preparedness program were reviewed and discussed with licensee representatives. An individual who once served as supervisor of the licensee's corporate emergency planning program was recently appointed as Compliance Engineer, which is the immediate supervisor of the Station Emergency Planner. As of July 1987,

the position of assistant to the Station Emergency Planner was added. Both of these personnel changes appeared to affect the emergency preparedness program in a positive manner.

Recent changes in upper management included the appointment of a new Station Manager, who was still considered to be in training as Emergency Coordinator, and a new Superintendent of Station Services, who received designated specialized training prior to being assigned to the emergency response organization. The personnel changes noted above were properly incorporated into the notification rosters found in the EPIPs. No other significant personnel changes in the onsite emergency organization or in offsite support groups were disclosed.

No violations or deviations were identified.

5. Training (82701)

Pursuant to 10 CFR 50.47(b)(2) and (15), Section IV.F of Appendix E to 10 CFR Part 50, and Section 0 of the Emergency Plan, this area was inspected to determine whether the licensee's key emergency response personnel were properly trained and understood their emergency responsibilities.

The inspector conducted an interview in the Control Room with one on-duty Shift Supervisor. The Shift Supervisor was given several sets of hypothetical emergency conditions and plant data and was asked in each case to talk through the response he would provide as Emergency Coordinator if such an emergency actually existed. The individual exhibited comprehensive knowledge of the Emergency Plan and its implementing procedures. No problems were observed in the areas of event classification and protective action decision-making. Peripherally involved in the referenced interview were the Shift Engineer (equivalent to Shift Technical Advisor) and the Shift Support Technician. The Shift Engineer advised the Shift Supervisor on technical matters at several points during the interview. The Shift Support Technician was questioned regarding procedures and methods for activating the station emergency organization and notifying offsite agencies. All interviewees were knowledgeable of their emergency response functions.

No violations or deviations were identified.

6. Independent Reviews/Audits (82701)

Pursuant to 10 CFR 50.47(b)(14) and (16) and 10 CFR 50.54(t), this area was inspected to determine whether the licensee had performed an independent review or audit of the emergency preparedness program, and whether the licensee had a corrective action system for deficiencies and weaknesses identified during exercises and drills.

Records of emergency preparedness program audits were reviewed. An independent audit was conducted by the licensee's Quality Assurance

Department from December 2, 1987 to April 27, 1988, and was to be documented in Audit Report No. NP-87-23(CM). That report, not yet issued at the time of the inspection, was expected to identify three unresolved items and two recommendations for the General Office, as well as one unresolved item for the Catawba facility. The referenced audit fulfilled the 12-month frequency requirement for such audits.

Findings identified during drills and exercises by licensee evaluators were tracked for follow-up on a computerized tracking system known as the Catawba Action List File (CALF). A recent CALF printout showed that all critique findings (except one minor problem with a clock) from the February 1987 exercise were satisfactorily addressed and closed. The documented critique of the August 20, 1987 semiannual health physics/site assembly drill delineated six negative findings, of which one (investigation of noise reduction techniques for the TSC) was still open, according to the CALF. Critique records for the February 1988 exercise showed that 57 items were identified; the inspector noted that all were entered on the CALF.

No violations or deviations were identified.

7. Action On Previous Inspection Findings (92701)

- a. (Closed) Inspector Follow-up Item (IFI) 413/85-39-30, 414/85-36-30: Standardizing data format to include all Regulatory Guide 1.97 parameters. The data format in the VAX system was considerably expanded to include subcooling margin, core thermocouple output, reactor vessel level indication, and several other parameters not originally included.
- b. (Closed) IFI 413/85-39-31, 414/85-36-31: Improving the method of data transmission to the Crisis Management Center so as to provide real-time or near-real-time data. This finding was determined to substantively duplicate IFI 413/85-39-28, 414/85-36-28, which was closed in Paragraph 5.e of NRC Report No. 50-413, 50-414/86-17.

3. Exit Interview

The inspection scope and results were summarized on May 20, 1988, with those persons indicated in Paragraph 1. An apparent violation involving failure to make a timely emergency declaration was discussed in detail, and is described above in Paragraph 2. Licensee management representatives took exception to this finding. During a telephone conversation on June 3, 1988, the inspector informed the licensee's Compliance Engineer that further review in the Regional Office determined that the finding in question did not constitute a violation. Although proprietary information was reviewed during this inspection, none is contained in this report.