



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

APR 27 1988

Report Nos.: 50-259/88-09, 50-260/88-09, 50-296/88-09

Licensee: Tennessee Valley Authority
6N 38A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Docket Nos.: 50-259, 50-260, 50-296

License Nos.: DPR-33, DPR-52,
DPR-68

Facility Name: Browns Ferry Nuclear Plant

Inspection Conducted: April 4-8, 1988

Inspector:

James L. Kreh
J. L. Kreh

April 22, 1988
Date Signed

Approved by:

Thomas R. Decker
T. R. Decker, Section Chief
Division of Radiation Safety and Safeguards

April 22, 1988
Date Signed

SUMMARY

Scope: This routine, announced inspection involved review and evaluation of the licensee's emergency preparedness program.

Results: No violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

R. Albright, Supervisor, Field Operations Section, Radiological Control
*M. Bolch, Site Radiological Emergency Preparedness Program Manager
*W. Ivey, Compliance Specialist
*E. Kingery, Program Manager, Emergency Preparedness Branch (Corporate)
D. Maehr, Engineering Aide
*J. Martin, Assistant to Plant Manager
W. Percle, Project Manager, Project Operations
*J. Savage, Compliance Manager
*J. Walker, Plant Manager
P. Walker, Shift Supervisor
H. Williamson, Program Manager, Emergency Preparedness Branch (Corporate)

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

NRC Resident Inspectors

*C. Brooks
*E. Christnot
*G. Paulk

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on April 8, 1988, with those persons indicated in Paragraph 1 above. 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.

3. Licensee Action on Previous Enforcement Matters

This subject was not addressed in the inspection.

4. 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 16 of the licensee's Radiological Emergency Plan (REP), this area was inspected to determine whether significant changes were made in the licensee's emergency preparedness program since the inspection in April 1987, 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 REP and the Emergency Plan Implementing Procedures (EPIPs). The inspector verified that licensee management approved all revisions to the REP and EPIPs issued during the previous 12 months, and that all such changes were submitted to the NRC within 30 days of the effective date, as required. Controlled copies of the REP and EPIPs were inspected at the following locations: Units 1 and 2 Control Room, Technical Support Center (TSC), Operations Support Center (OSC), Site Director's Office, Plant Manager's Office, REP Field Monitoring Van, and Health Station; all documents were found to be current revisions.

A significant improvement in the licensee's emergency preparedness program occurred with the implementation of the Automated Paging System (APS). The REP staff was responsible for preparing and issuing a weekly duty roster which assigned pager duty and addressed all off-shift TSC and OSC positions defined in the EPIPs. The availability of off-duty plant personnel to respond following an emergency declaration was tested by means of weekly drills in which the APS was activated by the Shift Clerk at the direction of the REP Program Manager. Other changes in the licensee's emergency preparedness program were in the areas of facilities and management, and are discussed below in Paragraphs 5 and 6, respectively.

No violations or deviations were identified.

5. 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 (Units 1 and 2) and TSC, and concluded that they were being maintained in an appropriate state of readiness. Documentation of the 13 quarterly inventories specified in EPIP-17 (Emergency Equipment and Supplies) was selectively reviewed for the period of January 1987 through March 1988. In addition, maintenance of TSC equipment, supplies, and documents was addressed in Site Services Instruction Letter T-2; records of such maintenance for the period January 1987 to February 1988 were reviewed by the inspector. Documentation of the referenced periodic audits indicated that identified problems and deficiencies were resolved expeditiously.

A major renovation of the TSC was in progress during the inspection. Although the total area of the TSC was to be unchanged, the licensee expected that removal of a partition and rearrangement of the facility's layout would make more efficient use of the available space. Completion of the project was expected before April 30, 1988. During this period of

unavailability of the TSC for its intended function, the Plant Manager's office was designated as the backup TSC. (The fact that all three reactors were in a defueled condition while the TSC modification was occurring greatly reduced the probability that TSC activation would be required.)

No violations or deviations were identified.

6. 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 REP and EIPs.

The organization and management of the emergency preparedness program were reviewed. As a result of a recent organizational change, the REP Program Manager reported to the Manager of Project Operations instead of the Director of Site Services (Site Services was abolished in the subject reorganization). This change had the effect of removing one level of management between the REP Program Manager and the Site Director. However, the Manager of Project Operations, while reporting to the Site Director, had a total of 11 program managers or supervisors reporting to him. The long-term impact of these changes on the emergency preparedness program will be assessed during future inspections.

Personnel changes in certain plant management positions resulted in the reassignment of some key roles in the emergency response organization. Selective review of training records of such personnel confirmed that requirements for their new positions in the emergency organization were completed prior to actual assignment to these positions.

No violations or deviations were identified.

7. Training (82701)

Pursuant to 10 CFR 50.47(b)(2) and (15), Section IV.F of Appendix E to 10 CFR Part 50, and REP Section 15.0, this area was inspected to determine whether the licensee's key emergency response personnel were properly trained and understood their emergency responsibilities.

The inspector reviewed records of training required by the REP for a representative sample of persons assigned to the onsite emergency organization. Information obtained from the licensee's computerized record-retrieval system indicated that (for the sample chosen) personnel were provided with training which was appropriate, in terms of content and frequency, and consistent with the requirements of the governing procedure (Site Director Standard Practice 22.4).

The inspector conducted an interview with one Shift Supervisor, who 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 Site Emergency Director if such conditions actually existed. The individual demonstrated good understanding of the REP and associated implementing procedures. No problems were observed in the areas of event classification and protective action decision-making.

No violations or deviations were identified.

8. 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 audits were reviewed. An independent audit was conducted by the Division of Nuclear Quality Assurance (DNQA) during the period May 18-July 31, 1987, and was documented in Report No. QSS-A-87-0016, dated August 28, 1987. That report identified 3 significant findings ("conditions adverse to quality," in the licensee's terminology) with regard to the Browns Ferry emergency preparedness program. Two of these findings were closed by DNQA on January 21, 1988; corrective action for the other was being actively pursued by the licensee. The referenced audit fulfilled the 12-month frequency requirement for such an audit. The report provided evidence that the State and local government interfaces were thoroughly evaluated. Audit findings and recommendations were presented to plant and corporate management.

Deficiencies identified during audits by DNQA and during drills and exercises by licensee evaluators were tracked for follow-up on a computer-based file known as the Activities Management and Oversight System (AMOS). The inspector determined that the licensee was effectively using AMOS as a management tool for ensuring the completion of corrective action for emergency preparedness problems.

No violations or deviations were identified.

9. Inspector Follow-up (92701)

- a. (Closed) Inspector Follow-up Item (IFI) 259, 260, 296/87-31-01: Periodic verification that evacuation route signs are in place. According to licensee documentation, following replacement of a number of missing signs, all 94 required signs were verified to be in place in Limestone and Morgan Counties. In addition, signs in Lauderdale and Lawrence Counties were determined adequate (i.e., no replacements were required). The inspector independently verified the presence of all required signs on several routes. A memo from

the State of Alabama's Emergency Management Agency to the emergency management coordinators of the 4 referenced counties requested that they provide the State with written procedures addressing the need to periodically check evacuation route signs and provide replacements as necessary.

- b. (OPEN) IFI 259, 260, 296/87-39-02: Exercise Weakness - Onsite personnel were not kept apprised of the emergency status. This item confirmed and updated past NRC findings regarding the inadequacy of the licensee's PA and emergency alarm system (source of requirements: NRC Bulletin 79-18). The inspector discussed with cognizant management representatives the licensee's plans for replacing the present system with one that would provide coverage in all areas of the plant, including those with high noise levels. The project was still at the design stage; completion was expected by September 1989, but must, in any case, occur prior to the startup of Unit 3, in accordance with a commitment in TVA's Nuclear Performance Plan.