APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-285/84-23 License: DPR-40

Docket: 50-285

Licensee: Omaha Public Power District (OPPD)
1623 Harney Street
Omaha, Nebraska 68102

Facility Name: Fort Calhoun Station

Inspection At: Fort Calhoun Station, Fort Calhoun, Nebraska

Inspection Conducted: October 22-25, 1984

Inspector: J B Baird for J. L. Montgomery, Emergency Preparedness Analyst — Date 1/7/85
Emergency Preparedness Section

Other Accompanying Personnel:

J. Jamison, Battelle
J. MacLellan, Battelle
T. Lonergan, Battelle
C. Haughney, Comex Inc.

Approved: J B Baird
J. B. Baird, Chief, Emergency Preparedness Section — Date 1/7/85

D M Hunnicutt
D. M. Hunnicutt, Chief, Project Section B — Date 1/10/85

Inspection Summary

Inspection Conducted October 22-25, 1984 (Report 50-285/84-23)

Areas Inspected: Routine, announced inspection of the licensee's performance and capabilities during an exercise of the emergency plans and procedures. The inspection involved 122 inspector-hours onsite by five NRC inspectors.

Results: Within the emergency response areas inspected, no violations or deviations were identified.

DETAILS

1. Persons Contacted

OPPD

*W. G. Gates, Plant Manager
M. Kallman, Supervisor, Administrative Services and Security
*F. Franco, Manager, Radiological Health and Emergency Planning
*D. Feighhart, Emergency Planning Coordinator
D. Jacobson, Training Instructor
*K. J. Morris, Manager, Logistics and Administrative Support
*R. Jaworski, Section Manager, Technical Services
*R. Andrews, Division Manager, Nuclear Production
M. Core, Supervisor, Maintenance
J. Shuck, Shift Support Coordinator
*G. Roach, Supervisor, Chemistry and Radiation Protection
*J. Gasper, Scenario Coordinator

Other Personnel

E. Simons, Nebraska Department of Health
*L. A. Yandell, Senior NRC Resident Inspector

*Denotes those present at the exit interview.

2. Control Room

The NRC inspectors assigned to the control room during the exercise observed that the control staff aggressively pursued the diagnosis and correction of problems. The shift supervisor maintained adequate command and control over his personnel and functioned effectively as the emergency duty officer until relieved by the technical support center (TCS) staff. Control room personnel effectively used their emergency procedures and plans, and demonstrated adequate evaluation and decisionmaking related to emergency worker protection.

The following weaknesses were observed in the control room by the NRC inspectors:

- periodic plant status announcements were not made
- the location and status of plant repair teams were not always known
- the special problems associated with fuel damage and high radioactivity in the reactor coolant system were not considered
- habitability readings were not clearly established and documented

No violations or deviations were identified.

3. Technical Support Center

The NRC inspector in the TSC observed that the licensee promptly manned and clearly announced that the TSC was ready for technical support. Habitability surveys were thorough, timely, and in accordance with emergency procedures. The transfer of emergency duty officer responsibility to the TSC was timely and clearly announced.

The following weaknesses were observed in the TSC by the NRC inspector:

- TSC direction, control, and briefings were observed to not always have been effective in motivating the staff to aggressively troubleshoot meaningful problems causing the plant emergency.

- The feasibility of using a diesel driven fire pump to fill the dry steam generator should have been aggressively pursued by the TSC staff and not delayed for 2 hours.

- Status boards in the TSC were well maintained but some data that were conflicting or misleading should have been discussed among TSC staff members before being altered on the status boards.

- Data trending should have been provided to estimate the time remaining before the start of major events such as core uncovering and fuel melt.

No violations or deviations were identified.

4. Operational Support Center (OSC)

The NRC inspector stationed in the OSC areas observed adequate briefings of repair teams on radiation protection in accordance with emergency procedures; however, routine briefings for OSC personnel on plant status were not held.

The NRC inspector noted that the controllers were not able to accompany some repair teams and this appeared to have disrupted the flow of the scenario and impacted participants making decisions at their repair stations.

No violations or deviations were identified.

5. Offsite Monitoring

The NRC inspector traveled with both offsite monitoring teams who were dispatched to perform field radiological monitoring and sampling.

The following weaknesses were observed by the NRC inspector:

- Contrary to emergency implementing procedure EPIP-EOF-18 the monitoring team members did not complete sample labeling and identification.

- The use of protective clothing by team members was inconsistent. One team member was observed wearing protective clothing while another was not.

- It appeared to the NRC inspector that the team members were not reading the survey meter scale consistently.

- Team members did not appear to evaluate their radiation exposures in relationship to radiation levels and in only one instance checked the reading of their dosimeters. The radiological protection and field team coordinator at the emergency operations facility (EOF) also did not appear to evaluate survey team radiation exposures and was not heard to discuss the subject with team members over the radio.

- Team members did not request instructions from the field team coordinator when the early warning system sirens sounded and no information about the reason for siren sounding was provided.

- One monitoring team learned of the general emergency declaration 40 minutes early by talking with an Iowa state monitor at a sampling location.

- An offsite monitoring team controller was prompting team members by assisting in the collection of emergency equipment by reviewing checklists with team members, directing team members to fill out sample labels, and allowing a team member to read scenario messages ahead of time.

Based on offsite monitoring team observations the following is an open item to be reviewed during a subsequent inspection:

(Open) Open Item (50-285/8423-01) Emergency offsite monitoring training and walk-through drills should address offsite monitoring team weaknesses in the use of sample labels, survey instruments, protective clothing, and dosimetry.

No violations or deviations were identified.

6. Emergency Operations Facility (EOF)

The EOF direction, decisionmaking and delegation of authority were performed well by the recovery manager and his staff. The transfer of emergency coordinator responsibilities was efficiently done and clearly announced.

The recovery manager conducted timely and clear briefings for the EOF staff approximately every 30 minutes throughout the exercises. When using the public address system to make announcements the recovery manager and his staff had to leave their private room and walk across the hall to room 10. It appeared to the NRC inspector that it would have been more convenient to have the system available at the recovery manager's desk.

The NRC inspector noted that the status board recorder experienced difficulty in erasing the plexiglass board and writing new data with a grease pencil. An improved status board surface or marking system should be considered to improve the effectiveness of data displayed on this board.

The NRC inspector also stated that a large trending graph for use in showing various data (e.g., projected offsite doses) should be considered for EOF staff members following trends.

No violations or deviations were identified.

7. Exit Interview

The exit interview was held with the division manager-nuclear production and his staff on October 25, 1984. The NRC senior resident inspector also attended.

The NRC team leader summarized the NRC team comments for the control room, TSC, OSC, EOF, and offsite monitoring areas. The licensee was informed that the problems noted with the offsite monitoring teams would be listed as an open item to be reviewed during a future emergency preparedness inspection.

The NRC team leader also discussed the licensee's lack of progress in upgrading the decontamination facility in the general employee training building at the plant site. This was listed as an open item (285/8330-01) during a 1983 emergency preparedness inspection. A licensee representative stated that they would investigate the matter and expedite the facility improvement.