

APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-445/84-41

Construction Permit: CPPR-126

Docket: 50-445

Category: A2

Licensee: Texas Utilities Electric Company (TUEC)
Skyway Tower
400 N. Olive Street
Lock Box 81
Dallas, Texas 75201

Facility Name: Comanche Peak Steam Electric Station

Inspection At: Comanche Peak Steam Electric Station, Glen Rose, Texas

Inspection Conducted: November 13-15, 1984

Inspector:

J B Baird
for J. L. Montgomery, Emergency Preparedness Analyst,
NRC Team Leader

1/24/85
Date

Other Inspectors:

W. N. Herrington, Battelle
L. A. Rathbun, Battelle
F. L. McManus, Battelle
T. R. Workinger, Battelle

Approved:

J B Baird
J. B. Baird, Chief, Emergency Preparedness Section

1/24/85
Date

D M Hunnicutt
D. M. Hunnicutt, Chief, Project Section B

1/25/85
Date

Inspection Summary

Inspection Conducted November 13-15, 1984 (Report 50-445/84-41)

Areas Inspected: Routine, announced inspection of the licensee's performance and capabilities during an exercise of the emergency plans and procedures. The inspection involved 166 inspector-hours onsite by five inspectors.

Results: Within the emergency response areas inspected, no violations or deviations were identified. Nine of the ten remaining Appendix A items from the emergency preparedness appraisal were closed.

DETAILS

1. Persons Contacted

Licensee Personnel

- *B. R. Clements, Vice President Nuclear
- *J. C. Kuykendall, Manager, Nuclear Operations
- *R. A. Jones, Manager, Plant Operations
- D. W. Braswell, Engineering Superintendent
- *B. T. Lancaster, Radiation Protection Engineer
- J. Ramsey, Security Supervisor
- *G. L. Bell, Health Physicist
- *G. J. Laughlin, Supervisor Emergency Planning
- *R. B. Seidel, Operations Superintendent
- *S. E. Bradley, Onsite Radiological Assessment Coordinator
- E. Alarcon, TSC Advisor
- *M. R. Blevins, Maintenance Superintendent
- R. Belekis, Emergency Planning
- *T. Gosdin, Support Services Superintendent
- C. Turner, Training Supervisor
- G. D. Lytle, Shift Supervisor
- *L. G. Barnes, Operations Supervisor
- *E. Jergins, Mechanical Maintenance Engineer
- B. Haynes, Technical Support Engineer
- *C. Conklin, Radiation Protection Engineer
- *R. Fishencord, Radiation Protection Supervisor
- *C. Meyer, Health Physicist

Nonlicensee Personnel

- C. L. Born, Texas Bureau of Radiological Health
- D. Lacker, Texas Bureau of Radiological Health
- E. G. Bailey, Texas Bureau of Radiological Health
- A. Lookabaugh, Federal Emergency Management Agency

*Denotes those present at the exit interview.

2. Licensee Action on Previous Open Items

a. 1983 Exercise Items

(Closed) Open Item (445/8436-01; 446/8321-01): The licensee utilized a scenario committee which included representatives from the reactor operations and engineering staff.

(Closed) Open Item (445/8346-02; 446/8421-02): The emergency classifications were clearly announced by the shift supervisor when he made the decision or received the classification.

(Closed) Open Item (445/8346-04; 446/8321-04): Control room and technical support center (TSC) personnel participated in drills to improve the accuracy and timeliness of their tasks.

(Closed) Open Item (445/8346-05; 446/8321-05): Additional emergency lighting had been installed in the emergency operations facility (EOF).

(Closed) Open Item (445/8346-06; 446/8321-06): EOF staff was drilled on dose assessment procedures using the newly acquired K-Pro computers.

b. Emergency Preparedness Appraisal Items

(Closed) Open Item (445/8333-09; 446/8317-09): The licensee had revised the emergency plan to conform with Table B-1 of NUREG-0654, Revision 1. An unannounced, after-hours augmentation drill was held and demonstrated that response times could be met.

(Closed) Open Item (445/8333-18; 446/8317-18): This item is part of the overall licensee request for acceptance of existing instrumentation by NRC in the licensing process.

(Closed) Open Items (445/8333-19; 446/8317-19), (445/8333-29; 446/8317-29), (445/8333-30; 446/8317-30), (445/8333-32; 446/8317-32), (445/8333-38; 446/8317-38), (445/8333-40; 446/8317-40), (445/8333-138; 446/8317-138): The digital radiation monitoring system and emergency response facility computer systems have been installed and emergency response staff has completed training on these systems. The licensee has indicated in letter dated October 25, 1984, that these items will be resolved when the systems are turned over by the supplier.

(Open) Open Item (445/8333-116; 446/8317-116): The licensee has conducted an accountability drill but the documentation of the results and controller observations was incomplete. Also, ongoing accountability was not maintained at the operational support center (OSC) during the exercise.

c. Corporate Emergency Plan Docketing

The NRC inspector confirmed that the licensee was continuing to use and update the corporate emergency plan. This document has not been officially docketed with the NRC and, therefore, is not part of the official license application file.

The licensee's emergency planning coordinator was informed of the need to docket the corporate emergency plan.

This will be listed as an unresolved item (445/8441-01) pending action by the licensee to include this plan in the application for an operating license prior to an NRC licensing decision in accordance with 10 CFR 50.34(b)(6)(v).

3. Control Room

The exercise began at 7:05 a.m. on November 14, 1984, with a main feedwater line rupture inside containment. The control room operators immediately began to evaluate plant conditions and referred to emergency operating procedures (EOPs).

The shift supervisor assumed control as the emergency coordinator and began to classify the accident in accordance with EOPs. Announcements of the notice of unusual event and alert categories were clearly communicated to the control room staff. Announcement of the general emergency category in the control room was delayed approximately 30 minutes.

Plant status updates by the shift supervisor should have been more frequent and formal. The shift supervisor spent too much time completing forms. This task should be delegated to other personnel, thus allowing the shift supervisor to maintain command and control as the emergency coordinator.

Health physics monitoring to determine habitability was not observed by the NRC inspector.

The communicators were isolated at one end of the control room and not in close contact with the remainder of the control room staff. The physical setup of the telephone could be improved by using an automated dialing system and eliminating physical barriers and space between the communicators and the shift supervisor.

The automatic ring down telephones to state and local agencies were inoperable during the exercise.

Based on the control room observations, the following is listed as an open item:

(Open) Open Item (445/8441-02): The automatic ring down telephones to offsite officials should be inspected to ensure proper operation.

No violations or deviations were identified.

4. Technical Support Center

The TSC was staffed and became operational within 45 minutes of declaration of an emergency by the shift supervisor. Status boards were accurately maintained and current. The TSC staff appeared knowledgeable and aggressively pursued various solutions to mitigate the plant emergency.

The TSC manager should have made a formal and distinct announcement when he assumed the emergency coordinator duties. When transferring the emergency coordinator authority, all personnel should be aware that the decision to make the transfer always rests with the incumbent emergency coordinator and not the successor.

Documentation of TSC activities should be more thorough especially when recording events involving protective action decisions and radiological health and safety.

The TSC staff appeared to delay their decision to open reactor header vents. Various staff members appeared to differ on how to deal with the open vent question. A more organized and methodical approach to make such decisions may be needed.

Personnel dosimeters were not handled in a careful or organized manner. They were dumped into a pile on a table and issuance to staff members was delayed.

No violations or deviations were identified.

5. Operational Support Center (OSC)

The OSC was activated within 12 minutes after the shift supervisors declared an alert. Initial accountability and habitability were adequate.

The OSC staff thoroughly briefed all teams on plant conditions and precautions. Medical treatment and rescue of the injured victim were adequate, although one rescuer was observed to be wearing a dosimeter on the outside of his protective clothing.

Initial personnel accountability was adequately performed in the OSC but ongoing accountability was not. Many emergency personnel enter and exit the OSC during an emergency. Many of these people would enter the plant to perform emergency duties and their accountability should be given high priority.

The use of protective clothing was adequate; however, the NRC inspector observed one team member with eyeglasses attempting to wear a respirator.

No communication devices (e.g. radios) were given to the teams observed by the NRC inspector. The teams were dependent upon fixed devices (e.g., telephones and gaitronics) for communication.

Based on the OSC observations, the following is listed as an open item.

(Open) Open Item (445/8441-03): Continuous accountability must be provided for in the OSC to aid in complying with 10 CFR 50.47(b)(11).

No violations or deviations were identified.

6. Offsite Monitoring Teams

The offsite monitoring teams observed by the NRC inspector appeared to perform their duties in a timely and professional manner.

One monitoring team adequately demonstrated the proper use of protective clothing.

One team observed by the NRC inspector experienced difficulty with their vehicle mounted radio. Poor communications resulted in one team leader being uninformed about a radiological release from the plant which affected the area where his team was working.

One team member was observed by the NRC inspector to be using an improper survey instrument for measuring ground deposition of radioactive material. This was contrary to EPP-309.

No violations or deviations were identified.

7. Emergency Operations Facility (EOF)

The EOF was activated in a timely manner and the EOF manager maintained adequate control and leadership over the EOF staff. Dose assessment capabilities were considerably improved over the 1983 exercise.

Status boards were adequately maintained although some data appeared to be entered approximately 20-30 minutes after being generated in the control room and TSC.

The declaration of a general emergency could have been made 10-15 minutes earlier based on the seriously degrading conditions in the reactor core.

Announcements of plant status by the EOF manager could have been more frequent and more easily heard by the state officials who resided in a separate room.

Vegetation samples were taken into the main EOF area by one monitoring team member. Although, the samples were surveyed for contamination, the licensee should use caution and follow proper procedures described in EPP-309.

Some personnel in the EOF and other facilities appeared to experience difficulty with communication head sets and volume control. Additional practice in using this equipment is recommended.

The discussion of re-entry and recovery procedures by plant and corporate management was thorough and adequately demonstrated.

No violations or deviations were identified.

8. Media Center

The news conferences were periodically held with actual news media representatives present. The media asked numerous questions of sufficient difficulty to test the corporate and plant representatives' ability to effectively communicate with reporters and other media personnel. The licensee representatives were able to adequately address technical and corporate policy questions; however, at times communications appeared to be ineffective and answers to some questions concerning core temperature data, effects of extreme heat and hydrogen gas concentrations appeared to be incomplete.

Based on the news center observations, the following is listed as an open item:

(Open) Open Item (445/8441-04): To improve communications with the news media at press conferences, the licensee should consider appointing a news media/public affairs professional to act as the moderator.

No violations or deviations were identified.

9. Exercise Critique

The NRC inspectors attended the licensee's critique conducted following the conclusion of the exercise, and noted that most of the weaknesses observed by the NRC inspectors during the exercise were also independently observed and reported by licensee personnel.

10. Unresolved Item 445/8441-01

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, violations or deviations. An unresolved item identified during this inspection is discussed in paragraph 2.c.

11. Exit Interview

The exit interview was conducted with Mr. B. R. Clements, Vice President, Nuclear and his staff on November 15, 1984. A list of attendees is shown in Section 1 of this report. The NRC senior resident inspectors were also present. The NRC inspection team leader summarized the team comments and observations in the subject areas of exercise scenario, control room, TSC, OSC, rescue and medical care, offsite monitoring, EOF and news center.