

U.S. NUCLEAR REGULATORY COMMISSION
Region I

Report No. 50-271/82-04

Docket No. 50-271

License No. DPR-28 Priority _____ Category _____

Licensee: Vermont Yankee Nuclear Power Corporation
1671 Worcester Road
Framingham, Massachusetts 01701

Facility Name: Vermont Yankee Nuclear Power Station

Inspection At: Vernon, Vermont

Inspection Conducted: February 16-19, 1982

Inspectors: E. Woltner, Exercise Team Leader
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Approved by: H. W. Crocker 3/12/82
H. W. Crocker, Chief, Emergency Section date signed

Inspection Summary:

Inspection on February 16-19, 1982 (Report Number 50-271/82-04)

Area Inspected: Annual Emergency Preparedness Exercise observation and inspection. The inspection involved 318 inspection hours by a team of 11 NRC Region I, NRC Headquarters, and NRC contractor personnel.

Results: No items of noncompliance were identified.

DETAILS

1. Persons Contacted

W. Conway, President and Chief Operating Officer
W. Murphy, Plant Manager
J. Pelletier, Assistant Plant Manager
M. Lyster, Operation Superintendent
S. Skibnlowsky, Emergency Planning Coordinator
R. Morrissette, Chemical and H.P. Assistant
A. Chesley, Shift Supervisor
G. Madsen, Nuclear Safety Engineer
E. Cumming, Radiological Engineer
J. Parillo, Radiological Engineer
C. Pierno, Engineer
E. Darois, Yankee, NSD
P. Casey, Yankee, NSD

The team also observed and interviewed other licensee emergency response personnel as they performed their emergency functions.

2. Emergency Exercise

The Vermont Yankee emergency exercise was conducted on February 18, 1982 from about 0600 to 1600.

a. Pre-exercise Activities

The NRC observers on February 17 1982 attended a licensee briefing for all observers and participated in the discussions of the emergency response actions expected during the various phases of the scenario.

The licensee scenario involved partial fuel clad failure, reactor coolant system breach, loss of primary containment, and failure of reactor building ventilation and a large release of radioactivity to the environment. The scenario required direct interface between the plant emergency organization, engineering support center, and the off-site officials in the States of Vermont, New Hampshire and Massachusetts.

Based on the above findings, this portion of the licensee's exercise program appeared to be acceptable.

b. Exercise Observation

During the conduct of the licensee's exercise, 11 NRC team members made detailed observations of the activation and augmentation of the emergency organization; establishment of the emergency response facilities; and actions of the emergency response personnel during the operation of the emergency response facilities. The following activities were observed:

- (1) detection, classification, and assessment of the events making up the scenario;
- (2) notification of licensee personnel and offsite agencies of pertinent information;
- (3) direction and coordination of the emergency response;
- (4) evacuation, assembly and accounting for licensee personnel;
- (5) assessment and projection of radiological (dose) data and consideration of protective actions;
- (6) performance of offsite, onsite, and in-plant radiological surveys;
- (7) provision of in-plant radiation protection;
- (8) communications and information flow;
- (9) post-accident sampling and analysis;
- (10) technical support; and
- (11) public information.

The NRC team noted that the licensee's activation and augmentation of the emergency organization; establishment of the emergency response facilities; and actions and use of the facilities were generally consistent with their emergency response plan and implementing procedures. However, the team did find areas for licensee improvement which are discussed below. (The licensee also identified most of these areas in their critique of the exercise).

The scope of the emergency scenario was acceptable as discussed in section 2.a. The inspectors noted that during the exercise, the licensee had a sufficient number of observers and controllers which provided independent assessment; and who gave necessary control cards and contingency messages to participants during the scenario.

The TSC communication room lacked sufficient space to avoid crowding, noise level and grouping of communications. The EOF requires a more efficient layout for assigned work spaces, tables and equipment to minimize cross traffic. There is a need for a dedicated communication line among the EOF, CR and TSC.

The EOF lacked a readily visible status board that could be kept current. Also the organization chart was poorly located and the EOF chart was not consistent with the Tag Board and Assignment Board.

It was observed that assistance could be used by the EOF Coordinator and the Radiation Assessment Coordinator in performance of their duties and for delegation of more tasks to other individuals.

Additional training should be provided to determine offsite dose projections; technical training in use of equipment by the survey teams; and procedure requirements for obtaining the post accident sample.

The CR failed to provide an organized system of logging information and the TSC log was not started until 90 minutes after the center was activated.

c. Exercise Critique

The NRC team attended the licensee's post-exercise critique on February 19, 1982, during which licensee observers discussed their findings. The observations made by their observers/controllers were presented by the chief observer/controller. The licensee documented all observer's comments for subsequent evaluation and appropriate corrective action.

The NRC team compared their findings with those of the licensee and determined that neither the licensee nor the NRC observers had identified items which exhibited a potential for a degraded emergency response. However, areas for improvement were identified. Discussions during the critique indicated that licensee management possessed sufficient understanding of these areas to permit timely and effective improvements.

3. Exit Meeting and NRC Critique

Following the licensee's self-critique, the NRC team met with the licensee representatives listed in Section 1 above. The team leader summarized the purpose and scope of the NRC inspection.

The team leader also informed the licensee that their performance in the exercise demonstrated that they could implement their Emergency Response Plan and Emergency Response Plan Implementing Procedures in a manner which would adequately provide for the health and safety of the public.