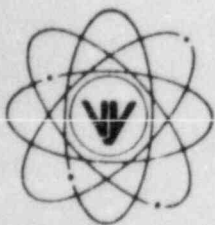


VERMONT YANKEE NUCLEAR POWER CORPORATION



RD 5, Box 169, Ferry Road, Brattleboro, VT 05301

FVY 84-97

REPLY TO:
ENGINEERING OFFICE

1671 WORCESTER ROAD
FRAMINGHAM, MASSACHUSETTS 01701
TELEPHONE 617-872-8100

August 6, 1984

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Darrell G. Eisenhut, Director
Office of Nuclear Reactor Regulation
Division of Licensing

References: a) License No. DPR-28 (Docket No. 50-271)
b) Letter, VYNPC to USNRC, FVY 84-10, dated 2/13/84
c) Letter, VYNPC to USNRC, FVY 84-54, dated 5/29/84
d) 10CFR50 Appendix E, Section IV.F.
e) Letter, VYNPC to USNRC, VYV 84-36C, dated 7/12/84

Dear Sir:

Subject: Request for Exemption - Emergency Plan Annual Exercise

In accordance with the provisions of 10CFR50.12, Vermont Yankee Nuclear Power Corporation hereby requests an exemption from the requirements of 10CFR50, Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities". Specifically, we are requesting an exemption from Section IV.F of Appendix E, which requires a nuclear power facility to conduct an annual emergency preparedness exercise.

As discussed in Reference b), our 1984 annual exercise was scheduled to be conducted on November 14, 1984. However, the event which occurred at Vermont Yankee on June 15, 1984 resulted in complete implementation and exercise of our Emergency Plan to Alert level. Our desire is to use this event as a substitute for the planned November 1984 drill. A description of the event is summarized in Appendix A. The basis for our exemption request is as follows:

1. Reference d) requires that the Emergency Plan be exercised annually. Although this requirement is typically met through the use of a drill with a pre-approved scenario and exercise objectives, we feel the June 15 event more than satisfies the intent of this requirement. All emergency centers were activated and staffed to the Alert level. All three states were involved and both New Hampshire and Massachusetts sent representatives to the EOF. Their response exceeded that planned for the 1984 drill [Reference c)]. Recovery and de-escalation, including State and NRC involvement, was successfully completed under reallife conditions. Appendix B contains a complete list of those features of the Emergency Plan that were demonstrated.

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VERMONT YANKEE NUCLEAR POWER CORPORATION

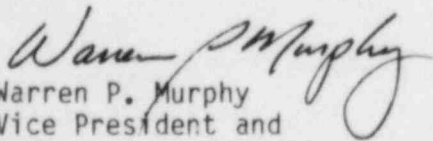
2. A requirement is included in NUREG 0654 that once every five years an unannounced exercise be conducted. The June 15 event certainly qualifies and meets this requirement.
3. The realism of an actual event which exercises the Emergency Plan is superior in many respects to an exercise using a pre-planned, pre-staged drill scenario. Plant conditions are not simulated, time frames are not compressed, and all participants are faced with actual conditions and pressures to deal with. The result is the best test of emergency planning, where real-life shortcomings, if any, are uncovered.
4. An element of the annual drill missing from the June 15 event was the presence of pre-staged observers in the emergency centers. Although not required by Reference d), they serve the purpose of providing unbiased comments during the formal post-event critique sessions. Following the June 15 event, five formal critique sessions were held with approximately 40 participants from the Control Room, OSC, TSC and the EOF/RC. The Resident NRC Inspector and State representatives from Massachusetts, New Hampshire, and Vermont were also included in the critique process. Participants had received Emergency Plan training and generated unbiased comments on the event and emergency planning improvements. Comments generated demonstrated recognition of where problems were encountered. Follow-up of comments in the areas of Emergency Plan procedures, equipment and training is proceeding.

Based on the above points, we strongly feel that our emergency plan was adequately exercised by the June 15 event and represents an acceptable substitute of a drill in 1984. With limited manpower for planning and implementation and the full-scale exercise planned for early 1985, we feel our approach is justified.

We trust that this request will be deemed acceptable. However, should you have any questions regarding this matter, please contact us. A resolution of this matter by August 22, 1984 would be appreciated.

Sincerely yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION


Warren P. Murphy
Vice President and
Manager of Operations

APPENDIX A

EVENT DESCRIPTION

At 0905 while performing core local power range monitor (LPRM) calibrations using the traversing in-core probe (TIP), a high radiation monitor alarm was received from the area radiation monitor near the TIP drives. Health Physics was notified to survey the area. At 0918, Health Physics reported a reading of 40 R/hr on contact with A TIP drive. At 0920, an ALERT was declared per AP 3125. It was determined that A TIP detector had somehow been withdrawn into the drive machine. The reactor building was evacuated. For recovery, the area around the TIP drive was designated a high radiation area and barriers were installed until the radiation levels decayed to a point where the detector could be disposed. At 1320 on 6/15/84, the ALERT condition was terminated. On 6/17/84, the TIP detector was removed and disposed.

The immediate response incorporated five key areas of an emergency exercise. They were accident assessment, emergency operations, communications, public information, and emergency management. The TSC, EOF/RC, and OSC were activated and staffed. Visitors were evacuated, complete personnel accountability was performed, and an extra search of the Reactor Building was made to ensure it had been completely evacuated. Dosimeters were checked and read for all personnel who may have been in the area of the TIP machines. Additional radiation surveys were made in the Reactor Building in areas above, below, and adjacent to the TIP machine area. An air sample was taken to determine whether the TIP was intact. The required off-site notifications were made and, since the NRC red phone was inoperable, an alternate means of continuous phone communication was established. The TSC established means to receive and update in-plant parameters. In addition, the EOF initiated various press releases and interfaced with the States and Engineering Support Center.

Three levels of management coordinated resources: the shift operating crew maintained plant status; the TSC controlled the flow of information and performed analysis; the EOF/RC maintained overall control and external communications.

The magnitude and trend of the problem was continuously assessed. Decay curves were plotted in the TSC. This information was compared to other decay curves in the plant data base and to those generated by the Engineering Support Center at the request of the EOF/RC. A separate task group headed by the Operations Superintendent assessed various options and recommended that a barrier be erected preventing unauthorized entry to the problem area until radiation levels decayed (this decision was determined as the optimal ALARA approach). The remaining TIP machines were de-energized with the TIPs in their shields.

When it was determined that the trend of the problem was decreasing and contained, a long-term recovery plan was initiated. Re-establishing controlled access to the Reactor Building, obtaining concurrence from the States for de-escalation, and erection of a locked barricade in the TIP machine area were pursued. Security continued to control access to the high radiation area after the ALERT was terminated until the locked barrier was installed.

APPENDIX B

ELEMENTS OF THE E-PLAN WHICH WERE EXERCISED

ALERT - JUNE 15, 1984

- I. Test and evaluate the adequacy of Vermont Yankee's Emergency Implementing Procedures in providing notification to appropriate off-site agencies, including de-escalation.
- II. Test and evaluate the adequacy of Vermont Yankee's Emergency Plan and Implementing Procedures in terms of management control in the following areas:
 - a. personnel accountability;
 - b. access and control measures; and
 - c. emergency dosimetry
- III. Test and evaluate Vermont Yankee's ability to assess and determine the extent of an emergency, and make appropriate recommendations concerning protective actions to State liaison personnel.
- IV. Demonstrate the performance of emergency duties associated with the coordination and interface of plant response with off-site governmental agency response.
- V. Demonstrate that accident information can be accessed and press releases can be issued in a timely fashion.
- VI. Provide an opportunity for hands-on practice and experience in performance of emergency duties in accordance with the emergency plan implementing procedures under emergency conditions.
- VII. Test and evaluate the ability of station personnel to recognize emergency initiating events and properly categorize and classify the emergency according to pre-established Emergency Action Levels.
- VIII. Test and evaluate the adequacy of plant emergency notification process and those emergency communication channels dedicated to this process. This includes such elements as:
 - a. the use of the Nuclear Alert System;
 - b. the activation of the Yankee NSD pager system; and
 - c. the use of in-plant telephone and page systems in managing required communications.
- IX. Test and evaluate control measures used in conducting an orderly plant evacuation.

- X. Demonstrate the ability of plant personnel to properly implement the activation of in-plant emergency response facilities (i.e., Control Room, TSC, OSC, and EOF/RC activation) as appropriate for the existing emergency class.
- XI. Demonstrate that the plant has established adequate engineering support capability (i.e., the Engineering Support Center) to provide rapid, accurate engineering input when requested.
- XII. Test and evaluate the plant's ability to conduct in-plant radiological surveys and analysis to establish appropriate emergency radiation exposure control measures associated with these activities.
- XIII. Demonstrate that adequate security measures, such as personnel accountability and plant access control, are implemented under emergency conditions.
- XIV. Test and evaluate the organization's implementation of an on-site recovery phase following accident conditions.
- XV. Demonstrate the plant's ability to manage effective documentation associated with performance of the following:
 - a. emergency communications;
 - b. emergency calculations;
 - c. emergency response actions; and
 - d. emergency exposure control.