



VERMONT YANKEE NUCLEAR POWER CORPORATION

SEVENTY SEVEN GROVE STREET
RUTLAND, VERMONT 05701

2.C.2.1
FVY 82-75
REPLY TO:
ENGINEERING OFFICE
1671 WORCESTER ROAD
FRAMINGHAM, MASSACHUSETTS 01701
TELEPHONE 617-872-8100

June 22, 1982

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

Attention: Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

References: a) License No. DPR-28 (Docket No. 50-271)
b) USNRC Letter to VYNPC, D.B. Vassallo to
R.L. Smith, dated April 19, 1982
c) VYNPC Letter to USNRC, L.H. Heider to D.G. Eisenhut,
dated April 14, 1981
d) VYNPC Letter to USNRC, E.W. Jackson to G.H. Smith,
dated June 15, 1982

Dear Sir:

Subject: Supplemental Information - NUREG 0737 Item III.A.1.2,
"Upgrade Emergency Support Facilities"

Reference (b) indicated that additional information needed to be submitted to allow the NRC to complete its review of Vermont Yankee's emergency organization/program. Our responses to these items are provided below:

1. EMERGENCY HEALTH PHYSICS AND CHEMISTRY

"Provide an analysis that identifies the health physics and chemistry tasks that may be required during the early phases of an accident and discuss the need and capability to perform them in relationship to accident time frames, accident processes and conditions and arrival times of augmentation personnel. This analysis should consider:

- 'providing H.P. support to onsite corrective/assessment actions teams at the direction of the Shift Supervisor;' "

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RESPONSE: All shift staff are currently trained in basic H.P. monitoring and assessment procedures including: dose measurement, air sampling and analysis and contamination surveys. The shift H.P. is available for monitoring and assessment and, additionally, shift staff members (operators and the STA) will be able to provide their own H.P. support until additional staff arrive at the plant site.

- "calculating protected off-site doses at the direction of the Shift Supervisor;"

RESPONSE: Presently, three shift staff members can perform the procedure for calculation of "projected off-site doses" in addition to the shift H.P. technician. They are the Shift Supervisor, the Senior Control Room Operator and the Shift Technical Advisor. This provides sufficient redundancy in personnel to assure a rapid, accurate dose assessment for off-site locations.

- "determining the habitability of the Control Room, OSC, or other on-site assembly areas;"

RESPONSE: All emergency response personnel who are trained to initially activate and subsequently man the Control Room and OSC and other on-site response facilities are additionally trained to determine the habitability of their respective facilities by taking dose rates and sampling and analyzing airborne contamination levels and assessing these rates and levels against pre-established guidelines for habitability. Additionally, each center is provided with air sampling and analysis equipment and dose rate measuring instruments to facilitate this assessment. No initial input by the shift H.P. Technician is necessary.

- "stack sampling and analysis to determine iodine release amounts;"

RESPONSE: The shift H.P. Technician has been trained to procedurally sample the stack effluents as the initial step in assessing iodine release rates. An analysis of sampling times indicates that personnel from the Chem and H.P. Department will respond to the plant site prior to the sample being ready for analysis. The additional personnel will then perform the analysis on the sample.

- "taking and analysis of containment and coolant samples;"

RESPONSE: Containment and coolant samples and the information acquired from them are not needed in the initial states of the emergency. Additional chemistry personnel would be available within one hour to sample and analyze containment and coolant samples as needed.

- "monitoring of plant evacuees;"

RESPONSE: During backshift hours when the basic shift complement is on duty, no evacuees are envisioned as all personnel are responsible for some emergency function. During periods when additional personnel are working at the plant site there will also be additional H.P. technicians on duty, as well as other station personnel who can perform monitoring functions should the need to evacuate occur.

- "determining the habitability of the EOF."

RESPONSE: Personnel who are assigned responsibility for activating and staffing the EOF have received training and are directed procedurally to perform habitability checks initially and periodically during the activation and subsequent functioning of the EOF. No additional assistance from the shift H.P. Technician is necessary.

- "conducting prompt off-site monitoring to determine release levels if on-site instruments are off-scale."

RESPONSE: In the event that on-site instruments which measure releases from the plant stack are either off-scale or inoperable, the security site boundary team is trained and is directed by procedure to measure dose rates in the downwind direction and to sample the air for concentrations of radioactive material. This information is then transferred to the Shift Supervisor so that he may continue his assessment of release levels and possible public protective action recommendations.

2. EMERGENCY NOTIFICATION/COMMUNICATIONS

- "Provide either a dedicated communicator or an individual who does not have any other emergency duties that may interfere with performance of the communicator function. If a non-dedicated individual is proposed, supply an analysis of the duties performed by this individual to demonstrate that there will be no interference with his/her other duties during an accident."

RESPONSE: In our letter of April 14, 1981, we outlined our method of addressing communications. In our review of this method and based on recent experiences with actual and drill-type notifications, we remain committed to the position that initial communications with off-site authorities must be conducted by an individual who possesses a full understanding of plant conditions. These initial communications are critical in that they define the scope of the response necessary by off-site personnel. Any additional

communications required in the short-term would be conducted by the Plant Emergency Director, the Supervisory Control Room Operator or the Shift Technical Advisor. Our review of NUREG 0654 indicates this to be consistent with Table B-1 which footnotes with four (4) asterisks that Notification/Communication may be performed by the engineering aide to the Shift Supervisor.

The results of our backshift call-in method tests indicate that within 30 minutes 1) an additional senior licensed person would be available to the Control Room to assist in communications; 2) the Technical Support Center would be staffed to conduct communications; and 3) the EOF would be staffed to the extent that efficient communications could be implemented.

The duties performed by on-shift personnel during an accident are a function of the accident scenario and are assigned by the Plant Emergency Director initially. It is our belief that notification/communication is an essential part of this response and that the quality of initial information be the maximum attainable. After this initial communication it would be some period of time before off-site agencies were staffed with sufficiently qualified people to maintain the high quality of communications necessary and by that time Vermont Yankee would have sufficient technical staff available at all Emergency Centers.

3. AUGMENTATION CAPABILITIES IN EMERGENCIES

- "In order to demonstrate that the augmentation goals of NUREG 0654 can be met, we suggest an analysis of the Table B-1 criteria, by emergency function, delineating the times that personnel can be available, including the travel time to the site and the time required for notification. Results of actual notification drills should be used to establish notification times. In addition, please discuss the provisions for annually testing and maintaining these augmentation capabilities (e.g., back-shift drills).

If expected augmentation times are significantly different from the goals of Table B-1, alternatives from an improved duty system should be presented."

RESPONSE: Vermont Yankee's position on this item is documented in Reference (d); a copy of that response is attached for your information.

We trust this information is acceptable; however, should you have further questions, please do not hesitate to contact us.

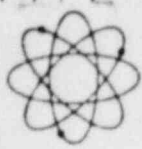
Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

E.W. Jackson
E.W. Jackson

Manager of Operations

EWJ/dm



VERMONT YANKEE NUCLEAR POWER CORPORATION

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REPLY TO:

ENGINEERING OFFICE

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

June 15, 1982

U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

Attention: George H. Smith, Director
Division of Emergency Preparedness
and Operational Support

References: a) License No. DPR-28 (Docket 50-271)
b) USNRC Letter to VYNPC, G.H. Smith to
E.W. Jackson, dated April 28, 1982

Dear Sir:

Subject: Emergency Preparedness - Augmentation Capabilities

Reference (b) requested Vermont Yankee to perform a study to determine how the intent of the augmentation goals of NUREG 0654, Table B-1, can be achieved. Subsequent to implementing our backshift call-in method, as required by Item 8 of Reference (b), notification drills were conducted to evaluate the effectiveness of our program.

Results from these tests generally indicate that sufficient staff augmentation can be achieved to meet the criteria specified in NUREG-0654, Table B-1. The results from our three drills are shown on the attached Table 1.

Vermont Yankee is continuing to investigate other possible methods to facilitate the call-in procedure and result in earlier response times. Included in this investigation is a review of the assignment/utilization of radio-activated pagers and a review of the capabilities of a new telephone system which is to be installed in the next 6-12 months.

We trust this information will be satisfactory for your review; however, should you have any questions or need further clarification of our position, please contact us.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

E.W. Jackson
E. W. Jackson

Manager of Operations

EWJ/dm

D-8206210283

TABLE 1

Backshift Augmentation Test Summary

FUNCTION DESCRIPTION	DEMONSTRATED RESPONSE*		
	30 min	60 min	Total
Notification/ Communication	3/1/1	6/7/2	9/8/3
Sr. Mgr. EOF	2/1/1	0/0/1	2/1/2
Sr. HP Expertise	1/1/1	1/0/0	2/1/1
Off-site Survey Team	3/5/2	4/2/5	7/7/7
On-site Surveys (out of plant)	1/1/1	1/1/1	2/2/2
In-plant Survey	1/1/1	1/1/1	2/2/2
Chem Techs	0/0/0	2/1/1	2/1/1
Core Thermal Hydraulics Eng.	1/1/1	2/0/0	3/1/1
Electrical Eng.	0/1/0	1/0/1	1/1/1
Mechanical Eng.	0/0/0	2/1/1	2/1/1
Mechanical Maint.	0/1/0	0/3/1	0/4/1
Electrical Maint.	0/0/0	1/1/1	1/1/1
I & C Tech.	1/1/1	5/5/0	6/6/1
Radiation Protection	1/1/0	3/3/4	4/4/4
Radwaste Operator	0/0/0	7/4/1	7/4/1
TOTAL	14/15/9	36/29/20	50/44/29

Additional Personnel
responding within 1½ hours

8/28/28

*Drill Dates: June 4, 5, and 7, 1982

NOTE: During the drill on 6/4/82, the Maintenance Department was not informed to implement their fanout procedure.