VERMONT YANKEE
NUCLEAR POWER CORPORATION

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REPLY TO:
ENGINEERING OFFICE
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FRAMINGHAM, MASSACHUSETTS 01701
TELEPHONE 617-872-8100

October 11, 1984

FVY 84-121

United States Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region I
631 Park Avenue
King of Prussia, PA 19406

Attention: Mr. Thomas T. Martin, Director
Division of Engineering and Technical Programs

References:
(a) License No. DPR-28 (Docket No. 50-71)
(b) Letter, VYNPC to USNRC, FVY 84-53, dated May 21, 1984
(c) Letter, USNRC to VYNPC, dated June 15, 1984
(d) Letter, USNRC to VYNPC, dated July 26, 1984
(e) Letter, VYNPC to USNRC, dated August 3, 1984
(f) Letter, USNRC to VYNPC, dated July 6, 1984
(g) Letter, USNRC to VYNPC, NVY 84-196, dated August 22, 1984

Subject: Vermont Yankee Progress, Findings and Interim Compensatory Measures on Appendix R Requirements - September 7, 1984 Conference Call Discussion Summary and Documentation of Additional Compensatory Measures

Dear Sir:

This letter is submitted to provide information concerning Vermont Yankee's progress, findings and interim compensatory measures on Appendix R, Part III.G requirements. Enclosure 1 of this letter provides a response to your request to document the substantive comments of the September 7, 1984, conference call initiated by Vermont Yankee. This conference call occurred as part of Vermont Yankee's continuing effort to comply with NRC's request [Reference (f)] that close contact be maintained with NRC Technical Staff during the development of the Vermont Yankee Reactor Building fire hazard resurvey/associated circuit analysis. Enclosure 2 of this letter provides documentation of implemented compensatory measures (regarding the details of the compensatory measures and their bases) as requested in Reference (g).

A E01

We trust that the enclosed information will be sufficient for your needs; however, should you have any questions or require additional information, please contact us.

Sincerely,

R. W. Capstick

R. W. Capstick
Licensing Engineer

RWC/cmj

Enclosures

cc: Participants per Enclosure 1
Vern Rooney, NRR
W. Raymond, I&E
W. P. Murphy
J. P. Pelletier

ENCLOSURE 1

Minutes of Conference Call Initiated By Vermont Yankee to Inform NRC of Yankee's Progress, Findings, and Interim Compensatory Measures on Appendix R Requirements

Date: September 7, 1984

Time: 1:00 p.m. EST

Participants

NRC	Vermont Yankee
R. Eberly - NRR	W. Penniman - N. Brattleboro
C. Anderson - Region I	R. Pagodin - Vernon
S. Pullani - Region I	D. Girroir - Vernon
	A. Kadak - Framingham
	S. Miller - Framingham
	R. Capstick - Framingham
	E. Sawyer - Framingham
	H. Shaffer - Framingham

Discussion

Vermont Yankee initiated the conference call to inform the NRC on the status of the Appendix R III.G Resurvey and Associated Circuits Study, which is nearing completion. A draft report has been prepared and is currently being reviewed by Vermont Yankee. At a meeting held in King of Prussia on May 24, 1984, Vermont Yankee indicated that when the Associated Circuits Study was complete, we would notify the NRC of any significant findings that would ensure additional interim compensatory measures. The purpose of this conference call was to report on those findings.

The Associated Circuits Study was conducted by tracing the routing of all cables and control circuits for safe shutdown equipment and instruments. Based on a fire protection engineering subdivision of the Reactor Building by elevation and "separation zones", certain areas were found in which cables and control circuits from different "divisions" were located in the same area. The existing compensatory measures instituted on May 23, 1984, covered all but one area on Elevation 280. Table 1 summarizes the associated circuits findings by elevation and describes the interim compensatory action taken or the basis for acceptability. We have instituted additional fire watch checks on the 280 level four times per shift in the area of the instrument racks and the RHR Valves V10-17 and V10-18, as noted on the Table. The NRC Resident Inspector was also notified of this additional measure.

The complete resurvey, which includes the entire plant, is now under review. We are assessing all possible corrective measures in an attempt to optimize the resolution of outstanding issues. We are reviewing the possible combination of fire protection modifications, electrical modifications, and exemptions that may be necessary to assure compliance. As our internal review progresses, additional changes in our Appendix R Compliance Program may be required.

Our current schedule is to complete our review and preparation of a final report which will delineate modifications and schedules by the end of October. Vermont Yankee feels it could be beneficial to tentatively schedule a meeting with the NRC the week of October 29, 1984, to discuss the final report.

ENCLOSURE 1 ATTACHED LIST

SYSTEM	ITEM	PROBLEM	INTERIM COMPENSATORY MEASURES
		Elevation 252 (see Figure 1)	
Automatic Depressurization System	Power/Control Cables for 2 ADS Valves	Power and Control Cables for all ADS Valves are routed on Division II side	Fire extinguishers and fire watch checks four times per shift.
Instruments	PT-2-3-56A	Could lose both divisions of Reactor Pressure	Fire extinguishers and fire watch checks four times per shift.
Instruments	TE-16-19-33C	Could lose both divisions of Torus Temperature	Fire extinguishers and fire watch checks four times per shift.
		Elevation 280 (see Figure 2)	
Residual Heat Removal	V10-17	Could lose ability to open valve needed for cold shutdown	*Fire watch checks four times per shift. Existing fire extinguishers.
Residual Heat Removal	V10-18	Could lose ability to open valve needed for cold shutdown	
Residual Heat Removal	UPS Cables	Could lose ability to power V10-25B and V10-27B needed for cold shutdown	None needed. Alternate Power feeds to MCCs (located at elevation 252) and controlled from the Main Control Room are available.
Instruments	PT-2-3-56A	Could lose both divisions of Reactor Pressure	*Fire watch checks four times per shift. Existing area fire extinguishers are available.

Elevation 303, 318

Residual Heat Removal	USP Feeds to MCCs 89A, B	Could lose ability to power V10-27A, B and V10-25A, B needed for cold shutdown	None needed. Alternate Power feeds to MCCs (elevation 252) controlled from Control Room, are available.

Elevation 213,232

No findings as a result of the Associated Circuits Study.

*New interim compensatory measures initiated as a result of study.

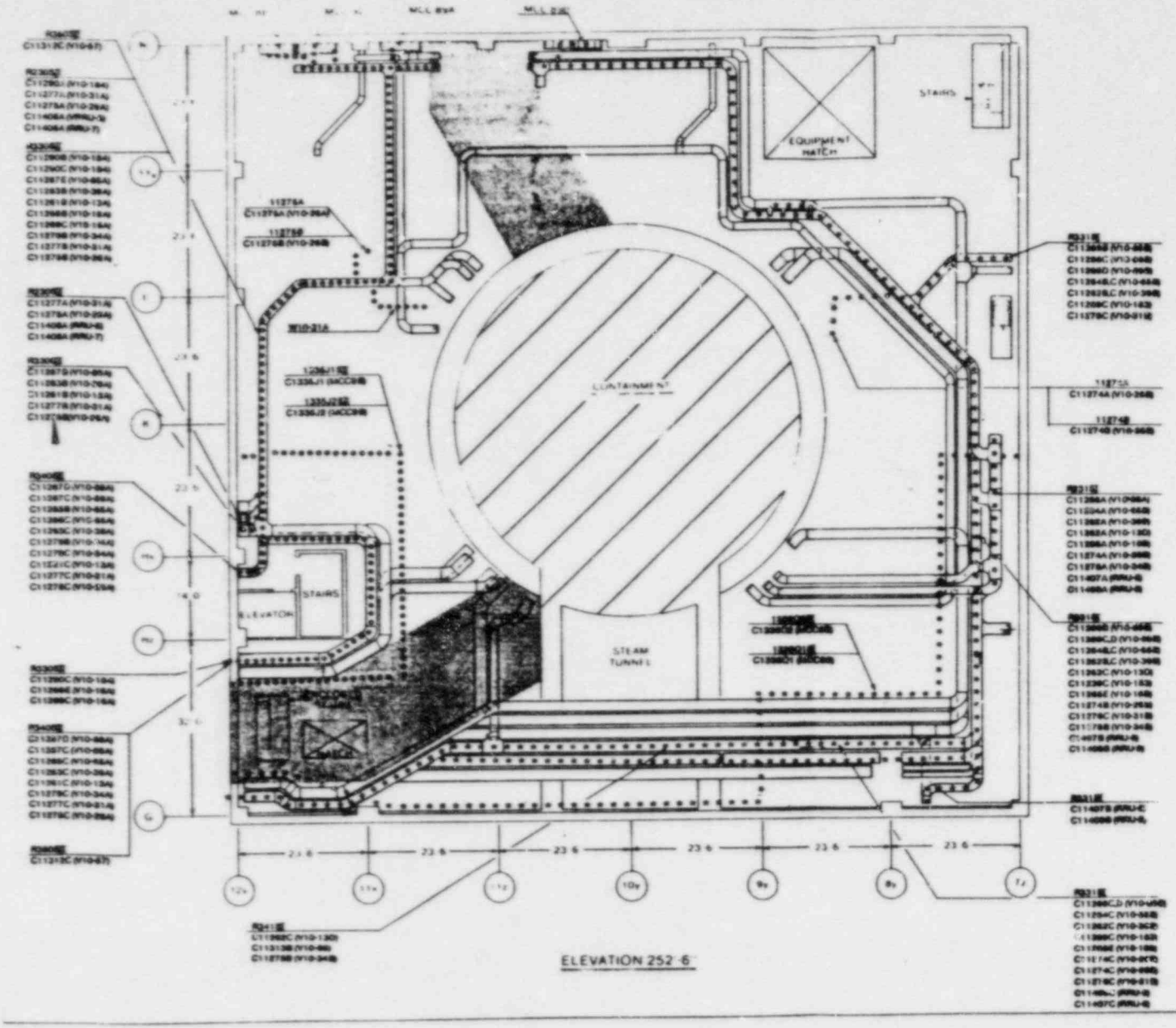

FIGURE 1

(Shaded areas not applicable to this submittal and should be disregarded.)

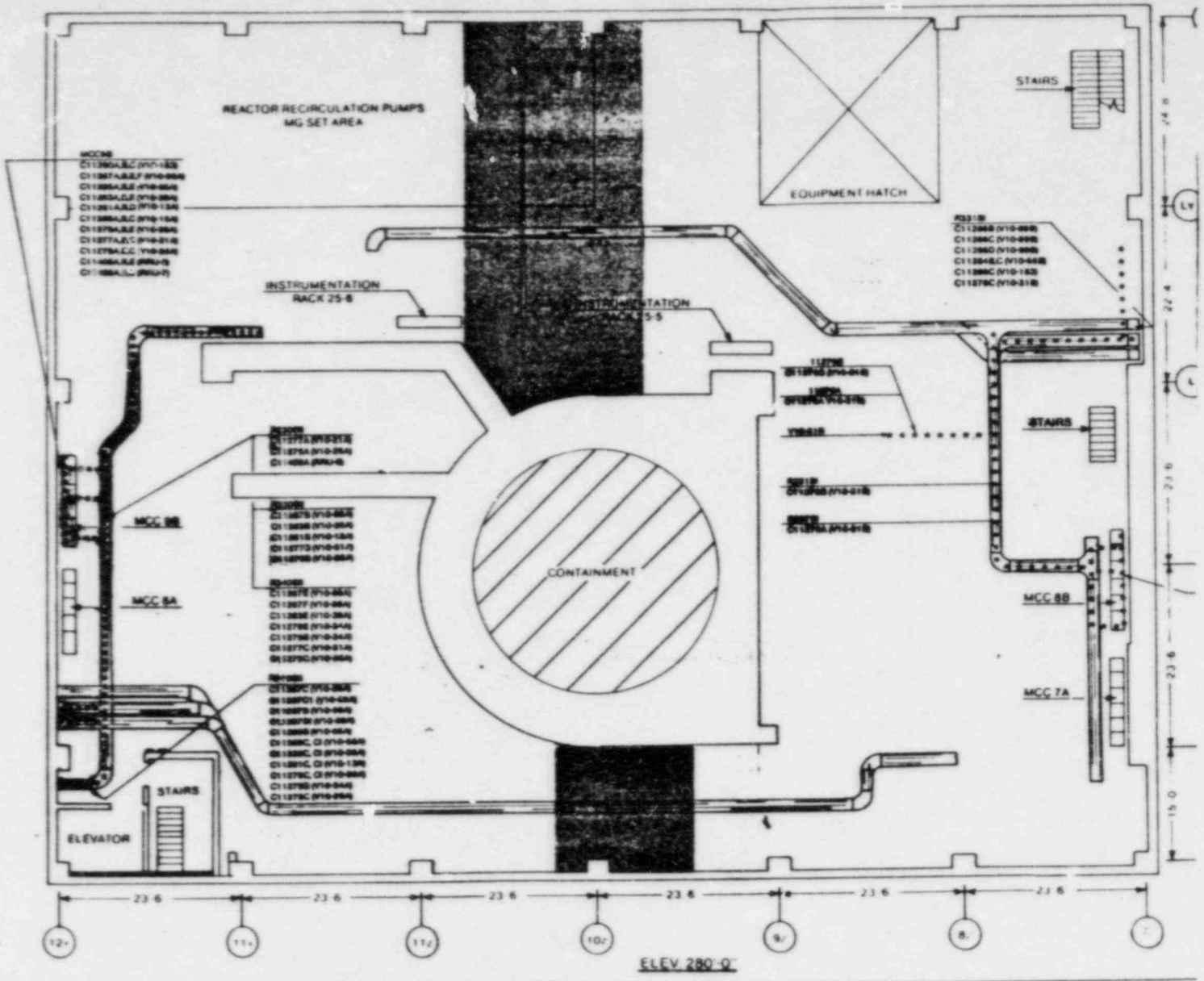

FIGURE 2

(Shaded areas not applicable to this submittal and should be disregarded.)

ENCLOSURE 2

Implemented Compensatory Measures

The additional compensatory measures listed below have been implemented for those areas that may not meet the Appendix R criteria. These measures will 1) limit sources of ignition, 2) control transient combustibles, and 3) provide detection for actual as well as potential fires.

1. A fire watch will rove through each area at least four (4) times per shift,

2. Additional spare fire extinguishers have been positioned in specific areas to supplement existing fire fighting equipment, and

3. The Fire Protection Coordinator will tour the areas of concern at least three (3) times per week.

   The specific areas of concern are identified as follows:

   (a) The Radwaste to Turbine Building Hall where overhead conduits contain power cables to MCC 8B and 9B.

   (b) Reactor Building Northwest Corner Room at Elevation 232 feet where power cables for both trains of RHR, RHR Service Water, and Core Spray Pumps enter the same area of the Reactor Building from the Switchgear Room.

   (c) Reactor Building Northwest Corner at Elevation 252 feet where both trains of control and instrument cables enter the same area of the Reactor Building (this area extends to the Steam Tunnel wall).

   (d) Reactor Building Northeast Corner at Elevation 252 feet where MCC 9D and 89A are in close proximity to MCC 89B. These MCCs provide power for redundant safe shutdown equipment.

   (e) Reactor Building Elevation 280 feet south and east sides where power cable for shutdown cooling valve V10-18 is routed.

These areas include any additional items identified in the recently completed Draft Associated Circuits Study performed on the Reactor Building.

Should we determine that additional areas need compensatory measures, we will notify the NRC Project Manager.