VERMONT YANKEE NUCLEAR POWER CORPORATION

SEVENTY SEVEN GROVE STREET
RUTLAND, VERMONT 05701

B.3.2.1
WVY 79-130

November 20, 1979

REPLY TO:
ENGINEERING OFFICE
TURNPIKE ROAD
WESTBORO, MASSACHUSETTS 01581
TELEPHONE 617-366-9011

United States Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Office of Nuclear Reactor Regulation
Mr. Harold Denton, Director

References: (a) License No. DPR-28 (Docket No. 50-271)
(b) USNRC Letter to YAEC dated October 5, 1979
(c) YAEC Letter to USNRC dated October 18, 1979
(d) USNRC Letter to YAEC dated September 13, 1979

Dear Sir:

Subject: Followup Actions Resulting from the NRC Staff Review Regarding The Three Mile Island Unit 2 Accident

This letter is in response to your letter, Reference (b).

Our initial response with regard to our followup actions, Reference (c), was based on your letter of September 13, 1979 (Reference (d)) and our perception of the clarifications provided at the regional and topical meetings that we attended. A revised version of Enclosure 1 of Reference (c) is enclosed which addresses several deficiencies that have been identified in our initial response to Reference (d) as well as updated commitments relative to BWR Owner's Group Positions; however, we have not assessed any expansion to the scope of these requirements which may be implied by Enclosure 1 of Reference (b) and reiterate that our current schedule is based on our understanding of your letter of September 13, 1979.

Our schedule for completing each of the followup requirements is firm. In the event of a delay in any of our implementation commitments, we will inform you of the degree of completion by January 1, 1980, including a detailed justification for the delay.

We trust this information is satisfactory; however, if you have any further questions, please contact us.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

D. E. Moody

D. E. Moody
Manager of Operations

DEM/dmp

Enclosure

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ATTACHMENT

Items labeled A will be implemented by 1/1/80. Items labeled B will be implemented by 1/1/81.

Section Number	Abbreviated Title	Requirement	Implementation Requirement	Commitment/Notes
2.1.1	Emergency Power Supply Requirement	Complete Implementation	A	Vermont Yankee meets the intent of this recommendation. The power operated reactor vessel safety/relief valves are powered from emergency sources. Redundant valves are provided. No block valves are or will be provided because this would be detrimental to safety. Vessel level instruments are powered from emergency sources.
2.1.2	Relief and Safety Valve Testing	Submit program description and schedule	A	The program description and schedule will be provided by the BWR Owners Group by January 1, 1980.
		Complete test program	By July 1981	It is expected that the testing will be complete by July 1981.
2.1.3.a	Direct Indication of Valve Position	Complete implementation	A	Relief Valves During the Sept-Oct. 1979 refueling outage changes were implemented at Vermont Yankee to facilitate/permit the installation during power operation of pressure instrumentation to sense safety/relief valve operation. A purchase order was issued to General Electric in Sept. for the required components. Despite our attempts to expedite delivery of the needed hardware, current information indicates it will not be available for implementation by Jan. 1, 1980. We intend to install the remaining pressure instrumentation as soon as possible following receipt.

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				Safety Valves: We firmly believe that the alternative proposed by the BWR Owner's Group is viable and provides adequate indication of a stuck open safety valve. However, in light of your recent letter, Eisenhut to Keenan, dated 11/13/79 which documents the NRC's refusal of the high drywell pressure option we will re-evaluate the need for installing additional equipment. Concurrently we will initiate efforts to design, procure and install any equipment deemed necessary during the 1980 refueling outage.
2.1.3.b	Instrumentation for Inadequate Core Cooling	Develop procedures and describe existing inst.	A	Vermont Yankee will meet the intent of this recommendation. Existing instrumentation and procedures have already been described in responses to Bulletin 79-08. The need for adequate core cooling instrumentation of a new design is being reviewed generically by the BWR Owners Group and the reactor vendor. Vermont Yankee expects to concur with the findings of these groups. BWR coolant systems operate at saturated temperatures, consequently a sub-cooling meter is of no value and will not be installed.
		New level instrument design submitted	A	
		Subcooling meter installed	A	
		New level instrument installed	B	
2.1.4	Diverse Containment Isolation	Complete implementation	A	Vermont Yankee intends to comply with the intent of this recommendation. Changes will be made to automatic containment isolation valve logic as required following receipt of equipment.

Section Number	Abbreviated Title	Requirement	Implementation Requirement	Commitment/Notes
2.1.5.a	Dedicated H_2 Control Penetrations	Description and implementation schedule	A	Vermont Yankee meets the intent of this recommendation regarding single failure criteria. In addition connections already exist on the CAD system which could be used for additional H_2 control penetrations.
		Complete installation	B	
2.1.5.c	Recombiners	Review procedures and bases for recombiner use	A	The requirement for recombiners has been placed in abeyance.
2.1.6.a	Systems Integrity for High Radioactivity	Immediate leak reduction program	A	Vermont Yankee intends to meet this recommendation. A review of systems will be conducted with the purpose of identifying methods of minimizing leakage of radioactive fluids. In addition, a preventative maintenance program will be implemented. We endorse the BWR Owners Group position on this matter.
		Preventive maintenance program	A	
2.1.6.b	Plant Shielding Review	Complete the design review	A	Vermont Yankee intends to meet this recommendation. A preliminary shielding review will be conducted with the objective of defining required systems and shielding requirements to enable operation and maintenance of these required systems. Modifications to plant systems will be dependent upon the results of the design review. The schedule for completion of the modifications will then be consistant with any associated constraints imposed by labor and material availability, with the objective of completion of the modifications by the January 1, 1981 date. We endorse the BWR Owners Group position on this matter.
		Implement plant modifications	B	

Section Number	Abbreviated Title	Requirement	Implementation Requirement	Commitment/Notes
2.1.7.a	Auto Initiation of Auxiliary Feed	Complete implementation of control grade	A	This NUREG 0578 position does not pertain to BWRs.
		Complete implementation of safety grade	B	
2.1.7.b	Auxiliary Feed Flow Indication	Complete implementation	A	This NUREG 0578 position does not pertain to BWRs.
2.1.8.a	Post Accident Sampling	Design review complete	A	Vermont Yankee will complete a review of its capability to obtain the necessary samples by January 1, 1980.
		Preparation of revised procedures	A	
		Implement Plant modifications	B	If the review to be complete in Item 2.1.8a-(1) indicates that the capability exists to obtain the desired samples procedures will then be revised to implement that capability by January 1, 1980.
		Description of proposed modification	A	If it is determine through the review the sampling capability does not exist, plant modifications will be engineered which will give that capability, in accordance with the January 1, 1981 requested date for completion.
				Vermont Yankee will submit a description of the proposed modifications by January 1, 1980.
2.1.8.b	High Range Radiation Monitors	Installation complete	B	Vermont Yankee will install extended range noble gas effluent monitors and high range containment radiation monitors by January 1, 1981, subject to instrument qualification and availability. We endorse the BWR Owners Group position on this item.

Section Number	Abbreviated Title	Requirement	Implementation Requirement	Commitment/Notes
		Quantifying Radioactive Releases	A	Vermont Yankee will have a method of quantifying radioactivity releases should the existing effluent instrumentation go offscale available for review by the NRC Emergency Plan Review Team.
2.1.8.c	Improved Iodine Instrumentation	Complete implementation	A	Vermont Yankee presently has the capability to determine airborne iodine concentrations. Procedures presently in effect require the use of charcoal for iodine sampling and the use of plant's GeLi detector for gamma ray energy spectrum analysis which can discriminate iodine from noble gases. We endorse the BWR Owners Group position on this item.
2.1.9	Transient and Accident Analysis	Complete analysis procedures, and training in areas of: small break LOCA, inadequate core cooling accidents and transients		To accomplish this action item, Vermont Yankee will utilize generic work produced by the NSSS vendor in accordance with commitments made between the BWR Owners' Group, and the Commission. Implementation of emergency procedures and initiation of training programs will be accomplished expeditiously, consistent with the intent of Reference (b) of the cover letter. In addition, within one year of completion of the generic analytical work, Vermont Yankee will validate independently the applicability of the generic guidelines and analyses for the Vermont Yankee plant.

Section Number	Abbreviated Title	Requirement	Implementation Requirement	Commitment/Notes
	Containment Pressure Monitor	Installation complete	B	Vermont Yankee will meet the intent of these recommendations. Containment pressure, level, and hydrogen monitoring equipment will be in service by the scheduled date. Additional discussion on these items is presented in the BWR Owners Group positions.
	Containment Water Level Monitor	Installation complete	B	
	Containment Hydrogen Monitor	Installation complete	B	
	RCS Venting	Design submitted Installation complete	A B	VY meets the intent of this recommendation. The details are discussed in the BWR Owners Group position on this item. There are 4 SRV's located on the main steam lines which are safety grade and are operable individually or collectively from the control room. In addition the vessel head is vented to one steam line and vent valves, operable from the main control room, are provided which vent to the drywell. Venting occurs also with operation of the RCIC or HPCI turbine.

NOTE: On the following items Vermont Yankee specifically endorses the BWR Owners Group positions and will use them as guidelines for implementation.

2.2.1.a	Shift Supervisor Responsibilities	Complete implementation	A	Vermont Yankee will meet this recommendation. Procedures defining SS responsibilities will be in effect on schedule.
2.2.1.b	Shift Technical Advisor	Shift technical advisor on duty	A	Vermont Yankee will augment the current staff with a shift technical advisor on duty by January 1, 1980

Section Number	Abbreviated Title	Requirement	Implementation Requirement	Commitment/Notes
		Complete Training	B	Vermont Yankee will implement the necessary procedures and complete the training of the shift technical advisor by January 1, 1981.
2.2.1.c	Shift Turnover Procedures	Complete implementation	A	Vermont Yankee will meet this recommendation. Procedures defining the requirements for shift turnover will be in effect on schedule.
2.2.2.a	Control Room Access Control	Complete implementation	A	Vermont Yankee will meet the intent of this recommendation. Procedures controlling access to the control room will be in effect on schedule.
2.2.2.b	Onsite Technical Support Center	Establish center	A	Vermont Yankee will meet the intent of this recommendation. A technical support center will be designated on site and appropriate equipment made available. Description of the permanent center will be submitted by January 1, 1980.
2.2.2.c	Onsite Operational Support Center	Complete implementation	A	Vermont Yankee will meet the intent of this recommendation. An operational support center will be established on the site and will be provided with appropriate equipment.