March 5, 1998

Mr. Donald A. Reid
Senior Vice President, Operations
Vermont Yankee Nuclear Power Corporation
185 Old Ferry Road
Brattleboro, VT 05301

SUBJECT: ISSUANCE OF AMENDMENT NO. 153 TO FACILITY OPERATING LICENSE NO. DPR-28, VERMONT YANKEE NUCLEAR POWER STATION (TAC NO. MA0197)

The Commission has issued the enclosed Amendment No. 153 to Facility Operating License DPR-28 for the Vermont Yankee Nuclear Power Station, in response to your application dated November 20, 1997.

The amendment revises Technical Specification (TS) 3.10 and its associated Bases to change the requirements for the main station batteries.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Original signed by:

Richard P. Croteau, Project Manager
Project Directorate I-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-271

Enclosures: 1. Amendment No. 153 to DPR-28
2. Safety Evaluation

cc w/encls: See next page

DOCUMENT NAME: G:\JABBOUR\VYMA0197.AMD

***PREVIOUS CONCURRENCE**

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DATE	02/18/98		02/13 /98		02/17/98		03/04/98			

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DATED: March 5, 1998

AMENDMENT NO. 153 TO FACILITY OPERATING LICENSE NO. DPR-28 VERMONT YANKEE ATOMIC POWER STATION

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

VERMONT YANKEE NUCLEAR POWER CORPORATION

DOCKET NO. 50-271

VERMONT YANKEE NUCLEAR POWER STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 153
License No. DPR-28

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment filed by the Vermont Yankee Nuclear Power Corporation (the licensee) dated November 20, 1997, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-28 is hereby amended to read as follows:

   (B) Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 153 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Cecil O. Thomas, Director
Project Directorate I-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specification

Date of Issuance: March 5, 1998

ATTACHMENT TO LICENSE AMENDMENT NO. 153

FACILITY OPERATING LICENSE NO. DPR-28

DOCKET NO. 50-271

Replace the following pages of Appendix A Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Remove	Insert
212	212
220	220

3.10 LIMITING CONDITIONS FOR OPERATION	4.10 SURVEILLANCE REQUIREMENTS
	within 13 seconds and accept the emergency loads and start each load within the specified starting time. The results shall be logged.
	c. Each diesel fuel oil transfer pump shall be tested in accordance with Specification 4.6.E.
2. Battery Systems	2. Battery Systems
The following battery systems shall be operable:	
a. The four Neutron Monitoring and Process Radiation Batteries, associated chargers, and 24 VDC Distribution Panels.	a. Every week the specific gravity, temperature, level, and voltage of the pilot cell and overall battery voltage shall be measured and logged.
b. The two main station battery systems consisting of:	b. Every three months the voltage, temperature, level, and specific gravity of each cell, and overall battery voltage shall be measured and logged.
1. Battery A1, Battery Charger A and Bus DC-1.	
2. Battery B1, Battery Charger B and Bus DC-2.	

BASES:

3.10 AUXILIARY ELECTRIC POWER SYSTEMS

A. The objective of this Specification is to assure that adequate power will be available to operate the emergency safeguards equipment. Adequate power can be provided by any one of the following sources: either of the startup transformers, backfeed through the main transformer, the 4160 volt line from the Vernon Hydroelectric Station or either of the two diesel generators. The backfeed through the main transformer and 4160 volt Vernon line are both delayed access off-site power sources. Backfeeding through the main transformer can be accomplished by disconnecting the main generator from the main transformer and energizing the auxiliary transformer from the 345 kV switchyard through the main transformer. The time required to perform this disconnection is approximately six hours. The 4160 volt line from the Vernon Hydroelectric Station can be connected to either of the two emergency buses within seconds by simple manual switching operation in the Main Control Room.

Two 480 V Uninterruptible Power Systems supply power to the LPCIS valves via designated Motor Control Centers. The 480 V Uninterruptible Power Systems are redundant and independent of any on-site power sources.

This Specification assures that at least two off-site and two on-site power sources, and both 480 V Uninterruptible Power Systems will be available before the reactor is taken beyond "just critical" testing. In addition to assuring power source availability, all of the associated switchgear must be operable as specified to assure that the emergency cooling equipment can be operated, if required, from the power sources.

Station service power is supplied to the station through either the unit auxiliary transformer or the startup transformers. In order to start up the station, at least one startup transformer is required to supply the station auxiliary load. After the unit is synchronized to the system, the unit auxiliary transformer carries the station auxiliary load, except for the station cooling tower loads which are always supplied by one of the startup transformers. The station cooling tower loads are not required to perform an engineered safety feature function in the event of an accident; therefore, an alternate source of power is not essential. Normally one startup transformer supplies 4160 volt Buses 1 and 3, and the other supplies Buses 2 and 4; however, the two startup transformers are designed with adequate capacity such that, should one become or be made inoperable, temporary connections can be made to supply the total station load (less the cooling towers) from the other startup transformer.

A battery charger is supplied for each battery. In addition, the two 125 volt station batteries have a spare charger available.

Power for the Reactor Protection System is supplied by 120 V ac motor generators with an alternate supply from MCC-8B. Two redundant, Class 1E, seismically qualified power protection panels are connected in series with each ac power source. These panels provide overvoltage, undervoltage, and underfrequency protection for the system. Setpoints are chosen to be consistent with the input power requirements of the equipment connected to the bus.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 153 TO FACILITY OPERATING LICENSE NO. DPR-28

VERMONT YANKEE NUCLEAR POWER CORPORATION

VERMONT YANKEE NUCLEAR POWER STATION

DOCKET NO. 50-271

1.0 INTRODUCTION

By letter dated November 20, 1997, the Vermont Yankee Nuclear Power Corporation (the licensee) submitted a request to amend the Vermont Yankee Nuclear Power Station (Vermont Yankee) Technical Specification (TS) 3.10 and its associated Bases. The proposed amendment would revise the TS and the Bases to eliminate the use of spare battery charger AB for meeting the TS because it is not a fully capable equivalent to either battery charger A or B.

2.0 EVALUATION

Vermont Yankee's design basis for 125 volt dc power requires: (1) that Vermont Yankee have two redundant 125 volt dc power systems, each capable of independently supplying its required loads; and (2) that no single failure shall cause a loss of dc power from both redundant dc systems. Battery chargers are a part of the 125 volt dc power systems. The function of the battery chargers is to supply dc power during normal plant operations, and to maintain their associated 125 volt station batteries fully charged so that sufficient dc power will be available during emergency conditions to operate all required equipment. To meet its design basis requirements, the licensee must have at least two independent battery chargers, one for each of the two redundant 125 volt dc power systems.

The 125 volt dc power systems for Vermont Yankee include two dedicated battery chargers, Charger A and Charger B, and a spare battery charger, Spare Charger AB. Chargers A and B are fully capable battery chargers that are independent of one another. Spare Charger AB can provide sufficient power to operate required equipment, but it is not independent of Charger A because it is supported by the same emergency diesel generator, and is not fully capable because it is load shed during a loss of normal power and its feeder breaker, which must be locally reclosed, may not be accessible during certain postulated accident scenarios.

Vermont Yankee TS 3.10.A.2., Battery Systems, presently allows the licensee to operate indefinitely with Charger A or B out-of-service provided Spare Charger AB is available and serving as a substitute. However, because Spare Charger AB is not a fully capable equivalent for either Charger A or Charger B, the licensee has proposed: (1) to modify TS 3.10.A.2. in order to preclude the possibility that Spare Charger AB might be used as a substitute for either Charger A or Charger B; and (2) to modify TS Bases 3.10 in order to clarify that Spare Charger AB is not a substitute for either Charger A or Charger B. Both of these proposed changes are intended to restrict a presently allowed plant operating configuration in order to ensure that Vermont Yankee will be operated in accordance with its design basis.

The TS changes proposed by the licensee are consistent with both NRC requirements and the Vermont Yankee design basis requirements. Because the proposed changes do not require any equipment modifications, there is no chance that implementation of these proposed changes will create a new or unanalyzed accident scenario.

The NRC staff has reviewed the licensees' proposed changes to restrict a presently allowed plant operating configuration. Based on this review, the staff finds that the changes are acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Vermont State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in amounts, and no significant change in the types of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (62 FR 68319). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: V. Beaston, NRR

Date: March 5, 1998