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.157TO FACILITY OPERATING LICENSE NO.

DPR-28, VERMONT YANKEE NUCLEAR POWER STATION (TAC NO. M99050)

Dear Mr. Reid:

The Commission has issued the enclosed Amendment No.157 to Facility Operating License No. DPR-28 for the Vermont Yankee Nuclear Power Station. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated June 9, 1997.

The amendment revises TSs Section 6.0 to add and revise reference to NRC-approved methodologies which will be used to validate or generate the cycle-specific thermal hydraulic stability based operating limits in the Vermont Yankee Core Operating Limits Report.

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

Sincerely.

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.157 to

License No. DRP-28

2. Safety Evaluation

cc w/encls: See next page

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#### D. Reid

CC:

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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. 157 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 June 9, 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 set forth in 10 CFR Chapter I;
  - 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) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 157, 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 to be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Cecil O. Thomas, Director Project Directorate I-3

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Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical

**Specifications** 

Date of Issuance: April 7, 1998

# ATTACHMENT TO LICENSE AMENDMENT NO. 157

# FACILITY OPERATING LICENSE NO. DPR-28

# **DOCKET NO. 50-271**

Replace the following page 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	<u>Insert</u>		
· 270 - · · · · · · · · · · · · · · · · ·	270 270a (new page)		

#### **VYNPS**

Letter from L. A. Tremblay, Jr. (VYNPC) to USNRC, "Supplemental Information to VYNPC April 19, 1990 Response Regarding FROSSTEY-2 Fuel Performance Code," BVY 90-054, dated May 10, 1990 (Approved by NRC SER, dated September 24, 1992).

Letter from L. A. Tremblay, Jr. (VYNPC) to USNRC, "Responses to Request for Additional Information on FROSSTEY-2 Fuel Performance Code," BVY 91-024, dated March 6, 1991 (Approved by NRC SER, dated September 24, 1992).

Letter from L. A. Tremblay, Jr. (VYNPC) to USNRC, "LOCA-Related Responses to Open Issues on FROSSTEY-2 Fuel Performance Code," BVY 92-39, dated March 27, 1992 (Approved by NRC SER, dated September 24, 1992).

Letter from L. A. Tremblay, Jr. (VYNRC) to USNRC, "FROSSTEY-2 Fuel Performance Code - Vermont Yankee Response to Remaining Concerns," BVY 92-54, dated May 15, 1992 (Approved by NRC SER, dated September 24, 1992).

Report, "Loss-of-Coolant Accident Analysis for Vermont Yankee Nuclear Power Station," NEDO-21697, August 1977, as amended (Approved by NRC SER, dated November 30, 1977).

Report, "General Electric Standard Application for Reactor Fuel (GESTARII)," NEDE-24011-P-A, GE Company Proprietary (the latest NRC-approved version will be listed in the COLR).

Report, General Electric Nuclear Energy, "BWR Owner's Group Long-Term Solutions Licensing Methodology," NEDO-31960, June 1991 (Approved by NRC SER, dated July 12, 1993).

Report, General Electric Nuclear Energy, "BWR Owner's Group Long-Term Solutions Licensing Methodology," NEDO-31960, Supplement 1, March 1992 (Approved by NRC SER, dated July 12, 1993).

Report, N. Fujita, et al., "Method for Power/Flow Exclusion Region Calculation Using the LAPUR5 Computer Code," YAEC-1926-A (Approved by NRC SER, dated November 5, 1996).

The core operating limits shall be determined so that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety analysis are met. The COLR, including any mid-cycle revisions or supplements thereto, shall be provided upon issuance, for each reload cycle, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

# B. Reportable Occurrences

This section deleted.

#### **VYNPS**

- C. <u>Unique Reporting Requirements</u>
  - 1. Annual Radioactive Effluent Release Report
    - a. Within 90 days after January 1 of each year, a report shall be submitted covering the radioactive content of effluents released to unrestricted areas during the previous calendar year of operation.

# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

# RELATED TO AMENDMENT NO. 157 TO FACILITY OPERATING LICENSE NO. DPR-28

# **VERMONT YANKEE NUCLEAR POWER CORPORATION**

# VERMONT YANKEE NUCLEAR POWER STATION

# **DOCKET NO. 50-271**

#### 1.0 INTRODUCTION

WICLEAR REGULA,

By letter dated June 9, 1997, the Vermont Yankee Atomic Power Corporation (the licensee) submitted a request to amend the Vermont Yankee Nuclear Power Station (Vermont Yankee) Technical Specifications (TSs). The proposed amendment would revise TSs Section 6.0 to add a reference to an NRC-approved methodology used for validating the cycle specific thermal hydraulic stability based operating limits in the Vermont Yankee core operating limits report (COLR).

#### 2.0 EVALUATION

Section 6.0 of the Vermont Yankee TSs contains a list of methods approved by the NRC to generate the thermal limits specified in the Vermont Yankee COLR. In a safety evaluation dated November 5, 1996, the NRC approved use of the LAPUR5 computer code at Vermont Yankee to calculate the power/flow exclusion region. In the safety evaluation, the NRC found that Vermont Yankee's implementation of LAPUR5 as described in YAEC-1926, "Method for Power/Flow Exclusion Region Calculation Using the LAPUR5 Computer Code," was technically adequate. In the cover letter that forwarded the safety evaluation to the licensee, the NRC stated "Prior to incorporating a power/flow exclusion region calculated by this methodology into the plant Core Operating Limits Report, this approved methodology should be referenced in the plant Technical Specifications." The proposed amendment will incorporate the previously approved LAPUR5 methodology into the Vermont Yankee TSs. The licensee's submittal added a suffix letter "A" to the report title, YAEC-1926-A, to indicate that the methodology was approved by the NRC in a safety evaluation report. Consistent with Generic Letter 88-16, section 6.0 of TS is to be modified to reference the following:

Report, N. Fujita, et al., "Method for Power/Flow Exclusion Region Calculation Using the LAPUR5 Computer Code," YAEC-1926-A (Approved by NRC SER, dated November 5, 1996).

Based on its review, the NRC staff finds that the proposed amendment is acceptable since it documents a methodology that was previously approved for the licensee and is appropriate to reference in the TSs. Use of the approved methodology will ensure that the values of cycle-specific parameters will be determined such that all applicable limits of the plant safety analysis are met.

### 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 43377). 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 CONSULTATION

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: Richard Croteau

Date: April 7, 1998