

October 2, 2001

Mr. Michael A. Balduzzi
Senior Vice President and Chief Nuclear Officer
Vermont Yankee Nuclear Power Corporation
185 Old Ferry Road
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SUBJECT: VERMONT YANKEE NUCLEAR POWER STATION - ISSUANCE OF
AMENDMENT RE: SECONDARY POST ACCIDENT MONITORING
INSTRUMENTATION (TAC NO. MB1742)

Dear Mr. Balduzzi:

The Commission has issued the enclosed Amendment No. 204 to Facility Operating License DPR-28 for the Vermont Yankee Nuclear Power Station, in response to your application dated April 17, 2001.

The amendment removes unnecessary details for certain secondary post-accident monitoring instrumentation from Technical Specification (TS) Table 3.2.6.

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

Sincerely,

/RA/

Robert M. Pulsifer, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-271

Enclosures: 1. Amendment No. 204 to
License No. DPR-28
2. Safety Evaluation

cc w/encls: See next page

Vermont Yankee Nuclear Power Station

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VERMONT YANKEE NUCLEAR POWER CORPORATION

DOCKET NO. 50-271

VERMONT YANKEE NUCLEAR POWER STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 204
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 April 17, 2001, 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) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 204, 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 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

James W. Clifford, Chief, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: October 2, 2001

ATTACHMENT TO LICENSE AMENDMENT NO. 204

FACILITY OPERATING LICENSE NO. DPR-28

DOCKET NO. 50-271

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove

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Insert

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 204 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 April 17, 2001, the Vermont Yankee Nuclear Power Corporation (the licensee) submitted a request to amend the Vermont Yankee Nuclear Power Station (VY) Technical Specifications (TSs). The amendment revises the TSs to remove unnecessary details for certain secondary post-accident monitoring (PAM) instrumentation from TS Table 3.2.6. The unnecessary details consist of the instrumentation identification numbers and ranges of certain secondary PAM instrumentation that are in TS Table 3.2.6.

2.0 BACKGROUND

Requirements for position indicating systems for safety relief valves (SRVs) and safety valves (SVs) are based on the need to provide the plant operator with a diagnostic aid to reduce ambiguity between indicators that might indicate either an open SRV, SV, or a small line break. VY License Amendment No. 63, dated March 2, 1981, originally added requirements to TS Table 3.2.6 for monitoring SRV and SV position as part of several changes related to TMI-2 Lessons Learned Category "A" requirements. These provisions were proposed in direct response to the NRC's letter dated July 2, 1980, to all Boiling Water Reactor licensees, which included a model TS. The model TS suggested establishing requirements for primary and backup detectors associated with the valve position indication functions for SRVs and SVs.

2.1 Design Description

The primary indicating system consists of tailpipe pressure switches that monitor the position of each SRV, and acoustic accelerometers which monitor the position of each SV. These provide the control room operator with a direct means to monitor SRV and SV position, and are the primary indicating systems noted in TS Table 3.2.6.

Notes 4 and 5 in Table 3.2.6 provide an alternate means for determining valve position.

The secondary indicating systems consist of downstream temperature detectors (thermocouples) for both SRVs and SVs, and one other means for confirming valve position. For SRVs, the other TS specified secondary indicator is torus water temperature, and for SVs it is containment pressure.

The discharge of the SRVs is piped to the suppression pool which terminates below the pool water level to permit the steam to condense in the pool when a valve actuates. The SVs discharge directly into the drywell atmosphere. The thermocouples located on the SRV and SV discharge detect valve leakage with readout and high temperature alarm in the control room. Thus, following the opening of an SRV or SV, the plant operator is able to monitor the resultant effects on suppression pool temperature or drywell pressure.

3.0 EVALUATION

The operability of the PAM instrumentation ensures that there is sufficient information available on selected plant parameters to monitor and assess plant status and behavior following an accident. The PAM instrumentation that provides primary information is necessary to support the plant operator in taking those manual actions for which no automatic control is provided and are required for safety systems to accomplish their safety functions during design-basis accident events. The instrumentation that monitors these key variables is designated as either Type A or Category 1 in accordance with Regulatory Guide (RG) 1.97, "Instrumentation For Light-Water-Cooled Nuclear Power Plants To Assess Plant and Environs Conditions During and Following an Accident."

The Nuclear Regulatory Commission (NRC) staff reviewed VY's RG 1.97 program and found it acceptable, as delineated in the Safety Evaluation Report dated December 4, 1990. Neither the SRV position indication, nor the SV position indication is designated as RG 1.97 Type A or Category 1 instrumentation.

The current TS Limiting Condition for Operation (LCO) 3.2.G requires that instrumentation that displays information in the control room necessary for the plant operator to initiate and control the systems used during and following an accident shall be operable during operation in accordance with Table 3.2.6. Table 3.2.6 includes instrumentation for monitoring SRV position from pressure switches and SV position from an acoustic monitor. Notes 4 and 5 in Table 3.2.6 specify requirements for instrumentation that provide a secondary or backup means for determining SRV or SV position should the primary PAM instrumentation be unavailable. By monitoring secondary parameters, the control room operator should be able to ascertain the same conditions monitored by the primary instruments.

The licensee proposes the following changes:

The first sentence of Note 4 in Table 3.2.6 presently states:

From and after the date..... reactor operation may continue provided safety/relief valve position can be determined from Recorder #2-166 (steam temperature in SRVs, 0-600°F) and Meter 16-9-33A or C (torus water temperature, 0-250°F).

The first sentence of Note 4 in Table 3.2.6 would be changed to:

From and after the date..... reactor operation may continue provided safety/relief valve position can be determined by monitoring safety/relief valve discharge temperature and torus water temperature.

The first sentence of Note 5 in Table 3.2.6 presently states:

From and after the date..... reactor operation may continue provided safety valve position can be determined from Recorder #2-166 (thermocouple, 0-600°F) and Meter 16-19-12A or B (containment pressure (-15) - (+260) psig.

The first sentence of Note 5 in Table 3.2.6 would be changed to:

From and after the date..... reactor operation may continue provided safety valve position can be determined by monitoring safety valve discharge temperature and primary containment pressure.

The existing details of the instrument component identification numbers in the TS are overly restrictive. The proposed changes remove unnecessary detail from the TS regarding specific instrumentation. The existing TS delineates details of the instrumentation used for monitoring the parameters. The proposed changes delete instrument identification numbers and instrument ranges. The proposed changes do not alter the availability requirements for secondary (or backup) indicators of valve position.

The proposed changes do not change the meaning or application of the TS requirement. Furthermore, the proposed changes do not modify the design bases of any RG 1.97 instrumentation. The proposed changes would delete instrument identification numbers and instrument ranges from the TS for the instrumentation discussed herein. These changes do not affect the ability of the PAM instrumentation to perform its function.

The staff, therefore, finds the proposed TS changes discussed herein acceptable.

4.0 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.

5.0 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 (66 FR 27178). 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.

6.0 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.

7.0 REFERENCES:

1. Branch Technical Position HICB-10 "Guidance on Application of Regulatory Guide 1.97"
<http://www.nrc.gov/NRC/NUREGS/SR0800/CH7/b10v05.htm>
2. 10 CFR Part 50 Appendix A
<http://www.nrc.gov/NRC/CFR/PART050/part050-appa.htm>
3. Vermont Yankee Nuclear Power Corporation (VYNPC) to U.S. Nuclear Regulatory Commission (USNRC), dated March 29, 1996, NUDOCS Accession Number 9604020310
4. USNRC to VYNPC, Conformance to Regulatory Guide 1.97 December 4, 1990, NUDOCS Accession Number 9012110220
5. Regulatory Guide 1.97, Revision 3, "Instrumentation For Light-Water-Cooled Nuclear Power Plants To Assess Plant and Environs Conditions During and Following an Accident," May 31, 1983, NUDOCS Accession Number 8502060303
6. Vermont Yankee Nuclear Power Corporation (VYNPC) Amendment No. 63, March 2, 1981, NUDOCS Accession Number 8103190216

Principal Contributor: D. Spaulding

Date: October 2, 2001