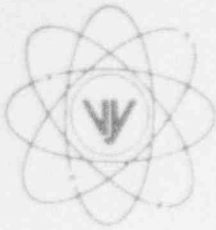


VERMONT YANKEE NUCLEAR POWER CORPORATION



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August 27, 1993
BVY 93 - 81

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Reference: a. License No. DPR-28 (Docket No. 50-271)

Subject: Proposed Change No. 170 to the Vermont Yankee Technical Specifications -
Revisions Relating to 10CFR20

Dear Sir:

Pursuant to Section 50.59 of the Commission's Rules and Regulations, Vermont Yankee hereby proposes the following changes to Appendix A of the Facility Operating License.

Proposed Change

This proposed change is being submitted to bring the Vermont Yankee Technical Specifications into compliance with recent revisions to 10CFR Part 20. In addition, several administrative changes are being proposed. The following descriptions detail the proposed changes:

1. Pages 4a, 147, 148, 149, 160f and 188: Definitions for "Member(s) of the Public" and "Site Boundary" are being revised to conform to the definitions or use of terms as provided in 10CFR20.1003. In addition, new definitions for "Unrestricted Area" and "Restricted Area" are added to reflect their use in the revised Technical Specifications and definitions in 10CFR20.1003. A new definition is also added for the "Controlled Area". This area is now identified as that portion of site property where the dose limit of 100 mrem per year (10CFR20.1301) to "Members of the Public" apply. With respect to existing Technical Specification off-site dose limits that are lower than 100 mrem/year, the NRC has indicated that 10CFR50, Appendix I, and 40CFR190 dose limits to members of the public still apply at the site boundary and beyond where the licensee no longer has control in limiting access to an area. As such, those Technical Specifications that implement the dose criteria of 10CFR50, Appendix I and 40CFR190 have been clarified where necessary to stipulate that they apply only to members of the public beyond the site boundary. In addition, the reference to the annual dose limits of the old 10CFR Part 20 as the bases for the instantaneous dose rate limits of Technical Specification 3.8.E (page 160f) has been restated to directly identify the bases of the existing specification without reference to the old Part 20.
2. Page 64 (Section 3.2) has been amended to delete reference to the limits of the old 10CFR20 with respect to the main steam line high radiation monitor and their response for gross fuel failures during reactor operations. The bases for the high radiation monitor actuation of the main steam line isolation valve closure (3 times normal background) is not changed by the deletion of reference to the old Part 20 since it was set specifically with respect to the dose limits of 10CFR100 for the control rod drop accident. Both the high radiation closure signal at 3 times background, and the alarm signal for possible gross fuel failure or abnormal fission product

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releases due to transient reactor operation remain unchanged. Therefore, there is no reduction in the operational response of this system. The removal of the old Part 20 reference is considered to be an administrative change only by deleting unnecessary or outdated references from the Technical Specifications.

3. Pages 147, 160d and 172j (Technical Specifications 3.8.A.1 and 3.9.A): Limitations on the concentration of radioactive material released in liquid effluents have been revised to maintain the previously approved dose basis for liquid effluents. The new 10CFR20 requires that the annual average releases of radioactive material in effluents be limited to the values in Appendix B, Table 2, Column 2. However, operational flexibility is allowed, compatible with considerations of health and safety, which may temporarily result in releases higher than the absolute values for concentration listed in Appendix B. The proposed specification allows for this flexibility, but still keeps the instantaneous concentrations at a level consistent with the previous 10CFR20.106. Since a release concentration corresponding to a limiting dose rate of 500 mrem/yr has been acceptable in the current Technical Specification to provide assurance that the limits of Appendix I to 10CFR50 are not likely to be exceeded, this same dose level should continue to be acceptable. In addition, this operational flexibility is especially important in establishing effluent monitor setpoints. When applied on an instantaneous basis, the new 10CFR20, Appendix B concentrations may be too low upon which to derive workable effluent monitor setpoints when monitor background, monitor sensitivity and performance characteristics must be taken into account.

4. Page 160e (Technical Specification 3.8.D): The bases for liquid holdup tanks has been restated to maintain the same dose bases (500 mrem/year) as that used to derive the 10 curie limit under the old MPC values of Appendix B to Part 20. Therefore, this modification maintains the same dose bases for the Technical Specification as was originally accepted.

5. Pages 154, 160, 160c, and 160i; Technical Specifications 3.8.L.1 and 4.8.L.1 currently require the primary containment to be vented/purged through SBTG if airborne activity levels in containment exceed the concentration values contained in 10CFR20, Appendix B. The concentration limits in the regulation range between E-06 and E-08 microcuries per ml. However, the implementing surveillance Table 4.8.2 only required analyses to a lower limit of detection of 1E-04, thereby not requiring analyses to be sensitive enough to be sure that requirements of Technical Specification 3.8.L.1 could be demonstrated. As a result, the plant had implemented Technical Specification Interpretation #37 to ensure that proper sample counting would provide the necessary sensitivity. The proposed Technical Specification change identifies that the SBTG System is effective for iodines and particulates only, with no credit taken for noble gas removal. As such, this filter system is only to be used if Iodine-131, Iodine-133 or particulates with half lives greater than 8 days are detected above the 10CFR20 limits. The surveillance Table 4.8.2 has also been revised to state the LLD as 1E-09 uC/ml to cover the sensitivity requirements to satisfy the Technical Specification. This will allow Technical Specification Interpretation #37 to be deleted.

6. Page 155, 160i and 214 (Technical Specification 3.8.M): The term "in areas at and beyond the site boundary" has been added to clarify which members of the public the dose limits of 40CFR190 (25 mrem/yr whole body) apply to, as opposed to members of the public within the "controlled area" where the dose limits of 10CFR20 (100 mrem/yr) apply. In addition, administrative changes to the reporting requirements noted on pages 160i and 214 have been made to reflect the change in references found in the old Part 20.405c and the corresponding new Part 20.2203.

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7. Pages 172e, and 172g: The current Technical Specification refers to the "National Bureau of Standards" when indicating traceability requirements for calibration sources. This has been updated to reflect that the National Bureau of Standards has been renamed to "National Institute for Standards and Technology". These are administrative changes that do not effect the conduct of plant calibration methods. These changes are not directly associated with revisions necessary to implement the new 10CFR20, but are included to take the opportunity of this amendment to update this portion of the Technical Specifications.
8. Page 207, 207a: Plant record keeping requirements have been modified to reflect requirements in the new 10CFR20 which state that records of radioactive shipments be retained for the life of the plant instead of for only five years.
9. Pages 159, 160b, 172a, 210, 211, 212, 218, 219, (with additional references on 159, 160b and 172a): A recent NRC notice in the Federal Register (Vol. 57, No. 169, 39353) revised 10CFR50.36a to allow radioactive effluent reports to be submitted to the NRC on an annual basis as opposed to semi-annually. This will reduce the number of reports that need to be prepared and submitted each year, as well as allow for a submittal schedule for the effluent data that is less restrictive than current requirements (i.e. 90 days after January 1 vs. the current 60 day requirements). No change in the time permitted to prepare a supplemental annual dose report is requested from that already granted in the Technical Specifications (180 days following January 1). The word changes on the pages noted above reflect the change from semi-annual to annual radioactive effluent release reports. This change is not required by the new 10CFR20, but is included here since many of the pages that are being changed for the new Part 20 also contain the requirement for semi-annual reporting.
10. Page 218: In addition to modifying the terminology used in Section 6.13, "Off-Site Dose Calculation Manual (ODCM)" referring to the previous version of 10CFR20, improvements are proposed to the wording which explains how amendments to the ODCM need to be documented. The revised wording is more direct in specifying the information and documentation requirements necessary to implement changes. It also addresses a current NRC request that a complete and revised ODCM be submitted to the NRC each time an amendment is made. This changes the existing situation whereby only pages with changes need to be submitted when an amendment is filed with the Commission.
11. Page 165: Note 5 in the current TS contains a typographical error in that it references e.8.A.1, instead of 3.8.A.1. This is an administrative change to provide a correct Technical Specification reference in Note 5.
12. Page 201: The requirements for control of access to High Radiation Areas has been expanded in Technical Specification 6.5.B by adding clarifications for distances at which dose rate limits apply in accordance with the use of these limits in the new 10CFR20.1001-20.2401.
13. Page 209: The term, "pocket dosimeter" has been replaced with "Self-Reading Dosimeter (SRD)" to reflect a more general category that includes both pocket ion chambers, as well as electronic dosimeters that can be used in estimating dose.

Reason and Basis for Change

On May 21, 1991, the NRC issued a complete revision to its standards for protection against ionizing radiation, 10CFR20. The purpose of the revision to 10CFR20 was to modify the NRC

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regulations to reflect developments in the principles, philosophy, and scientific knowledge underlying radiation protection.

Vermont Yankee implemented the requirements of the new 10CFR20 on July 8, 1993. In accordance with 10CFR20.1008(b), "after the time the licensee implements 20.1001-20.2401, the applicable sections of 20.1001-20.2401 shall be used in lieu of any section in 20.1-20.601 of this part that is cited in license conditions of Technical Specifications, except as specified in paragraphs (c), (d) and (e) of this section". This proposed change to the Vermont Yankee Technical Specifications reflects the implementation of the new 10CFR20 by replacing conditions cited in the previous version of 10CFR20 with appropriate conditions as cited in the new version of 10CFR20.

Additionally the reason and basis behind changing the frequency of submittal of the Vermont Yankee effluent report from semi-annual to annual is based upon recent changes to 10CFR50.36a to reduce the regulatory burden of routine report submittals.

Safety Considerations

This proposed change is being implemented to bring Vermont Yankee into compliance with newly revised regulations 10CFR20 and 10CFR50.36a.

Changes as proposed to meet the new 10CFR20 will bring Vermont Yankee into compliance with the latest Federal Regulations on radiation protection in advance of the January 1, 1994 required implementation date. Changes as proposed to meet 10CFR50.36a are administrative only, in that the regulatory burden is reduced by submitting the required effluent reports annually verses semi-annually.

This change has been reviewed by the Vermont Yankee Plant Operations Review Committee and the Nuclear Safety Audit and Review Committee.

Significant Hazards Considerations

The Commission has provided standards for determining whether a significant hazards determination exists as stated in 10CFR50.92. A proposed amendment to an operating license involves no significant hazards if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety. In addition, the Commission has provided guidance in the practical application of these criteria in 51FR7751, dated March 6, 1986.

The discussion below addresses each of these three criteria and demonstrates that the proposed amendment involves no significant hazards considerations:

1. The proposed change will not involve a significant increase in the probability or consequences of an accident previously evaluated. The changes as proposed consist of revisions to the Technical Specifications to meet new regulatory requirements as contained in 10CFR20 and 10CFR50.36a, and other related changes of an administrative nature. There is no change in the types and amounts of effluents released, nor will there be any increase in individual or cumulative occupational radiation exposures. None of the changes proposed will affect any plant hardware, plant design, safety limit settings, or plant system operation, and therefore do not modify or add any initiating

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parameters that would significantly increase the probability or consequences of any previously analyzed accident.

2. The proposed change will not create the possibility of a new or different kind of accident from any accident previously evaluated. The changes as proposed do not physically alter the plant nor do they change the operation of the plant.

3. The proposed change does not involve a significant reduction in the margin of safety. The changes will not increase the amount or types of effluents that may be released offsite, nor do they significantly increase individual or cumulative occupational radiation exposures. These changes will not alter any of the requirements or responsibilities for protection of the public and/or employees against radiation hazards.

Therefore, we conclude that the changes as proposed do not constitute a significant safety hazard as defined in 10CFR50.92.

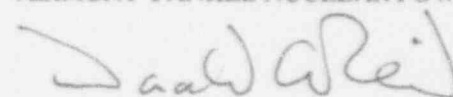
Schedule of Change

Vermont Yankee will implement these proposed changes to Technical Specifications as soon as practicable following receipt of NRC approval.

We trust that the information provided adequately supports our request for a license amendment; however, should you have any question in this matter, please do not hesitate to contact this office.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION



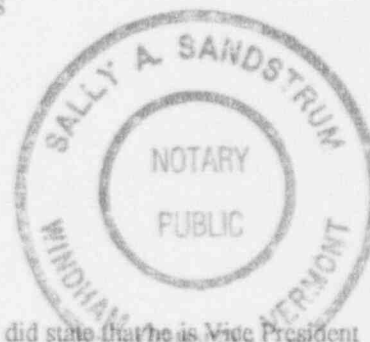
Donald A. Reid
Vice President - Operations

cc: USNRC Region I Administrator
USNRC Resident Inspector - VYNPS
USNRC Project Manager - VYNPS
VT Department of Public Service

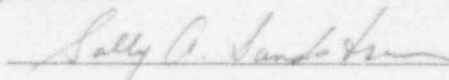
STATE OF VERMONT

WINDHAM COUNTY

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Then personally appeared before me, Donald A. Reid, who, being duly sworn, did state that he is Vice President - Operations of Vermont Yankee Nuclear Power Corporation, that he is duly authorized to execute and file the foregoing document in the name and on the behalf of Vermont Yankee Nuclear Power Corporation and that the statements therein are true to the best of his knowledge and belief.



Sally A. Sandstrum Notary Public
My Commission Expires February 10, 1995