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YANKEE ATOMIC ELECTRIC COMPANY

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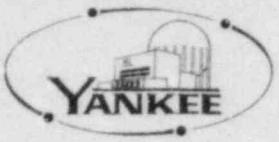

1671 Worcester Road, Framingham, Massachusetts 01701

September 30, 1982

PC 166-4
B.3.2.1

United States Nuclear Regulatory Commission
Washington, DC 20555

Attention: Office of Nuclear Reactor Regulation

References: (a) License No. DPR-3 (Docket No. 50-29)
(b) YAEC submitted to USNRC, Proposed Technical Specification Change No. 166, dated January 16, 1979 (WYR 79-5)
(c) Letter from Franklin Research Center to USNRC, dated May 28, 1982 (NYR 82-116)

Subject: Revised YAEC Radiological Effluent Technical Specifications

Dear Sir:

Pursuant to Section 50.59 of the Commission's Rules and Regulations, Yankee Atomic Electric Company hereby proposes the following modification to Appendix A of the Operating License:

Proposed Change: This submittal amends in its entirety, Proposed Change No. 166, dated January 16, 1979 [Reference (b)]. Reference is made to the Operating License DPR-3 and the Technical Specifications contained in Appendix A issued to Yankee Atomic Electric Company for the Yankee Nuclear Power Station in Rowe, Massachusetts. We propose to make the following changes:

(1) Add to Section 1.0 "Definitions," new definitions for "Source Check," "Off-Site Dose Calculation Manual,""Gaseous Radwaste Treatment System,""Ventilation Exhaust Treatment System,""Process Control Program,""Purge-Purging,""Member(s) of the Public,""Site Boundary," and "Solidification" in accordance with the use of these terms in the new specifications outlined below.

(2) Section 3/4.3.3.1 "Radiation Monitoring Instrumentation" is revised by moving certain effluent radiation monitoring instrumentation from Section 3/4.3.3.1 and placing them in new Sections 3/4.3.3.5 and 3/4.3.3.6 in accordance with NRC model Radiological Effluent Technical Specification (RETS) guidance - NUREG 0472. Table 3.3-4 has also been updated with respect to the measurement range of several of the listed monitors in keeping with the capabilities of the present instrumentation system.

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(3) Add new Section 3/4.3.3.6 "Radioactive Liquid Effluent Instrumentation." The inclusion of this section reflects new criteria put forth by USNRC in their revised model RETS.

(4) Add new Section 3/4.3.3.7 "Radioactive Gaseous Effluent Instrumentation." The addition of this specification reflects new criteria put forth by USNRC in their revised model RETS. The bases section of 3/4.3.3.7 describes the capabilities of in-plant instrumentation to assist plant personnel in identifying sources of high radiation at the primary vent stack.

It should be noted that on Table 3.3-9 of this section, Action 20 permits the operation of the waste gas holdup system when the continuous oxygen analyzer is not operable, provided that grab samples are collected and analyzed at least once per 24 hours. This analysis frequency is instead of once per 8 hours as quoted in the NRC model RETS. The lengthening of the sampling frequency is deemed appropriate due to the unique design of the plant's gaseous waste holdup/cover gas system. The waste holdup/cover gas system normally consists of approximately 30,000 cubic feet (@ STP) of gas with a typical oxygen content of about 0.2%. There are no vacuum degassifiers on the primary coolant letdown system, and in general, only about 4000 cubic feet of gas is added each year to the waste holdup/cover gas system from the primary coolant. The waste holdup/cover gas system is essentially passive in that gas addition from primary system letdown usually occurs only prior to a refueling shutdown. Based on past history of this system's operation with low oxygen content, lack of frequent transfers of primary gas to the holdup system, as well as the large dilution volume of the holdup system, grab samples on a frequency greater than once per 24 hours is not warranted.

(5) Delete Section 3/4.7.7.1 "Radioactive Solid Waste." The contents of this section dealing with the handling of solid radioactive waste have been changed and renumbered to a new Section 3/4.11.3 in accordance with the format of the USNRC model RETS.

(6) Delete Sections 3/4.7.7.2 "Radioactive Liquid Waste," 3/4.7.7.3 "Radioactive Gaseous Waste," and 3/4.7.8 "Environmental Monitoring." The contents of these sections have been revised to reflect the guidance put forth by the USNRC and have been renumbered to Sections 3/4.11.1, 3/4.11.2, and 3/4.12.1 respectively in order to reflect the format of the USNRC model RETS.

(7) Add new Section 3/4.11.1 "Liquid Effluents." The contents of this specification reflect the guidance put forth in the USNRC revised model RETS. It insures that the requirements of 10CFR20, 10CFR50, including Appendix I, with respect to liquid effluent concentrations, resulting doses to members of the public from liquid effluents, the storage of liquid waste in outdoor tanks, and the use of installed liquid radwaste equipment, are met.

(8) Add new Section 3/4.11.2 "Gaseous Effluents." The contents of this specification reflects the guidance put forth in the USNRC revised RETS. It provides assurance that the requirements of 10CFR20, 10CFR50, including Appendix I, and 40CFR190, with respect to release rate limits and doses to members of the public resulting from plant gaseous effluents, as well as the integrity and use of the gaseous radwaste system, are met.

(9) Add new Section 3/4.11.3 "Solid Radioactive Waste." The contents of this specification reflects the guidance put forth in the USNRC revised model RETS. It ensures that a suitable Process Control Program will be utilized to meet shipping and burial ground requirements for solid waste.

(10) Add new Section 3/4.11.4 "Total Dose." The contents of this section insures that the requirements of 40CFR, Part 190 with respect to doses to member(s) of the public contributed from plant effluents are met. Due to the remote location of our station with respect to other uranium fuel cycle facilities, and the fact that the operation and control of other portions of the uranium fuel cycle are outside our license jurisdiction, conformance with the requirements of 40CFR, Part 190 as applied to YAEC are considered to be demonstrated by the licensee utilizing plant radioactive sources only.

(11) Add new Section 3/4.12.1 "Monitoring Program." The contents of this section deal with the identification and conduct of the environmental radiological monitoring program and reflects the guidance given by the USNRC in their revised model RETS.

(12) Add new Section 3/4.12.2 "Land Use Census." The contents of this section deal with the identification and location of land uses which could affect the calculated doses to individuals from plant effluents. This specification reflects the guidance given by the USNRC in the revised model RETS.

(13) Add new Section 3/4.12.3 "Intercomparison Program." This new specification deals with quality control of laboratory analyses performed on samples collected as part of the Environmental Monitoring Program and is in accordance with the USNRC model RETS.

(14) Add new Figures 5.1-1 "Exclusion Area," 5.1-3 "Site Boundary Line," and 5.1-4 "Liquid Effluents Discharge Points." These figures reflect updated information required by the USNRC Standard Technical Specifications.

(15) As part of the "Administrative Controls," add to Section 6.5.1.6 new responsibilities for the Plant Operation Review Committee concerning unplanned releases of radioactive materials, Process Control Program, and the Off-Site Dose Calculation Manual. These additions reflect the guidance of the revised NRC model RETS.

(16) As part of the "Administrative Controls," add to Section 6.5.2.9 "Audits," the 'Radiological Environmental Monitoring Program,''The Off-Site Dose Calculation Manual,' the 'Process Control Program,' and the 'Quality Assurance Program' in order to reflect the inclusion and use of these items in the specifications.

(17) As part of the "Administrative Controls," add to Section 6.8 "Procedures," the requirement to include the 'Process Control Program,''Off-Site Dose Calculation Manual,' and the 'Quality Assurance Program' for effluent and environmental monitoring in accordance with the revised specifications which address these items. It should be noted that Pages 6-16 through 6-17 of the administrative controls section have been included in this submittal only to aid in the review of Section 6. There are no changes in the content of these four pages.

(18) As part of the "Administrative Controls," add to Section 6.9.4.a "Prompt Notification with Written Follow-up," the requirement to report the storage of radioactive materials in the waste gas holdup system if the content exceeds Specification 3.11.2.6.

(19) In Section 6.9.5 "Unique Reporting Requirements" of the Administrative Controls, add new requirement for reporting results of the radiological environmental monitoring program, and the semiannual effluent release report in accordance with the guidance put forth in the revised NRC model RETS.

(20) In Section 6.9.6 for "Special Reports," add requirements for 'Liquid Effluents,' Specifications 3.11.1.2 and 3.11.1.3; 'Gaseous Effluents,' Specifications 3.11.2.2, 3.11.2.3, and 3.11.2.4; 'Radiological Environmental Monitoring,' Specification 3.12.1, and 'Total Dose,' Specification 3.11.4 in conformance with the contents of these new specifications.

(21) In Section 6.10.2 for "Record Retention" add the requirement to retain records of analysis required by the radiological environmental monitoring program in accordance with the guidance of the NRC model RETS.

(22) As part of the "Administrative Controls," add new Section 6.14 "Process Control Program (PCP)" to reflect the requirements to make changes to an existing PCP as indicated in the revised model RETS.

(23) As part of the "Administrative Controls," add new Section 6.15 "Off-Site Dose Calculation Manual (ODCM)" to reflect the requirement to amend an initially approved version of the ODCM.

(24) As part of the "Administrative Controls," add new Section 6.16 "Major Changes to Radioactive Liquid, Gaseous and Solid Waste Treatment Systems" to reflect the requirement to make changes or modifications to existing radwaste systems, or the installation of new waste systems in accordance with the revised model RETS.

Revised Technical Specification pages are provided with this letter.

Reason for Change: The proposed changes are in direct response to the USNRC's request [via Reference (c)] that Yankee Atomic Electric Company amend its Operating License (No. DPR-3).

Basis for Change: The proposed technical specifications address issues put forth by the USNRC in their Draft Radiological Effluent Technical Specifications (NUREG 0472) and are intended to implement the following Federal Regulations; 10CFR, Part 50; Section 50.36a; Section 50.34a; 10CFR, Part 20; 10CFR, Part 50, Appendix I; General Design Criteria 60 and 64; and 40CFR, Part 190.

In addition, we expect to submit a draft of the Off-Site Dose Calculation Manual (ODCM) for implementing several of the requirements of the proposed Technical Specifications on or about October 15, 1982. Formal submittal of the ODCM will be pending the resolution of any comments the NRC staff or its contractor may have on this draft.

Safety Considerations: The changes proposed were requested by the USNRC and are not considered to constitute an unreviewed safety question. This change has been reviewed by the Nuclear Safety Audit and Review Committee.

Fee Determination: The proposed change contained herein is an amendment requested by the USNRC to a previously submitted Proposal Change No. 166 [Reference (b)] and as such is not subject to any new fees. In addition, it is our position that the major portion of this proposed change is an extension of the 10CFR, Part 50, Appendix I design study submitted to the USNRC on June 2, 1976, and constitutes completion of the requirements of Appendix I for the submittal of technical specifications. We conclude that this amendment should be exempt from any fees defined in 10CFR, Part 170.12(c) since fees were not applicable when the requirements put forth by Appendix I to 10CFR, Part 50 became effective, and since submittal of this information has been delayed pending guidance from the USNRC.

Schedule of Change: Except as noted below, these changes will be incorporated into the plant's Technical Specifications on the beginning of the calendar quarter which falls at least 180 days after the approval by the Commission, but in no case before October 1, 1983. This implementation schedule reflects the work load implied by the magnitude and scope of these changes and because of the present work load associated with the current plant maintenance and refueling outage which is scheduled to continue through the middle of December, 1982. This schedule also allows for time which is required to purchase and install several new equipment related items necessary to fulfill the requirements of the proposed Technical Specifications.

Not withstanding the above schedule, it is requested that the proposed Specification 3/4.12.1 "Radiological Environmental Monitoring Program" be incorporated into the plant's Technical Specifications as of January 1, 1983 since the is specification concerns only off-site activities that are best implemented on a calendar year basis.

Very truly yours,

YANKEE ATOMIC ELECTRIC COMPANY

L. H. Heider
Vice President

COMMONWEALTH OF MASSACHUSETTS)
)ss
MIDDLESEX COUNTY)

Then personally appeared before me, Lou H. Heider, who, being duly sworn, did state that he is a Vice President of Yankee Atomic Electric Company, that he is duly authorized to execute and file the foregoing request in the name and on the behalf of Yankee Atomic Electric Company and that the statements therein are true to the best of his knowledge and belief.

Robert H. Groce Notary Public
My Commission Expires September 14, 1984