6.0 ADMINISTRATIVE CONTROLS

6.1 Responsibility

6.1.1 The designated officer shall be responsible for overall facility operation and shall delegate, in writing, the succession to this responsibility during this absence.

6.1.2 The designated manager or his designee, in accordance with approved administrative procedures, shall approve each proposed test or experiment, and each set of fuel movements or load movements over the spent fuel pool, prior to implementation and shall approve modification to systems, structures, or components that affect the safe storage of irradiated fuel.

6.1.3 The Shift Manager (SM) shall be responsible for the operational command function.

6.1.4 Unless otherwise defined, the technical specification titles for members of the staff are generic titles. Unit specific titles for the functions and responsibilities associated with these generic titles are identified in the Connecticut Yankee Quality Assurance Program (CYQAP).

6.2 Organization

6.2.1 General Organizational Requirements

Unit organizations shall be established for unit operation and corporate management, respectively. These organizations shall include positions for activities affecting the safe storage of irradiated fuel.

a. Lines of authority, responsibility, and communication shall be established and defined for the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the Connecticut Yankee Quality Assurance Program (CYQAP).

b. The designated manager shall have overall responsibility for the unit, and shall have control over those onsite activities necessary for maintenance and storage of irradiated fuel in a safe condition.

c. The designated officer shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety.

d. The individuals who train the CERTIFIED FUEL HANDLERS and Equipment Operators, and those who carry out health physics and quality assurance functions, may report to the appropriate onsite manger; however, they shall have sufficient organizational freedom to ensure their ability to perform their assigned functions.

6.0 ADMINISTRATIVE CONTROLS

6.4 Training

6.4.1 An NRC approved retraining and replacement training program for the CERTIFIED FUEL HANDLERS shall be maintained under the direction of the designated manager.

6.0 ADMINISTRATIVE CONTROLS

6.5 Procedures and Programs

6.5.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:

a. The procedures applicable to the safe storage of spent fuel recommended in Regulatory Guide 1.33, Appendix A, (Revision 2, February 1978).

b. All programs specified in Specification 6.6.

c. Fire Protection Program implementation.

d. Quality controls for effluent monitoring, using the guidance in Regulatory Guide 1.21 Rev. 1, June 1974.

e. The use or operation of RADWASTE TREATMENT SYSTEMS utilizing the guidance provided in the REMODCM.

6.5.2 Each procedure of Specification 6.5.1 and program of Specification 6.6, and changes thereto, shall be independently reviewed in accordance with administrative procedures and approved by the designated manager or designee prior to implementation.

6.5.3 Temporary changes to procedures of Specification 6.5.1 may be made provided:

a. The intent of the existing procedure is not altered;

b. The change is approved by a member of the plant management staff and a CERTIFIED FUEL HANDLER; and

c. The change is documented, reviewed and approved by the designated manager or designee within 14 days of implementation.

6.6 Programs and Manuals

6.6.1 Radiation Protection Program

A program for personnel radiation protection shall be prepared consistent with the requirement of 10 CFR 20 and shall be approved, maintained, and adhered to for all operations involving personnel radiation exposure.

6.6.2 Process Control Program (PCP)

The PCP shall contain the current formulas, sampling, analyses, tests, and determinations to be made to ensure that processing and packaging of solid radioactive wastes will be accomplished to ensure compliance with 10 CFR Parts 20, 61, and 71; state regulations; burial ground requirements; and other requirements governing the disposal of solid radioactive waste.

Changes to the PCP:

a. Shall be documented and records of reviews shall be retained. This documentation shall contain:

   1. sufficicent information to support each change, together with the appropriate analyses or evaluations to justify the change; and

   2. a determination that each change maintains the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations; and

b. Shall become effective after the change is independently reviewed in accordance with administrative procedures and approved by the designated manager or designee.

6.6.3 Radiological Effluent Monitoring and Offsite Dose Calculation Manual (REMODCM)

The REMODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the Radiological Environmental Monitoring Program.

The REMODCM shall also contain the Radioactive Effluent Controls and Radiological Environmental Monitoring Program required by Specifications 6.6.4 and 6.6.5, respectively, and descriptions of the information that should be included in the Annual Radiological Environmental Operating and Radioactive Effluent Release Reports required under Specifications 6.7.2 and 6.7.3.

Changes to the REMODCM:

a. Shall be documented and records of review shall be retained. This documentation shall contain:

   1. sufficient information to support each change together with the appropriate analyses or evaluations to justify the change; and

   2. a determination that each change maintains the levels of radioactive effluent control required by 10 CFR 20.1302, 40 CFR Part 190, 10 CFR 50.36a, and 10 CFR 50, Appendix I, and that the change will not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations;

b. Shall become effective after the change is independently reviewed in accordance with administrative procedures and approved by the designated manager or designee; and

c. Shall be submitted to the NRC in the form of a complete legible copy of the entire REMODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change was made to the REMODCM. A summary of each change shall be included.

Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

6.6.4 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to MEMBERS OF THE PUBLIC from radioactive effluents as low as reasonably achievable. The program shall be contained in the REMODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation, including surveillance tests and setpoint determinations, in accordance with the methodology described in the REMODCM;

b. Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to the pre-1994 concentration values in 10 CFR Part 20, Appendix B (to 20.1 to 20.602), Table II, Column 2;

c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters described in the REMODCM;

d. Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from the facility to unrestricted areas, conforming to 10 CFR Part 50, Appendix I;

e. Determination of cumulative dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters described in the REMODCM performed at least every 92 days and determination of projected dose contributions from radioactive effluents in accordance with the methodology in the REMODCM performed at least every 92 days;

f. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days would exceed 2% of the guidelines for the annual dose or dose commitment, conforming to 10 CFR Part 50, Appendix I;

6.6.4 Radioactive Effluent Controls Program (continued)

g. Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the sit to areas at or beyond the SITE BOUNDARY shall be as follows:

1. for noble gases: ≤ a dose rate of 500 mrem/yr to the total body and ≤ a dose of 3000 mrem/yr to the skin; and

2. for tritium and all radionuclides in particulate form with half-lives >8 days: ≤ to a dose rate of 1500 mrem/yr to any organ;

h. Limitations on the annual and quarterly air doses from noble gases released in gaseous effluents from the unit to areas beyond the SITE BOUDNARY, conforming to 10 CFR Part 50, Appendix I;

i. Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from tritium and all radionuclides in particulate form with half-lives > 8 days in gaseous effluents released from each facility to areas beyond the SITE BOUDNARY, conforming to 10 CFR Part 50, Appendix I; and

j. Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC at points beyond the SITE BOUNDARY due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR Part 190.

The provisions of Specification 4.0.2 and Specification 4.0.3 are applicable to the Radioactive Effluent Controls Program Surveillance frequency.

The following reports shall be submitted in accordance with 10 CFR 50.4.

6.7.1 Occupational Radiation Exposure Report

An Occupational Radiation Exposure Report covering the activities of the facility during the previous calendar year shall be submitted by May 1 of each year. A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures >100 mrem/yr and their associated collective deep dose equivalent according to work and job functions (.e.g., decontamination and decommissioning, surveillance, routine maintenance, special maintenance (describe maintenance), waste processing and spent fuel movement). This tabulation supplements the requirements of 10 CFR 20.2206. The dose assignments to various duty functions may be estimated based on pocket ionization chamber, self-reading dosimeter, thermoluminescent dosimeter (TLD), or film badge measurements. Small exposures totaling < 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total deep dose equivalent received from external sources should be assigned to specific major work functions.

6.7.2 Annual Radiological Environmental Operating Report

The Annual Radiological Environmental Operating Report covering the activities of the facility during the previous calendar year shall be submitted prior to May 1 of each year. The Report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the Radiological Effluent Monitoring and Offsite Dose Calculation Manual (REMODCM).

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the tables and figures in the REMODCM, as well as summarized and tabulated results of these analysis and measurements. In the event that some individual results are not available for inclusion with the report, the submitted report shall note and explain the reasons for the missing results. The missing data shall be submitted in a supplementary report.

6.8 High Radiation Area

As provided in paragraph 20.1601(c) of 10 CFR Part 20, the following controls shall be applied to high radiation areas in place of the controls required by paragraph 20.1601(a) and (b) of 10 CFR Part 20:

6.8.1 High Radiation Areas with Dose Rates Not Exceeding 1.0 rem/hour at 30 Centimeters from the Radiation Source or from any Surface Penetrated by the Radiation

a. Each entryway to such an area shall be barricaded and conspicuously posted as a high radiation area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.

b. Access to, and activities in, each such area shall be controlled by means of Radiation Work Permit (RWP) or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.

c. Individuals qualified in radiation protection procedures and personnel continuously escorted by such individuals may be exempted from the requirement for an RWP or equivalent while performing their assigned duties provided that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

d. Each individual or group entering such an area shall possess:

1. A radiation monitoring device that continuously displays radiation dose rates in the area; or

2. A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or

3. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area, or

6.8.1 High Radiation Areas with Dose Rates Not Exceeding 1.0 rem/hour at 30 Centimeters from the Radiation Source or from any Surface Penetrated by the Radiation (continued)

4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,

   (i) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or

   (ii) Be under the surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with individuals in the area who are covered by such surveillance.

e. Except for individuals qualified in radiation protection procedures, or personnel continuously escorted by such individuals, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them. These continuously escorted personnel will receive a pre-job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing does not require documentation prior to initial entry.

6.8.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour at 30 Centimeters from the Radiation Source or from any Surface Penetrated by the Radiation, but less than 500 rads/hour at 1 Meter from the Radiation Source or from any Surface Penetrated by the Radiation

a. Each entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate that prevents unauthorized entry, and, in addition:

1. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designee.

2. Doors and gates shall remain locked except during periods of personnel or equipment entry or exit.

b. Access to, and activities in, each such area shall be controlled by means of an RWP or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.

c. Individuals qualified in radiation protection procedures may be exempted from the requirement for an RWP or equivalent while performing radiation surveys in such areas provided that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

d. Each individual or group entering such an area shall possess:

1. A radiation monitoring device that continuously integrates the radiation rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or

6.8.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour at 30 Centimeters from the Radiation Source or from any Surface Penetrated by the Radiation, but less than 500 rads/hour at 1 Meter from the Radiation Source or from any Surface Penetrated by the Radiation (continued)

2. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area with the means to communicate with and control every individual in the area, or

3. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,

   (i) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or

   (ii) Be under the surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with and control every individual in the area.

4. In those cases where options (2) and (3), above, are impractical or determined to be inconsistent with the "As Low As is Reasonably Achievable" principle, a radiation monitoring device that continuously displays radiation dose rates in the area.

e. Except for individuals qualified in radiation protection procedures, or personnel continuously escorted by such individuals, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them. These continuously escorted personnel will receive a pre-job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing does not require documentation prior to initial entry.

6.8.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour at 30 Centimeters from the Radiation Source or from any Surface Penetrated by the Radiation, but less than 500 rads/hour at 1 Meter from the Radiation Source or from any Surface Penetrated by the Radiation (continued)

f. Such individual areas that are within a larger area where no enclosure exists for the purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, nor continuously guarded, but shall be barricaded, conspicuously posted, and a clear visible flashing light shall be activated at the areas as a warning device.

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

SAFETY EVALUATION BY

THE OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

RELATED TO AMENDMENT NO. 200

TO FACILITY LICENSE NO. DPR-61

CONNECTICUT YANKEE ATOMIC POWER COMPANY

HADDAM NECK PLANT

DOCKET NO. 50-213

1.0 INTRODUCTION

In its application dated January 9, 2004, as supplemented on November 15, 2004, the Connecticut Yankee Atomic Power Company (the licensee) requested changes to the Technical Specifications (TSs) for the Haddam Neck Plant to incorporate approved Technical Specification Task Force (TSTF) changes.

The proposed amendment would revise several TS to be consistent with approved TSTF travelers. Specifically, the proposed amendment would (1) revise TS 6.6.4, "Radioactive Effluent Controls Program" to incorporate TSTF-308 and TSTF-258; (2) revise TS 6.7.1, "Occupational Radiation Exposure Report" consistent with TSTF-152; and (3) revise TS 6.8, "High Radiation Area" to incorporate TSTF-258.

The amendment also revises TSs 6.1, 6.2.1, 6.4, 6.5 and 6.6 to reflect the use of generic titles in lieu of plant-specific personnel titles consistent with TSTF-65.

A no significant hazards consideration determination was published on March 30, 2004, in the *Federal Register* (69 FR 16617) for the application.

2.0 REGULATORY REQUIREMENTS

TSTFs are changes to Standard Technical Specifications that have been; proposed, made available for public comment, reviewed, evaluated and approved by NRC staff, and are now available for adoption in proposed plant-specific license amendment applications. Regulatory Issue Summary RS 00-006, dated March 20, 2000, describes the Consolidated Line Item Improvement Process (CLIIP) for adopting standard TS changes for Power Reactors, licensees desiring to adopt specific TSTFs using the CLIIP are required to verify through the license amendment process that proposed changes are applicable to their facilities.