

# UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

#### CONNECTICUT YANKEE ATOMIC POWER COMPANY

DOCKET NO. 50-213

HADDAM NECK PLANT

#### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 54 License No. DPR-61

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Connecticut Yankee Atomic Power Company (the licensee) dated February 15, 1983 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.

 Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C(2) of Facility Operating License No. DPR-61 is hereby amended to read as follows:

#### (2) Technical Specifications

The Technical Specifications contained in Appendices A and B as revised through Amendment No. 54, 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 the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Dennis M. Crutchfield, Chief Operating Reactors Branch #5 Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: March 11, 1983

### ATTACHMENT TO LICENSE AMENDMENT NO. 54

#### FACILITY OPERATING LICENSE NO. DPR-61

#### DOCKET NO. 50-213

Replace the following pages of Appendix B Technical Specifications with the enclosed pages. The revised pages are identified by the captioned amendment number and contain vertical lines indicating the area of change.

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#### SCHEDULE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TECHNICAL SPECIFICATIONS

Section	<u>Item</u>	Date
2.4	Radioactive Effluents	July 1, 1975
5.6.1	The reporting periods for those required by Section 5.6.1 shall on:	reports commence January 1, 1975

All other sections will be implemented within 30 days of the final issuance of the Environmental Technical Specifications.

#### 1.0 <u>DEFINITIONS AND ABBREVIATIONS</u>

#### 1.1 Definitions

Blowdown is the process involving periodic draining of water from a boiler (steam generator) for removal of unwanted solids and discharge of contaminants.

Channel Calibration shall be adjustment of the channel output such that it responds with specified range and accuracy to a known value of the parameter which the channel monitors. The channel calibration shall encompass the entire channel from the sensor up to and including alarm and/or trip functions, and shall include the Channel Functional test.

Channel Check shall be the qualitative assessment of channel behavior during operation by observation. This determination shall include, where possible, comparison of the channel indication with other indications derived from independent instrument channels measuring the same parameter.

Channel Functional Test shall be the injection of a simulated signal into the channel as close to the primary sensor as practicable to verify operability including alarm and/or trip functions.

Discharge structure is that structure consisting of the concrete discharge tunnel under the turbine building auxiliary bay, a flow channel, and a weir consisting of rocks and gravel piled to elevation 3'10".

MPC is the maximum permissible concentration of a radionuclide according to 10 CFR 20, Appendix B, Table II, in air (MPCa) or water (MPCa).

Normal Power Operation is operation with the reactor critical and above 5 percent of rated power in conformance with the requirements of the Safety Technical Specifications.

Non-Routine Operation is that which occurs when all the four condenser cooling water pumps are not used because of pump failure, pump inspection and/or maintenance.

Routine Operation occurs when all four condenser cooling water pumps are utilized.

Standard Methods refers to those methods as specified in the Federal Register, Title 40, Part 136, Volume 38, No. 199, pages 28758 - 28760, October 16, 1973.

Unreviewed Environmental Impact—A change in plant design, in plant operation, or in procedures related to these Environmental Technical Specifications shall constitute an unreviewed environmental impact if both:

 The change could result in an increase in the environmental effects of station operation, and

 The increased effect is significant enough such that it exceeds the effect previously reviewed and evaluated by the NRC for the particular system or type of operation involved.

#### Abbreviations

1.2

CONVEX - Connecticut Valley Electric Exchange CYAPC - Connecticut Yankee Atomic Power Company

CY - Connecticut Yankee

El - Elevation above mean sea level

ERS - Environmental Review Board

FDSA - Facility Description and Safety Analysis

ID - Inner Diameter

MPC - Maximum Permissible Concentration

NRB - Nuclear Review Board

NUSCO - Norhteast Utilities Service Company

PORC - Plant Operations Review Committee

(INTENTIONALLY BLANK)

2.2.1 INTAKE VELOCITY (deleted)

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2.3 CHEMICAL (deleted)

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#### 5.0 ADMINISTRATIVE CONTROLS

#### Objective

Administrative and management controls are established to provide continuing protection to the environment and to implement the environmental technical specifications.

#### Specifications

#### 5.1 Responsibility

- 5.1.1 The ultimate responsibility for implementation of the Environmental Technical Specifications shall reside with the corporate officers of The Connecticut Yankee Atomic Power Company. The corporate and station level organization chart is shown in Figure 5.2.1.
- 5.1.2 The Plant Superintendent shall have direct responsibility for assuring that the operation of The Connecticut Yankee Atomic Power Company, Haddam Neck Plant, is conducted in such a manner as to provide continuing protection to the environment. During periods when the Plant Superintendent is unavailable, he may delegate his responsibility to the Assistant Plant Superintendent or qualified plant supervisory personnel as designated in the plant administrative procedures.

Operation of the plant to insure adherence to the limiting conditions for operation is the responsibility of the Plant Super-intendent with the assistance of the plant staff organization.

#### 5.1.3 (deleted)

- 5.1.4 The immediate responsibility for the review and updating of each program lies with the group performing the activity. They can receive assistance in the review from the various scientific and technical personnel employed by NUSCO or from outside environmental consultants.
- 5.1.5 The Environmental Review Roard's (ERB) scope of responsibilities shall include the review and about of environmental matters as described in Section 5.3.

5.3	Review	and	Audit
2 * 4		-	-

- 5.3.1 The Environmental Review Board shall review the following:
- 5.3.1.1 Proposed changes to these Environmental Technical Specifications and the evaluation of the impact of the change.
- 5.3.1.2 Proposed changes or modifications to plant systems or equipment which are determined to have an "unreviewed environmental impact"
- 5.3.2 The Environmental Review Board shall make or cause to be made at least semiannual reviews or audits of the following:
- 5.3.2.1 Investigations of all reported instances of violations of Environmental Technical Specifications. Where investigation indicates, evaluate and formulate recommendations to prevent recurrence.
- 5.3.2.2 Surveillance records, written procedures and reports required for compliance with these Environmental Technical Specifications.
- 5.3.3 (deleted)
- An annual review of the programs described in the Environmental Technical Specifications shall be performed by the Environmental Programs Branch with the objective of proposing changes or modifications of the scope or content of the programs. The proposed changes will be reviewed by PORC and the ERB before submittal to the NRC.

#### 5.5 Procedures

Detailed written procedures, including applicable check lists and instructions, shall be prepared and followed for all activities involved in carrying out the environmental technical specifications. Procedures shall include sampling, data recording and storage, instrument calibration, measurements and analysis, and actions to be taken when limits are approached or exceeded. Testing frequency of any alarms shall be included. These frequencies shall be determined from experience with similar instruments in similar environments and from manufacturers' technical manuals.

Procedures shall be prepared for assuring the quality of program results, including analytical measurements, which document the program in policy directives, designate a responsible organization or individuals, include purchased services, (e.g., contractual lab or other contract services), include audits and include systems to identify and correct deficiencies, investigate anomalous or suspect results, and review and evaluate program results and reports.

- Plant standard operating procedures shall include provisions, in addition to the procedures specified in Section 5.5.1, to ensure that all plant systems and components are operated in compliance with the limiting conditions for operations established as part of the Environmental Technical Specifications.
- 5.5.3 All procedures described above and changes thereto shall be reviewed prior to implementation as follows:
  - a. By PORC for procedures which are performed by or under the direct responsibility of plant personnel, procedures which may effect plant operation, or procedures related to nuclear safety.
  - b. By a qualified individual of the Environmental Programs Branch, other than the author, for procedures performed by or under the direct responsibility of the Environmental Programs Branch.
  - c. Temporary changes to procedures may be made provided:
    - 1) The intent of the original procedure is not altered
    - 2) For procedures reviewed by PORC, the change is approved by two members of the plant management staff, at least one of whom holds a senior reactor operator's license and then is reviewed by PORC and approved by the plant superintendent within 14 days of implementation.
    - 3) For procedures reviewed by the Environmental Programs
      Branch, the change is documented and reviewed by a member
      of the Environmental Programs branch within 14 days of
      implementation.

#### 5.6 Plant Reporting Requirements

#### 5.6.1 Routine Reports

Part A: Nonradiological Report.

(deleted)

Part B: Radiological Report. A report on the radiological environmental surveillance programs for the previous 12 months of operation shall be pebmitted to the Director of the appropriate Regional Office (with copy to the Director of Nuclear Reactor Regulation) as a separate document within 90 days after January 1, of each year. The period of the first report shall begin on January 1, 1975. The reports shall include summaries, interpretations, and statistical evaluation of the results of the radiological environmental surveillance activities for the report period, including a comparison with previous environmental surveillance reports and an assessment of the observed impacts of the plant operation on the environment. If harmful effects or evidence of irreversible damage are detected by the monitoring, the licensee shall provide an analysis of the problem and a proposed course of action to alleviate the problem.

The annual report shall include a summary table of all radiological environmental samples which shall include the following information for each pathway sampled and each type of analysis:

- 1. Total number of analyses performed at indicator locations
- 2. Total number of analyses performed at control locations
- 3. Minimum detectable level

In the event that some results are not available within the 90 day period, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted as soon as possible in a supplementary report.

b. Radioactive Effluents Release Report

A report on the radioactive discharges released form the site during the previous 6 months of operation shall be submitted to the Director of the appropriate Regional Office (with copy to the Director of Nuclear Reactor Regulation within 60 days after January 1 and July 1 or each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the plant as outlined in Regulatory Guide 1.21, measuring evaluating, and reporting readioactivity in solid wastes and releases of radioactive materials in liquid and gaseous effluents form light-water-cooled nuclear power plants with data summarized on a quarterly basis following the format of Appendix B thereof.

The report shall include a summary of the meteorological conditions concurrent with the release of gaseous effluents during each quarter as outlined in Regulatory Guide 1.21, with data summarized on a quarterly basis following the format of Appendix B thereof. Calculated offsite dose to humans resulting from the release of effluents and their subsequent dispersion in the atmosphere shall be reported as recommended in Regulatory Guide 1.21.

#### 5.6.2 Nonroutine Reports

 a. Nonroutine Environmental Operating Reports (deleted)

- b. Nonroutine Radiological Environmental Operating Report
  - (1) Anomalous Measurement Report. If a confirmed measured level of radioactivity in any off-site environmental medium exceeds ten times the control station value and can be attributed to an increase in plant related activity, a written report shall be submitted to the Director of the appropriate Regional Office (with copy to the Director of Nuclear Reactor Regulation) within 10 days after confirmation. This report shall include an evaluation of any release conditions, environmental factors, or other aspects necessary to explain the anomalous result.