



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. 130
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 July 5, 1990, 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.

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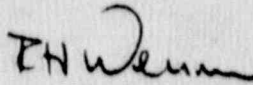
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-61 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 130, 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 issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard H. Wessman, Acting Assistant Director
for Region I Reactors
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 23, 1990

ATTACHMENT TO LICENSE AMENDMENT NO. 130

FACILITY OPERATING LICENSE NO. DPR-61

DOCKET NO. 50-213

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

Remove

3/4 4-31
3/4 4-32
3/4 4-32a
B 3/4 4-12

Insert

3/4 4-31
3/4 4-32
3/4 4-32a
B 3/4 4-12

REACTOR COOLANT SYSTEM

OPERATIONAL LEAKAGE

LIMITING CONDITION FOR OPERATION

3.4.6.2 Reactor Coolant System leakage shall be limited to:

- a. No PRESSURE BOUNDARY LEAKAGE,
- b. 1 gpm UNIDENTIFIED LEAKAGE,
- c. 0.4 gpm total primary-to-secondary leakage through all steam generators not isolated from the Reactor Coolant System and 150 gallons per day through any one steam generator not isolated from the Reactor Coolant System,
- d. 10 gpm IDENTIFIED LEAKAGE from the Reactor Coolant System,
- e. 2 liters per hour from the mechanical seal of any Residual Heat Removal pump.
- f. 0.8 gallons per hour (3 liters per hour) combined leakage outside containment from those portions of the Residual Heat Removal System,* the Charging System (including makeup, seal injection/return, and loop fill), and the HPSI system outside of containment used for or pressurized during recirculation.
- g. 1 gpm through each of the following ECCS valves : SI-CV-862 A, B, C, and D, and SI-CV-872 A and B.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

- a. With any PRESSURE BOUNDARY LEAKAGE, be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With any Reactor Coolant System leakage greater than any one of the above limits, excluding PRESSURE BOUNDARY LEAKAGE, reduce the leakage rate to within limits within 4 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. If primary-to-secondary tube leakage (not including leaks originating from tube to tube sheet welds) in excess of Specification 3.4.6.2c., above, results in COLD SHUTDOWN, inservice inspections shall be performed in accordance with First Sample Inspection requirements in Table 4.4-2 during that COLD SHUTDOWN.

* As determined from the last time the RHR leakage was measured at 145 psig.

LIMITING CONDITION FOR OPERATION (Continued)

REACTOR COOLANT SYSTEM

- d. If Residual Heat Removal Pump Seal leakage exceeds its allowable limit, monitor this leakage for at least 36 continuous operating hours. If the leak rate does not decrease or stabilize prior to reaching three liters per hour, the provisions of action statement b. are applicable.

SURVEILLANCE REQUIREMENTS

4.4.6.2.1 Reactor Coolant System leakages shall be demonstrated to be within each of the above limits by:

- a. Monitoring the containment atmosphere gaseous radioactivity monitor at least once per 12 hours;
- b. Monitoring the containment sump inventory at least once per 12 hours;
- c. Monitoring the Volume Control Tank level at least once per 4 hours;
- d. Performance of a Reactor Coolant System water inventory balance at least once per 24 hours;
- e. Monitoring the Reactor Head Flange Leakoff System at least once per 24 hours;
- f. Monitoring the RHR Pit, HPSI, and charging pump cubicles for indications of leakage at seals, flanges, and valves at least once per 12 hours.
- g. Performance of an operational leak rate test, for those portions of the HPSI, charging and RHR systems outside containment used for or pressurized during recirculation, at least once per 31 days and prior to entry into MODE 3 during a startup, if leakage testing has not been performed in the previous 31 days. The test shall be conducted at a hydrostatic pressure corresponding to the operating pressure under accident conditions.**

The provisions of Specification 4.0.4 are not applicable for entry into MODE 4 for the HPSI portion of Specification g, above.

- h. Monitoring leakage through each of the following ECCS valves (SI-CV-862 A, B, C, and D and SI-CV-872 A and B):
 - 1) At least once per 18 months,
 - 2) Prior to entering MODE 2 whenever the plant has been in COLD SHUTDOWN for 72 hours or more and if leakage testing has not been performed in the previous 9 months,

- 3) Prior to returning the valve to service following maintenance, repair, or replacement work on the valve, and
- 4) Within 24 hours following valve actuation due to flow through the valve.

The provisions of Specification 4.0.4 are not applicable for entry into MODE 3 or 4 for Specification h, above.

- i. In addition to surveillance requirement 4.4.6.2.1.g, at least once per refueling outage, perform an operational leak rate test for those portions of the HPSI, charging and RHR systems outside of containment used for or pressurized during recirculation (with the exception of RHR suction piping). The test shall be conducted at a hydrostatic pressure corresponding to the operating pressure under accident conditions. The following provides the alternate testing for the RHR suction piping:
 1. Containment Sump to RH-MOV-22/RH-V-808A -
Test for leakage during the ILRT.
 2. RH-MOV-22 to RH-CV-783 and RH-V-808A to RH-CV-808A -
Piping to be tested at a pressure of approximately 6 psi. The leak rate will be extrapolated to the operating pressure under accident conditions.
 3. Piping Downstream of RH-CV-783 and RH-CV-808A -
Piping to be tested at approximately 30 psi. The leak rate will be extrapolated to the operating pressure under accident conditions.

**Except for those portions of the HPSI, Charging and RHR suction piping which are not testable at accident pressure during normal operation, as defined below.

HPSI System - Those portions of HPSI suction piping downstream of the HPSI suction valves (SI-MOV-854A and B) and RHR/HPSI Crosstie valves (SI-MOV-901 and 902) and upstream of the HPSI pump suction.

CHARGING SYSTEM - Those portions of charging suction piping downstream of the RHR/Charging Crosstie Valves (RH-MOV-33A and B) and upstream of the charging pump suction.

RHR SYSTEM - Those portions of the RHR suction piping between the containment sump and the RHR pump suction.

The above piping will be tested in accordance with Specification 4.0.5.

REACTOR COOLANT SYSTEM

BASES

PRESSURE/TEMPERATURE LIMITS (Continued)

Although the pressurizer operates in temperature ranges above those for which there is reason for concern of nonductile failure, operating limits are provided to assure compatibility of operation with the fatigue analysis performed in accordance with the ASME Code requirements.

LOW TEMPERATURE OVERPRESSURE PROTECTION SYSTEMS

The OPERABILITY of two spring-loaded relief valves (SLRVs) or an RCS vent opening of greater than 7 square inches ensures that the RCS will be protected from pressure transients which could exceed the limits of Appendix G to 10 CFR Part 50 when one or more of the RCS cold legs are less than or equal to 315°F. Either SLRV has adequate relieving capability to protect the RCS from overpressurization when the transient is limited to either: (1) the start of an idle RCP with the secondary water temperature of the steam generator less than or equal to 20°F above the RCS cold leg temperatures, or (2) the start of a charging pump (centrifugal) and its injection into a water-solid RCS.

The Maximum Allowed SLRV Setpoint for the Low Temperature Overpressure Protection System (OPS) is derived by analysis which models the performance of the OPS assuming various mass input and heat input transients. Operation with a SLRV Setpoint less than or equal to the maximum Setpoint ensures that Appendix G criteria will not be violated with consideration for a maximum pressure overshoot beyond the SLRV Setpoint which can occur as a result of time delays in signal processing and valve opening, instrument uncertainties, and single failure. To ensure that mass and heat input transients more severe than those assumed cannot occur, Technical Specifications require lockout of one centrifugal charging pump and both HPSI pumps while in MODES 4, 5, and 6 with the reactor vessel head installed and disallow start of an RCP if secondary temperature is more than 20°F above RCS cold leg temperature.

The Maximum Allowed SLRV Setpoint for the OPS will be updated based on the results of examinations of reactor vessel material irradiation surveillance specimens performed as required by 10 CFR Part 50, Appendix H and in accordance with the schedule in Table 4.4-5.

3/4.4.10 STRUCTURAL INTEGRITY

The inservice inspection and testing programs for ASME Code Class 1, 2, and 3 components ensure that the structural integrity and operational readiness of these components will be maintained at an acceptable level throughout the life of the plant. These programs are in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a(g) except where specific written relief has been granted by the Commission pursuant to 10 CFR Part 50.55a(g)(6)(i).

3/4.4.11 REACTOR COOLANT SYSTEM VENTS

Reactor Coolant System vents are provided to exhaust noncondensable gases and/or steam from the RCS that could inhibit natural circulation core