CONNECTICUT YANKEE ATOMIC POWER COMPANY

BERLIN, CONNECTICUT
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ONE
203-666-6911

June 1, 1979

Docket No. 50-213

Director of Nuclear Reactor Regulation
Attn: Mr. D. L. Ziemann, Chief
Operating Reactors Branch #2
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Reference: (1) W. G. Counsil letter to B. H. Grier dated May 4, 1979.

Gentlemen:

Haddam Neck Plant
Proposed Revisions to Technical Specifications

In Reference (1), Connecticut Yankee Atomic Power Company (CYAPCO) informed the NRC, Office of Inspection and Enforcement, that all the items in I&E Bulletin 79-06A, Revision 1, had been carefully evaluated with respect to appropriate changes to Technical Specifications. In addition, Reference (1) stated that this review had identified one area in which a revision to the Technical Specifications for the Haddam Neck Plant was considered necessary and that this proposed change would be forwarded on or about June 1, 1979.

Therefore, pursuant to 10CFR50.90, CYAPCO hereby proposes to amend its operating license, No. DPR-61, by incorporating the enclosed revisions into the Technical Specifications for the Haddam Neck Plant. These proposed changes to Sections 3.8 and 4.8 provide revised limiting conditions for operation and surveillance requirements for the auxiliary feedwater system, including pumps, piping, and water sources.

A technical review of these revisions has been performed; it has concluded that the proposed changes further ensure the availability of the auxiliary feedwater system by providing more comprehensive and complete limiting conditions for operation and surveillance requirements. A safety evaluation of these proposed revisions has also been performed in accordance with 10CFR50.59 and has concluded that the changes do not constitute an unreviewed safety question.

The Connecticut Yankee Nuclear Review Board has reviewed and approved these proposed changes and has concurred in the above determination.

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CYAPCO has reviewed the above proposed license amendment pursuant to the requirements of 10CFR170. It has been determined that the proposal constitutes a Class 3 amendment; therefore, enclosed herewith is payment in the amount of $4,000 (four thousand dollars). The basis for this determination is that the proposal involves a single safety issue which does not involve a significant hazards condition.

Very truly yours,

CONNECTICUT YANKEE ATOMIC POWER COMPANY

W. G. Counsil

W. G. Counsil
Vice President

Enclosure

2356 039

STATE OF CONNECTICUT)
) ss. Berlin June 1, 1979
COUNTY OF HARTFORD)

Then personally appeared before me, W. G. Counsil, who being duly sworn, did state that he is Vice President of Connecticut Yankee Atomic Power Company, the Licensee herein, that he is authorized to execute and file the foregoing information in the name and on behalf of the Licensee herein and that the statements contained in said information are true and correct to the best of his knowledge and belief.

Sheila M. Oates
Notary Public

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DOCKET NO. 50-213

ATTACHMENT

HADDAM NECK PLANT

PROPOSED REVISIONS TO TECHNICAL SPECIFICATIONS

2356 041

JUNE, 1979

3.8 TURBINE CYCLE

Applicability: Applies to the operating status of turbine cycle components for removal of reactor core decay heat.

Objective: To specify conditions of the turbine cycle equipment necessary to insure the capability to remove decay heat from the reactor core.

Specification:

A. The reactor shall not be critical (except for determination of "just critical" rod position and low power physics tests at or below 10 percent of full power) unless the following conditions are met:

1. A minimum turbine cycle steam relieving capability of 7,000,000 lb/hr.

2. Two steam-driven auxiliary feedwater pumps operable.

3. The demineralized water storage tank (DWST) shall be OPERABLE with a minimum contained volume of 50,000 gallons of water and the primary water storage tank (PWST) shall be OPERABLE with a minimum contained volume of 80,000 gallons of water.

4. System piping and valves directly associated with the above components operable.

B. With one auxiliary feedwater pump inoperable, restore the inoperable auxiliary feedwater pump to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.

C. 1. With the DWST inoperable, restore the DWST to OPERABLE status within 4 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.

2. With the PWST inoperable, within 4 hours:

a. Restore the PWST to OPERABLE status, or

b. Provide an equivalent supply from an alternate source, or

c. Be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.

D. At power levels in excess of 1473 MWt a minimum turbine cycle steam relieving capability of 9,504,000 lbs-per-hour shall be available.

2356 042

Basis:

A reactor trip from power requires subsequent removal of core decay heat. Immediate decay heat removal requirements are normally satisfied by the steam bypass to the condensers. Thereafter, core decay heat can be continuously dissipated via the steam bypass to the condenser as feedwater in the steam generator is converted to steam by heat absorption. Normally, the capability to return feedwater flow to the steam generators is provided by operation of the turbine cycle feedwater system.

In the unlikely event of complete loss of electrical power to the station, decay heat removal would continue to be assured by the availability of a steam-driven, auxiliary steam generator feedwater pump, and steam discharge to atmosphere via the main steam safety valves and atmospheric dump line. In this case, feedwater is available from the demineralized water storage tank by gravity feed to the auxiliary feedwater pump. The specified 50,000 gallons of water in the demineralized water storage tank is adequate for decay heat removal for a period of at least two hours. Within this period, decay heat removal demands are reduced to approximately 150 gpm. Makeup water is available during this period from the primary water storage tank which contains a minimum volume of 80,000 gallons. The primary water transfer pumps can transfer 200 gpm from the primary water tank to the demineralized water tank. An alternate supply can be provided from the 100,000 gallon capacity Recycled Primary Water Storage Tank.

A steam relieving capability of 7,000,000 lbs-per-hour is required at power levels up to and including 1473 Mwt to maintain the pressure in turbine cycle components within ASME code allowable values in the event of a full load rejection at 1473 Mwt without a reactor trip or other control action and without feedwater flow to the steam generators. Similarly, at 1825 Mwt, a steam relieving capacity of 9,504,000 lbs-per-hour is required to maintain the pressure in turbine cycle components within code values in the event of a full load rejection at 1825 Mwt.

Reference:

(1) FDSA Section 8.1

(2) FDSA Section 8.3

2356 043

4.8 AUXILIARY STEAM GENERATOR FEED PUMPS

Applicability: Applies to periodic testing requirements of the steam-driven auxiliary steam generator feed pumps.

Objective: To verify the operability of the auxiliary steam generator feed pumps and their ability to respond properly when required.

Specification:

1. The auxiliary feedwater system shall be demonstrated OPERABLE at least once per 31 days by:

   a. Verifying that each steam turbine driven pump develops a discharge pressure of greater than or equal to 800 psig at a steam supply pressure of 300 psig.

   b. Verifying that each non-automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.

2. The DWST and PWST shall be demonstrated OPERABLE at least once per 12 hours by verifying the contained water volume is within its limits.

3. At refueling intervals the capability of each pump to attain rated flow of 450 gpm shall be verified.

Basis: The monthly testing program will verify the operability of the auxiliary steam generator feed pump. The refueling interval test will verify the capability of the turbine drive and pump to attain rated flow. A flow rate of 450 gpm is sufficient to prevent the steam generators from boiling dry during a period of coincident loss of off-site power and maximum decay heat removal requirements. This piece of equipment has sufficiently demonstrated itself throughout the power industry to be a most rugged and reliable component. Montly testing of similar equipment at the Yankee-Rowe power reactor has shown that the equipment has never failed to start.

Proper functioning of the steam admission valve and subsequent pump start will demonstrate the integrity of the system. Verification of correct operation will be made both from instrumentation within the main control room and direct visual observation of the pump.

Reference: (1) FDSA - Section 8.3

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