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March 4, 1994

Docket No. 50-213 B14707

Re: SEP Topic VI-4 ISAP Topic 1.03

U.S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, DC 20555

Haddam Neck Plant 10CFR50, Appendix A, General Design Criteria SEP Topic VI-4, Containment Isolation System

The purpose of this letter is to respond to the two remaining confirmatory items from the NRC Staff's Safety Evaluation Report of July 26, 1993,⁽¹⁾ on SEP Topic VI-4 at Connecticut Yankee Atomic Power Company's (CYAPCO's) Haddam Neck Plant.

On July 26, 1993, the NRC Staff closed out SEP Topic VI-4 based on the information provided to date by CYAPCO to the NRC Staff. In the July 26, 1993, letter, the NRC Staff premised this closure on CYAPCO providing information on three specific issues. The three issues are: (1) provide a discussion on the second barrier that will be installed for penetration P-39 and P-40; (2) verify that all automatic isolation valves take the position of greatest safety upon the loss of power; and (3) for those valves that do not receive an automatic closure signal, describe the administrative controls that assure the valves are locked closed, or procedurally controlled during use.

The information pertaining to the first issue, namely a discussion on the second barrier that will be installed for penetration P-39 and P-40, was provided via CYAPCO's letter of November 29, 1993.⁽²⁾

With regard to the NRC Staff's second request, CYAPCO has verified that all automatic isolation valves take the position of greatest safety upon loss of power. All of the 42 automatic isolation valves will close after a loss of off-site power. This is the position of greatest safety. In addition, as

- A. B. Wang letter to J. F. Opeka, "Haddam Neck Plant Systematic Evaluation Program Topic VI-4, 'Containment Isolation System' (TAC No. M51935)," dated July 26, 1993.
- (2) J. F. Opeka letter to the U.S. Nuclear Regulatory Commission, "10CFR50, Appendix A General Design Criteria, SEP Topic VI-4, Containment Isolation System," dated November 29, 1993.

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requested by the NRC Staff, CYAPCO has confirmed that valve SS-AOV-950, which has a key lock remote manual switch which can override the automatic mode, is controlled by Surveillance Procedure 5.1-5. This procedure tests the override functions of the valve, thus providing the necessary administrative controls required to ensure the valve is able to automatically close upon loss of power and achieve its position of greatest safety.

Concerning the NRC Staff's third request, CYAPCO has reviewed those valves which do not receive an automatic closure signal and has verified that those valves are closed, or procedurally controlled during use. Surveillance Procedure SUR 5.1-126 provides detailed information for administering control of test, vent, and drain lines by the use of locking devices or other methods to ensure they are effectively isolated. This surveillance is performed either at least once every 18 months to verify the position of the valves that must always be locked and/or prior to changing from a lower to a higher operational mode (i.e., Mode 4 to Mode 3). It also assures that any valve that is locked closed for containment integrity remains closed when containment integrity is required. As requested by the NRC Staff, CYAPCO has verified that this procedure confirms the control of manual valve SI-V-860 "cavity fill valve." This valve is locked closed and checked prior to entering Mode 4.

CYAPCO wishes to offer some clarifying comments on the NRC Staff's July 29, 1993, Safety Evaluation Report on SEP Topic VI-4. We do not believe that these changes affect the overall conclusions reached by the NRC Staff. The comments are contained in Attachment 1 to this letter.

If you should have any comments on the above, please contact my staff.

Very truly yours,

CONNECTICUT YANKEE ATOMIC POWER COMPANY

. F. Chile J. F. Opeka

Executive Vice President

cc: T. J. Martin, Region I Administrator

A. B. Wang, NRC Project Manager, Haddam Neck Plant

W. J. Raymond, Senior Resident Inspector, Haddam Neck Plant

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Attachment 1

Haddam Neck Plant

Comments on the NRC Safety Evaluation Report of July 26, 1993

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Haddam Neck Plant

Comments on the NRC Safety Evaluation Report of July 26, 1993

Location

Comment

 SER page 3 Penetration P-3

SER page 5

Penetration P-22

2.

The statement "three check valves (SI-CV-862A, B, and C) and..." should be modified to read "four check valves (SI-CV-862A, B, C, and D) and...." The basis for this change is that there are four parallel check valves. Refer to CYAPCO letter dated 1/16/91 and 1/28/93.

- This penetration was modified during the 1993 refueling outage whereby the piping for this penetration was cut and sealed during operation with a testable blank flange outside of containment. The blank flange will contain double viton "O" rings with provision to pressurize the space between the "O" rings to test leak tightness. A spool piece will be installed in the system during outages.
- SER page 6 Penetration P-24A, P24B, P-24C, and P-24D
- SER page 8 Penetrations P-55, 56, 57, and 58

The sentence in the 11th line should be revised as "During an accident these lines would most likely be pressurized by the HPSI flow inside containment and any leakage would tend to be into containment rather than out from containment to the RWST.

The statement the "service water pressure at this penetration...is higher than containment maximum design and any leakage would be from the service water into containment" is not accurate. Post LOCA, the containment atmospheric pressure is higher than service water's internal pressure. However, as indicated in our previous submittals, the service water system is a closed system inside containment, subject to low operating pressures. Should the containment pressurize post-LOCA it would not affect the CAR fans. The service water piping inside containment is a passive component, and is inspected frequently. As stated in our earlier letters, failure of this piping is not considered probable. U.S. Nuclear Regulatory Commission B14707/Attachment 1/Page 2 March 4, 1994

Location

Comment

 SER page 9 Penetration P-62 This penetration was extensively modified during the Cycle 17 refueling outage. This penetration now complies with Appendix A and J requirements.

previously, manual valve SA-V-413 was located outside containment and is the only containment isolation valve in this line. Check valve SA-CV-415 is located between SA-V-413 and containment, but is not considered a containment isolation valve and is not tested. Check valve SA-CV-417, which is located just inside containment, is also not considered a containment isolation valve and is not tested.

The modification made during the Cycle 17 refueling outage removed the internals from SA-CV-415. A test boundary valve was added downstream of SA-CV-417. Test connections have been installed between the containment and SA-CV-417 and between SA-CV-417 and the new boundary valve. The test connection between the containment and SA-CV-417 will be used to test SA-V-413 and the connection between SA-CV-417 and the new boundary valve will be used to test SA-CV-417 which has been replaced with a new QA check valve and should be considered a new containment isolation valve.

Delete "in report NUSCO149, 'Connecticut Yankee Probabilistic Safety Study', February 1986..." and replace it with "Haddam Neck Plant ISAP Final Report, December 1986."

Delete "NUSCO149" and replace it with "ISAP Final Report."

 Page 12 Section 3.1 2 paragraph

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Page 13 Section 3.2 Paragraph 1 (1 time) and paragraph 2 (2 times)