

**NORTHEAST UTILITIES**

THE CONNECTICUT LIGHT AND POWER COMPANY  
WESTERN MASSACHUSETTS ELECTRIC COMPANY  
HOLYOKE WATER POWER COMPANY  
NORTHEAST UTILITIES SERVICE COMPANY  
NORTHEAST NUCLEAR ENERGY COMPANY

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January 31, 1991

Docket No. 50-213  
813719

Re: 10CFR50.90

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

Gentlemen:

Haddam Neck Plant  
Movable Control Assemblies  
Proposed Changes to Technical Specifications

In a letter dated October 1, 1990,<sup>(1)</sup> Connecticut Yankee Atomic Power Company (CYAPCO) submitted to the NRC Staff a proposed license amendment request for the Haddam Neck Plant. Since that time, CYAPCO has been discussing this submittal with the NRC Staff. Based on these discussions, CYAPCO has revised our Significant Hazards Consideration (SHC) determination that was forwarded in the October 1, 1990 letter. The purpose of this letter is to transmit that revised SHC determination to the NRC Staff.

The proposed Technical Specification changes, submitted in CYAPCO's October 1, 1990 letter, address the situation where more than one control rod is inoperable due to causes other than excessive friction or mechanical interferences and remains trippable. One example of such a situation would be a failure of the master cyclor. Even though control rods would not respond to a demand signal from the rod control system, they could be tripped which is their intended safety function. These proposed changes ensure that the Technical Specifications provide specific directions for these circumstances.

The following represents a revised SHC determination for the October 1, 1990 license amendment request.

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(1) E. J. Mroccka letter to the U.S. Nuclear Regulatory Commission, "Haddam Neck Plant, Movable Control Assemblies, Proposed Changes to Technical Specifications," dated October 1, 1990.

Adol  
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### Significant Hazards Consideration

In accordance with 10CFR50.92, CYAPCO has reviewed the attached proposed changes and has concluded that they do not involve a significant hazards consideration. The basis for this conclusion is that the three criteria of 10CFR50.92(c) are not compromised. The proposed changes do not involve a significant hazards consideration because the changes would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated.

In the current Technical Specifications, there is no action statement covering a situation when more than one control rod is trippable but inoperable due to causes other than excessive friction or mechanical failure. The proposed change will provide specific directions to the operators if such a situation occurs.

The change requires that within 1 hour, the remainder of the rods in the bank(s) with the inoperable rods are aligned to within  $\pm 24$  steps of the inoperable rods while maintaining the rod sequence and insertion limits provided in the Technical Report Supporting Cycle Operation. The thermal power level is restricted pursuant to Specification 3.1.3.6.1 during subsequent 4 loop operation or Specification 3.1.3.6.2 during subsequent 3 loop operation. The proposed change also requires restoration of the inoperable rods to operable status within 72 hours. As such, the new action statements which permit limited variations from the basic requirements will still ensure that the original design criteria are met. The new action statement does allow continued plant operation but only in the case where the cause of control rod failure is specifically identified to not affect the ability of the control rods to fully perform their safety function, i.e., trip when called upon. Therefore, it is concluded that there is no adverse impact on the design basis analysis due to these changes.

No design basis accidents are affected by these changes. Therefore, there is no impact on the consequences of any design basis accidents nor the probability of occurrence of any design basis accidents. The performance of safety systems is not impacted.

The proposed changes do not involve a significant increase in the probability of occurrence or the consequences of an accident previously analyzed since the new action statements continue to ensure that the control rods will perform their safety function.

2. Create the possibility of a new or different kind of accident from any previously evaluated.

Since there are no changes in the way the plant is operated, the potential for an unanalyzed accident is not created. There is no impact on plant response to the point where it can be considered a new accident, and no new failure modes are introduced. The proposed changes do allow continued plant operation but only in the case in which the control rods will perform their intended safety function. Therefore, these proposed changes do not create the possibility of a new or different kind of accident from any previously analyzed.

3. Involve a significant reduction in a margin of safety.

These changes have no impact on the consequences of any design basis events. Therefore, these changes do not impact the protective boundaries, safety limits, or margins to safety. There are no failure modes associated with these changes. Since the control rods will continue to perform their intended safety function, there is no impact on the consequences of any accident previously analyzed and there is no reduction in a margin of safety.

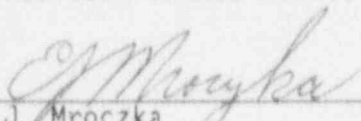
The Commission has provided guidance concerning the application of the standards in 10CFR50.92 by providing certain examples (51 FR 7751, March 6, 1986) of amendments that are considered not likely to involve a significant hazards consideration. The changes proposed herein are not enveloped by a specific example. As described above, the proposed changes do not constitute a significant hazards consideration since the proposed changes provide operating restrictions on the control rods that ensure they perform their intended safety function, i.e., trip when called upon. These changes do not impact the design basis accidents nor the performance of any of the safety systems. CYAPCO believes these changes will provide an equivalent level of reliability of the movable control assemblies to fulfill their design functions.

In accordance with 10CFR50.91(b), CYAPCO is providing the State of Connecticut with a copy of this followup submittal.

We trust that this revised SHC determination will facilitate NRC Staff review of our October 1, 1990 license amendment request. Please contact us if you have any additional questions.

Very truly yours,

CONNECTICUT YANKEE ATOMIC POWER COMPANY

  
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E. J. Mroczka  
Senior Vice President

cc: See following page.

U.S. Nuclear Regulatory Commission  
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cc: T. T. Martin, Region I Administrator  
A. B. Wang, NRC Project Manager, Haddam Neck Plant  
J. T. Shedlosky, Senior Resident Inspector, Haddam Neck Plant

STATE OF CONNECTICUT )  
  ) ss. Berlin  
COUNTY OF HARTFORD )

Then personally appeared before me, E. J. Mroczka, who being duly sworn, did state that he is Senior Vice President of Connecticut Yankee Atomic Power Company, a 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.

*Lorraine J. L'Amico*  
Notary Public

My Commission Expires March 31, 1993