

**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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July 11, 1986

Docket No. 50-336  
B12040

Office of Nuclear Reactor Regulation  
Attn: Mr. Ashok C. Thadani, Director  
PWR Project Directorate #8  
Division of PWR Licensing - B  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Gentlemen:

Millstone Unit No. 2  
Proposed Revisions to Appendix R Shutdown Process

On January 31, 1985,<sup>(1)</sup> Northeast Nuclear Energy Company (NNECO) consolidated and updated its request for exemption from Appendix R safe shutdown separation requirements for the Millstone Unit No. 2 main control room. In that letter, NNECO modified its approach to safe shutdown by introducing two new and important features, specifically:

- (1) the use of Millstone Unit No. 1 to supply emergency power capability to Millstone Unit No. 2 during a fire condition; and,
- (2) the installation of isolation switches in the Control Room<sup>(2)</sup> to disable the operation of components which may inhibit safe shutdown.

These changes were significant in providing important flexibility to Millstone Unit No. 2 operations in the event of a fire.

In the ensuing year, NNECO awaited the Staff's decision concerning the outstanding plans and exemption applications. Since detailed engineering design work could not proceed without Staff approval of the original NNECO proposals, NNECO was able to consider other options which may contribute to minimizing the impact of the number of proposed Appendix R modifications. In the course of that review, NNECO identified a means for extending the basic shutdown approach using the Fire Shutdown Panel as a remote shutdown station. This panel was originally developed for responding to a hypothetical control room fire that would completely destroy the main control board, the enclosed auxiliary control board panels, and all Foxboro spec 200 instrumentation panels in addition

- (1) W. G. Counsil letter to D. G. Eisenhut, dated January 31, 1985, Subject: Millstone Unit No. 2, Information Supporting 10 CFR 50 Appendix R Review.
- (2) The isolation switches have been moved outside the Control Room enroute to the Fire Shutdown Panel to minimize the number of actions the Control Room operators will need to perform, assuming a forced evacuation of the Control Room is necessary during a control room fire.

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to requiring the forced evacuation of the control room. NNECO proposes to extend the use of this panel as a remote shutdown station for other areas containing redundant safe shutdown equipment in relatively close proximity to each other. By this letter, NNECO seeks to provide the Staff with an early outline of the approach and obtain comments regarding its general feasibility.

Simply stated, the new approach involves a broader use of the Millstone Unit No. 1 power feeds to provide alternative shutdown capability for Millstone Unit No. 2 in the event of a fire in areas other than the main control room. The primary benefit of this approach is a reduction in the number of areas and configurations requiring exemptions from the separation requirements of Section III.G.2 of Appendix R, and a more uniform shutdown method in the event of a fire anywhere in the plant.

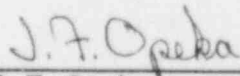
If this approach is acceptable to the Staff, NNECO would no longer require exemptions granted on April 15, 1986<sup>(3)</sup> for configurations in several fire areas. The proposed modifications offer significant benefits over the configurations established pursuant to the exemptions. Other benefits of using emergency AC power from Unit No. 1 would include reducing the susceptibility of Unit No. 2 to station blackout events.

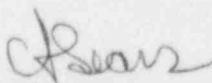
NNECO believes that the use of power backfeed for areas other than the control room represents a valuable capability in the event of a fire. Consequently, it would seem to be the preferable approach to resolving the Appendix R issue at Millstone Unit No. 2. If the Staff shares NNECO's interest in exploring the benefits of this approach, we would be prepared to discuss this concept at greater length prior to making a formal proposal on the docket.

NNECO proposes that a meeting be held with the appropriate NRC Staff personnel to discuss this subject. The purpose of a meeting would be to describe this approach further with the Staff, provide some preliminary results of the evaluation of the approach, and discuss the benefits of the approach to the Appendix R safe shutdown analysis as well as other benefits. NNECO would appreciate receiving the Staff's comments at your convenience.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

  
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J. F. Opeka  
Senior Vice President

  
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By: C. F. Sears  
Vice President

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(3) A. C. Thadani letter to J. F. Opeka, dated April 15, 1986, Subject: Appendix R Exemption Requests for Millstone Unit No. 2.