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 16, 1991

Docket No. 50-245
B13616
Re: 10CFR50.90
10CFR50, Appendix J

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

Gentlemen:

Millstone Nuclear Power Station, Unit No. 1
Proposed Revision to Technical Specifications
Integrated Leak Rate Test--Mass Point Method

Pursuant to 10CFR50.90, Northeast Nuclear Energy Company (NNECO) hereby proposes to amend Operating License DPR-21 by incorporating the change identified in Attachment 1 into the Technical Specifications of Millstone Unit No. 1.

Discussion

The proposed change adds to Section 4.7.A.3 of the Millstone Unit No. 1 Technical Specifications the mass point method as an alternative means of calculating containment integrated leak rate test results as outlined in American National Standard ANSI/ANS 56.8-1987. The mass point method is accurate, well understood, and utilized throughout the industry. This method avoids many well-known and documented problems associated with other test techniques. The mass point method calculates the air mass at each point in time and plots it against time. A linear regression line is plotted through the mass time points using a least square fit. The slope of this line is proportional to the leakage rate. This method has been acknowledged and accepted by the NRC, as outlined in 10CFR50, Appendix J, Section III.A.3.(a). The license amendment is necessary to update the Millstone Unit No. 1 Technical Specifications to reflect acceptance of the mass point method by the NRC. It should be noted that similar license amendments have been issued for Millstone Unit Nos. 2[1] and 3.[2]

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(1) D. H. Jaffe letter to E. J. Mroczka, "Change to the Technical Specifications and Exemption from the Requirements of Appendix J to 10 CFR Part 50, Paragraph III.A.3," dated February 11, 1988.

(2) D. H. Jaffe letter to E. J. Mroczka, "Issuance of Amendment," dated January 17, 1989.

Significant Hazards Consideration

NNECO has reviewed the proposed change in accordance with 10CFR50.92 and has concluded that it does not involve a significant hazards consideration in that the change does not:

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

   The change will provide the plant with the flexibility to use the total time method or the mass point method for calculating containment leakage rates. The change is consistent with 10CFR50, Appendix J, Section III.A.3.(a). There are no hardware modifications associated with this change. The revised surveillance requirement does not adversely affect the probability or consequences of the design basis accidents. Therefore, it is concluded that previously analyzed accidents are not affected.

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

   The proposed change adds an acceptable means of containment leak rate testing to the Technical Specifications and will not result in a degradation of containment integrity or affect any other system important to safety. Accordingly, the potential for an unanalyzed accident is not created. No new failure modes are introduced.

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

   Containment integrity will continue to be maintained with the use of the mass point method. The proposed requirements do not have any adverse impact on the protective boundaries. Since the proposed change does not affect the consequences of any accident previously analyzed, there is no reduction in a margin of safety.

The Commission has provided guidance concerning the application of standards in 10CFR50.92 by giving certain examples (March 6, 1986, 51 FR 7751) of amendments that are considered not likely to involve significant hazards considerations. The change proposed herein most closely resembles example (vii), a change to conform a license to changes in the regulations, where the license change results in very minor changes to facility operations clearly in keeping with the regulations. NNECO is proposing a change which will allow the use of the mass point test method to calculate containment leakage rates. The mass point method is accurate, well understood, and utilized throughout the industry. It has been acknowledged and accepted by the NRC, as outlined in 10CFR50, Appendix J, Section III.A.3.(a). The addition of this containment leak rate test method to Technical Specification 4.7.A.3 has no negative operational or safety impact on Millstone Unit No 1. In fact, this technique avoids many well-known and documented problems associated with other integrated leak rate test techniques.

Based upon the information contained in this submittal, there are no significant radiological or nonradiological impacts associated with the proposed changes, and the proposed license amendment will not have a significant effect on the quality of the human environment.

The Millstone Unit No. 1 Nuclear Review Board has reviewed and approved the change proposed herein and has concurred with the above determinations.

The proposed change would allow the flexibility to use either the mass point or total time methods for calculating containment integrated leak rates during the upcoming Millstone Unit No. 1 refueling outage. The integrated leak rate test is currently scheduled for early May 1991. Therefore, NNECO respectfully requests that the license amendment be issued prior to May 1, 1991, and be effective upon issuance.

In accordance with 10CFR50.91(b), NNECO is providing the State of Connecticut with a copy of this proposed amendment.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

E. J. Mroczka
Senior Vice President

cc: Mr. Kevin McCarthy, Director
Radiation Control Unit
Department of Environmental Protection
Hartford, CT 06116

T. T. Martin, Region I Administrator
M. L. Boyle, NRC Project Manager, Millstone Unit No. 1
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2, and 3

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 Northeast Nuclear Energy 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.

Notary Public
My Commission Expires March 31, 1993