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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, 1990

Docket No. 50-336
B13385
Re: 10CFR50, Appendix J

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

Gentlemen:

Millstone Nuclear Power Station, Unit No. 2
10CFR50, Appendix J Testing

On August 14, 1989,(1) the Staff transmitted to Northeast Nuclear Energy Company (NNECO) a letter stating its position on the need for leak-rate testing of certain valves in the Millstone Unit No. 2 Reactor Building Closed Cooling Water (RBCCW) system.

The valves at issue are the RBCCW to Containment Air Recirculation (CAR) fan cooler inlet and outlet valves; 2-RB-28.1A-D, 2-RB-28.2A-D, and 2-RB-28.3A-D. As such, these valves do not receive a containment isolation signal and are normally open. The remote manual actuation switches for some of these valves are locked open in the control room, whereas others open on a Safety Injection Actuation System (SIAS) signal. On this basis, Appendix J testing provides no significant benefit as it is anticipated that these valves will remain open following an accident. It should also be noted that valves 2-RB-28.1A-D, 2-RB-28.2A-D, and 2-RB-28.3A-D fail open on a loss of DC power or instrument air. Even following a beyond design basis core melt accident, it would be beneficial to keep these valves open to allow for containment cooling and prevention of containment overpressurization.

The only time that these valves would be closed would be following a rupture of one of the RBCCW lines or coolers inside containment. The probability of a random rupture following a design basis accident is sufficiently low such that Appendix J testing yields a negligible public safety benefit. Additionally, the system is adequately protected against a LOCA induced failure (i.e., pipe whip, jet impingement, etc.).

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(1) S. A. Varga letter to E. J. Mroczka, "Millstone Nuclear Power Station, Unit No. 2 Reactor Building Closed Cooling Water (RBCCW) System--Containment Isolation Valves (TAC No. 73760)," dated August 14, 1989.

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In the event that NNECO is required to leak-rate test these valves, the only practical long-term solution would be to replace them. Such replacement would subject the plant to additional outage time and considerable expense (approximately $2 million).

NNECO is currently evaluating the Staff's position and the available options, including the need to resume leak-rate testing of the valves in question. However, the regulatory basis for the Staff's position is unclear. In order for NNECO to evaluate the Staff's position, we find it necessary to request clarification of the following points:

1. As explained in NNECO's September 9, 1988[(2)] correspondence, the RBCCW system is a closed-loop system under the plant's approved licensing basis, and the valves in question do not specifically meet any of the four criteria of Appendix J, Section II.H. Nevertheless, the Staff's August 14 letter states that "it is our position that Appendix J . . . requires these valves to be tested." Does the Staff believe that the RBCCW valves in question meet the definition of containment isolation valves in Section II.H of Appendix J? If so, please explain the basis for this position.

2. The Staff's August 14 letter notes that the RBCCW system was designed and licensed by the NRC as equivalent to a Safety Class 3 system, but nevertheless states that "the existence of Safety Class 3 components in the system does not provide adequate assurance of post-accident integrity." In view of the fact that the RBCCW system was approved by the NRC with Class 3 components, please explain the basis for the Staff's conclusion that the design does not provide "adequate assurance of post-accident integrity." To the extent the Staff is relying on new criteria in the Standard Review Plan which specify Safety Class 2 for closed-loop systems, please explain why the Staff believes this application of new criteria is consistent with the plant's current licensing basis and does not constitute a backfit.

3. NNECO deleted the valves in question from its Appendix J program following a safety evaluation under 10CFR50.59. The Staff's August 14 letter states that NNECO has "not provided acceptable justification for suspension of Type 'C' testing for the RBCCW containment isolation valves. . . ." Please specifically discuss (a) whether the Staff disagrees with NNECO's use of Section 50.59 as an appropriate way to address this issue, (2) whether the Staff believes that certain aspects

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(2) E. J. Mroczka letter to U.S. Nuclear Regulatory Commission, "Millstone Nuclear Power Station, Unit No. 2, 10CFR50, Appendix J Testing," dated September 9, 1988.

of the Section 50.59 evaluation were deficient, and (3) whether other specific factors were considered by the Staff in reaching its conclusion.

4. The Staff's August 14 letter states that "[s]ince Appendix J (Type 'C') testing of the subject containment isolation valves was part of the original design basis for Millstone Unit 2, denial of relief from such testing cannot be considered as a 'Backfit'. . . . " In view of the fact that NNECO changed its original design basis as permitted by 10CFR 50.59, please explain why the changed design basis is not, in the Staff's view, the relevant baseline for backfitting purposes. (3)

Responses to these questions are necessary for NNECO to understand the regulatory basis for the Staff's position and meaningfully evaluate its options, especially given the lack of safety significance to Appendix J testing the subject valves and the costs associated with implementation of the Staff's position. It is estimated, based on engineering judgement, that the benefit to public safety from Appendix J Testing of valves 2-RB-28.1A-D, 2-RB-28.2A-D, and 2-RB-28.3A-D would be negligible. Currently, it is our view that the expenditure of some $2 million for this purpose is not the optimum use of these resources for improving public health and safety. It is from that perspective that these questions are being posed to the Staff. Because this issue raises questions relating to backfitting policy, we are providing copies of this correspondence to the Director of NRR and the Director of AEOD.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

E. J. Mroczka
Senior Vice President

cc: W. T. Russell, Region I Administrator
G. S. Vissing, NRC Project Manager, Millstone Unit No. 2
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2, and 3
T. E. Murley, Director, NRR
E. L. Jordan, Director, AEOD

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(3) In this connection, statements by the NRC Staff management during the regional workshops on the backfitting rule should be consulted. During the workshops, Staff management indicated that if a licensee uses Section 50.59 to make a change, and the safety evaluation is valid, then the change establishes a new licensing basis for backfitting purposes. See Backfitting Workshop, Region I, May 8, 1986, Tr. 71-72 (statement of Messrs. Cox and Sniezek).