NORTHEAST UTILITIES

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

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June 6, 1986

Docket Nos. 50-423
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B12109

Office of Nuclear Reactor Regulation
Attn: Mr. V. S. Noonan, Director
PWR Project Directorate #5
Division of PWR Licensing - A
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Reference: (1) T. M. Novak letter to J. F. Opeka, Issuance of Facility Operating License NPF-49 - Millstone Nuclear Power Station, Unit No. 3, dated January 31, 1986.

(2) B. J. Youngblood letter to J. F. Opeka, Issuance of Supplement 2 to NUREG-1031, dated September 27, 1985.

Dear Mr. Noonan:

Millstone Nuclear Power Station, Unit No. 3
Small Break LOCA Analysis, TMI Action Item II.K.3.31

The Millstone Unit No. 3 Operating License (Reference (1)) contains a license condition that requires Northeast Nuclear Energy Company (NNECO) to submit a plant specific analysis utilizing the new NRC approved NOTRUMP Small Break LOCA (SBLOCA) Evaluation Model (EM), as required by TMI Action Plan Item II.K.3.31. In Reference (2), the NRC Staff indicated that the resolution of TMI Action Plan Item II.K.3.31 may be accomplished by generic analyses to demonstrate that the previous NRC approved WFLASH SBLOCA EM results were conservative when compared with the new NOTRUMP SBLOCA EM. Such generic studies were planned by the Westinghouse Owners Group (WOG) of which NNECO is a participating member. The WOG has completed these generic studies and will be submitting the results of the analyses in the topical report WCAP-11145. This report will be submitted to the NRC on or about June 15, 1986. The purpose of this letter is to inform you that NNECO is referencing topical report WCAP-11145 in order to satisfy the requirements of TMI Action Item II.K.3.31 for Millstone Unit No. 3 in a generic fashion, in accordance with Reference (2).

Topical report WCAP-11145 documents the results of a series of Small Break LOCA (SBLOCA) analyses performed with the NRC approved NOTRUMP SBLOCA EM. Cold leg break spectrum analyses were performed for the limiting SBLOCA plant from each of the Westinghouse 4-loop, 4-loop Upper Head Injection (UHI), 3-loop, and 2-loop plant categories. The limiting SBLOCA plant in each category was defined on the basis of previous SBLOCA

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analyses which were performed with the NRC approved WFLASH SBLOCA EM. In addition to the cold leg break spectrums, a hot leg and pump suction break were performed as part of the 4-loop plant analyses, confirming that the cold leg was still the worst break location. Comparison of the NOTRUMP cold leg break spectrum results with the previously generated WFLASH results, showed that the WFLASH results were conservative for all plant categories. In particular, the 4-loop plant category results showed that the NOTRUMP SBLOCA EM calculated a limiting Peak Clad Temperature (PCT) which was 537°F less than that previously calculated by the WFLASH SBLOCA EM.

The generic results documented in WCAP-11145, demonstrate that a plant specific reanalysis of the 4-loop Millstone Unit No. 3 plant with the NOTRUMP SBLOCA EM would result in the calculation of a limiting PCT which would be significantly less than the 1483°F PCT currently calculated with the WFLASH SBLOCA EM. Hence, the WFLASH SBLOCA EM results which currently form the licensing basis for Millstone Unit No. 3 are conservative and still valid for demonstrating the adequacy of Millstone Unit No. 3's Emergency Core Cooling System to mitigate the consequences of a SBLOCA, as required by 10CFR50.46. It is therefore concluded that a plant specific analysis is not needed in order for Millstone Unit No. 3 to comply with TMI Action Item II.K.3.31. Rather, NNECO references WCAP-11145 in order to comply with TMI Action Item II.K.3.31 on a generic basis, in accordance with Reference (2). This should satisfy the license condition 2.c (11) of Millstone Unit No. 3 Operating License NPF-49.

If there are any questions, please contact our licensing representative directly.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

J. F. Opeka
Senior Vice President