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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September 13, 1985

Docket No. 50-423
B11709

Director of Nuclear Reactor Regulation
Mr. B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Reference: (1) J. F. Opeka letter to B. J. Youngblood, Response to SER Confirmatory Item #61, dated June 6, 1985.

Gentlemen:

Millstone Nuclear Power Station, Unit No. 3
Additional Information Concerning SER Confirmatory Item #61

In our response to SER Confirmatory Item #61 (Reference (1)), we stated that the conversion factors used for converting instrument readings from the high range effluent monitors to release rates were based on a one hour decayed mix of noble gas nuclides. In a September 4, 1985 telephone conversation between Ms. E. L. Doolittle (NRC Licensing Project Manager), Mr. J. Lee (NRC Effluent Treatment Systems Branch Reviewer) and representatives of Northeast Nuclear Energy Company (NNECO), Mr. Lee expressed concern that the assumption of a one hour nuclide mix could lead to errors in the release calculations for times other than one hour. NNECO indicated that a one hour decay time was chosen when determining an initial monitor conversion factor because it is accurate within a factor of two for decay times from 0 to 6 hours after an accident, which is when rapid estimates of releases are required. It was also chosen to be consistent with the on-site emergency dose calculation procedures which assumed a one hour decayed mix in developing dose conversion factors.

Specific nuclide efficiency factors supplied by the monitor vendor (Kaman) are readily available in the Corporate Emergency Operations Center (EOC). Within the six hour time period, sufficient support will be available in the corporate EOC and specific conversion factors for any nuclide mix could be calculated based on decay times or actual grab samples. The modified conversion factor could then be entered into the monitor software from the control room, or hand calculated corrections (ratios) of the monitor readout could be made. Therefore, the monitors in question and the program which utilizes them are fully capable of providing time dependent estimates of release rates.

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We believe this information should fully resolve the Staff's concerns regarding SER Confirmatory Item #61.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY
et. al.

BY NORTHEAST NUCLEAR ENERGY COMPANY
Their Agent

J. F. Opeka
Senior Vice President

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

Then personally appeared before me J. F. Opeka, who being duly sworn, did state that he is Senior Vice President of Northeast Nuclear Energy Company, an Applicant herein, that he is authorized to execute and file the foregoing information in the name and on behalf of the Applicants 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, 1988