

NORTHEAST UTILITIES



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

General Offices • Selden Street, Berlin, Connecticut

P.O. BOX 270
HARTFORD, CONNECTICUT 06141-0270
(203) 665-5000

October 25, 1985

Docket No. 50-423
B11832

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

Dear Mr. Youngblood:

Millstone Nuclear Power Station, Unit No. 3
Steam Generator Tube Rupture (SGTR) Issue - Three Loop Operation

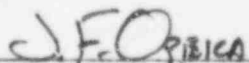
The enclosed information concerning the SGTR issue related to three loop operation of Millstone Unit No. 3 is being sent in response to an informal NRC question raised during a teleconference between Northeast Nuclear Energy Company, Westinghouse and the NRC on September 25, 1985.

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

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY
et. al.

BY NORTHEAST NUCLEAR ENERGY COMPANY
Their Agent


J. F. Opeka
Senior Vice President

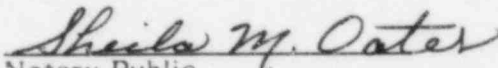

By: R. W. Bishop
Secretary

8511050107 851025
PDR ADOCK 05000423
A PDR

A05d
11

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

Then personally appeared before me R. W. Bishop, who being duly sworn, did state that he is Secretary 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, 1986

Millstone 3 SGTR Licensing Issues

A subgroup of the Westinghouse Owners Group (WOG) has been working to resolve the steam generator tube rupture (SGTR) licensing issues on a generic basis. Northeast Nuclear Energy Company (NNECO) is a member of the WOG and is participating in the SGTR Subgroup. NNECO is planning to utilize the results of the generic program to resolve the specific Millstone 3 licensing issues for both four loop and three loop plant operation.

The initial results of the WOG analysis program are presented in WCAP-10698, "SGTR Analysis Methodology to Determine the Margin to Steam Generator Overfill," dated December, 1984. The analysis methodology includes the simulation of the operator actions for SGTR recovery based on Revision 1 of the WOG Emergency Response Guidelines. An analysis was performed for a reference plant which demonstrates that an operator can perform the required recovery actions to terminate the primary to secondary leakage prior to steam generator overfill for the reference plant. An evaluation of the offsite radiation dose for a design basis SGTR was also performed, and the results are presented in Supplement 1 to WCAP-10698, "Evaluation of Offsite Radiation Doses for a Steam Generator Tube Rupture Accident," dated May, 1985. This evaluation demonstrates that the calculated offsite radiation doses for the reference plant and a reference site are less than the allowable guidelines of Standard Review Plan 15.6.3 for a design basis SGTR. In addition, a best estimate evaluation of the consequences of steam generator overfill due to an SGTR is also being performed for the reference plant to demonstrate that the consequences of overfill would be acceptable. This evaluation is currently in progress, and the results will be submitted in Supplement 2 to WCAP-10698 which is scheduled for completion by the end of 1985.

After NRC review and approval of the WOG subgroup generic program results is obtained, this information will be utilized to evaluate the specific SGTR concerns for Millstone 3. This evaluation may involve an analysis to demonstrate the applicability of the generic results to Millstone 3 or a plant-specific analysis using the analysis methodology developed by the generic program. It is expected that the results of the generic program can be used to demonstrate margin to steam generator overfill for Millstone 3 for both four loop and three loop operation. The evaluation is expected to demonstrate increased margin to steam generator overfill during four loop operation for Millstone 3 relative to the reference plant used for the generic analysis. This conclusion is based on the relative comparison of the preliminary estimates of the time to overfill for the two plant types presented in WCAP-10698 and a comparison of the other significant factors which may affect the margin to overfill (i.e., availability and qualification of the equipment used for SGTR recovery, expected operator action times, auxiliary feedwater system designs, etc.) It is expected that margin to steam generator overfill can also be demonstrated for three loop operation for Millstone 3, although the margin to overfill may be slightly less than for four loop operation. A slight reduction in the margin to overfill for three loop operation is expected as a result of the differences in initial plant conditions and recovery times associated with the reduced power level for three loop operation.