

June 4, 2001

Mr. R. P. Necci
Vice President - Nuclear Technical Services
c/o Mr. David A. Smith
Dominion Nuclear Connecticut, Inc.
Rope Ferry Road
Waterford, CT 06385-0128

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (RAI) REGARDING REVISIONS
TO THE MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2 FINAL
SAFETY ANALYSIS REPORT (TAC NO. MB0866)

Dear Mr. Necci:

By letter dated December 21, 2000, Northeast Nuclear Energy Company (NNECO), submitted a License Amendment Request (PLAR 2-00-4) seeking approval for changes to the Millstone Nuclear Power Station, Unit No. 2 (MP2) Final Safety Analysis Report (FSAR), Chapter 14, description of the Steam Generator Tube Rupture (SGTR) event and its associated radiological dose consequences.

At the time of the December 21, 2000, request NNECO was the licensed operator of MP2. On March 31, 2001, all of the owners of MP2 transferred their ownership interests in MP2 to Dominion Nuclear Connecticut, Inc. (DNC), and NNECO's operating authority for MP2 was transferred to DNC. By letter dated April 2, 2001, DNC requested that the U.S. Nuclear Regulatory Commission (NRC) continue to review and act upon all requests before the Commission that had been submitted by NNECO. Accordingly, the NRC staff has continued to review the December 21, 2000, submittal and we have determined that additional information is required in order to complete our review.

The NRC requests that you provide your response to the enclosed RAI within 60 days of receipt of this letter. This 60-day response time has been discussed with Mr. Ravi Joshi of your staff,

R. Necci

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and was established as a mutually agreeable timetable for your response. If circumstances result in the need to revise the target date, or you have any questions regarding this request, please contact me at (301) 415-2426.

Sincerely,

/RA/

Jacob I. Zimmerman, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-336

Enclosure: Request for Additional Information

cc w/encl: See next page

R. Necci

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Jacob I. Zimmerman, Project Manager, Section 2
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Unit 2

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Unit 2
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REQUEST FOR ADDITIONAL INFORMATION
PROPOSED REVISION TO THE
FINAL SAFETY ANALYSIS REPORT (FSAR)
MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2
DOCKET NO. 50-336

- 1) The proposed changes to FSAR Section 14.0.11 indicate that in the new analysis of a steam generator tube rupture (SGTR), a reactor trip is assumed to occur at the time of the event initiation without time delay. It is our understanding that the purpose of this assumption is to maximize the radiological consequences following the SGTR. Please provide a discussion to demonstrate why this assumption will lead to more conservative results as compared to a delayed reactor trip with respect to the radiological consequences.
- 2) You stated in your submittal that there are changes in the assumptions and methods used in the updated thermal hydraulic analysis of the SGTR accident. Please confirm that the computer codes used in the updated analysis are consistent with that for the current analysis and that they have been previously approved by the staff; also, please confirm that all changes of assumptions not addressed in your submittal will not lead to non-conservative results.
- 3) You stated in your submittal that the atmospheric dump values (ADVs) are assumed to not be available for 30 minutes from the time of reactor trip due to loss of instrument air. Are there any safety grade nitrogen bottles installed to support the operation of ADVs? Per the emergency operating procedures (EOPs) at Millstone Unit 2, the ADVs may be opened much earlier than 30 minutes into the event. Please provide a discussion to demonstrate that the assumed late actuation of ADVs would lead to more limiting results in radiological consequences.
- 4) Please confirm that the event scenario of the updated SGTR analysis is consistent with the operator actions per EOPs at MP2 except for the assumptions for the time of reactor trip and ADV initiation.
- 5) Please expand the sequence of events for the SGTR accident contained in the proposed revision of FSAR Table 14.6.3-3 (Attachment 3, Insert B of the application) to include all significant changes to primary and secondary system parameters and all major plant system responses during the postulated SGTR. This information is needed to assist the staff in assessing the radiological consequences for the event.
- 6) Please provide the atmospheric dispersion factors from the release points in the accident to the control room. If the Nuclear Regulatory Commission (NRC) staff has not reviewed and approved these values provide the information necessary to calculate these values. If the NRC has previously approved these atmospheric dispersion factors please provide the information necessary to verify that the NRC staff has performed a review of the values calculated.

Enclosure

- 7) Please provide details on when the control room ventilation intake is isolated and is set to emergency intake mode following a SGTR.
- 8) Please provide the doses calculated for the SGTR control room dose analyses.
- 9) Please justify ending the iodine spike at four 4 hours following the accident. What mechanism stops the spike at this time?
- 10) Please provide the activity of each radio nuclide used in the analysis for an equilibrium reactor coolant system concentration of 1 micro-Ci/gm Dose Equivalent Iodine-131. What inputs and assumptions were used to calculate these values?
- 11) Please provide the release rates of each radio nuclide used for the accident initiated spike source term and the assumptions and inputs used to calculate these values.
- 12) Please provide the bases for the air ejector partition factor.