



Northeast  
Utilities System

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Northeast Utilities Service Company  
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October 25, 1996

Docket No. 50-336

B15960

Re: 10CFR50.46

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

Millstone Nuclear Power Station, Unit No. 2  
Response To a Request For Additional Information  
Supporting the Evaluation of Unacceptable Behavior of the  
Siemens Large Break LOCA Methods Used for Millstone Unit No. 2

On October 16, 1996, representatives of Northeast Utilities Service Company (NUSCO) attended a public meeting with the NRC Staff and other licensees using the Siemens Power Corporation (SPC) Large Break Loss of Coolant Accident (LBLOCA) Evaluation Model. At this meeting, NUSCO reported that the analysis of record for Millstone Unit No. 2 employed the 1991 Evaluation Model and yielded a Peak Clad Temperature of 1922°F. As the 1991 Evaluation Model is currently unacceptable to the Staff, an additional analysis was presented by Millstone Unit No. 2 which used the previously approved 1986 Evaluation Model. This analysis resulted in a PCT of 1927°F. Additionally, in order to address Staff concerns with non-physical trends in this model, an analysis was performed which limited the reflood heat transfer coefficient to be no greater than that corresponding to a reflood rate of 1.77 in/sec. This analysis resulted in a PCT of 1950°F. These evaluations demonstrate that the 10CFR50.46 limits are met for Millstone Unit No. 2 and that the impact of the model change is not significant. Therefore this model change will be reported in the annual 10CFR 50.46 report.

At the October 16, 1996 meeting, the Staff requested that each licensee submit additional information supporting the conservatism of the reflood heat transfer model as applied to the licensing calculations. Millstone Unit No. 2 is currently in an extended plant shutdown. NUSCO understands the continuing Staff concern with the Siemens Power Corporation LBLOCA Evaluation Model and

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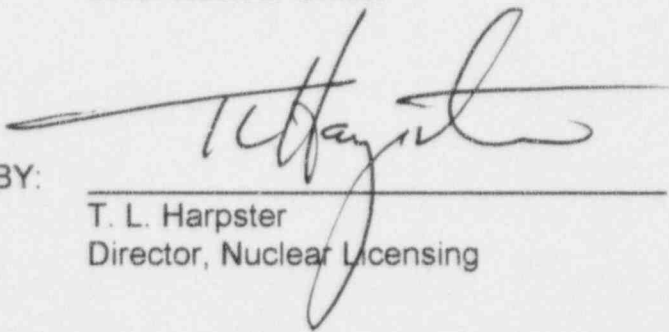
will continue to work closely with SPC and the NRC Staff in order to assure this issue is closed in a timely and technically justified manner. In addition, Millstone Unit No. 2 will meet all 10CFR50 reporting requirements that may result from the ongoing evaluations.

If you have any additional questions concerning this submittal, please contact Mr. Michael D. Ehredt at (860) 440-2142.

Very truly yours,  
NORTHEAST NUCLEAR ENERGY COMPANY

FOR: T. C. Feigenbaum  
Executive Vice President and  
Chief Nuclear Officer

BY:



T. L. Harpster  
Director, Nuclear Licensing

cc: H. J. Miller, Region I Administrator  
D. G. McDonald, Jr., NRC Project Manager, Millstone Unit  
No. 2  
P. D. Swetland, Senior Resident Inspector, Millstone Unit No. 2