

**NORTHEAST UTILITIES**

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

General Offices • Seiden Street, Berlin, Connecticut

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

December 16, 1991

Docket No. 50-336  
B13988

Re: ASME Code Relief

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

Gentlemen:

Millstone Nuclear Power Station, Unit No. 2  
Relief Request From ASME Code Section IX Requirements

Northeast Nuclear Energy Company (NNECO) has recently identified to the ASME Code Committee a need for change or clarification to a specific section of the ASME Code. This need for change was identified because it was the opinion of NNECO that the Code was technically inadequate. The ASME Code Committee has recently reviewed this request and has informed NNECO that a Code revision is prudent and is being processed through standard ASME Code procedure. We were also informed by ASME Code Committee members that such a change could not be processed in the time frame required to support our Millstone Unit No. 2 steam generator replacement.

Based upon the above considerations, NNECO is requesting relief from ASME Code Section IX requirements. Specifically, NNECO desires relief from paragraph QW410.7. Presently, QW410.7 reads, "A change in width, frequency or dwell time of oscillation, for machine or automatic welding only." This paragraph is considered a supplementary essential variable per QW256.

As written, any change in either width, frequency, or dwell time of oscillation from that qualified (i.e., utilized during procedure qualification tests) would require requalification of the procedure. This requirement appears to be overly restrictive and has questionable technical basis.

The fracture toughness of the weld metal and base metal heat-affected zone can be attributed to the cooling rates associated with the weld procedure and process. Cooling rates are controlled by base metal thickness, preheat, and interpass temperatures and heat input.

Section IX has several provisions covering thickness, preheat, and interpass temperatures and heat input (QW403.6, QW405.1, QW405.2, and QW409.1, respectively) to ensure adequate fracture toughness.

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Changes in the width, frequency, and dwell time of oscillation affect fracture toughness by influencing heat input or volume of weld metal per unit length of weld (QW409.1). Per QW409.1, only increases in heat input or volume of weld metal per unit length of weld require requalification. Yet, per QW410.7, changes in width, frequency, or dwell time which would have the effect of decreasing heat input would still require requalification.

NNECO therefore requests that QW410.7 be considered as a nonessential variable until the ASME Code has issued an appropriate revision to the Code.

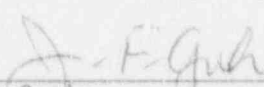
This issue has been a subject of our recent discussion with the NRC Staff and we understand that the Staff is aware of the Code Committee Working Group actions on this matter.

Because the 1992 refueling outage, which is currently scheduled to start in April 1992, is planned as our steam generator replacement outage, NNECO shall be performing machine welding of the reactor coolant system and other piping. Therefore, NNECO respectfully requests that this relief request be acted upon as expeditiously as possible in order to support planned welding activities for the steam generator replacement. We are sensitive to the time schedule in which this request is being made, and therefore will be available to provide the Staff with any information it may require in support of this request.

If you have any questions or require further information, please contact us.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

  
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J. F. Opoka  
Executive Vice President

cc: T. T. Martin, Region I Administrator  
G. S. Vissing, NRC Project Manager, Millstone Unit No. 2  
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2, and 3