



**Northeast  
Nuclear Energy**

Rope Ferry Rd. (Route 156), Waterford, CT 06385

Millstone Nuclear Power Station  
Northeast Nuclear Energy Company  
P.O. Box 128  
Waterford, CT 06385-0128  
(860) 447-1791  
Fax (860) 444-4277

The Northeast Utilities System

Docket No. 50-423

B16712

September 29, 1997

Re: 10CFR50, Appendix G  
10CFR 50.61  
GL 92-01

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

Millstone Nuclear Power Station, Unit No. 3  
Update to Generic Letter 92-01 Response

The purpose of this letter is to update our response to Generic Letter (GL) 92-01, Revision 1, Supplement 1 "Reactor Vessel Structural Integrity" (B15410) for Millstone Nuclear Power Station, Unit No. 3, dated November 13, 1995.

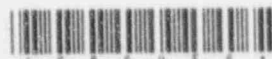
As a result of our response to this Generic Letter the NRC Staff provided "Closeout of Northeast Utilities Service Company (NUSCO) Response to Generic Letter 92-01, Revision 1, Supplement 1 for Millstone Nuclear Power Station, Units 1, and 3 (TAC Nos. M92696 and M92698)", dated July 19, 1996. Within this response, the NRC Staff requested that whenever additional relevant information became available, that it be evaluated and the results of the evaluation be provided.

As a result of our participation in the Asea Brown Boveri / Combustion Engineering (ABB/CE) Reactor Vessel Group's (RVG) vessel fabrication data review, additional weld fabrication data has been obtained for the Millstone Unit 3 reactor vessel. This data has been incorporated into our 10CFR50.61 and the 10CFR50, Appendix G evaluations. The results indicate that the previous information provided to the NRC Staff to demonstrate compliance with the 10CFR50 requirements remains unchanged. This conclusion is based on the fact that the Millstone Unit 3 vessel is plate limited (i.e. most limiting material properties occur in a plate not in a weld) and the minor changes to the weld properties as a result of the new data did not result in any weld becoming limiting.

We trust that our update provides the information that is needed to complete your review of GL 92-01 for Millstone Nuclear Power Station Unit No. 3. However, if additional information is required, please contact Mr. David A. Smith at (860) 437-5840.

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Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

  
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M. H. Brothers  
Vice President - Millstone Unit No. 3

Subscribed and sworn to before me

this 29 day of September, 1997

Donna Lynne Williams

Date Commission Expires: Nov. 30, 2001

cc: H. J. Miller, Region I Administrator  
W.D. Travers, PhD, Director, Special Projects Office  
J. W. Andersen, NRC Project Manager, Millstone Unit No. 3  
A. C. Cerne, Senior Resident Inspector, Millstone Unit No. 3

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Attachment 1

Millstone Nuclear Power Station, Unit No. 3  
Update to Generic Letter 92-01 Response  
Calculation of Initial Properties  
for CY and Millstone Reactor Vessels - MP3

September, 1997

**Table 1: Millstone 3**

	% Cu	% Ni	Chemistry Data Reference	Mean % Cu	Mean % Ni
Weld 4P6052	0.047	0.049	CE NPSD-1039 Final Report dated June 1997 Best Estimate Data	0.05	0.05
Int. Plate B9805-1	0.050	0.670	WCAP-10732 (pg A-2)	0.05	0.64
	0.045	0.620	WCAP-10732 (pg A-2)		
	0.060	0.620	MCR		
Int. Plate B9805-2	0.05	0.620	WCAP-10732 (pg A-2)	0.05	0.64
	0.050	0.650	MCR		
Int. Plate B9805-3	0.040	0.620	WCAP-10732 (pg A-2)	0.05	0.65
	0.060	0.680	MCR		
Lower Plate B9820-1	0.070	0.620	WCAP-10732 (pg A-2)	0.08	0.63
	0.080	0.630	MCR		
Lower Plate B9820-2	0.060	0.600	WCAP-10732 (pg A-2)	0.07	0.60
	0.070	0.600	MCR		
Lower Plate B9820-3	0.050	0.580	WCAP-10732 (pg A-2)	0.06	0.61
	0.070	0.630	MCR		

**Table 2: Millstone 3**

	Rtpts @ EOL (°F)	ID Flu @ EOL ence ( $\times 10^{19}$ n/cm <sup>2</sup> )	I <sup>2</sup> Tndt (°F)	Method of Det. IRTndt	delta RTndt@ EOL (°F)	FF @ EOL ( $\times 10^{15}$ n/cm <sup>2</sup> )	CF	Method of Det. CF	Margin (°F)	Method of Det. Margin	Cu%	Ni%
Lower Plate B9820-1	107.0	3.03	7.0	Plant Specific	66.0	1.293	51.0	Table	34.0	Measured Values	0.08	0.63
Int. Plate B9805-3	70.8	3.03	-3.3	Plant Specific	40.1	1.293	31.0	Table	34.0	Measured Values	0.05	0.65
Int. Plate B9805-1	134.1	3.03	50.0	Plant Specific	40.1	1.293	31.0	Table	34.0	Measured Values	0.05	0.64
Int. Plate B9805-2	80.3	3.03	6.2	Plant Specific	40.1	1.293	31.0	Table	34.0	Measured Values	0.05	0.64
Lower Plate B9820-3	100.4	3.03	18.6	Plant Specific	47.8	1.293	37.0	Table	34.0	Measured Values	0.06	0.61
Lower Plate B9820-2	129.7	3.03	38.8	Plant Specific	56.9	1.293	44.0	Table	34.0	Measured Values	0.07	0.60
Welds	47.0	3.03	-50.0	Plant Specific	41.0	1.293	31.7	Table	56.0	Measured Values	0.05	0.05

**Table 3: Millstone 3**

	USE @ EOL <sup>1</sup> , (ft-lbs)	t/4 Fluence @ EOL (x10 <sup>19</sup> n/cm <sup>2</sup> )	Unirr. USE (ft-lbs)	Method Determ. Unirr. USE	% Drop USE @ EOL	Method Determ % Drop	Cu%
Lower Plate B9820-1	60.2	1.660	76.7	Direct	21.5	Position 1.2 of RG 1.99 Rev 2	0.08
Int. Plate B9805-3	83.5	1.660	106.3	Direct	21.5	Position 1.2 of RG 1.99 Rev 2	0.05
Int. Plate B9805-1	89.0	1.660	113.3	Direct	21.5	Position 1.2 of RG 1.99 Rev 2	0.05
Int. Plate B9805-2	70.7	1.660	90.0	Direct	21.5	Position 1.2 of RG 1.99 Rev 2	0.05
Lower Plate B9820-3	62.3	1.660	79.3	Direct	21.5	Position 1.2 of RG 1.99 Rev 2	0.06
Lower Plate B9820-2	59.4	1.660	75.7	Direct	21.5	Position 1.2 of RG 1.99 Rev 2	0.07
Welds	113.0	1.660	144.0	Direct	21.5	Position 1.2 of RG 1.99 Rev 2	0.05