

# NORTHEAST UTILITIES



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

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(203) 666-6911

May 1, 1984

Docket No. 50-423  
B11148

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

- Reference: (1) B. J. Youngblood letter to W. G. Council, Draft SER, dated December 20, 1983.
- (2) B. J. Youngblood letter to W. G. Council, Request for Additional Information, dated January 16, 1984.

Gentlemen:

Millstone Nuclear Power Station, Unit No. 3  
Response to Materials Engineering Branch DSER Open Item

Attached is Northeast Nuclear Energy Company (NNECO) response to the Materials Engineering Branch Inservice Inspection Section open item MTEB 250.10 concerning the recording and investigating of crack indications. We expect the response will resolve the Staff's concerns regarding this open item.

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

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY  
et. al.

BY NORTHEAST NUCLEAR ENERGY COMPANY  
Their Agent

W. G. Council  
W. G. Council  
Senior Vice President

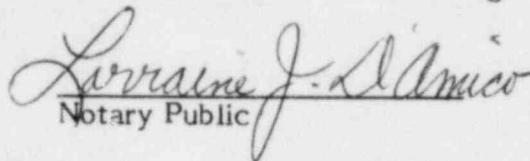
C. F. Sears  
By: C. F. Sears  
Vice President  
Nuclear and Environmental Engineering

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

Then personally appeared before me C. F. Sears, who being duly sworn, did state that he is Vice President 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, 1988

Millstone Nuclear Power Station, Unit No. 3  
Open Item  
Materials Engineering Branch  
Inservice Inspection Section

MTEB 250.10      Recording and Investigating Crack Indications (Draft SER Section 6.6)

250.10      Your response to Question 250.4 states that only indications 50 percent of DAC or greater will be recorded and investigated. This is not acceptable because a direct correlation does not always exist between the amplitude of ultrasonic response and the size of actual flaws.

Our position is when using either Article 5 of Section V or Appendix III of Section XI for examination of either ferritic or austenitic piping welds, the following should be incorporated:

1. Any crack-like indication, regardless of ultrasonic amplitude, discovered during examination of piping welds or adjacent base metal materials should be recorded and investigated by a Level II or Level III examiner to the extent necessary to determine the shape, identity, and location of the reflector.
2. The Owner should evaluate and take corrective action for the disposition of any indication investigated and found to be other than geometrical or metallurgical in nature.

Response

Our basis for not including item #1 in our procedures is that the reflected signal presented on the CRT cannot be accurately differentiated to a point where the character of the displayed signal can determine the type of reflector present. Since we are aware of the problem with an amplitude based examination we have added compensatory measures to our procedure. These measures include the use of a higher sensitivity by using the sensitivity established off the 3/4T SDH rather than the 10% T notches the ASME Code suggests. This gives us 2.5 to 4 times the Code required sensitivity for our recording level which would normally be 10% to 20% of DAC established by using 10%T notches. We feel that by using this criteria we will be less dependent on operator ability and obtain more accurate examination data. A copy of our austenitic piping weld examination procedure is available for your review. We have revised our ferritic piping weld examination procedure to require indications 20 percent of DAC or greater to be recorded and investigated.

In response to item #2 NUSCO does evaluate all indications determined not to be geometrical or metallurgical in nature. We presently have certified individuals to perform this function in-house.