

**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

July 27, 1983

Docket No. 50-423  
B10839

Dr. Thomas E. Murley, Regional Administrator  
Region I  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

- References: (1) W. G. Council letter to R. C. Haynes, Millstone Nuclear Power Station, Unit No. 3, Reporting of Potential Significant Deficiencies in Design and Construction: Cracks Related to Embedments in the Containment Crane Wall (SD-29), dated December 7, 1982.
- (2) W. G. Council letter to T. E. Murley, Millstone Nuclear Power Station, Unit No. 3, Reporting of Potential Significant Deficiencies in Design and Construction: Cracks Related to Embedments in the Containment Crane Wall (SD-29), dated June 16, 1983.

Dear Dr. Murley:

Millstone Nuclear Power Station, Unit No. 3,  
Reporting of Potential Significant  
Deficiencies in Design and Construction:  
Cracks Related to Embedments in  
the Containment Crane Wall (SD-29)

In Reference (1), Northeast Nuclear Energy Company (NNECO) reported a potential significant deficiency as required by 10CFR50.55(e) concerning cracks in the concrete in the containment crane wall near embedments. Reference (2) provided you with an update of our progress in resolving this potential deficiency. As outlined below, this investigation has been completed and it was found that the plate capacity is adequate to resist the forces from the pipe rack trusses.

The cracks occurred adjacent to embedment plates which act as supports for the annulus pipe racks carrying Category I piping. This condition was originally reported on N&D 0646 for one location. While performing an investigation leading to the N&D disposition, cracks at other similar plates were discovered.

A clear indication of the direction of the cracks was established by chipping the concrete. The cracks extend from the face of the concrete to the heads of the first row of studs and then over at an angle of approximately 45 degrees towards the center of the plate (see Attachment A).

11/11

The capacity of the plates was calculated based on the cracked section shown on Attachment A, and using the appropriate safety factors. Analysis of critical sections of the pipe rack trusses was performed using current support load information. The resulting reactions at the plates are less than the calculated plate capacity. Structural repairs were found not to be necessary.

NNECO considers this deficiency to be resolved. Therefore, this letter constitutes our final report closing out SD-29. We trust the above information satisfactorily responds to your concerns, however, if you should have any further questions, feel free to contact us.

Very truly yours,

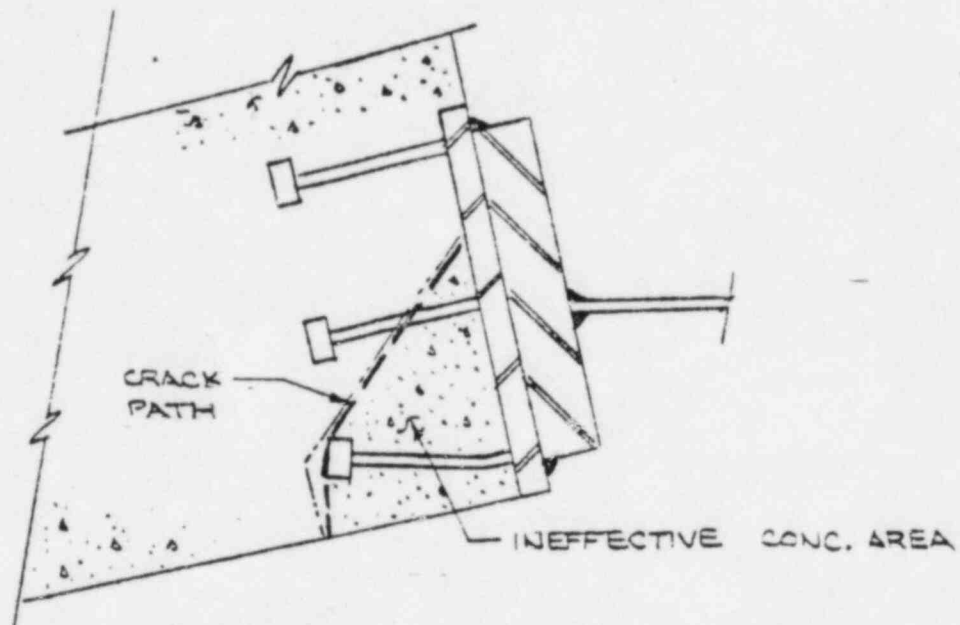
NORTHEAST NUCLEAR ENERGY COMPANY

W. G. Council

W. G. Council  
Senior Vice President

C. Frederick Sears

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



POWER INDUSTRY GROUP	TITLE				SCALE	N.T.S.
DRAWN	R.F. CARRIER				DATE	6/22/83
CORRECT						
APPROVED						
REVISIONS	(2)	(3)	(4)	(5)		

ATTACHMENT A