

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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August 1, 1988

Docket No. 50-423

A07358

Re: 10 CFR 50.49

Mr. William V. Johnston, Acting Director
Division of Reactor Safety
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Dear Mr. Johnston:

Millstone Nuclear Power Station, Unit No. 3
Response to Notice of Violation
Inspection Report No. 50-423/88-04

I. INTRODUCTION

By letter dated July 6, 1988, the NRC transmitted its Inspection Report No. 50-423/88-04 and associated Notice of Violation relating to the Region I Staff's announced inspection of March 14-18, 1988, of Millstone Nuclear Power Station, Unit No. 3. In its letter the Staff identified one Severity Level IV violation, four potential violations, and three unresolved items. The Staff requested that Northeast Nuclear Energy Company (NNECO) respond to the Notice of Violation within 30 days of the date of the Inspection Report. In addition, the Staff requested NNECO to attend an enforcement conference to discuss the four potential violations. This enforcement conference was held on July 20, 1988. At this meeting, NNECO provided information regarding the potential violation pertaining to Raychem splices. At the conclusion of this portion of our presentation, the Staff suggested that NNECO include that information when responding to the subject Notice of Violation. By this letter, NNECO responds to the Notice of Violation and the potential violation regarding Raychem splices.

II. NNECO RESPONSE TO VIOLATION

NNECO's response to the Severity Level IV violation identified by the Staff is set forth below:

A. Staff Statement of the Violation

"10 CFR 50.49, paragraph (f), requires that electrical equipment important to safety must be qualified by test and/or analysis.

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Contrary to the above, on March 18, 1988, the NRC identified Raychem cable splices installed in safety-related EQ equipment that did not meet the requirements in that the heat shrink tubing was applied over braided cable jacketing. This was not a qualified configuration prior to the time of new test data, dated March 1987, which determined the splices were qualified.

This is a Severity Level IV violation, Supplement I."

B. NNECO Statement of Position

NNECO does not contest the Notice of Violation as stated and accordingly admits there was insufficient documentation in the files to support the installation of Raychem splice over braided cable jacketing prior to March 1987.

C. Root Cause

Craft personnel failed to follow the specified vendor product installation procedure during installation of these Raychem splices.

D. Corrective Steps Taken

This installation was discovered on March 16, 1988, during the plant walkdown phase of Inspection No. 50-423/88-04. Qualification of this configuration was previously demonstrated by test in March 1987. This test data had been evaluated and included in the Millstone Unit No. 3 Raychem qualification file prior to the inspection.

E. Corrective Actions to Prevent Recurrence

The following corrective actions have been implemented:

1. Craft personnel have received additional training to emphasize the importance of following all specified procedures during component installations.
2. Craft, inspection, supervisory, and engineering personnel have received specific Raychem installation training conducted by qualified Raychem Corporation representatives.

F. Date for Full Compliance

Full compliance was achieved in March 1987. Pursuant to the requirements of 10 CFR 50.49, paragraph (f), this Raychem configuration was qualified by test as of that time.

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III. RELATED POTENTIAL VIOLATION 88-04-06

A. Statement of the Issue

NRC Inspection Report Issue 50-423/88-04-06 states, "a review of licensee walkdown records for Raychem splices indicate[s] additional nonconforming conditions involving excessive splice bends (less than the recommended 5X outside cable diameter) and splice seal length areas of less than 2 inches." According to the Staff, these deficiencies constitute a potential violation of 10 CFR 50.49 in that the splices were not qualified per the instruction procedures in effect at the time of the installation.

B. NNECO Position Regarding the Existence of a Violation

NNECO does not agree with the Staff's conclusions that installation of Raychem splices with a bend radius less than 5X the outside cable diameter was contradictory to the Raychem procedure/instructions existing at that time. NNECO followed existing procedures with regard to these installations at the time the plant went into operation.

NNECO also does not agree that the Millstone Unit No. 3 walkdown records indicate that the Raychem installation had splice lengths of less than two inches.

C. Basis for Denying that a Deficiency Existed

1. Bend Radius

The original installation of the splices was made in accordance with Millstone Unit No. 3 Electrical Installation Specification No. E-350. This procedure stated that Raychem installation instructions shall be in accordance with Raychem's "Product Installation and Inspection Guide--WCSF-N Heavy Wall, Flame Retarded Nuclear Cable Sleeves" (PII-57100-A) and installation instructions provided with each kit. E-350 also states that Quality Control personnel shall verify (in accordance with specifications) that proper Raychem components are used, manufacturer's installation instructions have been followed, and an acceptable splice has been made.

During the time at which Raychem Product Guide PII-57100-A (November 1982) was in effect, Raychem did not specify bend radius acceptance criteria. Accordingly, contrary to the inspection report findings, the Raychem installations were made in accordance with procedures in existence at that time. Upon issuance of NRC Information Notice 86-53 (June 26, 1986), NNECO

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took reasonable and prudent actions to address the issue. Bend radius criteria were first published in PII-57100-D (November 1987).

2. Seal Length

Contrary to the NRC inspection report, NNECO's review of walkdown records does not reveal any instances where Raychem splices with less than 2-inch seal lengths exist. NNECO Quality Control personnel witnessed the installation of some of the splices and did not note any such deficiencies in seal length. NNECO had no other indications that such deficiencies in seal length exist. Therefore, NNECO denies that the alleged deficiency in seal length existed. It should be noted that after issuance of Information Notice 86-53, in which this issue was raised, NNECO took reasonable and prudent actions to address it.

D. Safety Significance

These issues have no safety significance because the March 1987 testing has established that a bend radius much less than 5X the outside diameter and seal lengths much less than 2 inches are qualified configurations. Accordingly, no replacements or modifications of the components were required to establish or maintain qualification.

E. Other Factors that Should Be Considered

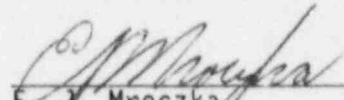
1. Notwithstanding the final determination regarding the existence of a violation, craft personnel have received additional training to emphasize the importance of following procedures during component installations.
2. In addition to the above, specific Raychem training was provided by Raychem personnel to ensure that installations were correct.
3. The EQ file was revised prior to the inspection to include test data (dated March 1987) that confirms the qualification of Raychem splices less than a 2-inch seal length and bends of less than 5X the outside diameter of the cable. The Staff has concurred with the acceptability of the March 1987 report to further establish qualification. (See Inspection Report 50-423/88-04 at p. 21.)

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If you have questions regarding the information contained in this letter,
please contact us.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

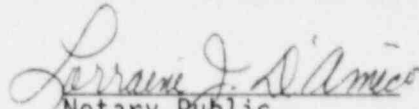

E. J. Mroczka
Senior Vice President

cc: W. T. Russell, Region I Administrator
D. H. Jaffe, NRC Project Manager, Millstone Unit No. 3
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2, and 3

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

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

Then personally appeared before me, E. J. Mroczka, who being duly sworn, did state that he is Senior Vice President of Northeast Nuclear Energy Company, a Licensee herein, that he is authorized to execute and file the foregoing information in the name and on behalf of the Licensee 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, 1993