

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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October 10, 1985

Docket No. 50-423

F0854A

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

- References: (1) J.F. Opeka letter to T.E. Murley, F0754A, dated May 10, 1985.
- (2) J.F. Opeka letter to T.E. Murley, F0777A, dated July 11, 1985.
- (3) J. F. Opeka letter to T. E. Murley, F0843A, dated September 18, 1985.

Dear Dr. Murley:

Millstone Nuclear Power Station, Unit No. 3
Reporting of Potential Significant Deficiencies
in Accordance with 10CFR 50.55(e):
Structural Steel Connections in the Main Steam Valve Building (SD-81)

In an April 12, 1985 telephone conversation between your Mr. T. Rebelowski and our Mr. P.J. Quinlan, Northeast Nuclear Energy Company (NNECO) reported a potential significant deficiency in the construction of Millstone Unit No. 3 in accordance with 10CFR 50.55(e). As noted in Reference (1), the potential significant deficiency involved structural steel connections in the Main Steam Valve Building (MSVB).

During the NRC Construction Appraisal Team inspection at Millstone Unit No. 3, a concern was identified regarding undersized fillet welds on the clip angles for three (3) W14 x 68 beams welded to embedded plates for the structural steel installation in the MSVB. Further concerns were identified with beams utilizing fixed end and slotted connections. The inspection also revealed beams with slotted connections to have bolts tensioned beyond the finger-tight requirement of the design drawing.

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In Reference (2), NNECO determined this to be a significant deficiency in accordance with 10CFR 50.55(e). NNECO also noted that these conditions were expected to be limited to the MSVB and that a sampling of connections in other QA Category I Buildings was still being performed to verify this.

Reference (3) noted that the sampling of connections was complete and that the evaluation of results was still in progress.

We hereby provide the results of our investigation.

The clip angle connections used in the MSVB were not of a standard type used on the job, and consequently were detailed on the erection drawings. Standard connections used on the Millstone project are covered on a SWEC standard and in the AISC manual of steel construction. In the MSVB, the subject connections referred to notes and details which were unusual and subject to misinterpretation causing the error on the part of both Construction and FQC.

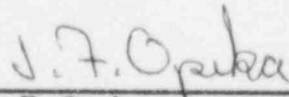
In order to determine if this method of detailing end connections was used in other designs, we have reviewed all QA Category I structural steel erection drawings to identify instances where standard and connection details included modified requirements to that of the referenced standards. Results of this review revealed this design detailing method was only used for designs in the MSVB. Therefore, it is determined that the clip angle problem was limited to the MSVB.

In an effort to determine the extent of the slotted end connection problem, all slotted connections were identified, and a 100% re-inspection of slotted connections was performed in all Category I buildings. Results of that re-inspection indicated two slotted connections in the Auxiliary Building and one slotted connection in the Containment Building required rework.

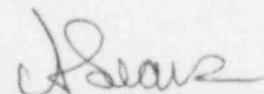
The deficient conditions have been identified and corrective action initiated. Therefore we consider this to be our final report for SD-81. We trust this information is sufficient to close this issue.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY



J. F. Opeka
Senior Vice President



By: C. F. Sears
Vice President

cc: Mr. J. M. Taylor, Director
Division of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555