

# NORTHEAST UTILITIES



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

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September 28, 1984

Docket No. 50-423

F0575A

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

Reference: (1) W. G. Council to T. E. Murley, F0557A, dated June 18, 1984.

Dear Dr. Murley:

In a May 19, 1984, telephone conversation between your Mr. T. Rebelowski and our Mr. R. R. Viviano, Northeast Nuclear Energy Company (NNECO) reported a potential significant deficiency in the construction of Millstone Unit No. 3 as required by 10 CFR 50.55(e). The potential significant deficiency involves vendor (Tubeco) supplied radiographs. A random sample of 125 out of a population size of 2,740 welds were reviewed. A total of 54 welds were found to be in noncompliance with vendor procedures and ASME III requirements due to film density violations, the placing of penetrameters and penetrometer identification numbers in the weld, undocumented linear indications, or excessive geometric unsharpness (See Reference 1).

Our architect-engineer, Stone & Webster Engineering Corporation, has reviewed this sample for weld quality. The results are summarized below.

- o No welds were rejected requiring repair for density violations.
- o No welds were rejected requiring repair for lead identification numbers being in the weld zone.
- o No welds were rejected requiring repair for incorrect penetrometer placement.
- o No welds were rejected requiring repair for geometric unsharpness (i.e., UG Factor).
- o No welds were rejected requiring repair for sensitivity.
- o No welds were rejected requiring repair for film artifacts.

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Therefore, NNECO has concluded that no weld defects resulted from a film quality problem.

Two welds with linear indications, which may have been evaluated by Tubeco but had no reader sheet disposition, required repair. These two welds were re-radiographed. Based upon our evaluation, they were determined to be unacceptable. These ASME III, Code Class 3 welds have been repaired.


The number of problem welds is not statistically significant within the limits of Stone & Webster's quality assurance procedure QAD 7.11. It should be noted that QAD 7.11 is derived from MIL-STD-105D, "Sampling Procedures and Tables for Inspection by Attributes", a widely used industry standard for statistical sampling (including samples which require 100% inspection) which has been recognized and accepted by the various regulatory agencies, including the NRC.

A qualitative review of the two rejected welds has been completed. The review determined that no safety concern would have resulted had the defects gone undetected. Based upon the results of the radiograph sample lot review and qualitative review of the four rejected weldments, NNECO believes that Tubeco weld quality is adequate.

We consider this to be our final report closing out SD-56. We trust that the above information satisfactorily responds to your concerns.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

  
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W. G. Council  
Senior Vice President

cc: Mr. R. C. DeYoung, Director  
Division of Inspection and Enforcement  
U. S. Nuclear Regulatory Commission  
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