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 8, 1983

Docket No. 50-423
B10807

Dr. Thomas E. Murley
Region I
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Reference: (1) W. G. Counsil letter to R. C. Haynes,
Millstone Nuclear Power Station, Unit No. 3,
Reporting of Potential Significant Deficiencies in Design and
Construction: Pipe Straps, dated January 11, 1983.

Dear Sir:

Millstone Nuclear Power Station, Unit No. 3,
Reporting of Potential Significant Deficiencies
in Design and Construction: Pipe Straps (SD-31)

In Reference (1), Northeast Nuclear Energy Company (NNECO) reported a potential significant deficiency involving a pipe strap design modification with "reduced ears". The pipe strap design was changed from a bolted design to a welded design. In changing to a welded design, smaller ears were used. The design was qualified by calculation for specific installations of 2-1/2 to 6-inch piping. The potential significant deficiency involved the use of the modified pipe strap design in numerous other installations without further qualification.

During a review of this new design, it was determined that the amount of weld may not be adequate for all load combinations and that a prequalified standard with full length ears should have been specified for these other installations.

Further review of this problem indicates that there are approximately 650 straps with the "reduced ears" which have been installed rather than 1500 previously estimated in Reference (1). Of these, 10 percent do not meet the Stone & Webster standard design criteria. Further analysis of the remaining 10 percent has shown that these supports are above design allowable values but below ultimate stress values per ASTM Special Technical Publication No. 226. This indicates that failure of the pipe strap would not occur under design loading conditions. Therefore, it is concluded that if the situation had gone uncorrected, the safe operation of the plant would not have been adversely affected. As such, this problem is not a significant deficiency reportable under 10CFR50.55(e).

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The following outlines the resolution on the 10 percent of the straps above design allowable values. A majority of the straps had not yet been installed so that the design was revised to incorporate a suitable pipe strap. In a few cases where the support had already been installed, modifications were performed in the field to increase the weld size and bring the stress level below design allowable values.

This letter constitutes our final report closing out all items related to SD-31. We trust the above information satisfactorily responds to your concerns.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

W. G. Counsil

W. G. Counsil
Senior Vice President