

# 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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April 25, 1985

Docket No. 50-423  
F0727A

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

Dear Dr. Murley:

Millstone Nuclear Power Station, Unit No. 3  
Reporting of Potential Significant Deficiencies  
in Accordance with 10CFR50.55(e):  
Anchor Darling Tilting Disc Check Valves (SD-77)

In a March 26, 1985 telephone conversation between your Mr. T. Rebelowski and our Mr. B. Kaufman, Northeast Nuclear Energy Company (NNECO) reported a potential significant deficiency in the construction of Millstone Unit No. 3 in accordance with 10CFR50.55(e). The potential significant deficiency involves feedwater check valves supplied by Anchor Darling and Valve Company.

Two (2) feedwater tilting disc check valves supplied by Anchor Darling were found to have cracks in the bushing to disc tack welds. Bushing to disc tack welds are used to prevent the hinge pin bushing from moving out of the disc. A loss of one or both bushings may result in the check valve not seating properly which could allow backflow through the valve.

Check valves are used in the safety-related portion of each feedwater line leading to the steam generators. As such, they perform two functions:

1. They prevent the uncontrolled blowdown of one or more steam generators in the event of a feedwater line break, and
2. Since auxiliary feedwater is discharged to the steam generators through a connection in each main feedwater line downstream of the check valves, they prevent the loss of auxiliary feedwater should a main feedwater line rupture occur upstream of the main feedwater check valve.

These check valves are also used in the auxiliary feedwater system. Failure here could allow backflow through auxiliary feedwater system piping by either main or auxiliary feedwater, therefore, reducing the effectiveness of the auxiliary

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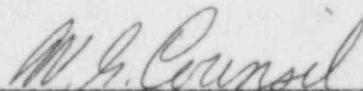
feedwater system. For these reasons, use of Anchor Darling tilting disk check valves represents a significant deficiency in the final design of Millstone Unit No. 3.

Anchor Darling has a newer hinge pin bushing design which prevents the bushing from coming out of the disc. All of the QA Category I Anchor Darling tilting disc check valves used at Millstone Unit No. 3 will have their bushings replaced with this newer design. This corrective action is expected to be complete by June 30, 1985.

As such, we consider this to be our final report for SD-77. 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. J. M. Taylor, Director  
Division of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555