

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
THE HARTFORD ELECTRIC LIGHT COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
NEW YORK WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

General Offices • Selden Street, Berlin, Connecticut

P.O. BOX 270
HARTFORD, CONNECTICUT 06101
(203) 666-6911



April 26, 1982

DOCKET NO. 50-423
AEC-MP3-271
B10490

Mr. Ronald C. Haynes
Regional Administrator
Region I
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 10406

Reference: (1) W. G. Council letter to B. H. Grier, Reporting
of Deficiencies in Design and Construction,
dated November 20, 1980.

Gentlemen:

MILLSTONE NUCLEAR POWER STATION UNIT NO. 3
FINAL REPORT ON A REPORTED POTENTIAL SIGNIFICANT DEFICIENCY
CONCERNING THE POTENTIAL FOR LOSS OF
ALL AUXILIARY FEEDWATER FOLLOWING A SMALL STEAM LINE RUPTURE

As required by Title 10, Code of Federal Regulations Part 50, Paragraph 55 (e), Northeast Nuclear Energy Company (NNECO) reported a potential significant deficiency in the design of Millstone Unit No. 3 in Reference (1). As described in our letter, NNECO had been notified by Westinghouse Electric Corporation of a potential for blowing down more than one steam generator in the event of a pipe break in the steam supply line to the turbine-driven auxiliary feedwater pump. If the operator was unable to isolate the uncontrolled blowdown because of the adverse environment at the location of the isolation valve controller or due to a malfunction of the controller, all three steam generators that supply the header would depressurize. The loss of the turbine-driven auxiliary feedwater pump, due to the loss of the steam supply line, would result in the motor-driven auxiliary feedwater pumps delivering against a back pressure corresponding to that of the blowdown steam generators. Thus, the motor-driven pumps could runout and trip due to high electrical loads.

After a detailed evaluation by Northeast Utilities Service Company, it has been determined that a potential significant deficiency does not exist for reasons stated below.

8205100251 820426
PDR ADOCK 05000423
S PDR

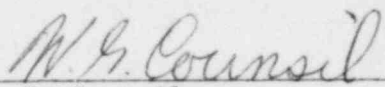
IEV
5/10

- o The Millstone Unit No. 3 design provides a normally closed valve in each of the steam supply lines from the steam generators. These valves are located upstream of the common steam supply header to the turbine driven auxiliary feedwater pump. Therefore, the common supply header is not subject to the failure described in Reference (1). Additionally an augmented inservice inspection program has been implemented for that portion of the individual steam supply lines normally pressurized between the containment and the above described isolation valves so these lines are not subject to the failure described in Reference (1).
- o The turbine driven auxiliary feedwater pump is required to operate when a motor driven auxiliary feedwater pump has failed. Since this failure is assumed to be the single active failure, a passive failure in the steam header piping is not postulated for short-term operation (less than 24 hours). After 24 hours the plant will be in a cold shutdown condition that would not require auxiliary feedwater, therefore, a passive failure of the steam header in the long term would not affect the ability of operators to maintain the plant in a safe condition.

The above report constitutes our final disposition of the reported significant deficiency in question. We trust it adequately discusses any concerns you may have had on the subject.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY



W. G. Council
Senior Vice President

cc: Mr. James H. Snizek, Director
Divison of Resident and Regional
Reactor Inspection
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, DC 20555