

NORTHEAST UTILITIES



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

General Offices • Seiden Street, Berlin, Connecticut

P.O. BOX 270
HARTFORD, CONNECTICUT 06141-0270
(203) 665-5000

May 22, 1991

Docket No. 50-336

B13793

Re: In-Service Test Program
10CFR50.55a(g)

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Gentlemen:

Millstone Nuclear Power Station, Unit No. 2
Second 10-Year In-Service Testing
Program for Pumps and Valves
Request for Relief

Northeast Nuclear Energy Company (NNECO), on behalf of Millstone Unit No. 2, hereby submits, as Attachment 1, one new request for relief from the valve testing requirements of the ASME Boiler and Pressure Vessel Code, Section XI, in accordance with 10CFR50.55a(g).

Background

In a letter dated October 30, 1987,⁽¹⁾ supplemented by a letter dated August 26, 1988,⁽²⁾ NNECO submitted the second 10-year In-Service Testing (IST) Program for Millstone Unit No. 2. These letters also requested relief from testing requirements that were determined to be impractical or would result in hardship or unusual difficulties without a compensating increase in the level of quality and safety, and proposed alternatives to provide an acceptable level of quality and safety.

The NRC Staff and contractor reviewed and subsequently provided NNECO with the Safety Evaluation (SE), Technical Evaluation Report (TER), and associated

- (1) E. J. Mrocza letter to the U.S. Nuclear Regulatory Commission, "Millstone Nuclear Power Station, Unit No. 2, In-Service Inspection Testing Program," dated October 30, 1987.
- (2) E. J. Mrocza letter to the U.S. Nuclear Regulatory Commission, "Millstone Nuclear Power Station, Unit No. 2, Inservice Inspection Testing Program (TAC No. 59265)," dated August 26, 1988.

findings. (3) Relief from certain testing requirements was granted with specified conditions.

Implementation of the testing program approved in Reference 3 has identified a potentially serious personnel hazard associated with testing of the main steam atmospheric dump valves, 2-MS-190A and 2-MS-190B. Testing of these valves during reactor operation requires that they be isolated from the main steam header. The isolation valves, 12-inch manually operated gate valves, do not have a bypass equalization line. Thus, after cycling the power-operated valve, these large gate valves must be manually opened against a very high differential pressure. Such operation could result in premature valve degradation and/or failure. Valve failure poses an unacceptable risk of personnel injury.

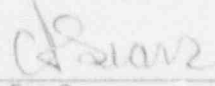
The Millstone Unit No. 2 Plant Operations Review Committee has reviewed this relief request and has concluded that (1) the presently required testing is impractical since it presents an unacceptable personnel hazard, and (2) the proposed alternative testing will provide adequate assurance of the operational readiness and integrity of these valves.

Because of the significant personnel hazard, Valves 2-MS-190A and 2-MS-190B should not be tested during reactor operation. Instead, NNECO proposes that these valves be tested during each period of hot shutdown operation, but not more often than once per quarter. Prompt approval of this request for relief is respectfully requested.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

FOR: E. J. Mroczka
Senior Vice President

BY: 
C. F. Sears
Vice President

cc: T. T. Martin, Region I Administrator
G. S. Vissing, NRC Project Manager, Millstone Unit No. 2
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2, and 3
P. Habighorst, Resident Inspector, Millstone Unit No. 2

(3) J. F. Stolz letter to E. J. Mroczka, "Second Ten-Year Inservice Testing Program and the Granting of Relief From Testing Requirements Determined to be Impractical for Millstone, Unit 2 (TAC79577)," dated July 19, 1990.

Docket No. 50-336
B13793

Attachment 1

Millstone Nuclear Power Station, Unit No. 2

Second 10-Year Interval
Relief From In-Service Testing Requirements

May 1991

U.S. Nuclear Regulatory Commission
B13793/Attachment 1/Page 1
May 22, 1991

Millstone Nuclear Power Station, Unit No. 2
Second 10-Year Interval
Relief From In-Service Testing Requirements

Relief Request RR-IWV-35

Main Steam System Valves 2-MS-190A and 2-MS-190B

Component Identification

ASME Code Class 2, Category B

Valve Function

Provide partial flow steam dump to atmosphere in the event of steam pressure excursion following reactor trip or rapid down-power transient.

Code Requirement

Exercise and measure stroke time once per quarter.

Basis for Relief

Stroke testing these valves with the reactor at power would result in an overpower transient. Isolation of these valves to perform stroke testing creates a significant personnel hazard. The manual isolation valves (2-MS-3A and 2-MS-3B) are 12-inch gate valves which have no bypass or equalization line. Opening these valves with full steam pressure differential (approximately 900 psid) across the gate places extraordinary stresses on the valve components. Such stresses could lead to valve component failure and consequent personnel injury. In addition, the stroke test conducted with the valve isolated from the main steam system may not be indicative of the actual in-service performance of the valve.

Proposed Alternative Testing

Exercise and measure stroke time during hot shutdown periods following cold shutdown, but not more often than once per quarter. This test will be performed with steam available to the valve to verify its operational readiness under actual operating conditions. The proposed alternative complies with ASME Section XI requirements.