

Northeast Nuclear Energy

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The Northeast Utilities System

MAR - 3 1998 Docket No. 50-423 B17108

RE: IST Program Relief Request

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

Millstone Nuclear Power Station Unit No. 3 Inservice Tost Program Request for Relief From ASME Section XI

Northeast Nuclear Energy Company (NNECO) hereby requests one time relief from the requirements of 10 CFR 50.55a(f) for performing the required In-service Test (IST) of certain Class 1 components in accordance with the American Society of Mechanical Engineers (ASME) Section XI for Millstone Unit 3. Approval of this one time relief is requested to support Mode 4 operations which is currently projected within the next 10 - 14 days.

Technical Specification (TS) \pm 0.5 states that the Inservice inspection and Testing of the ASME Code Class 1, 2, and 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 10 CFR 50.55a(f), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(f)(6)(i). Accordingly, pursuant to 10 CFR 50.55a(f)(5)(iii), NNECO hereby requests one time relief from the IST requirement of paragraph 4.3.2.4(c) of the OM-6 Code as modified by Generic Letter (GL) 89-04, NRC Staff Position 2, "Alternative to Full Flow Testing of Check Valves." Relief is specifically requested from the Position 2 requirements for inspecting each valve within a six year period, and that once this is completed, the sequence of disassembly must be repeated unless extension of the interval can be justified.

The Low Pressure Safety Injection (SIL) system accumulator outlet check valves are one group of check valves designated to be inspected every six years. They were identified within IST Program Relief Request R-3, to be disassembled, inspected, and manually exercised on a staggered sampling basis each refueling outage. It was recently determined that during the fifth refueling outage



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(RFO5), the sequence of disassembly and inspection was modified due to potential leakage concerns on one of the valves in the group. This valve of concern was inspected in the dot the one scheduled based on the previous sequence of inspections.

Disassembly and inspection of these valves requires the plant to be in a mid-loop configuration. Establishment of this condition would not be appropriate during this non-refueling outage. The use of a freeze seal to allow disassembly and inspection under current plant shutdown conditions was evaluated and determined to not be viable due to system piping configuration and support locations. Thus the imposition of the required inspections is considered a hardship.

The proposed alternative testing is to partially disassemble, inspect and manually full stroke exercise two of the valves in that group during RFO6. One will be the valve originally scheduled for RFO5 and the other will be the next valve in sequence currently scheduled for RFC6. This will return the valves to the correct sequence of disassembly. These valves will continue to be partially disassembled, inspected, and manually exercised on a staggered sampling basis each refueling outage.

A detailed relief description is provided in Attachment 1. The revised commitments are provided in Attachment 2. Should you have any questions regarding this matter, please contact Mr. D. A. Smith at (860) 437-5840.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

ML Burling

M. L. Bowling, Jr Millstone Unit No. 2 - Recovery Officer

Attachment: 1)

2)

- Request for relief from ASME Section X! NNECO's commitments for relief from ASME Section XI code requirements
- cc: H. J. Miller, Region I Administrator
 - W.D. Travers, PhD, Director, Special Projects Office
 - J. W. Andersen, NRC Project Manager, Millstone Unit No. 3
 - A. C. Cerne, Senior Resident Inspector, Millstone Unit No. 3

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Attachment 1

Millstone Nuclear Power Station Unit No. 3 Inservice Test Program Request for Relief From ASME Section XI

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> Attachment 1 Millstone Nuclear Power Station, Unit No. 3 Inservice Test Program

One Time Relief Request From In-Service Test Requirements

RELIEF REQUEST: R-2

VALVES:

3SIL*V15, V17, V19, V21

CATEGORY: AC

CODE CLASS:

FUNCTION: Open to allow SI accumulator tank discharge to the RCS loops.

TEST REQUIREMENT: Generic Letter (GL) 89-04, NRC Staff Position 2, "Alternative to Full Flow Testing of Check Valves." Specific requirements of a) "With four valves in a group and an 18-month reactor cycle, each valve would be disassembled and inspected every six years." and b) "Once this is completed, the sequence of disassembly must be repeated unless extension of the interval can be justified."

BASIS FOR RELIEF: Each of these valves have been disassembled. inspected and manually full stroke exercised in the previous refueling outages in accordance with Position 2 of GL 89-04 and as stipulated in approved relief request R-3 to Rev. 4 of the IST Program. Valve 3SIL*V15 was inspected in RFO1, 3SIL*V17 in RFO2, 3SIL*V19 in RFO3, and 3SIL*V21 in RFO4. Inspection and manual exercising results for each valve showed them to be in excellent condition with no visible degradation and with full stroke capability. The sequence of disassembly and inspection was scheduled to be repeated in RFO5 (i.e., 3SIL*V15 was scheduled to be inspected), however, indications during operation identified valve 3SIL*V19 as potentially having increased back leakage. Valve 3SIL*V19 was substituted for 3SIL*V15 and was

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disassembled, inspected, and manually exercised in RFO5. Inspection and manual exercising results for valve 3SIL*V19 showed it to be in excellent condition with no visible degradation and with full stroke capability.

These valves are 10 inch Westinghouse swing check valves. A review of industry operating experience for this type of valve did not identify any failures of the valves to open on demand. These valves were evaluated, in response to INPO SOER 86-03, using "EPRI Applications Guidelines for Check Valves in Nuclear Power Plants." They were classified as priority 3 valves which specifies disassembly and inspection within a period of five fuel cycles.

These valves cannot be full or part stroke exercised open during operation since the only flow path is from the SI accumulators to the vessel and accumulator pressure is insufficient to overcome RCS pressure. The valves should not be exercised during cold shutdowns because complete or partial discharge of the accumulator tanks into the reactor vessel could result in low temperature over pressurization of the RCS. Disassembly and inspection requires the plant to be in a mid-loop configuration. The use of a freeze seal to allow disassembly and inspection under current plant shutdown conditions was evaluated and determined to not be viable due to system piping configuration and support locations.

ALTERNATE TESTING: Valves 3SIL*V15 and 3SIL*V17 will be partially disassembled, inspected and manually full stroke exercised during RFO6. This will return the valves to the correct sequence of disassembly. Valves 3SIL *V15, 3SIL *V17, 3SIL *V19, and 3SIL *V21 will continue to be partially disassembled, inspected and manualiy full stroke exercised on a staggered sampling basis each refueling outage. During each disassembly, the valve internals will be inspected for structural soundness (no loose or corroded parts). In the event a disassembled valve's full stroke capability is questionable, additional valves will be disassembled until 100% of the valves identified in this group have been disassembled and inspected.

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Attachment 2

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Millstone Nuclear Power Station Unit No. 3 NNECO's Commitments for Request for Relief From ASME Section XI

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Attachment 2

List of Regulatory Commitments

The following table identifies those actions committed to by NNECO in this document. Please notify the Manager - Regulatory Compliance at the Millstone Nuclear Power Station Unit No. 3 of any questions regarding this document or any associated regulatory commitments.

Commitment		Committed Date or Outage
B17108-01	Valves 3SIL*V15 and 3SIL*V17 will be partially disassembled, inspected and manually full stroke exercised during RFO6.	By completion of the sixth refuel outage.
B17108-02	Valves 3SIL *V15, 3SIL *V17, 3SIL *V19, and 3SIL *V21 will continue to be partially disassembled, inspected, and manually full stroke exercised on a staggered sampling basis each refueling outage. During each valve disassembly, the valve internals will be inspected for structural soundness (no loose or corroded parts). In the event a disassembled valve's full stroke capability is questionable, additional valves will be disassembled until 100% of the valves identified in this group have been disassembled and inspected.	Ongoing