



**Northeast
Nuclear Energy**

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The Northeast Utilities System

MAR 16 2000

Docket No. 50-336
B18031

Re: 10 CFR 50.73(a)(2)(i)

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


Millstone Nuclear Power Station, Unit No. 2
Licensee Event Report 2000-005-00
Failure to Assure Containment Integrity for Certain Locked or
Sealed Valves Located Inside Containment Prior to Entering Mode 4
from Cold Shutdown

This letter forwards Licensee Event Report (LER) 2000-005-00, documenting a condition that occurred at Millstone Nuclear Power Station, Unit No. 2, on February 16, 2000. This LER is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B).

The Northeast Nuclear Energy Company (NNECO) regulatory commitments contained in this letter are located in Attachment 1.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY


C. J. Schwarz
Station Director

Attachments (2): List of Regulatory Commitments
LER 2000-005-00

cc: H. J. Miller, Region I Administrator
J. I. Zimmerman, NRC Project Manager, Millstone Unit No. 2
D. P. Beaulieu, Senior Resident Inspector, Millstone Unit No. 2

IL22

Attachment 1

Millstone Nuclear Power Station, Unit No. 2

List of Regulatory Commitments

March 2000

List of Regulatory Commitments

The following table identifies actions committed to by NNECO in this document.

Number	Commitment	Due
	Appropriate Operations department personnel were briefed on the specifics of this condition.	Complete
B18031-01	The plant's heat-up procedure will be revised to ensure compliance with Technical Specification Surveillance Requirement 4.6.1.1(a).	May 26, 2000

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Attachment 2

Millstone Nuclear Power Station, Unit No. 2

LER 2000-005-00

March 2000

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

FACILITY NAME (1) Millstone Nuclear Power Station Unit 2		DOCKET NUMBER (2) 05000336	PAGE (3) 1 OF 4
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TITLE (4)
Failure to Assure Containment Integrity for Certain Locked or Sealed Valves Located Inside Containment Prior to Entering Mode 4 from Cold Shutdown

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
02	16	2000	2000	-- 005 --	00	03	16	2000	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9) 4	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)									
POWER LEVEL (10) 000	20.2201(b)		20.2203(a)(2)(v)	<input checked="" type="checkbox"/>	50.73(a)(2)(i)		50.73(a)(2)(viii)			
	20.2203(a)(1)		20.2203(a)(3)(i)		50.73(a)(2)(ii)		50.73(a)(2)(x)			
	20.2203(a)(2)(i)		20.2203(a)(3)(ii)		50.73(a)(2)(iii)		73.71			
	20.2203(a)(2)(ii)		20.2203(a)(4)		50.73(a)(2)(iv)		OTHER			
	20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A			
	20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vii)					

LICENSEE CONTACT FOR THIS LER (12)

NAME R. Joshi, MP2 Acting Regulatory Compliance Supervisor	TELEPHONE NUMBER (Include Area Code) (860) 440-2080
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE).	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On February 22, 2000, during preparations to conduct the next scheduled performance of Technical Specification (TS) Surveillance Requirement (SR) 4.6.1.1(a) which verifies primary containment integrity, it was discovered that the last performance of this surveillance may have been inappropriately credited when the unit transitioned from Mode 5 to Mode 4 on February 16, 2000, at 0857 hours.

It was later revealed that SR 4.6.1.1(a) was last conducted on January 20, 2000 with the unit in Mode 1. In this Mode, certain containment penetrations located in containment are not required to be surveilled under SR 4.6.1.1(a) although the SR does require that these penetrations be verified closed prior to entering Mode 4 from Mode 5 if not performed within the previous 92 days. Since these containment penetrations had not been verified closed during the past 92 days, it was determined that containment integrity had not been assured during the February 16, 2000 Mode change.

The root cause of this condition was determined to be a deficiency in the plant's heat-up procedure such that there was insufficient information to cue the user that the Mode needs to be considered in determining whether the surveillance is still current.

As corrective actions, appropriate Operations department personnel were briefed on the specifics of this condition and prior to May 26, 2000, the plant's heat-up procedure will be revised to ensure compliance with Technical Specification Surveillance Requirement 4.6.1.1(a).

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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		2000	-- 005 --	00	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

I. Description of Event

On February 22, 2000, during preparations to conduct the next scheduled performance of Technical Specification (TS) Surveillance Requirement (SR) 4.6.1.1(a) which verifies primary containment integrity, it was discovered that the last performance of this surveillance may have been inappropriately credited when the unit transitioned from Mode 5 to Mode 4 on February 16, 2000, at 0857 hours.

Specifically, SR 4.6.1.1(a) requires that while in Modes 1 through 4, all penetrations** (double asterisk) [PEN] not capable of being closed by OPERABLE containment automatic isolation valves [V], be verified closed at least once every thirty-one (31) days. Prior to the February 16, 2000 Mode change, Operations personnel concluded that the prior performance of SR 4.6.1.1(a) was valid and still in effect since it was last conducted within the past 31 days.

It was later revealed that SR 4.6.1.1(a) was last conducted on January 20, 2000 with the unit in Mode 1. In this mode, certain containment penetrations had not been surveilled since SR 4.6.1.1(a)** (double asterisk) excludes verification of certain valves, blind flanges, and deactivated automatic valves located inside the containment which are locked, sealed, or otherwise secured in the closed position. However, the SR does require that these certain penetrations be verified closed prior to entering Mode 4 from Mode 5 if not performed within the previous ninety-two (92) days. Evidence to support that this latter contingency had been performed, prior to entering Mode 4 on February 16, 2000, could not be located.

Since these containment penetrations had not been verified closed in the past 92 days, it was determined that containment integrity had not been assured during the February 16, 2000 Mode change. Consequently, this condition is being reported pursuant to 10 CFR 50.73(a)(2)(i)(B), as any operation or condition prohibited by the plant's Technical Specifications.

II. Cause of Event

The root cause of this condition was determined to be a deficiency in the plant's heat-up procedure such that there was insufficient information to cue the user that the Mode needs to be considered in determining whether the surveillance is still current.

A contributing cause was the inadequate work practice of signing-off on mode 4 surveillances based solely on periodicity requirements. This resulted in tunnel vision in which all of the factors that make a previous surveillance performance valid were not appropriately considered.

III. Analysis of Event

Validating primary containment integrity ensures that the release of radioactive materials from the containment atmosphere will be restricted to those leakage paths and associated leak rates assumed in the accident analyses. This restriction, in conjunction with the leakage rate limitation, will limit the site boundary radiation doses to within the limits of 10CFR100 during accident conditions.

In this instance, SR 4.6.1.1(a) is somewhat unique in that although the TS Limiting Condition for Operation notes applicability only in operating Modes 1 through 4, this particular surveillance contains a Mode 5 contingency. The logic however is sound since during periods of cold shutdown there is a potential where locked or otherwise secured penetrations located in containment may be serviced which creates the need to verify that they are closed prior to plant heat-up (Mode 4 and higher).

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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

The unit operated approximately 3 days under the missed SR, i.e., the unit entered Mode 4, transitioned to Mode 3 and then cooled down to Mode 5 on February 19, 2000 (at 1539 hours) to repair a leaking valve. After the unit had re-entered Mode 5, SR 4.6.1.1(a) was successfully completed which confirmed that these valves had been properly secured prior to the February 16, 2000 Mode change. Consequently, this condition is considered to be of low safety significance.

IV. Corrective Action

As a result of this condition, the following actions have been, or will be performed:

1. Appropriate Operations department personnel were briefed on the specifics of this condition.
2. Prior to May 26, 2000, the plant's heat-up procedure will be revised to ensure compliance with Technical Specification Surveillance Requirement 4.6.1.1(a).

In addition, other corrective actions related to this condition are being addressed via the Millstone Corrective Action Program.

V. Additional Information

Similar Events

As noted in the similar events, certain valves inside containment had not been surveilled in accordance with SR 4.6.1.1(a) as a result of being omitted from the surveillance checklist. Since the SR double asterisk was not added to the TS until after November 19, 1997 (NRC Amendment No. 210 approval date), the corrective actions performed as a result of these two similar events, would not have prevented this current condition from occurring.

LER 96-026: On May 3, 1996, at approximately 1945 hours with the plant in mode 5 at 0% power, during a review of the Technical Specifications (TS) it was discovered that the surveillance requirements of TS section 4.6.1.1.a, "Containment Integrity," were not met. TS surveillance 4.6.1.1.a requires, at least once per 31 days, that a verification be performed to ensure that all penetrations, not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions, "are closed by valves, blind flanges or deactivated automatic valves secured in their positions..." Certain valves which are subject to this surveillance requirement were not included during the conduct of the surveillances. This event was reported pursuant to the requirements of 10 CFR 50.73(a)(2)(i)(B). The cause of this event was an historical interpretation of the TS that resulted in operating practices that were not consistent with the TS requirements. The manual valves identified which had not been included in this surveillance were verified to be in their proper position. Corrective actions taken included a shift briefing by the operations manager informing operators that the practice of entering "N/A" for certain valves on the valve lineups is unacceptable.

LER 96-023: On April 25, 1996 at 1520 hours, with the plant in Mode 5 at 0% power, an internal audit discovered that several valves located within containment isolation boundaries were not being inspected to verify they were in the closed position. This monthly check demonstrates containment integrity and is required to be performed at least once per 31 days, in accordance

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TEXT CONTINUATION

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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

with the requirements of Technical Specifications (TS) section 4.6.1.1.a. This event was reported pursuant to the requirements of 10 CFR50.73(a)(2)(i)(B), "Any operation or condition prohibited by the plant's Technical Specifications." As corrective action, other TS surveillances which require periodic valve position verification were reviewed and deficiencies identified for TS sections: 4.1.2.1a and b, 4.1.2.2b, 4.5.2a.7, 4.5.3.1, 4.7.1.2a.5, 4.7.3.1a.5 and 4.7.4.1a.5. The cause of this event was failure to properly incorporate Technical Specification surveillance requirements into plant surveillance procedures. The isolation valves that had not been inspected in accordance with the TS were subsequently inspected and verified to be in the closed position. Other valve line-ups which fulfill TS required valve position verifications were reviewed. Procedure changes have been completed to add the missing valves to the appropriate forms.

Energy Industry Identification System (EIIIS) codes are identified in the text as [XX].