

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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DONALD B. MILLER, Jr.
SENIOR VICE PRESIDENT - MILLSTONE

Re: 10CFR50.73(a)(2)(i)

May 27, 1994
MP-94-366

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Reference: Facility Operating License No. NPF-49
Docket No. 50-423
Licensee Event Report 94-003-01

Gentlemen:

This letter forwards Licensee Event Report 94-003-01 which is being submitted to report on root cause and corrective action. This supplements Licensee Event Report 94-003-00 which was submitted pursuant to 10CFR50.73(a)(2)(i).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

Donald B. Miller, Jr.
Senior Vice President - Millstone Station

DBM/RM:ljs

Attachment: LER 94-003-01

cc: T. T. Martin, Region I Administrator
P. D. Swetland, Senior Resident Inspector, Millstone Unit Nos. 1, 2 and 3
V. L. Rooney, NRC Project Manager, Millstone Unit No. 3

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PDR ADDCK 05000423
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LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNB 7714) 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.

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

FACILITY NAME (1) Millstone Nuclear Power Station Unit 3	DOCKET NUMBER (2) 05000423	PAGE (3) 1 OF 4
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TITLE (4)
Unlocked Manual Containment Isolation Valve

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
01	25	94	94	003	01	27	94			05000
									FACILITY NAME	DOCKET NUMBER
										05000

OPERATING MODE (9) 1	THIS REPORT IS BEING SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)										
POWER LEVEL (10) 88%	20.402(b)			20.405(c)			50.73(a)(2)(v)			73.71(b)	
	20.405(a)(1)(i)			50.36(c)(1)			50.73(a)(2)(v)			73.71(c)	
	20.405(a)(1)(ii)			50.36(c)(2)			50.73(a)(2)(vi)			OTHER	
	20.405(a)(1)(iii)			50.73(a)(2)(i)			50.73(a)(2)(vii)(A)			(Specify in Abstract below and in Text, NRC Form 366A)	
20.405(a)(1)(iv)			50.73(a)(2)(ii)			50.73(a)(2)(vii)(B)					
20.405(a)(1)(v)			50.73(a)(2)(iii)			50.73(a)(2)(x)					

LICENSEE CONTACT FOR THIS LER (12)

NAME William J. Temple, Site Licensing	TELEPHONE NUMBER (include Area Code) (203) 437-5904
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X	NO					

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewriter lines) (16)

On January 25, 1994, at 0130 hours, with the plant in Mode 1 at 88% power, the outboard containment isolation valve for the Integrated Leak Rate Test (ILRT) pressurization/depressurization line was found unlocked. The control room was immediately informed, and the valve was relocked. The valve had been unlocked to verify that it was closed before tagging it closed to support a work order for downstream maintenance. The total time between the unlocking and relocking was 4 hours 10 minutes.

This condition is reported as a violation of Technical Specification 4.6.1.1 which requires containment integrity to be demonstrated by verifying that all penetrations not capable of being closed by OPERABLE containment automatic isolation valves, are closed by valves, blind flanges, or deactivated automatic valves secured in their positions. The outboard isolation valve was always maintained closed and was therefore capable of performing its intended isolation function. However, while it was tagged closed for downstream maintenance, it was not locked. The condition did not have safety significance. The containment penetration was isolated by the OPERABLE key locked closed automatic inboard isolation valve, which was also always maintained closed throughout this condition.

The root cause was a program failure; attributable to a procedure deficiency and a management deficiency on expectations. As action to prevent recurrence, procedures have been revised and additional training and expectations are being provided.

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MINBB 7714), 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.

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		94	003	01	

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

I. Description of Event

On January 25, 1994, at 0130 hours, with the plant in Mode 1 at 88% power, the outboard containment isolation valve for the Integrated Leak Rate Test (ILRT) Pressurization/ Depressurization line was found red-tagged (danger-tagged) closed but unlocked when performing a surveillance. The control room was immediately informed and the valve was then locked closed. An investigation revealed that the valve had been unlocked to verify that it was closed before red-tagging it closed to support a work order associated with downstream maintenance. It was relocked when discovered during the valve position surveillance. The total time between the unlocking and relocking was 4 hours and 10 minutes.

II. Cause of Event

The root cause was a program failure; attributable to a procedure deficiency and a management deficiency on expectations. Operating procedures that covered valve lineups and verification did not provide guidance on locked valves when hanging a tag clearance. Management expectations were not clearly provided on locked valves when hanging a tag clearance.

III. Analysis of Event

This condition is reported under 10CFR50.73(a)(2)(i)(B) as an operation or condition prohibited by the plant's Technical Specifications. Technical Specification 4.6.1.1 requires containment integrity to be demonstrated by verifying that all penetrations not capable of being closed by OPERABLE containment automatic isolation valves, are closed by valves, blind flanges, or deactivated automatic valves secured in their positions. The outboard isolation valve (3HVU*V005) remained closed, and was therefore capable of performing its intended isolation function. However, while it was red-tagged secured for downstream maintenance, it was not locked (secured) for a period of 4 hours and 10 minutes. The containment penetration was isolated by the OPERABLE key locked closed automatic inboard isolation valve, which was also always maintained closed throughout this condition although it was not deactivated.

The outboard valve (3HVU*V005) is a manual 30" butterfly valve which provides outside containment isolation for the ILRT pressurization/depressurization line. The purpose of this line is to provide a flow path for the pressurization and depressurization of containment during the ILRT. It also serves as a flow path for the emergency depressurization of the containment. This line is isolated within containment by an automatic isolation valve (3HVU*CTV33A) which is closed and secured in the closed position by a key locked switch.

The condition did not have safety significance. Both isolation valves were always closed. The inboard automatic isolation valve was always locked, although not deactivated. For the limited period of time in question the closed outboard manual isolation valve was under the administrative control of a red-tag, while maintenance was being performed. This condition did not involve a serious degradation of the principal safety barriers, nor significantly compromise plant safety, nor place the plant in a condition outside the design basis of the plant.

IV. Corrective Action

The control room was immediately informed, and the valve was relocked when discovered during the valve position surveillance. A night order was promptly issued with additional restrictions on unlocking valves. The total time between the unlocking and relocking was 4 hours and 10 minutes.

As action to prevent recurrence, procedures have been revised and additional training and expectations are being provided to operations personnel. The procedure changes add guidance on how to tag valves that are locked.

EXPIRES: 5/31/95

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 25%;">YEAR</th> <th style="width: 25%;">SEQUENTIAL NUMBER</th> <th style="width: 25%;">REVISION NUMBER</th> </tr> <tr> <td style="text-align: center;">94</td> <td style="text-align: center;">- 003 -</td> <td style="text-align: center;">01</td> </tr> </table>	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	94	- 003 -	01	03 OF 04
YEAR	SEQUENTIAL NUMBER	REVISION NUMBER							
94	- 003 -	01							

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Management expectations on tagging locked valves have been documented via memo and provided to operations personnel. The operations manager will review these expectations with all operating shifts. In addition, there is an ongoing effort to develop criteria to define which valves should be locked. Applying these criteria to the plant will help determine if the number of locked valves should be changed. The criteria will also reduce the potential for recurrence of errors involving locking valves.

V. Additional Information

Four cases of unlocked containment isolation valves have been reported since initial plant operation in 1986:

LER 93-022 reported an unlocked manual containment isolation valve due to equipment interface. It was reported that the outboard isolation valve had an unlocked padlock for up to 28 days following the opening of the valve to perform an operational surveillance test of the hydrogen recombiner. During the surveillance the inboard containment isolation valve was also opened to establish the necessary flowpath. Subsequent surveillances were performed to verify that the outboard valve was locked, and those surveillances were inadequate because they missed the fact that it had been unlocked from the time it was last operated. The root cause was a design deficiency with the locking cap. As corrective action, the padlocks were replaced with a different design.

LER 92-001 reported six valves which were missing locking devices. The valves were found closed but not locked as required. These valves are leakage monitoring connection vent valves which are used to test the containment isolation valves associated with Residual Heat Removal cold leg injection lines. The root cause was program failure - procedure deficiency, administrative error. The system lineups did not include the subject valves among those required to be locked closed. As corrective action the valves were locked closed and the penetration surveillances were updated to include these valves.

LER 91-021 reported that a containment isolation valve required to be locked closed was found to be open. The valve is a two inch, manually operated valve that provides inside containment isolation of a demineralized water line. The root cause was improper task verification. After being verified closed the subject valve was opened to support work evolutions in containment. While the need to close this valve was identified on the Shift Turnover Report, the Shift Supervisor removed the item from the turnover report without verifying that the valve had been closed and locked. The outboard containment isolation valve was verified closed throughout the event. As corrective action, the event and its associated root cause were discussed with Operations department personnel and were incorporated into Operations department training in order to emphasize the importance of containment isolation valves.

LER 90-021 reported that the Integrated Leak Rate Test (ILRT) Supply and Exhaust valve (3HVU*V005) was unlocked and open. As part of a containment entry the Shift Supervisor (SS) initiated steps to facilitate a rapid pressurization of the sub-atmospheric containment if necessary. One of these steps was unlocking and opening 3HVU*V005. The evolution was not covered under a plant procedure. The SS subsequently did not log the applicable Technical Specification Limiting Condition of Operation. The root cause was the failure to use the applicable procedure for a non-routine evolution. In addition there was a cognitive failure to recognize the Technical Specification implications of 3 HVU*V005. As corrective action, the valve was closed and locked upon discovery; the SS was counseled on procedural usage and communications; and procedure changes were made to heighten personnel awareness of the contingent actions for rapid Containment pressurization.

By comparison, the current case involves a manual outboard isolation valve (3HVU*V005) that had always been closed, and it was red-tagged closed without locking for 4 hours and 10 minutes, to support a work order associated with downstream components. During this time the inboard containment isolation valve was always closed and it was locked closed. The penetration had been secured as described above, throughout the limited condition.

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EIS Codes

System

Component

None

ISV (Valve, Isolation)