Northeast
Nuclear Energy

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Millstone Nuclear Power Station
Northeast Nuclear Energy Company
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The Northeast Utilities System

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

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

May 23, 1994
NP-94-361

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

Reference: Facility Operating License No. DPR-21
Docket No. 50-245
Licensee Event Report 94-017-00

Gentlemen:

This letter forwards Licensee Event Report 94-017-00 required to be submitted within thirty (30) days pursuant to 10CFR50.73(a)(2)(iv).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

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

DBM/SK:bjo

Attachment: LER 94-017-00

cc: T. T. Martin, Region I Administrator
P. D. Swetland, Senior Resident Inspector, Millstone Unit Nos. 1, 2 and 3
J. W. Andersen, NRC Acting Project Manager, Millstone Unit No. 1

010002

cert # P 246 578 619

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NRC Form 366 (5-92)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

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

APPROVED BY OMB NO. 3150-0104
EXPIRES: 5/31/95

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 (MNBB 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.

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Millstone Nuclear Power Station Unit 1	05000245	1 OF 03

TITLE (4)
Invalid Actuation of Primary Containment Isolation

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
										05000
04	22	94	94	- 017 -	00	05	23	94	FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9)	R	THIS REPORT IS BEING SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)								
			20.402(b)		20.405(c)	X	50.73(a)(2)(iv)		73.71(b)	
POWER LEVEL (10)	0		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)(vii)		OTHER	
			20.405(a)(1)(iii)		50.73(a)(2)(i)		50.73(a)(2)(viii)(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)(viii)(B)			
			20.405(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)			

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
Drexel N. Harris, Site Licensing	(203) 437-5903

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 typewritten lines) (16)

On April 22, 1994 at 1636 hours, with the plant in cold shutdown, an invalid Primary Containment Isolation occurred. A technician had removed the rear cover of the newly installed steam leak annunciator panel in order to terminate wires. In the process of terminating connections in the back of the annunciator, the technician bumped the cover, causing it to make contact with an unpainted steel unistrut member and an Instrument AC fuse block. A short occurred between the fuse block line side and the grounded unistrut, however it cleared almost immediately. Primary Containment Isolation groups 2, 3, and 5 occurred due to a momentary reduction in Instrument AC voltage. Expected system responses to the isolations were verified. No safety consequences resulted from this event.

I. Description of Event

On April 22, 1994 at 1636 hours, with the plant in cold shutdown, an invalid Primary Containment Isolation occurred. A technician removed the rear cover of the newly installed steam leak annunciator panel in order to terminate wires. The rear cover of this panel, located in a control room panel, was unscrewed and carefully removed from the annunciator, then set upright on top of a piece of equipment located immediately below the annunciator. The rear cover was not taken out of the control panel since it contains a small cooling fan which was hard-wired to the annunciator.

In the process of terminating connections in the back of the annunciator, the technician bumped the rear cover, moving it such that it made contact with an unpainted steel unistrut member and an Instrument AC fuse block. A short occurred between the fuse block line side and the grounded unistrut, however, it cleared almost immediately due to the momentary contact. A 1.0 ampere fuse in the fuse holder blew during this event, and the 30 ampere circuit breaker feeding this circuit did not open. Several alarms, as well as Group 2, 3, and 5 isolations, occurred due to a momentary reduction in Instrument AC voltage.

II. Cause of Event

The root cause of this event has been attributed to personnel error. The technician did not take appropriate precautions to prevent the back panel from shorting to the adjacent fuse blocks. A contributing cause was the design of the Steam Leak Annunciator panel. It was difficult to remove the back cover from the control panel without disconnecting the hard-wired fan mounted in the back panel.

III. Analysis of Event

This event is being reported in accordance with the requirements of 10CFR50.73(a)(2)(iv), which requires the reporting of any event or condition that results in a manual or automatic actuation of any Engineered Safety Feature (ESF).

This event did not result in a loss of Instrument AC, but caused a momentary drop in voltage on the Instrument AC bus. For this reason, all alarms/isolations/actuations normally seen on an Instrument AC loss were not observed. Primary Containment Isolation groups 2, 3, and 5 were observed, resulting in expected system isolations.

All loads on the affected Instrument AC circuit were checked for proper operation, and each was verified to be operating properly. No process computer data was available for the Instrument AC bus, however Vital bus data and other indications related to the Instrument AC bus confirmed that there was no lasting effect from this momentary short circuit. This indirectly obtained data confirmed that the duration of the short circuit was less than 0.8 seconds, and is estimated to have lasted less than 0.4 seconds. The brief duration of this event was insufficient to open the 30 Ampere circuit breaker since the short circuit current needed to trip the breaker during this brief event was not available. This is an expected characteristic of this type of circuit breaker. The net result was that the bus voltage dropped for the period of the short, then recovered when the short was removed. The Instrument AC bus stabilized immediately after the fault cleared.

APPROVED BY OMB NO. 3150-0104
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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Millstone Nuclear Power Station Unit 1	05000245	94	-- 017 --	00	03 OF 03

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

IV. Corrective Action

Proper work practices in disassembling and protecting equipment in control panels were reinforced with the test technician involved. Additionally, this event has been discussed with I&C personnel.

A review of similar equipment mounted in control panels disclosed that all rear panel covers are easily removable from the control panel. Removal of the cover is accomplished either by unplugging the standard AC line cord or by using the length of the cord to completely remove the cover from the control panel. A design change to install a standard AC line cord to the fan on the back cover of the new steam leak annunciator has been completed.

V. Additional Information

None.