



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)

August 24, 1994

MP-94-517

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

Reference: Facility Operating License No. DPR-65
Docket No. 50-336
Licensee Event Report 94-023-00

This letter forwards Licensee Event Report 94-023-00 required to be submitted within thirty (30) days pursuant to 10CFR50.73 (a)(2)(iv), any event or condition that results in manual or automatic actuation of any Engineered Safety Feature (ESF), including the Reactor Protection System (RPS).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

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

DBM/KD:bjo

Attachment: LER 94-023-00

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

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cert # 2758 994 858

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PDR ADDCK 05000336
S PDR

Handwritten initials/signature

LICENSEE EVENT REPORT (LER)

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

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)

Millstone Nuclear Power Station Unit 2

DOCKET NUMBER (2)

05000336

PAGE (3)

1 OF 03

TITLE (4)

Inadvertent Start of "B" Charging Pump

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
07	25	94	94	023	00	08	24	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)	100	20.402(b)		20.406(c)		X	50.73(a)(2)(iv)		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)(ix)		

LICENSEE CONTACT FOR THIS LER (12)

NAME

Philip J. Lutzi, Site Licensing

TELEPHONE NUMBER (include Area Code)

(203) 447-1791 Ext. 6585

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
B	CB	HS	6080	N						

SUPPLEMENTAL REPORT EXPECTED (14)

YES	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
X					

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

On July 25, at 0147 hours, with the plant in mode 1, 100% power, operations personnel were changing the Charging Pump running and starting sequence by moving the selector switch (Charging Pump Backup Control Switch) from position 1&2 to 2&3. The selector switch provides the control of which Charging Pump is running, and which pump is the first and second to start automatically on a low level in the Pressurizer.

Due to a failure of the selector switch, when the operator changed the switch position, the Charging Pumps did not respond as required and there was an unexpected automatic start of one of the Charging Pumps. This failure effected the normal level control circuit, and had no affect on the normal ESF response of the Charging Pumps.

The root cause of the event is a worn detent mechanism within the General Electric SB-1 control switch. The worn detent mechanism would not align all of the switch contacts properly, and in this case two Charging Pumps did not receive a stop signal. To prevent a recurrence, the switch will be replaced during the upcoming refueling outage. The selector switch has been caution tagged to alert operators that the switch position and performance, must be verified, due to the worn detent mechanism.

There are no other similar events.

EXPIRES: 5/31/95

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 (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)	LER NUMBER (6)	PAGE (3)						
Millstone Nuclear Power Station Unit 2	05000336	<table border="1"><tr><th data-bbox="1009 340 1080 377">YEAR</th><th data-bbox="1080 340 1240 377">SEQUENTIAL NUMBER</th><th data-bbox="1240 340 1346 377">REVISION NUMBER</th></tr><tr><td data-bbox="1009 377 1080 446">94</td><td data-bbox="1080 377 1240 446">-- 023 --</td><td data-bbox="1240 377 1346 446">00</td></tr></table>	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	94	-- 023 --	00	02 OF 03
YEAR	SEQUENTIAL NUMBER	REVISION NUMBER							
94	-- 023 --	00							

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

I. Description of Event

On July 25, at 0147 hours, with the plant in mode 1, 100% power, operations personnel were changing the Charging Pump starting sequence by moving the selector switch (Charging Pump Backup Control Switch) from position 1&2 to 2&3. The selector switch provides the control to determine which Charging Pump is running, and which pump is the first and second to start automatically on a low level in the Pressurizer.

While in the process of changing from the "C" Charging Pump running to the "A" Charging Pump running, the "B" Charging Pump also started which was not expected. Additionally, the "C" Charging Pump did not stop as expected however, the "A" pump did start as it should have. When the operator observed all three pumps running, he secured the "B" and "C" pumps by placing the respective control switches to the "off" position. He then placed these two control switches back to the normal-after-start position, and automatically the "B" pump restarted. The operator reviewed the plant conditions and verified that a low level signal was not present. He attempted a second time to secure the "B" pump and had the same results. After approximately 5 minutes, the operator moved the "Charging Pump Backup Control Switch" to the 1&2 position, and observed proper operation of all three Charging Pumps for this condition. There were no automatic or manually initiated safety responses taken as a result of this event.

II. Cause of Event

The root cause of the event has been determined to be a worn detent mechanism within the General Electric SB-1 control switch, model 16SB1HD3B70SSM2V. The worn detent mechanism would not align all of the switch contacts properly, and in this case the "B" Charging Pump started without a low level signal. During troubleshooting of the problem, personnel could not duplicate the failure, however the test personnel did notice the switch stop positions were easily defeated causing the switch to over travel to the other position. The stop positions are a feature of the detent mechanism of the switch which usually has 90 degree stops.

III. Analysis of Event

The starting of the "B" and "C" Charging Pumps is being reported conservatively pursuant to 10CFR50.73(a)(2)(iv), "Any event or condition that resulted in manual or automatic actuation of any Engineered Safety Feature (ESF), including the Reactor Protection System (RPS).

The Charging Pumps in question were started due to a failure of a control switch within the normal level control scheme for the Charging Pump system. The ESF signal to the Charging Pumps was not affected, nor was it blocked by the control switch failure. This is being reported to identify an ESF component (Charging Pump) which was started inadvertently due to a failure of a control switch.

The failure of the control switch within the normal level control scheme for the Charging System would not affect the ability of the ESF signal to start the Charging Pumps. If the operator did not notice the inadvertent start of a Charging Pump, a high Pressurizer level alarm would have directed the operator to secure the Charging Pump. Therefore, this event is of minimum safety consequence.

IV. Corrective Action

The selector switch for the Charging Pump level control, General Electric model 16SB1HD3B70SSM2V, will be replaced during the upcoming refueling outage, presently scheduled for late September/October 1994. The selector switch has been caution tagged to alert operators that the switch position and performance must be verified due to the worn detent mechanism.

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

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Millstone Nuclear Power Station Unit 2	05000336	94	— 023 —	00	03 OF 03

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

The failed component is a General Electric SB-1 control switch, model number 16SB1HD3B70SSM2V.

There are no similar events.

EIIS Codes:

Charging Pumps — CB-P-G200

Control Switch — CB-HS-G080