

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)(ii)

June 8, 1994  
MP-94-392

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 94-014-00

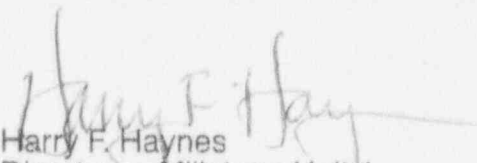
Gentlemen:

This letter forwards Licensee Event Report 94-014-00 required to be submitted within thirty (30) days pursuant to 10CFR50.73(a)(2)(ii).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

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

BY:   
Harry F. Haynes  
Director - Millstone Unit 1

DBM/RAP:dlr

Attachment: LER 94-014-00

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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# 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 (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.

FACILITY NAME (1) Millstone Nuclear Power Station Unit 2	DOCKET NUMBER (2) 05000336	PAGE (3) 1 OF 3
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TITLE (4)  
Missing Support on Service Water Pipe

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
05	10	94	94	014	00	06	08	94		05000
									FACILITY NAME	DOCKET NUMBER
										05000

OPERATING MODE (9) 5	THIS REPORT IS BEING SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)										
POWER LEVEL (10) 000	20.402(b)			20.405(c)			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)			X 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)(viii)					

LICENSEE CONTACT FOR THIS LER (12)

NAME Philip J. Lutz, 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 NPRDC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDC

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

On May 10, 1994 at 1500 hours, with the plant shutdown in Mode 5, an overstress condition was discovered in a common discharge line from the vital DC switchgear room coolers. The overstressed condition, which existed in the seismic load case only, was discovered while performing piping stress analysis for a future plant design modification.

The safety consequences of this event have been determined to be negligible. An operability evaluation demonstrated that alternate cooling provisions in existing plant operating procedures were adequate to ensure adequate room cooling water would be available following a seismic event. The missing support has been installed.

## 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.

FACILITY NAME (1)  Millstone Nuclear Power Station Unit 2	DOCKET NUMBER (2)  05000336	LER NUMBER (6)	PAGE (3)						
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">YEAR</td> <td style="width: 33%;">SEQUENTIAL NUMBER</td> <td style="width: 33%;">REVISION NUMBER</td> </tr> <tr> <td style="text-align: center;">94</td> <td style="text-align: center;">- 014 -</td> <td style="text-align: center;">00</td> </tr> </table>	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	94	- 014 -	00	02 OF 03
YEAR	SEQUENTIAL NUMBER	REVISION NUMBER							
94	- 014 -	00							

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

### I. Description of Event

On May 10, 1994 at 1500 hours with the plant in Cold Shutdown, (107°F and 0 PSIG), Engineering was performing an analysis of a 3" service water pipe, part of the common discharge line from the vital DC switchgear room chillers. The 3" line was found to be overstressed, for the seismic load case, due to a missing pipe support. The condition was discovered during pipe stress analysis being performed to support a future plant modification. The missing support was discovered during an walkdown of the line to resolve what appeared to be a potential drawing discrepancy.

An evaluation of the piping in its as-found condition determined that pipe stresses, exceeding design allowables, would have resulted during a seismic event. Stresses for dead and thermal loads were found to be acceptable. No damage was evident to the piping system or connected components due to the missing support.

Operations was immediately notified of this event. An operability evaluation was performed for the vital DC Switchgear rooms which are cooled by this line. It was determined that the rooms would remain operable based on normal and alternate contingency cooling. A night order was written instructing operators to check for pipe failure following a seismic event.

No other systems or secondary functions were affected by this event.

### II. Cause of Event

The root cause of the missing hanger is uncertain. During the first refueling outage, a Design Change was implemented to replace the original stainless steel pipe with the currently installed copper nickel (Cu/Ni) material. A subsequent flange addition on a nearby 16" service water line (to the TBCCW exchanger X-17C) may have resulted in an interference with the line of interest. It is suspected that the support of interest may have been disconnected and replaced by another support downstream on the line to relieve the interference. Existing drawings do not reflect the disconnected support or the addition of the new support. Upon discovery of the drawing discrepancy during the on-going service water project, a detailed computer based seismic analysis of the as-found condition determined that the piping stresses exceed design allowables for the seismic load case.

This support non-conformance was not previously detected because this portion of the system is excluded from the ISI program and had been excluded from the IE Bulletin 79-14 project, the two programs which would have detected this problem. The line is excluded from the ISI program since it is within a Class 3 piping system and the ISI program is not required to inspect Class 3 systems which are below 4" in diameter. This line was excluded from the IEB 79-14 project due to the Cu/Ni piping modification project. This exclusion was based on the project implementation procedure which allowed lines to be excluded when as-built inspections had previously been verified within 12 months, or earlier than 12 months on a case-by-case basis, to an equivalent degree as defined in the 79-14 program and adequate documentation of the verification was available. Since the CU/Ni replacement project was closed out in November 1978, and its closure required as-built verification of the modifications against the design drawings, the line was considered to have met the exclusion requirement.

### III. Analysis of Event

This event is reportable in accordance with 10CFR50.73(a)(2)(ii), "any event or condition that resulted in the condition of the nuclear power plant, being seriously degraded.

**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

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

A drawing discrepancy was noted while analyzing a 3" chilled water pipe, part of the common discharge line from the vital DC switchgear room chillers, in support of a plant modification project. As a result of a field inspection to resolve the discrepancy, it was determined that a piping support was not installed as detailed on the support drawing. This service water line is classified as QA, seismic category I with design basis loading conditions include pressure, deadweight, thermal and seismic loads. A computer based stress analysis of the "as-found" condition determined that the pipe stresses were in excess of the allowable values for the seismic loading condition.

An operability assessment of the failure of the DC switchgear room cooling system, in the event of a seismic condition, was performed. This evaluation concluded that since alternative cooling was available, a seismically induced failure in the common service water return line from the east and west DC switchgear rooms would not render the rooms inoperable in the interim period while the missing support was being installed. Since no seismic events had occurred prior to this event, operability of the system had been maintained. Therefore there were no safety consequences as a result of this event.

IV. Corrective Action

The missing support has been installed, and the current as-built configuration has been analyzed and shown to meet the appropriate design allowable values. Upon identification of the missing support, approximately 500 feet of chilled water system piping associated with over 70 supports were inspected. No additional drawing discrepancies were identified.

V. Additional Information

Similar LER's: None

EIIS Codes for Referenced Comment:

Service Water: BI-CLR-000

Chilled Water: KM-CHU-000

DC Switchgear: EJ-CLR-000

Support: BI-SPT-000