

NORTHEAST UTILITIES

NU
The Connecticut Light And Power Company
Western Massachusetts Electric Company
Holyoke Water Power Company
Northeast Utilities Service Company
Northeast Nuclear Energy Company

General Offices: Selden Street, Berlin Connecticut

P.O. BOX 270
HARTFORD, CONNECTICUT 06414-0270
(203)665-5000

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

October 5, 1990
MP-90-1084

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 90-009-01

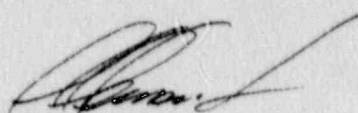
Gentlemen:

This letter forwards update Licensee Event Report 90-009-01 being submitted pursuant to the requirements of 10CFR50.73(a)(2)(v).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

FOR: Stephen E. Scace
Director, Millstone Station

BY: 
Carl H. Clement
Millstone Unit 3 Director

SES/TST:mo

Attachment: LER 90-009-01

cc: T. T. Martin, Region I Administrator
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2 and 3
M. Boyle, NRC Project Manager, Millstone Unit No. 1

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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 Records and Reports Management Branch (p-530), U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503.

FACILITY NAME (1) **Millstone Nuclear Power Station Unit 1** DOCKET NUMBER (2) **050002451** PAGE (3) **OF 02**

TITLE (4) **House Heating Steam High Energy Line Break**

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 NAMES															
0	5	1	1	9	0	9	0	-	0	0	9	-	0	1	1	0	0	5	9	0				
											0	5	0	0	0									

OPERATING MODE (9) **N** THIS REPORT IS BEING SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)

POWER LEVEL (10) 1	20.402(b)	20.402(c)	50.73(a)(2)(iv)	73.71(b)
0	20.405(a)(1)(i)	50.36(c)(1)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)	73.71(c)
0	20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
0	20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
	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)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME **Trudy S. Thull, Engineer (Ext. 5197)** TELEPHONE NUMBER **203 447-1791**

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS

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 fifteen single-space typewritten lines) (16)

On May 1, 1990, with the plant at 100% power (530 degrees Fahrenheit and 1030 psig), it was determined that the House Heating Steam System, which is classified as a High Energy Line Break (HELB) System, could potentially degrade environmentally classified "EEQ Mild Environments". Upon recognition of this potentially unanalyzed condition, the House Heating Steam System was removed from service at 1715 hours. A Reportability Evaluation was immediately initiated to determine if a reportable condition existed. On May 11, 1990, preliminary results of the reportability evaluation concluded the consequences of a House Heating Steam Line rupture in "EEQ Mild Environments" would have a potentially negative impact on Class 1E equipment required for shutdown.

To insure other high energy sources have not been overlooked relative to their potential impact on equipment required for safe shutdown following a HELB, a mini review of the 1973 HELB study was immediately performed. The review concluded that there were no other major problem areas and the Auxiliary Steam System represented an isolated case. The review identified a concern that the HELB study was a 1973 snapshot, rather than a living document against which plant modifications are reviewed and determined acceptable. While the study, to date, has not found specific instances of plant modifications that adversely impacted the HELB study results, all areas having this potential will be validated. This issue is being pursued under a long term review program.

**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 Records and Reports Management Branch (p-530), U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503.

FACILITY NAME (1) Millstone Nuclear Power Station Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 2 4 5 9 0	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		0 0 9	0 1	0 2	OF	0 2

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

I. Description of Event

On May 1, 1990, with the plant at 100% power (530 degrees Fahrenheit and 1030 psig), it was determined that the House Heating Steam System, which is classified as a High Energy Line Break System, could potentially degrade environmentally classified "EEQ Mild Environments". The mild environment areas identified as being subjected to a house heating steam line break include the Switchgear Room, Lower and Upper HVAC Rooms, and the Control Room via normally open ductwork in the Lower HVAC room.

At 1715 hours upon recognition of this potentially unanalyzed condition, the House Heating Steam System was removed from service. A Reportability Evaluation was immediately initiated to determine if a reportable condition existed.

On May 11, 1990, preliminary results of the reportability evaluation concluded the consequences of a House Heating Steam Line rupture in "EEQ Mild Environments" would have a potentially negative impact on Class 1E equipment required for shutdown.

II. Cause of Event

The cause of the oversight appears to be an incorrect conclusion drawn from the 1973 HELB study. The report addressed an Auxiliary Steam System line break and its non-relevance on safety related equipment, stating the environmental conditions ensuing from any break would be of no consequence to any shutdown methods. This issue remains an open item being tracked under the Reportability Evaluation.

III. Analysis of Event

This event is being reported in accordance with 10CFR 50.73(a)(2)(v) which requires the reporting of any event or condition that alone could have prevented the fulfillment of the safety related structures or systems that are needed to (A) shutdown the reactor and maintain it in a safe condition and (B) remove residual heat.

IV. Corrective Action

On May 1, 1990, at 1715 hours, upon recognition of this potentially unanalyzed condition, the House Heating Steam System was removed from service. Plant modifications are being implemented prior to placing the House Heating Steam back in continuous operation and are expected to be complete by 12/1/90. These modifications reroute the auxiliary steam lines outside the Heating and Ventilation Room. Until the plant modifications are complete, an Operability Evaluation addresses selectively valving in the House Heating System for specific evolutions utilizing compensatory measures.

To insure other high energy sources have not been overlooked relative to their potential impact on equipment required for safe shutdown following a HELB, a mini review of the 1973 HELB study was immediately performed. The review concluded that there were no other major problem areas and the Auxiliary Steam System represented an isolated case. The review identified a concern that the HELB study was a 1973 snapshot, rather than a living document against which plant modifications are reviewed and determined acceptable. While the study, to date, has not found specific instances of plant modifications that adversely impacted the HELB study results, all areas having this potential will be validated. This issue is being pursued under a long term review program.

V. Additional Information

None