

# NORTHEAST UTILITIES



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

General Offices - Seiden Street, Berlin Connecticut

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(203)665-5000

December 2, 1992  
MP-92-1268

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

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 92-025-00


Gentlemen:

This letter forwards Licensee Event Report 92-025-00 required to be submitted within thirty (30) days pursuant to 10CFR50.73(a)(2)(i).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

FOR: Stephen E. Scace  
Vice President - Millstone Station

BY:   
Carl H. Clement  
Millstone Unit 3 Director

SES/JSY:ljs

Attachment: LER 92-025-00

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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## 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 3

DOCKET NUMBER (2)

0 5 0 0 0 4 2 3 1 OF 0 3

PAGE (3)

TITLE (4)

Limiting Condition for Operation Not Entered for Pressurizer Heatup

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																
1	1	0	2	9	2	9	2	0	2	5	0	0	1	2	0	2	9	2	0	5	0	0	0	1	1
OPERATING MODE (9)		4		THIS REPORT IS BEING SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)																					
PC-VSR LEVEL (10)		0 0 0		20.402(b)			20.402(c)			50.73(a)(2)(iv)			73.71(b)												
				20.405(a)(1)(i)			50.36(a)(1)			50.73(a)(2)(v)			73.71(c)												
				20.405(a)(1)(ii)			50.36(a)(2)			50.73(a)(2)(vi)			OTHER (Specify in Abstract below and in Text, NRC Form 366A)												
				20.405(a)(1)(iii)			X 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)(v)															

LICENSEE CONTACT FOR THIS LER (12)

NAME

Jeffrey S. Young, Engineer, Ext. 6442

TELEPHONE NUMBER

AREA CODE

2 0 3 4 4 7 - 1 7 9 1

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

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 fifteen single-space typewritten lines) (16)

On November 2, 1992, at 1710 with the plant in mode 4 at 0% power, the actions required by Limiting Condition for Operation (LCO) 3.4.9.2.a were not initiated when the Pressurizer heatup rate of 100 degrees Fahrenheit in one hour was exceeded. The heatup occurred in the liquid space as a result of an insurge of relatively cold water and subsequent return to saturation conditions. The discovery was made by the control room staff on November 4 at 0100 while in Mode 3 at 0% power during review of the surveillance form. The action statement was entered at that time. The Unit had changed modes between occurrence and discovery.

There were two root causes of this event. First, procedural guidance was not detailed for managing the insurge. Second, senior licensed operators believed that the temperature changes in the Pressurizer liquid space did not constitute a pressurizer heatup if the steam space temperature remained constant.

To address the first root cause, a procedure change to minimize the insurge during plant heatup has been implemented. In addition, a review of other procedures which may result in thermal transients on other components such as letdown and charging and the safety injection accumulators will be conducted. To address the second root cause, operators will be trained on the basis for the Pressurizer heatup limits and the impact of insurges during plant heatup.

NRC Form 366A (8-89)		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED OMB NO. 3150-0104 EXPIRES: 4/30/92 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.																
<b>LICENSEE EVENT REPORT (LER) TEXT CONTINUATION</b>																				
FACILITY NAME (1)  Millstone Nuclear Power Station Unit 3		DOCKET NUMBER (2)  0   5   0   0   0   4   2   3		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="3" style="text-align: center;">LER NUMBER (8)</th> <th colspan="2" style="text-align: center;">PAGE (3)</th> </tr> <tr> <th style="width: 15%;">YEAR</th> <th style="width: 35%;">SEQUENTIAL NUMBER</th> <th style="width: 35%;">REVISION NUMBER</th> <th style="width: 10%;"></th> <th style="width: 5%;"></th> </tr> <tr> <td style="text-align: center;">9   2</td> <td style="text-align: center;">0   2   5</td> <td style="text-align: center;">0   0</td> <td style="text-align: center;">0   2</td> <td style="text-align: center;">OF 0   3</td> </tr> </table>		LER NUMBER (8)			PAGE (3)		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			9   2	0   2   5	0   0	0   2	OF 0   3
LER NUMBER (8)			PAGE (3)																	
YEAR	SEQUENTIAL NUMBER	REVISION NUMBER																		
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

I. Description of Event

On November 2, 1992, at 1710 with the plant in Mode 4 at 0% power (350 psia and 210 degrees Fahrenheit), the Pressurizer heatup rate limit of 100 degrees Fahrenheit in one hour was exceeded. The heatup resulted after the Residual Heat Removal (RHR) system was removed from service during the plant heatup and an insurge of cold water entered the bottom of the pressurizer at approximately 1600 when the plant was in mode 5 at 180 degrees Fahrenheit. Pressurizer water level increased approximately 15%. The water space cooled down 140 degrees Fahrenheit over the next 15 minutes. Over the next hour the water space heated up to pre-insurge conditions. The operating procedure did not address methods for minimizing the insurge.

The fact that short term heatup rate was exceeded was noted by the control room staff, however, they did not consider this to be Technical Specification limit of an actual Pressurizer heatup since the steam space temperature remained constant. The fact that the 100 degree Fahrenheit change in one hour had been exceeded was not recognized until 0100 on November 4. The actions required by LCO 3.4.9.2.a were initiated at this time. The LCO was exited at 0400 on November 4 when the engineering evaluation, which determined that the pressurizer was acceptable for continued operation, was completed.

II. Cause of Event

Two root causes exist for this event. First, the operating procedure did not provide a method for minimizing the insurge. If the operator had been able to reduce the size of the insurge, the thermal transient on the Pressurizer would have been reduced. Second, senior licensed operators believed that the temperature changes in the Pressurizer liquid space did not constitute a pressurizer heatup if the steam space temperature remained constant.

III. Analysis of Event

This report is being submitted in accordance with 10CFR50.73(a)(2)(i)(B) as a condition prohibited by Technical Specifications.

Technical Specification 3.4.9.2. requires that if the pressurizer heatup rate exceeds 100 degrees Fahrenheit in one hour, the temperature must be returned to within limits in the next 30 minutes and an engineering evaluation on the structural integrity of the pressurizer must be performed or the plant must be in Hot Standby within 6 hours and depressurized to 500 psia in the following 30 hours.

No actual safety degradation occurred because the Pressurizer was determined to be acceptable when the engineering evaluation was completed. However, plant heatup continued placing the Pressurizer in a potentially unacceptable condition for approximately 32 hours.

IV. Corrective Action

The immediate corrective action was to perform an engineering evaluation to verify that the Pressurizer was within its fatigue life.

Actions taken to address the first root cause of inadequate procedural guidance are as follows:

- a procedure change to minimize the insurge during plant heatups has been implemented. Recent industry information on Pressurizer thermal transients will be reviewed with the intent to minimize thermal effects on the Pressurizer lower head.
- a review of procedures for other systems where thermal transients may occur will be conducted.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

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FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

Millstone Nuclear Power Station  
Unit 3

YEAR

SEQUENTIAL  
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0 | 5 | 0 | 0 | 0 | 4 | 2 | 3 | 9 | 2 | - | 0 | 2 | 5 | - | 0 | 0 | 0 | 3 | OF | 0 | 3

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

Actions taken to address the second root cause of incorrect evaluation of the transient are as follows:

- operators will be trained on the basis for the Pressurizer heatup rate limits and the impact of insurges during plant heatup.

V. Additional Information

Other Licensee Event Reports (LERS) which have been submitted which discuss similar events are as follows:

LER NumberTitle

92-017

Pressurizer Vent Path Inoperable Action Statement Not Performed

89-019

Inoperable Fire Protection Hose House Due To Mispositioned Valve Due to Safety Tagging Deficiencies.

89-007

Control Building Ventilation Not Placed in Filtered Recirculation Due to Personnel Error.

87-049

Missed Engineering Evaluation Due to Misinterpretation of Technical Specifications

LER 92-017 discusses an event where the Limiting Condition for operation (LCO) for one inoperable train of the Pressurizer Steam Space vent path was not implemented. The root cause was personnel error in not recognizing that closing and deenergizing the actuator for a blocking valve requires that the associated Power Operated Relief Valve (PORV) actuator also be de-energized. To prevent recurrence, a change to the TS will be submitted to clarify actions required when one vent path is inoperable. The corrective action addressed the specific problem of 2 different TS applying to 1 piece of equipment and, therefore, would not have prevented this event.

LER 89-019 discusses an event where the condition for exiting a Limiting Condition for operation (LCO) were not satisfied prior to exiting the LCO. This LER involved a Fire Protection Hose House which was left inoperable after repairs to a broken valve. The root cause was administrative deficiency in that the LCO exit conditions were not properly documented. This LER is sufficiently different in root cause so that the corrective actions would not have prevented this event.

LER 89-007 discusses an event where the LCO requiring that the Control Building Ventilation System be in recirculation when a channel of the Radiation Monitor was taken out of service was not entered. The root cause was personnel error in that the Senior Control Room operator failed to tell the control room staff to perform the required action. While both LERs involve personnel error, one is a failure to take correct action the other is failure to recognize that action was required and, therefore, the corrective action for this LER would not have prevented this event.

LER 87-049 discusses an event where an engineering evaluation required by plant Technical Specifications within 72 hours of discovery of an inoperable snubber was not performed. The root cause was misinterpretation of the Technical Specification in that the time limit was applied to replacing the snubber but not to when the engineering evaluation had to be performed.

ELIS codesSystemsComponent

Reactor Coolant System - AB

Vessel - VSL