

LICENSEE EVENT REPORT

UPDATE REPORT  
PREVIOUS REPORT DATE 033183

CONTROL BLOCK: 1 (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 C T M N S 2 2 0 0 - 0 0 0 0 0 0 0 0 3 4 1 1 1 1 4 5  
8 9 LICENSE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 31 CAT 56

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01 REPORT SOURCE L 6 0 5 0 0 0 3 3 6 7 0 3 0 2 8 3 8 0 9 0 3 8 5 9  
8 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES 10

02 During a plant cooldown on 2 March 1983, the pressurizer spray water temperature  
03 differential exceeded the limit outlined in T.S.3.4.9.2.c., a maximum pressurizer  
04 spray water temperature differential of 350°F. An engineering evaluation was  
05 performed to determine the effects on the fracture toughness properties of the  
06 pressurizer, and it was determined that the pressurizer remains acceptable for  
07 continued operation. Similar LER's: None

08 09 SYSTEM CODE C A 11 CAUSE CODE X 12 CAUSE SUBCODE Z 13 COMPONENT CODE X X X X X X X X 14 COMP SUBCODE 7 15 VALVE SUBCODE Z 16  
9 10 11 12 13 14 15 16 17 18 19 20  
17 LER NO. 8 3 21 22 23 0 1 1 0 24 25 26 27 0 3 28 29 X 30 31 1 32  
ACTION TAKEN X 33 34 Z 35 Z 36 Z 37 0 0 0 0 38 Y 39 N 40 N 41 C 4 9 0 42 43 44 45  
EVENT YEAR 21 22 SEQUENTIAL REPORT NO. 24 25 OCCURRENCE CODE 27 28 REPORT TYPE 30 31 REVISION NO. 32  
EFFECT ON PLANT 35 SHUT-DOWN METHOD 36 HOURS 38 ATTACHMENT SUBMITTED 39 NRC FORM 366 40 PRIME COMP SUPPLIER 41 COMPONENT MANUFACTURER 42

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS 27

11 The cause of the out-of-limit condition was due to the fact that the pressurizer  
12 cooled down at a much slower rate than did the RCS, such that when auxiliary spray  
13 was initiated, a temperature differential > 350°F occurred. A Technical Specific-  
14 ation change has been approved by the NRC to help increase the actual pressurizer  
cooldown while in Mode 3.

15 FACILITY STATUS D 78 29 0 0 0 30 OTHER STATUS NA 31 METHOD OF DISCOVERY A 32 DISCOVERY DESCRIPTION Review of Data  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32  
16 ACTIVITY CONTENT Z 33 34 35 AMOUNT OF ACTIVITY NA 36 LOCATION OF RELEASE NA  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32  
17 PERSONNEL EXPOSURES 0 37 38 39 NA  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32  
18 PERSONNEL INJURIES 0 40 41 42 NA  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32  
19 LOSS OF OR DAMAGE TO FACILITY Z 43 44 45 NA  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32  
20 PUBLICITY N 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

8509110555 850903  
PDR ADOCK 05000336  
S PDR

NAME OF PREPARER Robert Borchert

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NRC USE ONLY

# NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY  
WESTERN MASSACHUSETTS ELECTRIC COMPANY  
HOLYOKE WATER POWER COMPANY  
NORTHEAST UTILITIES SERVICE COMPANY  
NORTHEAST NUCLEAR ENERGY COMPANY

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

Reference: Facility Operating License No. DPR-65  
Docket No. 50-336  
Reportable Occurrence RO 50-336/83-10/03X-1

Gentlemen:

This letter forwards the Licensee Event Report 83-10/3X-1. This report explains the corrective action taken as a result of the pressurizer spray water differential temperature of greater than 350°F.

Yours truly,

NORTHEAST NUCLEAR ENERGY COMPANY

A handwritten signature in cursive script, appearing to read 'Wayne D. Romberg'.

Wayne D. Romberg  
Station Superintendent  
Millstone Nuclear Power Station

WDR/RB:ejl

Attachment: LER RO 50-336/83-10/03X-1

cc: Dr. T. E. Murley, Region I

IE22  
1/1

ATTACHMENT TO LER 83-10/03X-1  
NORTHEAST NUCLEAR ENERGY COMPANY  
MILLSTONE NUCLEAR POWER STATION - UNIT 2  
FACILITY OPERATING LICENSE NUMBER DPR-65  
DOCKET NO. 50-336

Causing Description and Corrective Actions

During plant cooldown on 2 March 1983, the pressurizer spray water temperature differential exceeded the limit outlined in T.S.3.4.9.2.c., a maximum pressurizer spray water temperature differential of 350°F. This occurred while in Mode 4, with an RCS temperature of approximately 290°F, a steam space temperature of approximately 545°F and with RCS pressure less than 500 psig. At this RCS temperature, with only one RCP operating, there was insufficient pressurizer pressure control, such that when auxiliary spray was initiated, spray water temperature differentials of 367°F for a period of approximately 8 minutes and 391°F for a period of approximately 4 minutes occurred.

An engineering evaluation was performed on the pressurizer spray nozzle and the pressurizer spray piping to determine the effects on the out-of-limit condition on the fracture toughness properties of the pressurizer. It was determined that these transients did not compromise the structural integrity of the pressurizer spray nozzle or the pressurizer spray piping, and that the pressurizer remains acceptable for continued operation.

A Technical Specification change has been approved by the NRC. This change allows a greater pressurizer level span, which helps to increase the actual pressurizer cooldown while in Mode 3.