

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 - Selden Street, Berlin Connecticut

P.O. BOX 270
HARTFORD, CONNECTICUT 06141-0270
(203)655-5000

April 8, 1993
MP-93-278

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

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 93-005-00

Gentlemen:

This letter forwards Licensee Event Report 93-005-00 required to be submitted within thirty (30) days pursuant to 50.73(a)(2)(iv).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

A handwritten signature in dark ink, appearing to read 'Stephen E. Scace'. The signature is fluid and cursive, with a large, sweeping 'S' at the beginning and a long, horizontal stroke at the end.

Stephen E. Scace
Vice President - Millstone Station

SES/RB:dlr

Attachment: LER 93-005-00

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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NRC Form 366 (6-89) *		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: 50.8 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.	
LICENSEE EVENT REPORT (LER)					
FACILITY NAME (1) Millstone Nuclear Power Station Unit 2				DOCKET NUMBER (2) 0 5 0 0 0 3 3 6 1 OF 1 3	
TITLE (4) Automatic Reactor Protection System Actuation While Shutdown					
EVENT DATE (5)		LER NUMBER (6)		REPORT DATE (7)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER
0 2	2 2	9 3	9 3	0 0 5	0 0
				0 4 0 8 9 3	
OPERATING MODE (8) 3		THIS REPORT IS BEING SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)			
POWER LEVEL (10) 0 1 0 1 0		20.402(b) C		20.402(c) X	
		20.405(a)(1)(i)		50.73(a)(2)(iv)	
		20.405(a)(1)(ii)		50.73(a)(2)(v)	
		20.405(a)(7)(iii)		50.73(a)(2)(vi)	
		20.405(a)(1)(iv)		50.73(a)(2)(vii)(A)	
		20.405(a)(1)(v)		50.73(a)(2)(viii)(B)	
		20.405(a)(1)(vi)		50.73(a)(2)(ix)	
OTHER (Specify in Abstract below and in Text, NRC Form 366A)					
LICENSEE CONTACT FOR THIS LER (12)					
NAME Robert Borchert, Unit 2 Reactor Engineer, Ext. 4418				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 NPPDS	
SUPPLEMENTAL REPORT EXPECTED (14)					EXPECTED SUBMISSION DATE (15)
<input checked="" type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)					0 7 3 1 0 3
<input type="checkbox"/> NO					
ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16) <p>On March 11, 1993, at 1625 hours, with the plant in Mode 1 at 100% power, it was discovered that an automatic Reactor Protection System (RPS) actuation had occurred on February 22, 1993 which had not been immediately reported to the USNRC. The USNRC was notified of this event on March 11, 1993 at 1707 hours.</p> <p>On February 22, 1993, at 0811 hours, with the plant in Mode 3 at 0% power, Reactor Coolant System (RCS) pressure at 2267 psia, RCS average temperature at 527 degrees Fahrenheit, and all control rods fully inserted, an automatic RPS actuation occurred during an unplanned cooldown event. The cooldown caused the steam generator pressures to decrease to approximately 707 psia, which caused an automatic RPS actuation on low steam generator pressure.</p> <p>The only automatic safety system response during the above event was the opening of the reactor trip circuit breakers. Due to personnel error, this event was not immediately reported to the USNRC pursuant to the requirements of Paragraph 50.72(b)(2)(ii), reporting any event or condition that results in manual or automatic actuation of any Engineered Safety Feature System, including the Reactor Protection System.</p>					

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

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

I. Description of Event

On March 11, 1993, at 1625 hours, with the plant in Mode 1 at 100% power, during an investigation of a plant cooldown event, a review of the computer alarm typer printouts revealed that an automatic Reactor Protection System (RPS) actuation had occurred on February 22, 1993 which had not been immediately reported to the USNRC. The USNRC was notified of this event on March 11, 1993 at 1707 hours.

On February 22, 1993, at 0811 hours, with the plant in Mode 3 at 0% power, Reactor Coolant System (RCS) pressure at 2267 psia, RCS average temperature at 527 degrees Fahrenheit, and all control rods fully inserted, an automatic RPS actuation occurred during an unplanned cooldown event. The cooldown was initiated during stroking of the main turbine intercept stop valves in accordance with procedure EOP 2526, "Reactor Trip Recovery." The turbine trip signal caused the feedwater regulating bypass valves to automatically open to 75%. The feedwater regulating bypass valves automatically closed when steam generator water level reached 85%. The cold feedwater injection into the steam generators cooled the bulk water. This caused the steam generator pressures to decrease to approximately 707 psia. An automatic RPS actuation occurred on low steam generator pressure. The only automatic safety system response was the opening of the reactor Trip Circuit Breakers (TCBs). The operator actions taken included closing the Main Steam Isolation Valves (MSIVs) in response to the cooldown.

Due to personnel error, this event was not immediately reported to the USNRC pursuant to the requirements of Paragraph 50.72(b)(2)(ii), reporting any event or condition that results in manual or automatic actuation of any Engineered Safety Feature System, including the Reactor Protection System.

Prior to the above event, the RPS was reset to allow the main turbine to be reset for surveillance testing. The operators involved in this event considered the RPS to be out-of-service because the reactor was shutdown with all control rods fully inserted. Based on this fact, the personnel involved did not consider the RPS actuation to be a reactor trip event and therefore did not perform the required event notifications.

II. Cause of Event

The root cause of the cooldown event was poor attention to detail by the operators during the stroking of the main turbine intercept stop valves. The operators should have taken actions to stop the injection of cold feedwater to the steam generators following the turbine trip signal in accordance with a caution statement in procedure EOP 2526, "Reactor Trip Recovery."

The cause of the failure to immediately report the automatic RPS actuation to the USNRC was due to personnel error and a lack of sensitivity to automatic RPS actuation reporting requirements when the reactor is in a shutdown condition. Prior to the above event, the RPS was reset to allow the main turbine to be reset for surveillance testing. The operators involved in this event considered the RPS to be out-of-service because the reactor was shutdown with all control rods fully inserted. Based on this fact, the personnel involved did not consider the RPS actuation to be a reactor trip event and therefore did not perform the required event notifications.

III. Analysis of Event

This event is being reported pursuant to the requirements of Paragraph 50.73(a)(2)(iv), reporting any event or condition that resulted in manual or automatic actuation of any Engineered Safety Feature System, including the Reactor Protection System.

There were no safety consequences from this automatic RPS actuation since the reactor was already shutdown with all control rods fully inserted, and maintained in a shutdown condition throughout the actuation.

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 2	DOCKET NUMBER (2) 0 5 0 0 0 3 3 6 9 3	LER NUMBER (3)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

TEXT (if more space is required, use additional NRC Form 365A s) (17)

IV. Corrective Action

A memorandum has been sent to all licensed plant reactor operators and key management personnel concerning the reporting requirements for any event or condition that results in a manual or automatic actuation of any Engineered Safety Feature System, including the Reactor Protection System, regardless of plant operating/shutdown conditions.

Procedure EOP 2526, "Reactor Trip Recovery", is being changed to more clearly identify the operator actions to be taken when stroking the main turbine intercept stop valves.

A memorandum will be sent to all licensed plant reactor operators and key management personnel concerning the operability requirements of the RPS for all modes of plant operation.

V. Additional Information

Similar LER'S: 91-008

EHS Code Identifiers for Referenced Components:

Reactor Protection System: JC-5-C490

Intercept Stop Valves: TG-ISV-GO84

Feedwater Regulating Bypass Valves: SJ-FCV-C635

Main Steam Isolation Valves: SB-ISV-A585

Trip Circuit Breakers: JC-52-GO80