

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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July 5, 1989
MP-13270

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

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

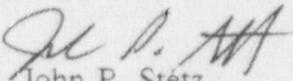
Reference: Facility Operating License No. NPF-49
Docket No. 50-423
Licensee Event Report 89-012-00

Gentlemen:

This letter forwards Licensee Event Report 89-012-00 required to be submitted within thirty (30) days pursuant to the requirements of 10CFR50.73(a)(2)(i), any operation or condition prohibited by the plants Technical Specifications.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

BY: 
John P. Stetz
Unit 1 Superintendent
Millstone Nuclear Power Station

FOR: Stephen E. Scace
Station Superintendent
Millstone Nuclear Power Station

SES/JAP:mo

Attachment: LER 89-012-00

cc: W. T. Russell, Region I Administrator
D. H. Jaffe, NRC Project Manager, Millstone Unit No. 3
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2, and 3

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Millstone Nuclear Power Station Unit 3	DOCKET NUMBER (2) 0 5 0 0 0 4 2 3	PAGE (3) 1 OF 0 3
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TITLE (4)
Containment Leakage in Excess of Limits Due to Valve Leakage

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 6 0 5 8 9	8 9	-	0 1 2	-	0 0	0 7 0 5 8 9				0 5 0 0 0	

OPERATING MODE (9) 6	THIS REPORT IS BEING SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §. (Check one or more of the following) (11)										
POWER LEVEL (10) 0	20.402(b)	20.402(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)(vii)	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)(iv)	50.73(a)(2)(iii)	50.73(a)(2)(x)									

LICENSEE CONTACT FOR THIS LER (12)

NAME James A. Petrosky, Engineer	TELEPHONE NUMBER AREA CODE 2 0 3 4 4 7 - 1 7 9 1
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRDS

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 June 5, 1989 at approximately 0550 and on June 15, 1989 at approximately 0600 hours, while at 0% power in Mode 6 (Refueling), atmospheric pressure, and 89 degrees Fahrenheit, during the performance of Local Leak Rate Testing (LLRT) specific piping penetrations could not be pressurized to test pressure. These undetermined leak rates exceeded the Technical Specification limit of 0.6 La. The Residual Heat Removal pump discharge check valve to #1 cold leg, inside containment (3SIL*V6) leaked excessively on June 5. The "A" Containment Recirculation pump suction isolation valve (3RSS*MOV23A) leaked excessively on June 15.

The root cause of the 3SIL*V6 leakage was that this swing check valve had not been fully seated prior to the LLRT. Filling and redraining the penetration allowed the valve to properly seat, and a satisfactory "as left" LLRT was performed.

The root cause of the 3RSS*MOV23A leakage was separation of the rubber seat from its mounting surface. The valve was removed from the system and shipped to the manufacturer for overhaul. The post maintenance LLRT will be performed prior to proceeding to Mode 4.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR 8 9	SEQUENTIAL NUMBER 0 1 2	REVISION NUMBER 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 June 5, 1989 at approximately 0550 while at 0% power in Mode 6 (Refueling), atmospheric pressure, and 89 degrees Fahrenheit, during the performance of Local Leak Rate Testing (LLRT), 3SIL*V6 had excessive leakage which prevented the desired test pressure from being reached. This "as found" undetermined leak rate exceeded the Technical Specification limit of 0.6 La. 3SIL*V6 is the Residual Heat Removal pump discharge check valve, inside containment, to Reactor Coolant System #1 cold leg. No immediate action was required since the plant was shutdown.

On June 15, 1989 at approximately 0600 while at 0% power in Mode 6 (Refueling), atmospheric pressure, and 89 degrees Fahrenheit, during the performance of Local Leak Rate Testing (LLRT), 3RSS*MOV23A had excessive leakage which prevented the desired test pressure from being reached. This "as found" undetermined leak rate exceeded the Technical Specification limit of 0.6 La. 3RSS*MOV23A is the "A" Containment Recirculation pump suction, outside containment, isolation valve. No immediate action was required since the plant was shutdown.

II. Cause of Event

The root cause of 3SIL*V6 leakage was that the valve had not fully seated prior to the LLRT (possibly due to debris on seating surface or disc hanging up when the piping was drained for the LLRT). 3SIL*V6 is a 6 inch Westinghouse hard-seated swing check valve.

The root cause of 3RSS*MOV23A leakage was that the vulcanized rubber seat had separated from its mounting surface. 3RSS*MOV23A is a 12 inch Pratt butterfly valve.

III. Analysis of Event

These events are reportable under 10CFR50.73(a)(2)(i), in that the undetermined leakage rate past 3SIL*V6 and 3RSS*MOV23A exceeded the limits allowed by plant Technical Specification 3.6.1.2.b.

The health and safety of the public were not at risk due to these events.

In the first event, containment integrity was maintained by verifying that the outside containment isolation 3SIL*MV8809A, was operable. 3SIL*8809A passed its LLRT this outage, and thus provided an acceptable containment boundary.

In the second event, containment integrity was maintained by the Containment Recirculation System piping. Containment Recirculation System piping is a closed loop in which the Containment Recirculation pump takes a suction on the containment sump and discharges back to containment. 3RSS*MOV23A, the "A" pump suction isolation valve, is a normally open valve which stays open during accident conditions. It does not serve as a containment boundary under accident conditions. The integrity of the Containment Recirculation System closed loop piping was verified by conducting a special Local Leak Rate Test. The low leak rate of 1686 sccm proved that this piping provides an acceptable containment boundary. This piping will be tested again during the upcoming Integrated Leak Rate Testing.

IV. Corrective Action

No immediate corrective action was required of plant operators since the plant was shutdown.

As corrective action for 3SIL*V6 leakage, the penetration was drained (after being partially refilled) prior to conducting a subsequent LLRT. The purpose of this LLRT was to attempt to quantify the leakage rate. The leakage rate on this second LLRT was satisfactory. The refilling and draining sequence apparently allowed the check valve to properly seat by dislodging debris from the disc, or by freeing the hung-up disc. Because of this subsequent satisfactory test, valve disassembly and inspection were deemed unnecessary.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR 8 9	SEQUENTIAL NUMBER 0 1 2	REVISION NUMBER 0 0	

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

V. Corrective Action (Cont'd)

As corrective action for 3RSS*MOV23A leakage, the valve was removed from the system and shipped to the manufacturer for overhaul. The post-maintenance LLRT will be performed prior to proceeding to Mode 4.

VI. Additional Information

LER 87-043 discussed "Bypass Leakage in Excess of Technical Specification Limits" due to improper installation of the elastomer T-ring on a Fisher butterfly valve. LER 89-011, "Containment Unfiltered Leakage in Excess of Limits due to Valve Leakage", addressed containment boundary valve leakage in "as found" LLRT's from the current refueling outage. The valves discussed in these previous LER's were Fisher butterfly valves and a Walworth gate valve. These valves do not have designs similar to 3SIL*V6 / 3RSS*MOV23A, and the root causes of valve leakage were not the same. The corrective actions, i.e., revised maintenance procedures, post maintenance bench stroking, and changing the gate valve wedge angle, were not applicable to 3SIL*V6 and 3RSS*MOV23A, and would not have prevented these events from occurring. 3SIL*V6 and 3RSS*MOV23A have performed satisfactorily on all previous LLRT's.

3SIL*V6 is a 6 inch Westinghouse hard-seated swing check valve.

3RSS*MOV23A is a 12 inch Pratt butterfly valve.

EIIS Codes

<u>System</u>	<u>Component</u>
Residual Heat Removal/ Low Pressure Safety Injection - BP Containment Recirculation System - BE	Check Valve - ISV Butterfly Valve - ISV

Vendor

Westinghouse - W351
Henry Pratt - P340