

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Millstone Nuclear Power Station Unit 1										DOCKET NUMBER (2) 0 5 0 0 0 2 4 5 1 OF 0 3										PAGE (3) 1					
TITLE (4) Main Steam Safety/Relief Valve Setpoint Drift																									
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					DOCKET NUMBER(S)											
0	6	3	0	8	7	8	7	—	0	2	1	—	0	0	0	7	2	8	8	7	0 5 0 0 0				
OPERATING MODE (9) R				THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 8: (Check one or more of the following) (11)																					
POWER LEVEL (10) 0 0 0				20.402(b)				20.406(c)				50.73(a)(2)(iv)				73.71(b)									
				20.406(a)(1)(i)				50.36(c)(1)				50.73(a)(2)(v)				73.71(c)									
				20.406(a)(1)(ii)				50.36(c)(2)				50.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text NRC Form 365A)									
				20.406(a)(1)(iii)				50.73(a)(2)(i)				50.73(a)(2)(vii)(A)													
				20.406(a)(1)(iv)				50.73(a)(2)(ii)				50.73(a)(2)(viii)(B)													
				20.406(a)(1)(v)				50.73(a)(2)(iii)				50.73(a)(2)(ix)													
LICENSEE CONTACT FOR THIS LER (12)																									
NAME Michael J. Bigiarelli, Asst. Engineering Supvr. X4193												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 NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS																
X	S	B	R	V	T	0	2	0	Y																
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 June 30, 1987, while performing surveillance testing on the six Main Steam Safety/Relief Valves (RV), five of the valves lifted at pressures in excess of their desired setpoint. Analysis demonstrated that the as-found valve setpoints would not have caused reactor vessel pressure to exceed its Technical Specification limit if a limiting transient had occurred. The valves were rebuilt, set to their desired setpoints and satisfactorily tested. There were no consequences.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104  
EXPIRES: 8/31/88

FACILITY NAME (1)  Millstone Nuclear Power Station Unit 1	DOCKET NUMBER (2)  0 5 0 0 0 2 4 5 8 7 — 0 2 1 — 0 0 0 2 OF 0 3	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

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

I. Description of Event

On June 30, 1987, while performing surveillance testing on the Main Steam Safety Relief Valves (SRV), five (5) of the six (6) valves lifted at pressures in excess of the Technical Specification limit. The as-found setpoints of the valves were:

<u>Pilot Assembly Serial Number</u>	<u>Desired Setpoint</u>	<u>As Found Setpoint</u>	<u>Percentage of Tech. Spec. Limit</u>
1036	1095 psig	1114 psig	101.7%
1037	1125 psig	1174 psig	104.4%
1038	1110 psig	1610 psig	145.0%
1042	1125 psig	1177 psig	104.6%
1077	1125 psig	1156 psig	102.8%

Technical Specifications require that these valves perform their safety function at plus or minus one (1) percent of the required setpoint. This event is reportable per 10CFR50.73(a)(2)(v).

At the time of the event, the unit was shut down for a scheduled refueling outage. There were no consequences.

II. Cause of Event

The valves in question are Model 7567F, two-stage valves manufactured by Target Rock Corporation. Setpoint drift in these valves has been experienced at Millstone 1 and at other utilities. A continuing effort by the BWR Owner's Group Subcommittee for Safety/Relief Valve Setpoint Drift is being made to determine the cause and long term corrective action for this phenomenon. Based on trending of valve test data that has been accumulated to date, the setpoint drift can be attributed to high friction at the labyrinth seal in the valve topworks assembly.

III. Analysis of Event

Following identification of the event, the General Electric Company was contacted to determine whether the as-found valve setpoints would have allowed peak reactor vessel pressures in excess of 1375 psig during occurrence of the limiting vessel over-pressurization transient. To insure that actual conditions were bounded by the analysis, it was assumed that one valve failed to open and the remaining valves opened at 105 percent of their desired setpoints. The result of this analysis indicated that occurrence of the limiting transient, Main Steam Isolation Valve closure from rated power with no high flux scram, would have resulted in a peak reactor vessel pressure of 1311 psig. Therefore, this event did not result in an unanalyzed condition.

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IV. Corrective Action

The valves in question were rebuilt, set to their desired setpoints and satisfactorily tested. Millstone 1 will continue to participate in the activities of the BWR Owner's Group Subcommittee for Safety/Relief Valve Setpoint Drift and will consider any appropriate modifications recommended by the Owner's Group and the valve manufacturer.

V. Additional Information

Similar occurrences of this event at Millstone 1 have been reported as LER 85-029-00 and LER 84-012-00.



# 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 28, 1987  
MP-10620

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

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

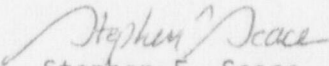
Reference: Facility Operating License No. DPR-21  
Docket No. 50-245  
Licensee Event Report 50-245/87-021-00

Gentlemen:

This letter forwards the Licensee Event Report 87-021-00 required to be submitted within thirty (30) days pursuant to the requirements of 10CFR50.73(a)(2)(v).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

  
Stephen E. Scace  
Station Superintendent  
Millstone Nuclear Power Station

SES/MJB:mo

Attachment: LER 87-021-00

cc: W. T. Russell, Region I  
T. Rebelowski, Senior Resident Inspector

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