



Northeast  
Nuclear Energy

Rope Ferry Rd. (Route 156), Waterford, CT 06385

Millstone Nuclear Power Station  
Northeast Nuclear Energy Company  
P.O. Box 128  
Waterford, CT 06385-0128  
(203) 444-4300  
Fax (203) 444-4277

The Northeast Utilities System  
Donald B. Miller Jr.,  
Senior Vice President - Millstone

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

March 24, 1994  
MP-94-211

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 94-009-00

Gentlemen:

This letter forwards Licensee Event Report 94-009-00 required to be submitted within thirty (30) days pursuant to 10CFR50.73(a)(2)(i).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

Donald B. Miller, Jr.  
Senior Vice President - Millstone Station

DBM/TD:dfr

Attachment: LER 94-009-00

cc: T. T. Martin, Region I Administrator  
P. D. Swetland, Senior Resident Inspector, Millstone Unit Nos. 1, 2 and 3  
J. W. Andersen, NRC Acting Project Manager, Millstone Unit No. 1

9404060029 940324  
PDR ADOCK 05000245  
S PDR

cert # P 516 640 346

JE27 1/1

# LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Millstone Nuclear Power Station Unit 1	DOCKET NUMBER (2) 05000245	PAGE (3) 1 OF 3
---	-------------------------------	--------------------

TITLE (4)  
Hydraulic Snubbers HSS-015 & HSS-018

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 NAME	DOCKET NUMBER
02	17	94	94	009	00	03	24	94		05000
									FACILITY NAME	DOCKET NUMBER
										05000

OPERATING MODE (9)	THIS REPORT IS BEING SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)										
	20.402(b)			20.405(c)			50.73(a)(2)(iv)			73.71(b)	
POWER LEVEL (10)	100										
	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)(vi)			OTHER		
20.405(a)(1)(iii)			X 50.73(a)(2)(f)			50.73(a)(2)(vii)(A)			(Specify in Abstract below and in Text. NRC Form 366A)		
20.405(a)(1)(iv)			50.73(a)(2)(ii)			50.73(a)(2)(vii)(B)					
20.405(a)(1)(v)			50.73(a)(2)(iii)			50.73(a)(2)(x)					

LICENSEE CONTACT FOR THIS LER (12)

NAME Drexel N. Harris, Site Licensing	TELEPHONE NUMBER (Include Area Code) (203) 437-5903
--	--

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
B		SNB	B204						

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	NO						

**ABSTRACT** (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

During the 1994 Refuel outage, 2 hydraulic snubbers failed to meet the acceptance criterion for functional testing.

Functional testing of the first 10% sample for hydraulic snubbers found one snubber (HSS-015) that failed to meet the acceptance criteria. An additional 5% was functionally tested as required by Technical Specifications with no additional failures.

One snubber (HSS-018) required a retest as a result of failing the previous functional test during the 1992 inspection and failed to meet the acceptance criteria.

Engineering evaluations were performed to determine what affects, if any, these snubbers had on the system to which the snubbers were attached. These evaluations concluded the inoperable snubbers did not have any affects on the attached system which would have impaired the operability of these systems.

These events are reportable pursuant to 10CFR50.72(a)(2)(i)(B).

EXPIRES: 5/31/95

**LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION**

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENT REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  Millstone Nuclear Power Station Unit 1	DOCKET NUMBER (2)  05000245	LER NUMBER (6)			PAGE (3)  02 OF 03
		YEAR  94	SEQUENTIAL NUMBER  009	REVISION NUMBER  00	

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

**I. Description of Event**

During the 1994 Refuel outage 2 hydraulic snubbers failed to meet the acceptance criterion for functional testing.

Functional testing of the first 10% sample for hydraulic snubbers found one snubber (HSS-015) that failed to meet the acceptance criteria. An additional 5% was functionally tested as required by Technical Specifications with no additional failures.

One snubber (HSS-018) required a retest as a result of failing the previous functional test during the 1992 inspection and failed to meet the acceptance criteria.

Both HSS-015 and HSS-018 are located on the 10" MS-8B Main Steam Safety Relief Valve (SRV) discharge line.

These events are reportable pursuant to 10CFR50.72(a)(2)(i)(B).

**II. Cause of Event**

HSS-015 was functionally tested as part of the original 10% sample required by Technical Specifications. The snubber failed with a high lockup in compression. Particulates were discovered in the fluid, however particulates would have a low probability of increasing the lockup rate. The likely cause for this type of failure is air entrapped in the fluid which would allow the snubber to momentarily accelerate during functional testing, thus indicating a higher lockup rate. The snubber was thoroughly cleaned, rebuilt, retested and reinstalled.

HSS-018 was functionally tested due to its failure during the previous inspection (1992). The snubber failed with a low bleed rate in compression. Particulates were also found in the fluid of this snubber. In the case of a low bleed rate, particulates can collect in the bleed orifice and reduce the velocity at which fluid will pass. This snubber was rebuilt and the bleed rate set at mid range of the acceptance, retested and reinstalled. The failure during the 1992 test was also a low bleed rate and was rebuilt in 1992 to meet the acceptable range. The snubber was set at the low end of the acceptance range (4.2 in/min) and reinstalled.

HSS-015 and HSS-018 are attached to the Main Steam Safety Relief Valve (SRV) discharge line 10" MS-8B. All other snubbers attached to this line were removed and functionally tested with no other failures. A visual inspection was also performed to determine the extent of any physical damage to this line if any. The visual inspection identified no other indications of impaired operability. There were 78 Hydraulic Snubbers removed and rebuilt during the 1994 inspection. No particulates were found in any of these snubbers. HSS-015 and HSS-018 were the only two snubbers rebuilt during the 1992 inspection. These two snubbers are considered an isolated case. The root cause of these two failures is attributed to the rebuild activities during the 1992 inspection.

**III. Analysis of Event**

An engineering evaluation was performed to determine what affects if any, the failed snubbers had on the attached system. No safety consequences resulted from this event. The snubbers are installed to restrain the system against seismic events while allowing for freedom of movement thermally. Additionally, snubbers HSS-015 and HSS-018, located on the Main Steam Safety Relief Valve (SRV) discharge line protect against SRV discharge loadings. The evaluation of these snubbers verified the operability of the SRV discharge line and that the SRV discharge function would not have been compromised during normal SRV discharge, SSE earthquake or DBA loadings.

**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 INFORMATION AND RECORDS MANAGEMENT BRANCH (MNB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  Millstone Nuclear Power Station Unit 1	DOCKET NUMBER (2)  05000245	LER NUMBER (6)			PAGE (3)  03 OF 03
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
		94	-- 009 --	00	

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

IV. Corrective Action

HSS-015 and HSS-018 were the only two snubbers rebuilt during the 1992 inspections. These snubbers were determined to be an isolated instance where particulates and possibly air, was entrapped in the fluid during a routine rebuild activity. Both hydraulic snubbers HSS-015 and HSS-018 were thoroughly cleaned, rebuilt, tested and reinstalled. No further corrective action is required at this time.

V. Additional Information

During visual inspection of hydraulic snubber HSS-046, a visual discrepancy was identified which questioned the operability of the snubber. Specifically, a one inch bolt was found instead of the designed one and one quarter inch load stud. As a result of this discrepancy, a functional test was performed and satisfactorily completed. Nonetheless, since of the functional test could not be performed in the as-found configuration, an engineering evaluation was performed. The engineering evaluation concluded that the discrepancy did not impact the functional test results or the operability of the snubber. All other snubbers which could be generically susceptible were inspected and corrective action taken. Both hydraulic snubbers HSS-015 and HSS-018 were thoroughly cleaned, rebuilt, tested and reinstalled.