



**Northeast  
Nuclear Energy**

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The Northeast Utilities System

MAY 15 1996

Docket No. 50-336  
B15694


Re: 10 CFR 50.73

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

This letter forwards Licensee Event Report (LER) 96-021-00 documenting an event that occurred at Millstone Nuclear Power Station, Unit No. 2 on February 27, 1996. This LER is being submitted pursuant to 10 CFR 50.73(a)(2)(i).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

  
\_\_\_\_\_  
P. M. Richardson  
Director - Millstone Unit No. 2

Attachment: LER 96-021-00

cc: T. T. Martin, Region I Administrator  
P. D. Swetland, Senior Resident Inspector, Millstone Unit No. 2  
D. G. McDonald, Jr., NRC Project Manager, Millstone Unit No. 2

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## LICENSEE EVENT REPORT (LER)

(See reverse for required number of  
digits/characters for each block)ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY  
INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS  
LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED  
BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN  
ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-  
6 F33), 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 2

DOCKET NUMBER (2)  
05000336PAGE (3)  
1 of 4

TITLE (4)

Snubber Failure in Pressurizer Spray Line

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
02	27	96	96	021	00	05	15	96	FACILITY NAME	DOCKET NUMBER
OPERATING MODE (9)		5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
POWER LEVEL (10)		0%	20.2201(b)		20.2203(a)(2)(v)		<input checked="" type="checkbox"/> 50.73(a)(2)(i)		50.73(a)(2)(viii)	
			20.2203(a)(1)		20.2203(a)(3)(i)		<input type="checkbox"/> 50.73(a)(2)(ii)		50.73(a)(2)(x)	
			20.2203(a)(2)(i)		20.2203(a)(3)(ii)		<input type="checkbox"/> 50.73(a)(2)(iii)		73.71	
			20.2203(a)(2)(ii)		20.2203(a)(4)		<input type="checkbox"/> 50.73(a)(2)(iv)		OTHER	
			20.2203(a)(2)(iii)		50.36(c)(1)		<input type="checkbox"/> 50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A	
			20.2203(a)(2)(iv)		50.36(c)(2)		<input type="checkbox"/> 50.73(a)(2)(vii)			

## LICENSEE CONTACT FOR THIS LER (12)

NAME: G. P. van Noordennen, Nuclear Licensing Supervisor  
TELEPHONE NUMBER (Include Area Code): (860)440-2084

## COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDs	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDs
X	AB	SPT	P029	N/A					

## SUPPLEMENTAL REPORT EXPECTED (14)

YES ☐ NO ☒  
(If yes, complete EXPECTED SUBMISSION DATE).

## EXPECTED SUBMISSION

MONTH DAY YEAR

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

On February 27, 1996 at 1200 hours, with the plant in operating Mode 5 at 0% power, mechanical snubber 12883 located on support No. 410049 failed the functional testing portion of Surveillance Procedure SP21174. This event is being reported pursuant to the requirements of 10CFR50.73.(a)(2)(i), "Any operation or condition prohibited by the plants Technical Specifications." This snubber provides support for pressurizer spray piping line number 3-CCA-11. A failure analysis of the subject snubber was performed. Additionally, the snubber was disassembled, and upon inspection, indication of internal water damage was found. The snubber internals were severely corroded, indicating that the snubber was in a degraded condition for an extended period of time.

The cause of this event is corrosion, which resulted from an undetermined event, that subjected the snubber to moisture conditions.

The immediate corrective action was to replace snubber serial no.12883 with an identical model PSA-1 snubber. Support 410049 has been restored to meet its functional requirements. As a result of its failure, snubber support 410049 is required to be functionally tested during the next surveillance period.

There were no automatic or manually initiated safety systems activated as a result of this event.

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

I. Description of Event

On February 27, 1996 at 1200 hours, with the plant in operating Mode 5, at 0% power, mechanical snubber 12883 located on support No. 410049 failed the functional testing portion of Surveillance Procedure SP21174. This snubber provides support for pressurizer spray piping line number 3-CCA-11. The first phase of the functional test strokes the snubber over its entire range of motion. During this initial stroke test, the snubber visibly compressed but at a higher than acceptable test load. A load of approximately 375 lb. (25% of design load) was applied without recordable movement in the tension direction. Movement was visible in the compression direction, but at well above acceptable limits. The subject snubber was declared inoperable as per the requirements of Technical Specification (TS) 3/4.7.8 "Snubbers."

On April 19, 1996, an operability analysis was performed and this event was determined to be reportable, based on the severe corrosion discovered on the snubber. The operability analysis determined that the snubber had been inoperable for an indeterminate but extended period of time. Subsequent to the reportability determination, the NRC resident inspector was notified.

There were no automatic or manually initiated safety system actuations as result of this event. Additionally no operator action was required in response to this event.

II. Cause of Event

The cause of this event was determined to be corrosion of the snubber which resulted from an undetermined event that subjected the snubber to moisture conditions. A failure analysis was performed on the mechanical snubber. The snubber internals were severely corroded precluding snubber operation. It was concluded that the mechanical snubber was probably sprayed with water, or exposed to a high humidity environment. A historical records search was performed to determine if any events occurred that may have subjected the snubber to a corrosive environment. No events were identified, as a result of the document search that could be attributed to have caused the snubber corrosion.

The last time this snubber was functionally tested in accordance with TS surveillance requirements 4.7.8.d was November 21, 1986. Test results were in compliance with TS 3/4.7.8 requirements. Considering the above there appears to be sufficient evidence that the failed snubber was in the degraded condition for an extended period of time.

III. Analysis of Event

This event is being reported pursuant to the requirements of 10CFR50.73(a)(2)(i) "Any operation or condition prohibited by the plants Technical Specification."

Millstone Unit 2 TS section 3.7.8, Limiting Condition for Operation (LCO), requires all snubbers to be operable. Following discovery of an inoperable snubber, the TS action requirement LCO 3.7.8 requires restoration of snubber operability and an engineering evaluation of components supported by the snubber within 72 hours or declare the attached system inoperable and follow the appropriate TS action statements.

The snubber was last tested on November 21, 1986 and was, at that time, found to meet the functional test acceptance criteria. The process of corrosion occurs over a long period of time. Approximately 9 years have

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

passed since the last functional test was conducted, therefore, it is concluded that the snubber has been inoperable for an indeterminate but extended period of time. Since it is believed that the snubber was inoperable for an extended period of time, it has been concluded that the TS requirement to evaluate the condition within 72 hours has been exceeded.

The actual and potential safety significance of this event is low based upon the following:

- The operability determination of the snubber supporting the pressurizer spray piping line 3-CCA-11 assessed the structural limits of the piping in accordance with section 6.13 of Generic Letter 91-18, "Information to Licensees Regarding Two NRC Inspection Manual Sections on Resolution of Degraded and Nonconforming Conditions and on Operability." It concluded that the ASME code stress allowables were not exceeded and that the pressurizer spray piping line remained operable with the non functional snubber. Therefore, the piping system was always capable of performing its safety function.
- Augmented inspections of the pressurizer spray line piping system and supports confirmed that no permanent structural damage occurred as a result of the failed snubber.

A historical document review was performed to identify if other corrosion related snubber failures have occurred. The results of this effort yielded no additional corrosion related failures. Based on the information available, the failure of this snubber, resulting from corrosion, was determined to be an isolated event.

#### IV. Corrective Action

The immediate corrective action was to replace snubber no. 12883 with an identical model PSA-1 snubber. Snubber support 410049 has been restored to meet its functional requirements. The replacement snubber will be functionally tested during the next surveillance period, consistent with the TS requirements.

In accordance with the requirements of TS section 4.7.8, an additional 5% of the snubber population, similar in design to snubber no. 12283, were tested. Testing was completed on April 23, 1996. No additional failures were found.

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**TEXT CONTINUATION**

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

V. Additional Information

None

Similar Events

LER 95-019  
LER 92-020  
LER 85-008

Manufacturer Data

Model - PSA-1	Weight - 10.2 lb.(Shock arrestor only)
Travel - 4.0 in.	Length - 11.0 in. (Fully Retracted)
Load - 1500 lb.	