

# 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-Seiden Street, Berlin Connecticut

P.O. BOX 270  
HARTFORD, CONNECTICUT 06141-0270  
(203)665-5000  
December 13, 1993  
MP-93-982

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

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 93-019-00

Gentlemen:

This letter forwards Licensee Event Report 93-019-00 required to be submitted within thirty (30) days pursuant to 10CFR50.73(a)(2)(i).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

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

BY: Fred R. Dacimo  
Director - Millstone Unit 3

DBM/NJ:dlr

Attachment: LER 93-019-00

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

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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 INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNEB 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 4
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TITLE (4)  
Standby Gas Treatment (SBGT) Surveillance Procedure Inadequacy

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
11	11	93	93	019	00	12	13	93			05000
									FACILITY NAME		DOCKET NUMBER
											05000

OPERATING MODE (9) RUN	THIS REPORT IS BEING SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)										
	20.402(b)	20.405(b)	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)(vii)(A)	(Specify in Abstract below and in Text, NRC Form 366A)							
	20.405(a)(1)(iv)		50.73(a)(2)(vii)(B)								
	20.405(a)(1)(v)		50.73(a)(2)(viii)								

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

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 15 single-spaced typewritten lines) (16)

On November 11, 1993 at 1345 hours with the plant operating at 100% power, it was determined that the requirements of Technical Specification (Tech. Spec.) 4.7.B.3.c were not being met due to inadequate surveillance testing. Specifically, Tech. Spec. Surveillance Requirement 4.7.E.3.c states that "when one circuit of the standby gas treatment system becomes inoperable, the other circuit shall be demonstrated to be operable immediately and daily thereafter." The applicable surveillance procedure used to fulfill these requirements was determined to be insufficient to definitively verify the operability of all active components in the Standby Gas Treatment (SBGT) system at the specified frequency required by this Tech. Spec.

Additional surveillances have and will be performed to verify SBGT train operability. No safety consequences resulted from this event.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 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)
		YEAR      SEQUENTIAL NUMBER      REVISION NUMBER	
		93      --      019      --      00	02      OF      4

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

I. Description of Event

On November 11, 1993 at 1345 hours with the plant operating at 100% power, it was determined that the requirements of Technical Specification (Tech. Spec.) 4.7.B.3.c were not being met due to inadequate surveillance testing. Specifically, Tech. Spec. Surveillance Requirement 4.7.B.3.c states that "when one circuit of the standby gas treatment system becomes inoperable, the other circuit shall be demonstrated to be operable immediately and daily thereafter." The applicable surveillance procedure used to fulfill these requirements was determined to be insufficient to definitively verify the operability of all active components in the Standby Gas Treatment (SBGT) system at the specified frequency required by this Tech. Spec.

II. Cause of Event

A failure to adequately translate a Tech. Spec. surveillance requirement for demonstration of train operability into specific component level operability requirements, was determined to be the cause of this event.

III. Analysis of Event

The surveillance procedure performed for functionally testing one train when the other train of the Standby Gas Treatment system becomes inoperable, verifies that the Standby Gas Treatment Fan (HVE-5A(B)) initiates and establishes a nominal train flowrate of ~ 500 scfm. However, use of the nominal flowrate was determined to be inadequate to verify train operability. The surveillance procedure requires establishment of a:

- System Design Flowrate of ~ 1100 scfm for restorative surveillances which would be performed if fan, filter, damper, heater or logic maintenance has been completed or
- Nominal Train Flowrate of ~ 500 scfm to demonstrate train operability to comply with Tech. Spec. 4.7.B.3.c.

Verification of the operability of another active component in the train, the 5 kW heater, which is energized upon receiving a SBGT start signal, was not performed as part of the surveillance procedure. The design function of the 5 kW electric heater is to warm the entering airstream to lower its relative humidity to less than 70%. The 5 kW electric heater, which auto-starts in conjunction with a fan auto-start is not tested in accordance with the frequency prescribed in this surveillance procedure i.e. initially and daily thereafter.

The 5 kW heater is tested functionally once per operating cycle in accordance with Tech. Spec. 4.7.B.1.b. In addition, once per month relative humidity in the charcoal bed is verified to be less than 70% as part of surveillance testing to fulfill the requirements of Tech. Spec. 4.7.B.2.d. Other surveillances are performed to ensure the SBGT fans are specifically verified to operate at  $1100 \pm 10\%$  scfm design flowrate once per year to meet the requirements of Tech. Spec. 3.7.B.2.c. A flow rate of ~ 1100 scfm is also established for other surveillances such as those which are performed once per operating cycle to measure total SBGT train differential pressure and secondary containment integrity. Secondary containment was maintained at all times, with recent testing verifying this condition.

Due to a failure to test all active components of one train of the SBGT system for operability at full design flowrates when the other train is out of service, the intent of verifying operability per Tech. Spec. 4.7.B.3.c was not met and hence this event is being reported in accordance with 10CFR50.73(a)(2)(i)(B), any operation or condition prohibited by the plant's Tech. Specs.

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

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MINBB 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.

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
		93	019	00	

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

IV. Corrective Action

A complete review of the SBTG surveillance procedures has been performed to ensure all Tech. Spec. Surveillance Requirements are fully met to verify SBTG train operability, with no other findings. Additionally, a consolidation of the associated surveillance procedures has been initiated. Any necessary revisions will be incorporated at that time. During the next internal Tech. Spec. -required surveillance audit increased attention will also be focused on the root cause of this LER.

V. Additional Information

A Tech. Spec. Change Request is also being processed which will remove the requirement to verify operability of one of the SBTG trains before and after the other train is removed from service. This is fully consistent with the NRC position on alternate train testing as outlined in an NRC memorandum from C. Grimes to NRR Project Directors, "Operability Requirements During Testing and Requirements For Alternate Train Testing", dated April 10, 1992.

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

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 80.0 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

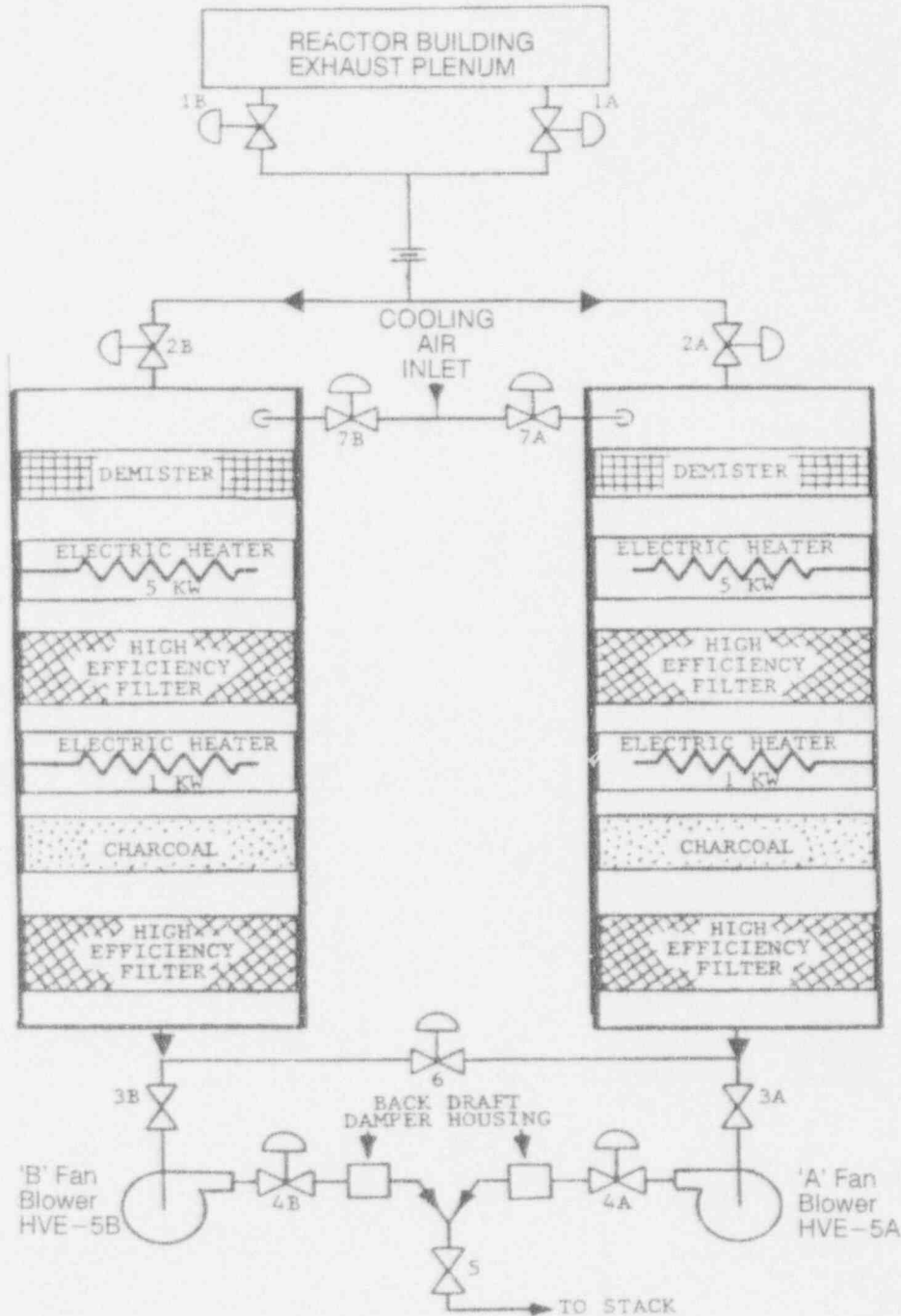
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)



**STANDBY GAS TREATMENT SYSTEM**

**FIGURE 1**