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)(B)

April 29, 1994
MP-94-292

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

Reference: Facility Operating License No. DPR-65
Docket No. 50-336
Licensee Event Report 94-005-00

Gentlemen:

This letter forwards Licensee Event Report 94-005-00 required to be submitted within thirty (30) days pursuant to 10CFR50.73(a)(2)(i)(B).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

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

BY: Harry F. Haynes
Director - Millstone Unit 1

DBM/clc

Attachment: LER 94-005-00

cc: T. T. Martin, Region I Administrator
P. D. Swetland, Senior Resident Inspector, Millstone Unit Nos. 1, 2 and 3
G. S. Vissing, NRC Project Manager, Millstone Unit No. 2

IE22
1/1

NRC Form 366 (5-92)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES: 5/31/95

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.

LICENSEE EVENT REPORT (LER)

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

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Millstone Nuclear Power Station Unit 2	05000336	1 OF 3

TITLE (4)
EBFS Surveillance Requirements Not Satisfied

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
										05000
04	01	94	94	- 005 -	00	04	29	94	FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9)	1	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)	99.8	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
		20.405(a)(1)(iii)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)(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)(viii)(B)	
		20.405(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
William J. Temple, Site Licensing	(203) 437-5904

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)

At approximately 1430 hours, on April 1, 1994, it was determined that both facilities of the Enclosure Building Filtration System (EBFS) had never been properly tested in accordance with Technical Specification Surveillance 4.6.5.1.a. Technical Specification Surveillance 4.6.5.1.a requires that the EBFS system be demonstrated OPERABLE, in part, "by verifying that the train operates for at least 10 hours with the system heaters on." The existing surveillance procedure performs this test with the system operating in Auto, however, the heaters only energize when the moisture control switch senses a relative humidity greater than 70%. Consequently, the heaters would not be energized for the required 10 hour surveillance run if the relative humidity was less than 70%.

This condition resulted in both trains of EBFS being considered inoperable and the plant being outside the Limiting Condition for Operation (LCO) for the EBFS system. The plant entered Technical Specification Action Statement 3.0.3 and Surveillance 4.0.3. A bypass/jumper was processed to jumper out the moisture control switch and to energize the heaters continuously. The 10 hour surveillance run was then performed satisfactorily for both trains of the EBFS system.

The root cause of this event was program failure/personnel error resulting in procedure deficiencies. The failure to account for the actual system operating configuration during development of the surveillance procedure resulted in the failure to incorporate into the surveillance procedure, a method to ensure that the system heaters operate continuously for the required 10 hour surveillance run.

I. Description of Event

At approximately 1430 hours on April 1, 1994, while in Mode 1, at 99.8% power, the plant was notified by the NRC Resident Inspector, that a problem existed with the surveillance procedure for the Enclosure Building Filtration System (EBFS). The Inspector questioned whether compliance with the Technical Specification requirement for running the system for 10 hours with the system heaters energized was being satisfied. A subsequent review of the EBFS design drawings indicated that the system heaters would only be energized when the moisture control switch contacts close. The surveillance procedure performs this test with the system operating in Auto, however, in this operating mode the heaters only energize when the moisture control switch senses a relative humidity greater than 70%. Consequently, the heaters would not be energized for the required 10 hour surveillance run if the relative humidity was less than 70%. Based on this, it was determined that both facilities of the Enclosure Building Filtration System (EBFS) had never been properly tested in accordance with Technical Specification surveillance 4.6.5.1.a. Technical Specification surveillance 4.6.5.1.a requires that the EBFS system be demonstrated OPERABLE, in part, "by verifying that the train operates for at least 10 hours with the system heaters on."

This condition resulted in both trains of EBFS being declared inoperable and the plant being outside the Limiting Condition for Operation (LCO) for the EBFS system. The plant entered Technical Specification Action Statement 3.0.3 and Surveillance 4.0.3. Because the current design of the EBFS system does not allow for continuous energization of the system heaters, a bypass/jumper was processed to jumper out the moisture control switch and to energize the heaters continuously. The 10 hour surveillance run was then performed satisfactorily for both trains of EBFS. There was no automatic or manually initiated safety system actuations as a result of this event.

II. Cause of Event

The root cause of this event was program failure/personnel error resulting in procedure deficiencies. The failure to account for the actual system operating configuration during development of the surveillance procedure resulted in the failure to incorporate into the surveillance procedure a method to ensure that the system heaters operate continuously for the required 10 hour surveillance run. This event was classified as a program error (procedural deficiencies/lack of detail), because the surveillance procedure did not require or provide a method to ensure that the system heaters remained energized during the 10 hour surveillance run, and also as personnel error (inattention to detail), because the operation of the system heaters in conjunction with the moisture control switch was not recognized or accounted for during the development of the surveillance procedure.

III. Analysis of Event

Based on the event investigation, a determination was made that the surveillance procedure for the performance of Technical Specification 4.6.5.1.a was inadequate in that it did not fully test the EBFS system by verifying that each train operates for at least 10 hours with the system heaters energized, and that consequently, both facilities of EBFS had never been properly tested in accordance with the requirements of this surveillance. This is reportable under the criteria of 50.73(a)(2)(i)(B), any operation or condition prohibited by the plant's Technical Specifications. The surveillance procedure operates the system for 10 hours, however, due to the system design configuration, the heaters were considered energized as an automatic function, cycling on as the moisture control switch sensed a relative humidity greater than 70%. This design condition has existed from original construction.

There were no safety consequences as a result of this event. This conclusion is based on the fact that the system remained available to perform its intended post-accident ESF function and no degradation of the system or its components existed. The subsequent surveillance performed verified that the system heaters were functional and that the system was OPERABLE. At no time were any safety systems out of service due to this event. Additionally, while the system heaters are designed to maintain and control the relative humidity of 70% to ensure the effectiveness of the activated carbon absorber section of the EBFS system, the effectiveness of the activated carbon absorber section of the EBFS system is tested at a 95% relative humidity (value required without credit taken for safety grade heaters), in accordance with the testing criteria specified in Regulatory Guide 1.52, and would have retained its effectiveness even without heater operation.

IV. Corrective Action

Following the event discovery on April 1, 1994, immediate corrective action was to declare both trains of EBFS inoperable. A temporary electrical jumper was then installed across the EBFS moisture control switch to ensure that the heaters would be continuously energized when EBFS was running during the surveillance. The surveillance was then repeated for the required 10 hour run. The surveillance was completed satisfactorily for both trains of EBFS.

To prevent recurrence, the surveillance procedure is being revised to include steps to require installation of a temporary electrical jumper across the moisture switch each time this surveillance is performed to ensure that the system heaters remain energized for the entire 10 hour surveillance run. Additionally, as a long term corrective action, a design change is being evaluated to consider the installation of a permanent moisture control switch key lock bypass switch.

V. Additional Information

There were failed components associated with this event.

Similar LERs - None.

EIIS Codes

Enclosure Building Filtration System - BH