Northeast
Nuclear Energy

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Millstone Nuclear Power Station
Northeast Nuclear Energy Company
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The Northeast Utilities System

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

Re: 10CFR50.73(a)(2)(i)(B)
April 28, 1994
MP-94-288

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 94-008-00

Gentlemen:

This letter forwards Licensee Event Report 94-008-00 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

HFH/clc

Attachment: LER 94-008-00

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

LICENSEE EVENT REPORT (LER)

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

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.

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Millstone Nuclear Power Station Unit 2	05000336	1 OF 4

TITLE (4)
Procedure Data Recording Error for ESF Response Time Test

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
03	29	94	94	- 008 -	00	04	28	94	FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9)	i	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)(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)

On March 11, 1994, at approximately 1100 hours, with the plant in Mode 1 at 100% power, during a review of response time data records, it was discovered that the data in OPS Form 2604P-2, "Engineered Safety Features Equipment Response Time Testing," was recorded incorrectly. On March 29, 1994, the unit's Licensing group determined that this event was reportable as a condition prohibited by the plant's Technical Specifications.

On January 11, 1993, Operations Department personnel completed SP 2604P, "Engineered Safety Features Equipment Response Time Testing." One of the data sheets associated with this surveillance, OPS Form 2604P-2, calculates the circuit response time by totaling the instrument response time, diesel sequence time, and equipment response time. The operators did not consider the equipment sequencing time when they were calculating "diesel sequence time" data on the surveillance form. The form requested "diesel sequencer time" when it should have used the term "DG start and sequencing time."

Upon discovery, the response times were recalculated and a new procedure data sheet was completed. The recalculated response times met the acceptance criteria.

This test is performed in accordance with Technical Specifications surveillance requirement 4.3.2.1.3.

I. Description of Event

On March 11, 1994, at approximately 1100 hours, with the plant in Mode 1 at 100% power, during a review of response time data records, it was discovered that the data in OPS Form 2604P-2, "Engineered Safety Features Equipment Response Time Testing," was recorded incorrectly. On March 29, 1994, the unit's Licensing group determined that this event was reportable as a condition prohibited by the plant's Technical Specifications.

On January 11, 1993, Operations Department personnel completed SP 2604P, "Engineered Safety Features Equipment Response Time Testing." One of the data sheets associated with this surveillance, OPS Form 2604P-2, calculates the circuit response time by totaling the instrument response time, diesel sequence time, and equipment response time.

The data used in OPS Form 2604P-2 is derived from 3 sources:

a. Instrument response time was calculated using SP 2403, "ESAS Response Time Testing."

b. Diesel sequence time and sequencer loading delays are derived on OPS Form 2613C-1, "ESF Integrated Test." This surveillance tests for proper EDG start and energization of emergency buses and permanently connected loads. It also demonstrates the energization of the automatically connected loads by proper operation of the load sequencer. Two data points from OPS Form 2613C-1 were used in the calculation in OPS Form 2604P-2.

   * Diesel start time

   * Sequencer loading delays

c. Equipment response time is derived on OPS Form 2604P-1, "ESF Equipment Response Time Testing."

This test is performed in accordance with Technical Specifications surveillance requirement 4.3.2.1.3, which states that the ESF response time of each ESF function shall be demonstrated to be within its limit every 18 months.

The event occurred because the term "diesel sequence time" was not clear to the operators performing the surveillance. They interpreted "diesel sequence time" to be "diesel start time" only. They did not consider the equipment sequencing time when they were calculating "diesel sequence time" data on the surveillance form. The form requested "diesel sequencer time" when it should have used the term "DG start and sequencing time."

This 18 month surveillance was also performed on November 10, 1990 and April 25, 1989. The data on the forms was reviewed for these 2 surveillances and it was determined that the data was correct and the calculations were performed properly.

There were no major operator actions required as a result of this event. Additionally, there were no automatic or manual safety system actuations as a result of this event.

II. Cause of Event

The root cause for this event was program failure, procedure deficiencies, and technical error. The procedure and its associated forms did not provide adequate guidance as to how to calculate "diesel sequence time."

The surveillance procedure did not provide adequate guidance to the operators for the term "diesel sequence time." The response time calculation section of the procedure did not define the terms used on the surveillance forms. It basically directed the operators to calculate the response times for the appropriate signals using recently completed surveillance data sheets and then verify that the acceptance criteria for the various signals are met. The procedure has been revised as part of the Station Procedure Upgrade Project. Revision 5 to the procedure, which was approved effective 04/27/94, provides clearer guidance as to how to perform the surveillance.

The term "diesel sequence time" was not clear to the operators performing the surveillance. They interpreted "diesel sequence time" to be "diesel start time" only. They did not consider the equipment sequencing time when they were recording "diesel sequence time" data. The data form requested "diesel sequencer time" when it should have used the term "DG start and sequencing time" to account for diesel generator starting time and sequencer load delays.

III. Analysis of Event

Data for the Engineered Safety Features Response time testing was incorrectly recorded on the procedure data sheets. This resulted in the miscalculation of response times. Upon discovery, the response times were recalculated and a new procedure data sheet was completed. The recalculated response times met the acceptance criteria.

Although the recalculations demonstrated that the equipment was operable, the failure to correctly complete the procedure data sheet is considered a missed surveillance because the data is used to determine equipment operability. Therefore, this event was considered reportable pursuant to 10CFR50.73(a)(2)(i)(B), as a condition prohibited by the plant's Technical Specification.

In this instance, the procedure violation resulted in a missed surveillance because the data was not used appropriately to determine equipment operability.

There were no safety consequences as a result of this event since all response times acceptance criteria requirements were satisfied.

IV. Corrective Action

When the problem was discovered on March 11, 1994, an SRO licensed operator recalculated the ESF equipment circuit response time by adding the sequencer loading delays to the sum of the previously listed data. When this additional data was added to the original numbers, the total response times was determined to be within the acceptance criteria for the surveillance.

To prevent recurrence, the following action was implemented:

SP 2604P, "Engineered Safety Features Equipment Response Time Testing," was revised and approved effective 04/27/94. In Section 4.5, "ESF Response Time Calculation," numerous steps were added to provide clearer guidance as to how to perform the surveillance. All necessary information from OPS Forms 2604P-1 and 2604P-2 were combined. The term "diesel sequence time" on the OPS form was revised to state, "DG start and sequencing time."

V. Additional Information

There were no failed components associated with this event.

Similar Events: None.

EIIS Codes:
Engineered Safety Features Equipment – JE
Emergency Diesel Generator – EK