

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: Selden Street, Berlin, Connecticut

P.O. BOX 270
HARTFORD, CT 06141-0270
(203) 665-5000

November 2, 1992
MP-92-1177

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

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

Reference: Facility Operating License No. NPF-49
Docket No. 50-423
Licensee Event Report 92-023-00

Gentlemen:

This letter forwards Licensee Event Report 92-023-00 required to be submitted within thirty (30) days pursuant to 10CFR50.73(a)(2)(i).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

Stephen E. Scace
Vice President - Millstone Station

SES/JSY:amc

Attachment: LER 92-023-00

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

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Estimated burden per response to comply with this information collection request: 50-6 hrs. Forward comments regarding burden estimate to the Records and Reports Management Branch (3150-0104), U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)
Millstone Nuclear Power Station Unit 3DOCKET NUMBER (2)
0 5 0 0 0 4 2 3 1 OF 0 3TITLE (3)
Inadequate Surveillance Procedure for 4160 Volt Undervoltage

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 NAMES											
1	0	0	3	9	2	9	2	0	0	1	1	0	2	9	2	0 5 0 0 0 0 0 0 0 0 0 0				

OPERATING MODE (9)	THIS REPORT IS BEING SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 51 (Check one or more of the following) (11)																								
5	<table border="1"><thead><tr><th>20.402(a)</th><th>20.402(c)</th><th>50.73(a)(2)(iv)</th><th>73.71(a)</th></tr></thead><tbody><tr><td>20.405(a)(1)(i)</td><td>50.38(a)(1)</td><td>50.73(a)(2)(iv)</td><td>73.71(a)</td></tr><tr><td>20.405(a)(1)(ii)</td><td>50.38(a)(2)</td><td>50.73(a)(2)(vii)</td><td>OTHER (Specify in Abstract below and in Text, NRC Form 365A)</td></tr><tr><td>20.405(a)(1)(iii)</td><td>50.73(a)(2)(i)</td><td>50.73(a)(2)(viii)(A)</td><td></td></tr><tr><td>20.405(a)(1)(iv)</td><td>50.73(a)(2)(ii)</td><td>50.73(a)(2)(viii)(B)</td><td></td></tr><tr><td>20.415(a)(1)(vi)</td><td>50.73(a)(2)(iii)</td><td>50.73(a)(2)(ix)</td><td></td></tr></tbody></table>	20.402(a)	20.402(c)	50.73(a)(2)(iv)	73.71(a)	20.405(a)(1)(i)	50.38(a)(1)	50.73(a)(2)(iv)	73.71(a)	20.405(a)(1)(ii)	50.38(a)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)	20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)		20.415(a)(1)(vi)	50.73(a)(2)(iii)	50.73(a)(2)(ix)	
20.402(a)	20.402(c)	50.73(a)(2)(iv)	73.71(a)																						
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20.405(a)(1)(ii)	50.38(a)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)																						
20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)																							
20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)																							
20.415(a)(1)(vi)	50.73(a)(2)(iii)	50.73(a)(2)(ix)																							

LICENSEE CONTACT FOR THIS LER (12)
NAME
Jeffrey S. Young, Engineer, Ext. 4557TELEPHONE NUMBER
AREA CODE
2 0 3 4 4 7 - 1 7 0 1

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)									
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

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

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-ruled typewritten lines) (16)

On October 3, 1992 at 1700 with the plant in Mode 5 at 0% power, a review of the surveillance procedure for testing of undervoltage relays for the emergency 4.160 volt buses showed that it did not satisfy the requirements of Technical Specification (TS) surveillance requirement 4.3.2.1. The discovery was made by the engineer performing the review. No immediate corrective action was required because the TS requirement does not apply in Mode 5.

The root cause of this event was incorrect application of the meaning of "associated logic" in TS surveillance requirement 4.3.2.1 when reviewing the surveillance procedure.

To prevent recurrence, surveillance procedures for other devices which require "trip actuation device operational tests" will be reviewed to ensure that they meet TS requirements.

A proposed change to the surveillance requirement is being submitted to permit the current method of testing the undervoltage relays to continue.

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 Records and Reports Management Branch (P-630), U. S. Nuclear Regulatory Commission, Washington, DC 20555, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503.

FACILITY NAME (1) Millstone Nuclear Power Station Unit 3	DOCKET NUMBER (2) 0 5 0 0 0 4 2 3	LER NUMBER (3)						PAGE (3)	
		YEAR	SEQUENTIAL NUMBER		REVISION NUMBER				
		9 2	0 2 3	0 0	0 2	OF	0 3		

TEXT (if more space is required, use additional NRC Form 366A's) (17)

I. Description of Event

On October 3, 1992 at 1700 with the plant in Mode 5 at 0% power (350 psia and 146 degrees Fahrenheit), it was determined that the surveillance testing for the emergency 4,160 volt undervoltage relays did not satisfy all requirements of the TS.

Footnote 3 of Table 4.3-2 of TS 3.3.1 states:

On a monthly basis an undervoltage condition will be initiated at the sensing device to verify the operability of the trip actuating device and verify that the associated logic and alarm relays operate.

The TS requirement which was not being satisfied is the testing of "associated logic" which consists of relays between the undervoltage relays and the circuit breakers.

No immediate action was required because the TS does not apply to Mode 5.

Detection of degraded or loss of voltage on the emergency 4,160 volt busses is required to prevent damage to electrical equipment by initiating automatic transfer to alternate power supplies.

II. Cause of Event

The root cause of this event was incomplete review of the emergency 4,160 volt undervoltage surveillance procedure after the footnote quoted above was added to Technical Specifications in Amendment 45. "Associated logic" was incorrectly interpreted to mean up to but not including the 2 of 4 trip logic. "Associated logic" is now interpreted as the circuitry between the 2 of 4 trip logic and the circuit breakers. This was not part of the monthly surveillance procedure.

III. Analysis of Event

This report is being submitted in accordance with 10CFR50.73(a)(2)(i)(B), as a condition prohibited by Technical Specifications.

Technical Specification 3.3.2, (Engineering Safety Features Actuation System instrumentation channels and interlocks) as it applies to emergency 4,160 volt undervoltage requires that 3 of 4 channels per bus be operable and that 2 of 4 channels per bus will initiate automatic bus switching in Modes 1 through 4. Any inoperable channel must be tripped within 1 hour. Since all TS surveillance requirements were not met, the relays were conservatively declared to have been inoperable. Compensatory action was not taken previously because the status of these relays was not known by the Control Room staff.

No significant safety concern was involved in this event for the following reasons:

The entire relay logic scheme is tested every 18 months and has shown no failure of any component over the past 5 years.

The 2 of 4 trip logic would allow proper system operation even if one of the undervoltage relays had failed.

IV. Corrective Action

No immediate corrective action was required because the undervoltage relays are not required in Mode 5. A test of all associated logic was completed on October 6, 1992. No failures were experienced.

To prevent recurrence, surveillance procedures for other devices which require "trip actuation device operational tests" will be reviewed to ensure that they meet TS requirements.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

Estimated burden per response to comply with this information collection request: 50 minutes. Forward comment regarding burden estimate to the Records and Reports Management Branch (5-530), U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)	PAGE (3)		
Millstone Nuclear Power Station Unit 3		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
		0 5 0 0 0 4 2 1	4 2 - 0 2 3 -	0 0 0 3	

TEXT (if more space is required, use additional NRC Form 255A's) (17)

A change to the TS surveillance requirement is being submitted to allow the current method of testing the input undervoltage relays on a monthly basis and testing the entire circuit every 18 months. This test method is acceptable based on the potential failure modes and the system redundancy.

V. Additional Information

No other Licensee Event Reports (LERs) have been submitted which discuss events where an inadequate review of a surveillance procedure was performed after a TS change.

FEIS codes

Systems

Component

Low Voltage Power

Relay, Undervoltage - 27

System - EC