

NORTHEAST UTILITIES



The Connecticut Light And Power Company
Western Massachusetts Electric Company
Hoyoke Water Power Company
Northeast Utilities Service Company
Northeast Nuclear Energy Company

General Offices - Seiden Street, Berlin Connecticut

P. O. BOX 270
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Re: 10CFR50.73(a)(2)(i)
February 19, 1991
MP-91-156

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

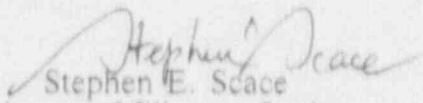
Reference: Facility Operating License No. NPF-49
Docket No. 50-423
Licensee Event Report 91-001-00

Gentlemen:

This letter forwards Licensee Event Report 91-001-00 required to be submitted within thirty (30) days pursuant to 10CFR50.73(a)(2)(i), any operation or condition prohibited by the plant's Technical Specifications.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY


Stephen E. Scace
Director, Millstone Station

SES/RK:mo

Attachment: LER 91-001-00

cc: T. T. Martin, Region I Administrator
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2 and 3
D. H. Jaffe, NRC Project Manager, Millstone Unit No. 3

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IF22*

LICENSEE EVENT REPORT (LER)

Estimated burden per response to comply with this information collection request: 30-60 hrs. Forward comments regarding burden estimate to the Records and Reports Management Branch (6-530), U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to the Paperwork Reduction Project (3150-0106), 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	PAGE (3) 1 OF 3
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TITLE (4)
Inadequate Surveillance Procedure for Radiation Detector Beta Scintillation Source Check

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
0 1	1 7	9 1	9 1	0 0 1	0 0	0 2	1 9	9 1	0 5 0 0 0 0
THIS REPORT IS BEING SUBMITTED PURSUANT TO THE REQUIRED UNITS OF 10 CFR 1. (Check one or more of the following) (11):									

OPERATING MODE (9) 1	20.402(b)	20.402(b)	50.73(a)(2)(iv)	70.1(b)
POWER LEVEL (10) 0 7 5	20.405(a)(1)(ii)	50.36(a)(1)	50.73(a)(2)(iv)	70.1(c)
	20.405(a)(1)(iii)	50.36(a)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 306A)
	20.405(a)(1)(iv)	X 50.73(a)(2)(ii)	50.73(a)(2)(viii)(A)	
	20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(viii)(B)	
	20.405(a)(1)(iv)	50.73(a)(2)(iii)	50.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME Robert N. Keller, Engineer, Ext. 5507	TELEPHONE NUMBER AREA CODE 2 0 3 4 4 7 - 1 7 9 1
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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)

<input type="checkbox"/> YES (if yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (16)	MONTH	DAY	YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (15):

On January 17, 1991, at 0900 hours, with the plant in Mode 1 at 75% power, 578 degrees Fahrenheit and 2250 psia, it was discovered that the source check surveillance procedure for verification of operability of the beta scintillation radiation detectors did not meet the requirements of the applicable plant Technical Specification. The discrepancy was discovered after plant personnel were notified of a similar incident at another nuclear unit. The affected radiation detectors were immediately declared inoperable.

The root cause of this event is procedural inadequacy. The surveillance procedure for source checking the beta scintillation detectors did not require detector exposure to radiation as required by Plant Technical Specifications.

On January 18, 1991 the surveillance procedure was revised and performed, and the detectors were declared operable at 1254 hours.

This event posed no significant safety consequences. Although the method for determining operability of the beta scintillation detectors was not in strict compliance with the plant's Technical Specifications, it was in accordance with the equipment manufacturer's recommendations for verifying detector response.

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 Records and Reports Management Branch (p-530), U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to the Paperwork Reduction Project (2160-0104), Office of Management and Budget, Washington, DC 20503.

FACILITY NAME (1) Millstone Nuclear Power Station Unit 3	DOCKET NUMBER (2) 0 6 0 0 0 4 2 3 9 1	LER NUMBER (3)		PAGE (3) 0 2 OF 0 3
		YEAR	SEQUENTIAL NUMBER	
		0 0 1	0 0 1	

TEXT (if more space is required, use additional NRC Form 306A's) (17)

I. Description of Event

On January 17, 1991, at approximately 0900 hours, with the plant in Mode 1 at 75% power, 578 degrees Fahrenheit and 2250 psia, it was discovered that the surveillance procedure for operability verification of the beta scintillation radiation detectors, did not meet the requirements of the applicable plant Technical Specification. The discrepancy was discovered after the on-site NRC resident inspector notified Instrumentation & Controls Department personnel of a similar incident at another nuclear power station. The affected radiation detectors are 3HVR*RE10B (Reactor Plant Ventilation Vent Normal Range Monitor) and 3HVQ*RE49 (Engineered Safeguards Building Ventilation Vent Monitor). Upon notification, shift supervisory personnel immediately declared the affected detectors inoperable and logged into Limiting Condition of Operation (LCO) Action Statement 3.3.3.10: Radioactive Gaseous Effluent Monitoring Instrumentation. This LCO Action Statement requires initiation of 12 hour grab sampling, with analysis of those grab samples completed within 24 hours. No other immediate action was required.

II. Cause of Event

The root cause of this event is procedural inadequacy. The surveillance procedure for source checking 3HVR*RE10B and 3HVQ*RE49 utilized a manufacturer recommended procedure for determining detector operability. This method verifies correct detector response by exposure of the beta scintillation detector to a light emitting diode (LED). LEDs are built into 3HVR*RE10B and 3HVQ*RE49 specifically for performing source checks. However, a source check is defined in the Plant Technical Specifications as "the qualitative assessment of channel response when the channel sensor is exposed to radiation." The manufacturer's recommended method did not expose the detectors to radiation.

III. Analysis of Event

This event is being reported pursuant to 10CFR50.73(a)(2)(i), as a condition prohibited by the plant's Technical Specifications.

This event had no significant safety consequences. Although the method for determining operability of 3HVR*RE10B and 3HVQ*RE49 was not in strict compliance with the plant's Technical Specifications, it was in accordance with the equipment manufacturer's recommendation for verifying detector response. When the detectors were exposed to the radiation source as required by plant Technical Specifications, an accurate response was obtained.

IV. Corrective Action

The immediate corrective action was to declare the affected radiation detectors inoperable, and perform the compensatory action required by the applicable Technical Specification.

On January 18, 1991, the deficient surveillance procedure was revised to meet plant Technical Specification requirements. A surveillance on the radiation detectors was successfully completed on January 18, 1991 at 1254 hours, at which time the detectors were declared operable.

As long term corrective action, a change to plant Technical Specifications to allow use of the manufacturer's recommended method for verifying detector operability is being considered.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

Estimated burden per response to comply with this information collection request: 50 U.S. hrs. Forward comments regarding burden estimate to the Records and Reports Management Branch (3-530), 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) Millstone Nuclear Power Station Unit 3	DOCKET NUMBER (2) 0 6 0 0 0 4 2 3	LER NUMBER (3)			PAGE (3) 0 5 OF 0 3
		YEAR 9 1	SEQUENTIAL NUMBER 0 0 1	REVISION NUMBER 0 0	

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

V. Additional Information

The following Licensee Event Reports (LERs) document similar incidents in that they are Technical Specification violations due to procedural inadequacy:

<u>LER Number</u>	<u>Subject</u>
86-034	Rad Monitor Sampler Flow
86-047	OTdT Setpoint
86-053	Intermediate Range Detector Setpoints
86-058	Rad Monitor Surveillance
87-035	Containment Air Lock
87-042	Missed Intermediate Range/Power Range Surveillance
87-045	Failure to Sample Diesel Fuel Oil For Kinematic Viscosity
88-020	Improper Bypass Breaker Surveillance
89-006	Missed Fire Detector Surveillance on Six Detectors
89-021	Miscalculation of ESF Response Time
90-007	Inadequate Equipment Load Shed Verification

Part of the corrective action for LER 87-042 was to perform a comprehensive review of all Technical Specifications against their applicable surveillance procedures. This was completed by the end of 1985.

LER 88-020 was submitted to document an inadequate surveillance interval for the Reactor Trip Bypass Breakers. This inadequacy was identified during the comprehensive review discussed above. LER 89-006 reported a deficient fire detector surveillance for six fire detectors, identified after the comprehensive review. As corrective action, a complete review of the fire detection and control system surveillances verifying Technical Specification requirements was performed. The comprehensive review did not discover the deficiency because the reviewer did not account for the number of detectors within each fire zone detector group. LER 89-021 discussed the use of inadequate procedures for calculation of ESF response times. The procedures did not take into account slave relay actuation time, and therefore did not calculate ESF response time in accordance with the Technical Specification definition. This discrepancy was identified during the surveillance review, but was not correctly identified as a Technical Specification violation. Therefore the event was not initially reported. LER 90-007 reported the failure to verify certain components shed from their electrical busses in response to a Loss of Power signal due to a deficient surveillance procedure. In this case, the individual assigned to do the comprehensive review in 1988 was the same individual that was assigned to review that same surveillance procedure a year earlier for different reasons. He did note the discrepancies in 1987, and, assuming they had been resolved, waived the comprehensive review of 1988 based on his earlier review. It was concluded that the method of review that this individual applied was not representative of the overall Technical Specifications review methods.

Pertaining to the event discussed in this LER, the individual that reviewed the deficient procedure in 1988 did verify a source check was performed in the procedure. However, he did not compare the source check surveillance method used with the requirements of a source check found in the definitions section of plant Technical Specifications. This incident is viewed as an isolated case for that reason.

EIIS Codes

Radiation Monitoring System - IL

Components

MON - Monitor