



Northeast
Utilities System

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November 1, 1996

Docket No. 50-245

50-336

50-423

B15977

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

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

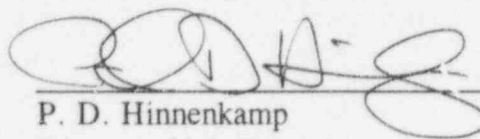
This letter forwards Licensee Event Report (LER) 96-053-00, documenting an event that occurred at Millstone Nuclear Power Station, Unit No. 1 on October 2, 1996. This event is reportable for all three Millstone units and this LER is submitted pursuant to 10CFR50.73(a)(2)(i).

The following is Northeast Nuclear Energy Company's (NNECO's) commitment made within this letter. All other statements made within this letter are for information only.

- B15977-1 NNECO will develop necessary procedures to perform monthly source checks for these monitors or properly document an appropriate alternative method of satisfying the surveillance requirement prior to April 1, 1997. The instrument calibrations will be performed monthly to satisfy Technical Specification source check requirements until adequate procedures for source checks are developed.
- B15977-2 NNECO will review the applicability of this event at the other Millstone units to ensure that Technical Specification source check requirements are properly met by December 10, 1996.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY



P. D. Hinnenkamp
Director, Unit Operations

Attachment: LER 96-053-00

9611050187 961101
PDR ADOCK 05000245
S PDR

083422-9 REV. 1-95

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TE22/1

cc: H. J. Miller, Region I Administrator
T. A. Easlick, Senior Resident Inspector, Millstone Unit No. 1
J. W. Andersen, NRC Project Manager, Millstone Unit No. 1
D. P. Beaulieu, Resident Inspector, Millstone Unit No. 2
D. G. McDonald, Jr., NRC Project Manager, Millstone Unit No. 2
A. C. Cerne, Senior Resident Inspector, Millstone Unit No. 3
V. L. Rooney, NRC Project Manager, Millstone Unit No. 3

LICENSEE EVENT REPORT (LER)(See reverse for required number of
digits/characters for each block)ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY
INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS
LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED
BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN
ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-
6-F33), 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 3

TITLE (4)

Radiation Effluent Monitor Source Check Surveillances Not in Accordance with Technical Specifications

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
10	02	96	96	053	00	11	01	96	Millstone Unit 2	05000336
									Millstone Unit 3	05000423
OPERATING MODE (9)		N		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)						
POWER LEVEL (10)		000		20.2201(b)		20.2203(a)(2)(v)		<input checked="" type="checkbox"/> 50.73(a)(2)(i)		50.73(a)(2)(viii)
				20.2203(a)(1)		20.2203(a)(3)(i)		<input type="checkbox"/> 50.73(a)(2)(ii)		50.73(a)(2)(x)
				20.2203(a)(2)(i)		20.2203(a)(3)(ii)		<input type="checkbox"/> 50.73(a)(2)(iii)		73.71
				20.2203(a)(2)(ii)		20.2203(a)(4)		<input type="checkbox"/> 50.73(a)(2)(iv)		OTHER
				20.2203(a)(2)(iii)		50.36(c)(1)		<input type="checkbox"/> 50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A
				20.2203(a)(2)(iv)		50.36(c)(2)		<input type="checkbox"/> 50.73(a)(2)(vii)		

LICENSEE CONTACT FOR THIS LER (12)

NAME	Robert W. Walpole, MP1 Nuclear Licensing Manager	TELEPHONE NUMBER (Include Area Code)	(860)440-2191
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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)

YES	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION	MONTH	DAY	YEAR
(If yes, complete EXPECTED SUBMISSION DATE).					

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On October 2, 1996, at 1030 hours, with the plant in the Cold Shutdown condition, it was discovered, during a review of the Surveillance Master List, that Millstone Unit No. 1 was not in compliance with the Technical Specifications (TS) surveillance requirements for source checking four of its effluent radiation monitors. One of these monitors is the Millstone Unit No.1's Main Stack Noble Gas Activity Monitor which is also in the TS of Millstone Unit Nos. 2 and 3. Thus, the TS surveillance requirement for this monitor is determined to have not been met for all three units. Millstone Unit Nos. 2 and 3 were also in Cold Shutdown at the time of discovery.

Since surveillance requirements were not adequately performed in accordance with Technical Specification requirements, this event is reportable pursuant to 10CFR50.73(a)(2)(i)(B), which requires the reporting of any operation or condition prohibited by the plant's Technical Specification. Each of the four monitors were declared inoperable. There were no safety consequences as a result of this event. The corrective action is to develop necessary procedures to perform monthly source checks for these monitors or properly document an appropriate alternative method of satisfying the surveillance requirement.

LICENSEE EVENT REPORT (LER)

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

I. Description of Event

On October 2, 1996, at 1030 hours, with the plant in the Cold Shutdown condition, a review of the Surveillance Master List determined that it did not include source check surveillances required by Millstone Unit No. 1 TS for the Steam Jet Air Ejector (SJAE) Off-Gas, Main Stack Noble Gas, and the Service Water Effluent Line Radiation Monitors. Additional assessment of effluent monitors determined that the Liquid Radwaste Effluent Monitor was also affected by this concern. Further review concluded that Millstone Unit No. 1 was not in compliance with the effluent radiation monitor source check TS surveillance requirements for these four monitors (TS 4.8.A.1 for Radioactive Liquid Effluent and TS 4.8.B.1 for Radioactive Gaseous Effluent). All four monitors were declared inoperable due to failure to perform surveillances as specified in Technical Specifications. The SJAE Off-Gas and Liquid Radwaste Effluent Line Radiation Monitors had already been previously declared inoperable, due to failure to verify instrument response time. These two monitors will remain inoperable until TS requirements are satisfied.

An operability review of recent solid source instrument calibrations of the Main Stack Noble Gas and Service Water Effluent Line Radiation Monitors indicated this surveillance would satisfy the requirement for a source check of these instruments. Thus, these two instruments were determined to be currently operable since the associated calibrations were within the required source check periodicity, but historically inoperable. The instrument calibrations will be performed monthly to satisfy TS source check requirements until adequate procedures for source checking these monitors are developed.

The Millstone Unit No.1's Main Stack Noble Gas Activity Monitor is also in the TS (Surveillance Requirement 4.3.3.10) of the Millstone Unit Nos. 2 and 3. Thus, the TS surveillance requirement for this monitor is determined to have not been met for all three units. Since surveillance requirements were not adequately being performed in accordance with TS requirements, this event is reportable pursuant to 10CFR50.73(a)(2)(i)(B) which requires the reporting of "any operation or condition prohibited by the plant's Technical Specifications."

There were no immediate operator actions required as a result of this event. There were no automatically and manually initiated safety system responses.

II. Cause of Event

During the development of the Radiological Effluent TS (RETS), a non-standard definition for Source Check was chosen to accommodate older plant designs that do not have Check Sources designed in the radiation monitors. The intent of the definition and the means of satisfying the source check surveillance requirement was to use the daily instrument checks. Based upon a surveillance upgrade project, which cross verified our present testing methodology against industry standards, it was determined that our current source check methodology was not adequate.

III. Analysis of Event

The TS definition states, "A SOURCE CHECK shall be the qualitative assessment of channel response when the channel sensor is exposed to radiation." Previous interpretations of this definition was that the reading taken to satisfy the daily instrument check requirement effectively verified that the monitor was responding to radiation, and therefore, satisfied the requirements of a source check. This decision was based on the effluent radiation monitors being exposed to a radioactive process stream and/or having area or natural

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Millstone Nuclear Power Station Unit 1

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

background levels high enough to maintain a minimum reading which would maintain them onscale. It has been determined that this test methodology does not provide compliance of Technical Specification source check requirements to perform a qualitative assessment of channel response when the channel sensor is exposed to radiation. Since an instrument response could not be observed without a change in the radiation field, it was not possible to perform a qualitative assessment.

The safety-related functional requirements for the SJAE Off-Gas radiation monitor is to monitor the level of radioactive effluent gases removed from the main condenser by the SJAE in the Off-Gas System and if release limits are approached, provide an alarm, and after a 15 minute delay, close the off-gas stack inlet isolation valve. The other affected radiation monitors have no safety related functional requirements. The non-safety related functional requirements for the Main Stack Radiation Monitors are to monitor the level of radioactive effluent gases discharged from the stack and provide an alarm if setpoints are exceeded. The non-safety related functional requirements for the Radwaste Liquid Effluent Monitors are to monitor the radiation level in the radioactive liquid discharge effluents and if setpoints are exceeded close the valves in the discharge line. The non-safety related functional requirements for the Reactor Building Service Water System is to monitor the radiation level and provide an alarm if the setpoints are exceeded.

A historical review of the eighteen-month interval solid source calibration results revealed that, although monthly source checks were not adequately performed, none of the monitors had been discovered to be non-responsive when exposed to the radioactive calibration sources. Therefore, the monitors were never in a condition where they were incapable of performing their intended function and thus no safety consequences resulted from this event.

IV. Corrective Action

1. Northeast Nuclear Energy Company (NNECO) will develop necessary procedures to perform monthly source checks for these monitors or properly document an appropriate alternative method of satisfying the surveillance requirement prior to April 1, 1997. The instrument calibrations will be performed monthly to satisfy TS source check requirements until adequate procedures for source checks are developed.
2. NNECO has a Commitment No. B15785-2 in LER 96-043 to verify literal compliance with TS surveillance requirements or implement Improved TS prior to startup for operating Cycle 16.
3. NNECO will review the applicability of this event at the other Millstone units to ensure that TS source check requirements are properly met by December 10, 1996.

V. Additional InformationSimilar Events

LER 96-043

Inadequate Instrument Calibration Due to Failure to Verify Response Time

Manufacturer Data

None