



Northeast  
Nuclear Energy

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The Northeast Utilities System

MAY 9 1997

Docket No. 50-336

B16458

Re: 10 CFR 50.73(a)(2)(i)(B)

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

This letter forwards Licensee Event Report (LER) 97-013-00, documenting an event that occurred at Millstone Nuclear Power Station, Unit No. 2 on April 11, 1997. This LER is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B).

There are no commitments contained within this letter.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

FOR: J. A. Price  
Director - Millstone Unit 2

BY:

*H L Miller*

H. L. Miller  
Director - Unit Services

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cc: see page 2

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Attachment: LER 97-013-00

cc: W. D. Travers, Director of Special Projects  
H. J. Miller, Region I Administrator  
D. P. Beaulieu, Senior Resident Inspector, Millstone Unit No. 2  
D. G. McDonald, Jr., NRC Senior Project Manager, Millstone Unit No. 2

EXPIRES 04/30/98

## 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 (IT-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 2

DOCKET NUMBER (2)

05000336

PAGE (3)

1 OF 3

TITLE (4)

Surveillance Procedure Bypasses Wrong Radiation Monitor Annunciator

| 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                              |
| 04                 | 11  | 97   | 97  | -- 013 --         | 00              | 05                | 09  | 97   | FACILITY NAME                 | DOCKET NUMBER                              |
| 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)  |     | X    | 50.73(a)(2)(i)                | 50.73(a)(2)(viii)                          |
|                    |     |      | 20.2203(a)(1)   |                   |                 | 20.2203(a)(3)(i)  |     |      | 50.73(a)(2)(ii)               | 50.73(a)(2)(x)                             |
|                    |     |      | 20.2203(a)(2)(i)  |                   |                 | 20.2203(a)(3)(ii) |     |      | 50.73(a)(2)(iii)              | 73.71                                      |
|                    |     |      | 20.2203(a)(2)(ii)   |                   |                 | 20.2203(a)(4)     |     |      | 50.73(a)(2)(iv)               | OTHER                                      |
|                    |     |      | 20.2203(a)(2)(iii)  |                   |                 | 50.36(c)(1)       |     |      | 50.73(a)(2)(v)                | Specify in Abstract below of NRC Form 366A |
|                    |     |      | 20.2203(a)(2)(iv)   |                   |                 | 50.36(c)(2)       |     |      | 50.73(a)(2)(vii)              |  |

## LICENSEE CONTACT FOR THIS LER (12)

NAME

R. G. Joshi, MP2 Nuclear Licensing

TELEPHONE NUMBER (Include Area Code)

(860) 440-2080

## 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<br>(If yes, complete EXPECTED SUBMISSION DATE). | X NO | EXPECTED SUBMISSION DATE (15) | MONTH | DAY | YEAR |
|   |      |                               |       |     |      |

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

On April 11, 1997, during the performance of the Containment Gaseous Radiation Monitor calibration, an error was identified in the calibration procedure which rendered the annunciator for the operating Stack Gaseous Radiation Monitor INOPERABLE. The Containment Gaseous Radiation Monitor calibration procedure included a step to install an electrical jumper across the annunciator's input cable. The intent of this jumper was to eliminate nuisance annunciator alarms during the performance of the calibration, however, the jumper disabled the alarm for the wrong instrument. Instead of disabling the alarm for the Containment Gaseous Radiation Monitor (R-8123B), the jumper disabled the alarm for the Stack Gaseous Radiation Monitor (R-8132B). Verification of this alarm's operability is required by Tech. Spec. Table 4.3-13, Item 1a, Notation 2. This activity was not completed because the alarm was disabled.

The cause of this condition was inattention to detail in the procedure validation and verification.

Upon identification of this condition, a correction to the Containment Radiation Monitors Calibration Procedure was approved. Corrective actions also included a review of other calibration/functional test procedures for similar problems.

## LICENSEE EVENT REPORT (LER)

## TEXT CONTINUATION

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| Millstone Nuclear Power Station Unit 2 | 05000336 | 97             | -- 013 --            | 00                 | 2 OF 3   |

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

I. Description of Event

On April 11, 1997, during the performance of the Containment Gaseous Radiation Monitor [RF] calibration, an error was identified in the calibration procedure which rendered the annunciator for the operating Stack Gaseous Radiation Monitor INOPERABLE. The Containment Gaseous Radiation Monitor calibration procedure included a step to install an electrical jumper across the annunciator's input cable. The intent of this jumper was to eliminate nuisance annunciator alarms during the performance of the calibration, however, the jumper disabled the alarm for the wrong instrument. Instead of disabling the alarm for the Containment Gaseous Radiation Monitor (R-8123B), the jumper disabled the alarm for the Stack Gaseous Radiation Monitor (R-8132B). Verification of this alarm's operability is required by Tech. Spec. Table 4.3-13, Item 1a, Notation 2. This activity was not completed because the alarm was disabled. At the time of discovery of this event, the unit was defueled.

The action statement associated with Technical Specification LCO 3.3.3.10 specifies that effluent releases via this pathway may continue provided that best efforts are made to repair the instrument and that grab samples are taken once per 12 hours and these samples are analyzed for gross activity within 24 hours. Technical Specification LCO 3.3.3.10 requires this alarm to be operable to ensure the offsite limits are not exceeded.

Since the plant operators were not aware the Stack Radiation Monitor alarm had been defeated, the required grab samples were not obtained. The Millstone Unit 2 stack is used as a continuous vent path; therefore, each time the Containment Gaseous Radiation Monitors calibration procedure was performed, the Stack Radiation Monitor's alarm was temporarily disabled and the referenced Technical Specification requirement was not met. The error in the calibration procedure appears to have been in place at least since 1989. A review of the data sheets starting on May 5, 1989 until April 4, 1997 identified this procedure was used during nine separate calibrations which ranged from one to eight days in duration.

This event is being reported in accordance with 10CFR50.73.(a)(2)(i)(B), any operation or condition prohibited by the plant's Technical Specifications.

II. Cause of Event

The cause of this condition was inattention to detail in the procedure validation and verification.

III. Analysis of Event

The Stack Gaseous Radiation Monitor (R-8132B) monitors the gross noble gas activity discharged from the Millstone Unit 2 stack. Technical Specification LCO 3.3.3.10 requires this instrument to be OPERABLE in all modes with the applicable alarm/trips setpoints set to ensure offsite dose limits are not exceeded. The stack radiation monitor does not have any trip functions; however, it does have an alarm which actuates a common annunciator on an instrument failure (10 counts per minute) or high radiation (300 counts per minute). The Technical Specifications state the alarm setpoints are determined in accordance with the methods and parameters as described in the Offsite Dose Calculation Manual.

The stack monitor also provides a signal to the plant process computer which was not affected by the jumper. The plant computer has an independent alarm feature which alerts the Operator of an instrument failure (10 counts per minute) or high radiation (500 counts per minute).

Another feature of the radiation monitor is the ability to "lock-in" an alarm once received. In order for the alarm to be cleared, the Operator is required to manually reset the alarm push-button on the monitor. If a high radiation condition had existed during the time the jumper was installed, the annunciator would have actuated when the

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

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

jumper was cleared. Additionally, the alarm condition would still be clearly noted by illumination of the alarm light on the radiation monitor module in the control room. Although the computer alarm is not tested as part of a Technical Specification Surveillance and the radiation monitor's "lock-in" feature would have been delayed, the fact that neither of these alarms were actuated provides assurance the alarm setpoints were never exceeded.

The intent of the Technical Specification requirement is to provide monitoring instrumentation to ensure the offsite limits are not exceeded. Although the installation of the electrical jumper temporarily disabled the stack radiation monitor's alarm feature, it had no effect on the actual discharge. Based on the above, this event is not considered to be safety significant.

IV. Corrective Action

As a result of this event, the following actions have been performed.

1. The Containment Radiation Monitor Calibration Procedure has been corrected.
2. The remaining radiation monitor calibration and functional test procedures were reviewed for similar conditions. No additional problems were identified.

V. Additional Information

Similar Events: Previous LERs that involve deficient surveillance procedures include:

- LER 96-023: Discrepancies Found in Various Technical Specification Required Valve Lineups
- LER 96-024: Inadequate Surveillances for Reactor Protection System and Engineered Safety Actuation System Response Time Testing
- LER 96-025: Enclosure Building Filtration Actuation Signal/Auxiliary Exhaust Actuation Signal Interlock Not Tested Periodically
- LER 96-026: Incomplete Technical Specification Required Surveillance - Valve Lineups Inside Containment
- LER 96-035: Failure to Perform Periodic Surveillance Testing for Interlock Function Associated with the Main Steam Isolation System Function of the Engineered Safeguards Actuation System
- LER 96-037: Inadequate Surveillance Procedure for Verifying Average Water Temperature at the Unit 2 Intake Structure
- LER 96-038: Inadequate Surveillance Procedures Used to Verify Emergency Diesel Generator Operability
- LER 96-039: Failure to Perform Periodic Surveillance Testing for Containment Purge System Containment Isolation Valves in Accordance with Technical Specification 4.9.10
- LER 96-040: Inadequate Surveillance Procedure for Verifying Motor Circuit Breaker Position in Accordance with Technical Specification Requirements 4.1.2.3.2, 4.1.2.3.3, and 4.4.1.4
- LER 97-003: Surveillance Procedure SP2618C Fails to Meet Technical Requirements Manual Surveillance Requirements
- LER 97-007: Inadequate Surveillance Procedure for Verifying Operability of Reactor Coolant System Vents

Energy Industry Identification System (EIIIS) codes are identified in the text as [XX].