

# 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, CONNECTICUT 06141-0270  
(203)665-5000

Re: Facility Operating License  
No. NPF-49

March 24, 1992  
MP-92-317

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

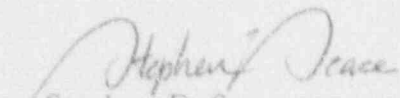
Reference: Facility Operating License No. NPF-49  
Docket No. 50-423  
Licensee Event Report 92-005-00

Gentlemen:

This letter forwards Licensee Event Report 92-005-00 required to be submitted within thirty (30) days pursuant to Facility Operating License Section 2.F, any violations of the requirements in Section 2.C.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

  
Stephen E. Scace  
Director, Millstone Station

SES/NDH:ljs

Attachment: LER 92-005-00

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

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9204020225 920324  
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S PDR

FACILITY NAME (1) **Millstone Nuclear Power Station Unit 3** DOCKET NUMBER (2) **0 5 0 0 0 4 2 3** PAGE (3) **1 OF 0 3**

TITLE (4) **Failure to Notify the NRC of Change to PSAR Chapter 14**

| 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              | 2   | 2    | 4              | 9                 | 2               | 9               | 2   | 9    | 2                             | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0              | 2   | 2    | 4              | 9                 | 2               | 9               | 2   | 9    | 2                             | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

OPERATING MODE (9) **1 0 1 0**

POWER LEVEL (10) **1 0 1 0**

THIS REPORT IS BEING SUBMITTED PURSUANT TO THE REQUIREMENTS OF 30 CFR §. (Check one or more of the following) (11)

|  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> 20.402(b)         | <input type="checkbox"/> 20.403(d)        | <input type="checkbox"/> 50.73(a)(2)(i)(v)          | <input type="checkbox"/> 79.71(b)                             |
| <input type="checkbox"/> 20.405(a)(1)(i)   | <input type="checkbox"/> 50.36(d)(1)      | <input type="checkbox"/> 50.73(a)(2)(iv)            | <input type="checkbox"/> 79.71(c)                             |
| <input type="checkbox"/> 20.405(a)(1)(ii)  | <input type="checkbox"/> 50.36(e)(2)      | <input checked="" type="checkbox"/> 50.73(a)(2)(iv) | CYBER (Specify in Abstract below and in Text, NRC Form 366-A) |
| <input type="checkbox"/> 20.405(a)(1)(iii) | <input type="checkbox"/> 50.73(a)(2)(v)   | <input type="checkbox"/> 50.73(a)(2)(iv)(i)(A)      |   |
| <input type="checkbox"/> 20.405(a)(1)(iv)  | <input type="checkbox"/> 50.73(a)(2)(vi)  | <input type="checkbox"/> 50.73(a)(2)(iv)(B)         |   |
| <input type="checkbox"/> 20.405(a)(1)(v)   | <input type="checkbox"/> 50.73(a)(2)(vii) | <input type="checkbox"/> 50.73(a)(2)(v)(i)          |   |

LICENSEE CONTACT (12) THIS LER (12) **Nelson D. Hulme, Senior Engineer, Extension 5398** TELEPHONE NUMBER **2 0 3 4 4 7 - 1 7 9 1**

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

| CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPPDS | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPPDS |
|-------|--------|-----------|--------------|---------------------|-------|--------|-----------|--------------|---------------------|
|       |        |           |              |                     |       |        |           |              |                     |
|       |        |           |              |                     |       |        |           |              |                     |

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-space typewritten lines) (16)

At 1700 hours on February 24, 1992, with the plant at 100 percent power, at a temperature of 587 degrees Fahrenheit and a pressure of 2270 psia, it was discovered that the requirement of 2.C.(10) of the Facility Operating License was not met. License Condition 2.C.(10) requires any changes to the Initial Test Program described in Final Safety Analysis Report (FSAR) Section 14 made in accordance with the provisions of 10CFR50.59 be reported in accordance with 50.59(b) within one month of such change. Section 15 of the Test Objective and Summary from Test No. 71 of FSAR Table 14.2-1 stated that proper actuation, operation, reset, and response time of the power operated relief valves (PORVs) will be demonstrated by simulating a high pressure signal to each valve. This test was not performed during the startup test program, and no report was made as required. The root cause of this event is a lack of communication between personnel responsible to review the changes and personnel performing the test.

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-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)<br><br>Millstone Nuclear Power Station<br>Unit 3 | DOCKET NUMBER (2)<br><br>0 5 0 0 0 4 2 3 | LER NUMBER (6) |                            | PAGE (3)<br><br>0 2 OF 0 3 |
|  |  | YEAR<br>9 2    | SEQUENTIAL NUMBER<br>0 0 5 |                            |

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

I. Description of Event

At 1700 hours on February 24, 1992, with the plant at 100 percent power, at a temperature of 587 degrees Fahrenheit and a pressure of 2270 psia, it was discovered that the requirement of 2.C.(10) of the Facility Operating License was not met. License Condition 2.C.(10) requires any changes to the Initial Test Program described in Final Safety Analysis Report (FSAR) Section 14 made in accordance with the provisions of 10CFR50.59 be reported in accordance with 50.59(b) within one month of the change. Section 10 of the Test Objective and Summary from Test No. 71 of FSAR Table 14.2-1 stated that proper actuation, operation, reset, and response time of the power operated relief valves (PORV) will be demonstrated by simulating a high pressure signal to each valve. This test was not performed during the startup test program. At that time, the item should have been deleted in accordance with 10CFR50.59 and notification to the NRC should have been made, but this was not done.

The discovery was made during processing of a FSAR change to delete the reference to this test requirement. As stipulated in Section 2.F of the Facility Operating License, an initial notification was made within 24 hours to the NRC Operations Center via the Emergency Notification System.

II. Cause of Event

The root cause of this event is a lack of communication between personnel responsible to review the changes and personnel performing the test. Millstone Unit 3 considers this event as an isolated event in that other changes to the Initial Test Program were properly evaluated against 10CFR50.59 and reported to the NRC in accordance with License Condition 2.C.(10).

III. Analysis of Event

This report is being submitted as required by Section 2.F of the Facility Operating License. Section 2.F requires submission of a written follow-up in accordance with the procedures described in 10CFR50.73(b), (c), and (e) within thirty days of the event.

Millstone Unit 3 has two PORVs, 3RCS\*PCV455A (PCV455A) and 3RCS\*PCV456 (PCV456). They are designed to perform the following functions:

- Prevent actuation of the reactor high pressure trip for all design transients.
- Limit the RCS pressure excursion for some Anticipated Transients Without Trip (ATWS) events.
- Provide cold overpressure protection (COPS) when the plant is shut down.

Except for COPS, no credit is taken for operation of the PORVs in the safety analysis for design basis accidents. If the PORVs fail to open during a high pressure transient while the plant is at full power, the pressurizer safety valves will function to prevent RCS pressure from exceeding 110 percent of system design pressure in compliance with the ASME Code. The analysis for ATWS assumes both PORVs are available to function during some events. However, the effects of ATWS events are not considered as part of the design basis accident analysis for Unit 3.

The PORVs may be used for COPS. However, the circuitry and plant conditions applicable for COPS are different from the circuitry and plant conditions affected by the test which is the subject of this report. In any case, surveillance procedures are performed in order to assure COPS is operable.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

Estimated burden per response to comply with this information collection request: 50 hrs. Forward comments regarding burden estimate to the Records and Reports Management Branch (D-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)<br><br>Millstone Nuclear Power Station<br>Unit 3 | DOCKET NUMBER (2)<br><br>0   5   0   0   0   4   2   3 | LET NUMBER (6)    |                                    |                              | PAGE (3)<br><br>0   3   OF   0   3 |
|  |  | YEAR<br><br>9   2 | SEQUENTIAL NUMBER<br><br>0   0   5 | REVISION NUMBER<br><br>0   0 |                                    |

TEXT (if more space is required, use additional NRC Form 308A's) (17)

Although the PORV test was not performed precisely as stated in FSAR section 14, the startup test program, the continuing surveillance test program, and actual PORV operation in response to a plant trip have verified that the PORVs are capable of performing their intended design function. Testing performed during startup included functional checks of the PORV control circuits, verification that the PORV input signals were properly calibrated, and verification that the automatic controls operated in accordance with their design. PCV455A actually opened during a reactor/turbine overpressure event and prevented the pressurizer safety valves from lifting (see LER 90-030-00 for a description of the incident); except for time response, this satisfied the requirements of the deleted test. Except for time response, the intent of the deleted test was also met for PCV456 through overlap testing during the Hot Functional Testing (HFT), including a manual discharge of steam to the Pressurizer Relief Tank.

A time response test was not performed for the complete operation of the PORVs during HFT. However, surveillance procedures are performed to determine time response for the pressure transmitters, and to verify that the PORVs will open within one second when manually operated from the control room. No time response testing is performed for circuitry between the pressure transmitters and the PORVs. But the time response of the intervening circuit is insignificant compared to the valve stroke time. In any event, there are no time response limits imposed by design. Therefore, the startup and surveillance testing together with actual operation of a PORV when challenged have amply demonstrated that the PORVs are capable of performing their safety and non-safety related design functions.

IV. Corrective Action

A review of PORV testing and operational history was done in order to assure the valves are capable of performing their design function. A safety evaluation for deletion of the test described in Section I for FSAR Table 14.2-1 was also performed. The results of this review are described in Section III. Overlapped surveillance tests continue to provide verification that the pressure transmitters, circuitry, and safety related controls for the PORVs will function per design. The non-safety related capabilities of PCV455A were recently demonstrated as described in LER 90-030-00. PCV456 was not required during this event, so it was not challenged.

The startup test program was developed based on the requirements of FSAR Chapter 14. A deficiency system documented any test or plant problems which occurred. Each deficiency was dispositioned by plant management with respect to potential effects on plant operation and safety. Millstone Unit 3 made seven submittals in accordance with License Condition 2.C.(10) from February 12, 1986 to July 18, 1986. The fact that the testing reported by this LER was not submitted is considered to be an isolated event.

V. Additional Information

There are no previous events which are similar to the event presented in this LER. However, the investigation which identified a failure to test the PORVs as described in Section I, also uncovered the fact that some components which are required for performing a remote shutdown outside the control room may not have been included in Technical Specifications. Although this is not reportable per 10CFR50.73, Millstone Unit 3 has issued a Special Report to document the omission and describe the actions which are being taken.

EIIS CODES

Systems

Reac Coolant System -- AB

Components

Relief Valve -- PCV