

# NORTHEAST UTILITIES



The Connecticut Light and Power Company  
Western Massachusetts Electric Company  
Hudson Water Power Company  
Northeast Utilities Service Company  
Northeast Nuclear Energy Company

General Offices: Seiden Street, Berlin, Connecticut

P. O. BOX 270  
HARTFORD, CONNECTICUT 06141-0270  
(203)666-5000

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

March 27, 1992  
MP-92-330

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

Reference: Facility Operating License No. NPF-43  
Docket No. 50-423  
Licensee Event Report 91-029-01


Gentlemen:

This letter forwards Licensee Event Report (LER) 91-029-01 which is being submitted to provide update information on LER 91-029-00. LER 91-029-00 was submitted pursuant to 10CFR50.73(a)(2)(i), as an event or condition prohibited by the plant's Technical Specifications.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

FOR: Stephen E. Seace  
Director, Millstone Station

  
BY: Carl H. Clement  
Unit 3 Director

SES/PAF:tp

Attachment: LER 91-029-01

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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LICENSEE EVENT REPORT (LER)

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) **Millstone Nuclear Power Station Unit 3** DOCKET NUMBER (2) **0 8 0 0 0 1 2 3** PAGE (3) **1 OF 0 3**

TITLE (4) **Unsealed Fire Stop and Seal Penetration In the Engineered Safety Features Building**

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	1	2	1	9	1	0	1	0	3	2	7	9	2	0	8	0	0	0	0	0

OPERATING MODE (9) **5** THIS REPORT IS BEING SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)

20.402(d)	<input type="checkbox"/>	20.402(e)	<input type="checkbox"/>	50.73(a)(2)(iv)	<input type="checkbox"/>	73.71(b)	<input type="checkbox"/>
20.405(a)(1)(i)	<input type="checkbox"/>	50.38(v)(1)	<input type="checkbox"/>	50.73(a)(2)(iv)	<input type="checkbox"/>	73.71(c)	<input type="checkbox"/>
20.405(a)(1)(ii)	<input type="checkbox"/>	50.38(c)(2)	<input type="checkbox"/>	50.73-1(a)(2)(iv)	<input type="checkbox"/>	OTHER (Specify in Abstract below and in Text - NRC Form 36CA)	<input type="checkbox"/>
20.405(a)(1)(iii)	<input type="checkbox"/>	50.73(k)(2)(i)	<input checked="" type="checkbox"/>	50.73(a)(2)(viii)(A)	<input type="checkbox"/>		
20.405(a)(1)(iv)	<input type="checkbox"/>	50.73(a)(2)(ii)	<input type="checkbox"/>	50.73(a)(2)(viii)(B)	<input type="checkbox"/>		
20.405(a)(1)(v)	<input type="checkbox"/>	50.73(k)(2)(ii)	<input type="checkbox"/>	50.73(a)(2)(ix)	<input type="checkbox"/>		

LICENSEE CONTACT FOR THIS LER (12)

NAME **Peter A. Freeman, Engineer, Ext. 5323** TELEPHONE NUMBER **2 0 3 4 4 7 - 1 5 4 1**

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DEPICTED BY THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRS

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)

On November 21, 1991, at approximately 1230 hours, with the plant at 0% power in Mode 5 (Cold Shutdown), an unidentified unsealed fire penetration was discovered between the "A" Train Containment Recirculation Spray system (RSS) and Residual Heat Removal (RHR) cubicles located in the Engineered Safety Features (ESF) building. As immediate corrective action, the unidentified unsealed fire penetration was declared inoperable, the associated fire detectors were verified operable and an compensatory fire watch was immediately established in the affected area.

The root cause of the event is incomplete work practices during construction. The subject fire penetration was not identified on construction drawings. The post construction seal verification process did not properly reconcile the wall configuration against the associated Fire Stop and Seal drawing.

On December 21, 1991, the subject penetration was sealed in accordance with design specifications. The penetration was declared operable and the fire watch patrol terminated on December 23, 1991. A 100% inspection of all wall and floor boundary penetrations in the ESF building has been performed.

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)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

Milstone Nuclear Power Station  
Unit 3

YEAR INCIDENT NUMBER REVISION NUMBER

0 8 0 0 0 4 2 3 9 1 0 2 9 0 1 0 2 OF 0 3

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

I. Description of Event

On November 21, 1991, at approximately 1230 hours, with the plant at 0% power in Mode 5 (Cold Shutdown), a non-licensed Operator (PEO) discovered an unsealed Technical Specification fire boundary penetration during the performance of a Fire Stop and Seal Inspection surveillance. The unsealed fire boundary penetration was located between the "A" Train Containment Recirculation Spray system (RSS) and the "A" Train Residual Heat Removal (RHR) cubicle located on the 17 foot elevation of the Engineered Safety Features (ESF) building. Technical Specification 3.7.13 (Fire Rated Assemblies) requires that a compensatory fire watch be established if a fire barrier is breached. As immediate corrective action, the unsealed penetration was declared inoperable and an hourly fire watch patrol was established in the affected areas. On December 21, 1991, the subject penetration was sealed in accordance with design specifications. The penetration was declared operable and the fire watch patrol terminated on December 23, 1991.

II. Cause of Event

The root cause of this event is incomplete work practices during construction. The subject penetration was not identified on construction drawings and the post construction seal verification process did not properly reconcile the wall configuration against the associated Fire Stop and Seal drawing. During the initial seal location process, the subject penetration was identified on the applicable Fire Stop and Seal drawing but was utilized as a dimensional reference indication for surrounding penetrations in lieu of a penetration indication. Due to the subject penetration being located below a walkway grating in an area which is not readily accessible, the penetration was not identified during the post construction seal location verification process. These errors resulted in the penetration not being identified or sealed in accordance with design requirements.

III. Analysis of Event

This event is reportable under 10CFR50.73(a)(2)(i), as a condition prohibited by the unit's Technical Specifications.

The subject penetration is 4 inches in diameter and has a depth of 24 inches. While a communicable fire path does exist, the horizontal path required for fire propagation through a single 4 inch opening which is 24 inches in depth does not represent a significant fire hazard increase in either of the affected fire areas. Because the unsealed penetration did not affect redundant trains of equipment, only one train of safety related equipment could have been impacted in the event of a fire. The ability of the equipment to perform its design function in the "A" Train RSS or RHR cubicle was not significantly affected by this event.

Fire suppression for the affected area consists of the unit's fire brigade. The fire Brigade is required to respond when indication of a fire is received at the control room. At the time the subject penetration was discovered, fire detection was fully operable. If fire detection was inoperable during previous time periods, a compensatory fire watch would have been posted per the unit's Technical Specifications. Therefore, this event posed no significant safety consequence.

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 (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   5   0   0   0   4   2   3	LER NUMBER (5)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9   1	0   2   9	0   1	0   3	OF	0   3

TEXT (if more space is required, use additional NRC Form 386A's) (17)

IV. Corrective Action

Immediate corrective action was to establish an hourly fire watch patrol in the affected areas. On December 21, 1991, the subject penetration was sealed to design requirements. The penetration was declared operable and the fire watch patrol terminated on December 23, 1991.

The Fire Stop and Seal program requires inspection of 10% of the units Technical Specification Fire Stops and Seals population once per 18 months leading to 100% seal inspection. Approximately 40% of the total seal population has been inspected to date. The only two unsealed Technical Specification penetrations have been located in the ESF Building. Because of these findings, a 100% inspection of all technical specification required wall and floor boundary fire seals greater than two inches in diameter in the ESF building has been performed to ensure all fire boundaries are properly sealed. Technical Specification required fire seals less than two inches in diameter and area entrance/egress security verification devices were not inspected. The communicable fire travel path and additional fire loading represented by this criteria is considered negligible.

Approximately 950 Technical Specification required fire stops and seals were evaluated by an inspection team comprised of personnel experienced with Unit 3 fire stop and seal details and installation configurations. Seven penetrations were evaluated as requiring the installation of a qualified sealing detail. On February 25, 1992, qualified fire seals were installed in the seven penetrations which had been previously evaluated as requiring fire seals. The subject penetrations were declared operable and the hourly firewatch patrols which had been established in accordance with plant Technical Specifications were terminated.

The findings of the inspection team verified the overall integrity of the units fire stop and seal program. The seven omissions represent less than 1.0% of the total Technical Specification required fire seals located within the ESF building.

V. Additional Information

License Event Report 89-003, Unidentified Fire Seal due to Inadequate Design Review, was submitted in response to an unidentified seal located in the ESF building. The corrective action for LER 89-003 was limited in scope because it was felt that the unidentified seal was an isolated event. The seal was not identified because Uni-Strut was found covering the opening disguising the penetration from view. The corrective action discussed in this LER will resolve concerns as to the potential for other unsealed penetrations in the building and should prevent recurrence of similar events.

EHS Codes

System

Components

Engineered Safety Features Building - NT

Fire Seal - Seal