

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
January 4, 1993
MP-93-9

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

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

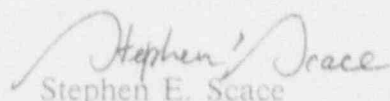
Reference: Facility Operating License No. DPR-21
Docket No. 50-245
Licensee Event Report 92-028-00

Gentlemen:

This letter forwards Licensee Event Report 92-028-00 required to be submitted within thirty (30) days pursuant to 10CFR50.73(a)(2)(iv).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY


Stephen E. Scace

Vice President - Millstone Station

SES/WGN:dlr

Attachment: LER 92-028-00

cc: T. T. Martin, Region I Administrator
P. D. Swetland, Senior Resident Inspector, Millstone Unit Nos. 1, 2 and 3
J. W. Andersen, NRC Acting Project Manager, Millstone Unit No. 1

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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 1

DOCKET NUMBER (2) 050002451 OF 03

TITLE (4) Reactor Scram due to Inadvertant MSIV Switch Closure

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	2	0	3	9	2	9	2	0	5	0	0	0	0	0	0	0	0	0

OPERATING MODE (9)		THIS REPORT IS BEING SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)																			
		20.402(b)				20.402(c)				<input checked="" type="checkbox"/> 50.73(a)(2)(iv)				73.71(b)							
POWER LEVEL (10)		20.405(a)(1)(i)				50.36(a)(1)				50.73(a)(2)(v)				73.71(c)							
1		0				20.405(a)(1)(ii)				50.36(c)(2)				50.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 365A)			
		20.405(a)(1)(iii)				50.73(a)(2)(i)				50.73(a)(2)(vii)(A)											
		20.405(a)(1)(iv)				50.73(a)(2)(ii)				50.73(a)(2)(viii)(B)											
		20.405(a)(1)(v)				50.73(a)(2)(iii)				50.73(a)(2)(ix)											

LICENSEE CONTACT FOR THIS LER (12)

NAME William G. Noll, Senior Engineer

TELEPHONE NUMBER
AREA CODE 203 444-1574

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)

YES (if yes, complete EXPECTED SUBMISSION DATE) ☒ NO

EXPECTED SUBMISSION DATE (15)

MONTH DAY YEAR

ABSTRACT (Limit to 7400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On December 3, 1992, at 0920 hours, with the plant operating at 100% power (530°F and 1030 psig), a reactor scram occurred during the performance of a routine surveillance test on the Isolation Condenser system. During performance of the surveillance procedure, an operator inadvertently closed two Main Steam Isolation Valve (MSIV) switches which resulted in a Group 1 Containment Isolation signal on high main steam flow and a subsequent reactor scram. All safety systems functioned as required throughout the event.

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 (3150-0104), Office of Management and Budget, Washington, DC 20503.

FACILITY NAME (1) Millstone Nuclear Power Station Unit 1	DOCKET NUMBER (2) 0500024592	LER NUMBER (6)			FACILITY IDENTIFICATION NUMBER (7) 02 OF 04
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
		92	028	00	

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

I. Description of Event

On December 3, 1992, at 0920 hours, with the plant operating at 100% power (530 °F and 1030 psig), a reactor scram occurred during the performance of a routine surveillance test on the Isolation Condenser system. During performance of the surveillance procedure SP 412L "Isolation Condenser Isolation Instrument Functional Test/Calibration", an operator inadvertently closed two Main Steam Isolation Valve (MSIV) switches which resulted in a Group I Containment Isolation signal on high main steam flow and a subsequent reactor scram. The location of the MSIV control switches on the control room boards are directly adjacent to the Isolation Condenser valve control switches.

All safety systems functioned as required throughout the event.

II. Cause of Event

The cause of this event has been attributed to operator error due to lack of "self verification". The surveillance procedure being performed on the IC system at the time of the event is performed on a monthly basis. There have been no other incidents associated with the performance of this surveillance procedure.

A contributing factor to this event is the control board layout of the IC system control switches. As shown in the attached figure, the IC system control switches are physically separated by the inboard and outboard MSIV control switches and the Containment Atmosphere Control valve switches by approximately four feet. During the performance of SP 412L "Isolation Condenser Isolation Instrument Functional Test/Calibration", IC system valves IC-2, IC-3, and IC-6&7 are operated from the left side of MSIV control switches. IC system valves IC-1, IC-4 and the IC isolation logic reset switch, are operated from the right side of the MSIV control switches and the Containment Atmosphere Control valve switches. The control switches for MSIV's MS-1A and MS-1C were inadvertently closed instead of IC-6&7 and IC-3 during performance of the surveillance test. This physical separation of the IC system valve control switches by the MSIV control switches is the original plant design of Millstone Unit One.

III. Analysis of Event

This event is reportable pursuant to 10CFR50.73(a)(2)(iv), any event or condition that resulted in a manual or automatic actuation of any Engineered Safety Feature (ESF), including the Reactor Protection System (RPS). Immediate notifications were performed in accordance with 10CFR50.72(b)(2)(ii).

A MSIV closure from 100% power is a moderate frequency design basis accident described in Chapter 15 of the Millstone Unit One Updated Final Safety Analysis Report. Due to the performance of the Isolation Condenser surveillance procedure, the IC was out of service during the scram event and no automatic IC initiation signals were generated during this event.

The inadvertent closure of the MSIV control switches resulted in a Group I Containment Isolation signal, a reactor scram signal, and closure of the inboard and outboard MSIV's. The cause of the scram and Group I Containment Isolation signal was immediately recognized by the reactor operator performing the surveillance. This prompt action resulted in re-opening the MSIV's and establishing the main condenser as the primary heat sink. No Safety Relief Valves (SRV's) were required to open during this transient. The highest reactor pressure recorded by the process computer was approximately 1083 psig which is below the SRV opening setpoint.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

Millstone Nuclear Power Station
Unit 1

YEAR

SEQUENTIAL
NUMBERREVISION
NUMBER

0 5 0 0 0 2 4 5 9 2 - 0 2 8 - 0 0 0 3 OF 0 4

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

IV. Corrective Action

The individual operator involved in this incident was counseled. The Operations Manager also discussed the scram event with each operating crew. The practice of "self verification", especially during routine and frequently performed evolutions, was emphasized as a vital part of safe reactor plant operation.

Millstone Station is in the process of implementing a site wide "self checking" program to improve "attention to detail". It is well recognized that "self checking" is a skill, and to be proficient, this skill must be practiced during day to day activities and in the training environment.

A Human Performance Evaluation (HPES) review of this incident was completed which helped to identify the root cause and other contributing factors. As a result of his review, small, easily removable, plexiglass covers were installed on the MSIV control switches to provide an additional barrier against inadvertent switch operation.

The first phase of the Millstone Unit One Control Room Design Review (CRDR) project was implemented during the 1991 Refueling Outage. The modifications associated with the IC system included the installation of a system mimic and color coded valve control switches. The second phase of the CRDR project will relocate the necessary IC system control valve switches so that all control switches will be located at the same board location. This modification is scheduled to be implemented during the next refueling outage.

V. Additional Information

None.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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FACILITY NAME (1) Millstone Nuclear Power Station Unit 1	DOCKET NUMBER (2) 0 6 0 0 0 2 4 6 9 2	LER NUMBER (6)			PAGE (3) 0 4 OF 0 4
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
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TEXT (If more space is required, use additional NRC Form 368A s) (17)

