



Northeast
Utilities System

107 Seiden Street, Berlin, CT 06037

Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06141-0270
(203) 665-5000

April 16, 1996

Docket No. 50-423
B15662

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

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

This letter forwards Licensee Event Report 96-004-00, which is submitted within thirty (30) days pursuant to 10CFR50.73(a)(2)(i)(B).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

M. H. Brothers
Millstone- Unit 3 Director

Attachment: LER 96-004-00

cc: T. T. Martin, Region I Administrator
A. C. Cerne, Senior Resident Inspector, Millstone Unit No. 3
V. L. Rooney, NRC Project Manager, Millstone Unit No. 3

240068

9604240376 960416
PDR ADOCK 05000423
S PDR

IFCC
11

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-8 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 3		DOCKET NUMBER (2) 05000423	PAGE (3) 1 of 2
---	--	-------------------------------	--------------------

TITLE (4)
Auxiliary Feedwater Isolation Valves Noncompliance 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
03	19	96	96	004	00	04	16	96	FACILITY NAME	DOCKET NUMBER
OPERATING MODE (9)		1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more) (11)							
POWER LEVEL (10)		100	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)			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 or in NRC Form 366A
			20.2203(a)(2)(iv)			50.36(c)(2)			50.73(a)(2)(vii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME William J. Temple, Nuclear Licensing Supervisor	TELEPHONE NUMBER (include Area Code) (860)437-5904
---	---

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

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

On March 19, 1996, with the plant in MODE 1 at 100% power, it was determined that there were several historical occasions when the plant had failed to enter the appropriate Technical Specification's limiting condition for operation (LCO) action statement when shutting the Turbine Driven Auxiliary Feedwater pump discharge valves, at less than 10% power.

The failure to enter and abide by the appropriate LCO action statement is reportable under 10CFR50.73(a)(2)(i)(B) as a condition prohibited by the Technical Specifications.

The cause of the historical Technical Specification noncompliance was a misinterpretation of the Technical Specifications. The plant erroneously used a Technical Specification Surveillance Requirement to take exception to a Technical Specification LCO.

As immediate action, the plant determined to no longer shut these valves in MODE 1, at less than 10% power, or in MODE 2 or 3, without entering the appropriate Technical Specification LCO action statement.

As action to prevent recurrence, this event will be reviewed with station personnel to caution others on using Technical Specification Surveillance requirements to alter Technical Specification LCOs.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1) Millstone Nuclear Power Station Unit 3	DOCKET NUMBER (2) 05000423	LER NUMBER (6)			PAGE (3) 2 of 5
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
		96	-- 004 --	00	

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

I. Description of Event

On May 13, 1994, the plant approved a procedure change which shut the turbine driven auxiliary feedwater pump (3FWA*P2) discharge valves (3FWA*HV36A, B, C, and D) when a motor driven auxiliary feedwater pump (3FWA*P1A or B) was used to feed the steam generators during normal start-ups, shut-downs, or hot standbys. This change was in response to the discovery that the lines, upstream of 3FWA*HV36A, B, C, and D, had to be qualified for a high energy line break if they were pressurized during normal start-ups, shut-downs, or hot standbys. An evaluation determined that shutting 3FWA*HV36A, B, C, and D was allowed by Technical Specification Surveillance Requirement 4.7.1.2.1.a.2 which requires "Verifying that each auxiliary feedwater control and isolation valve in the flow path is in the fully open position when above 10% RATED THERMAL POWER." This event was described in LER 94-006-00 on May 14, 1994.

On March 19, 1996, with the plant in MODE 1 at 100% power it was determined that the Technical Specification Surveillance Requirement 4.7.1.2.1.a.2 is meant to allow the use of an auxiliary feedwater pump to feed the steam generators at less than 10% power. Feeding the steam generators requires the running pump to have its control and isolation valves in the throttled or closed position and the Surveillance Requirement allows this without declaring the pump inoperable. The Surveillance Requirement is not meant to allow isolating a standby pump. Isolating a standby pump makes the associated flow path inoperable. Technical Specification LCO section 3.7.1.2, requires that "At least three independent steam generator auxiliary feedwater pumps and associated flow paths shall be OPERABLE" in MODEs 1, 2, and 3. The LCO action statement associated with one inoperable pump is a 72 hour action statement with no allowances for a mode change.

A historical review of the plant computer and the Shift Manager's log, after May 13, 1994, shows 3FWA*HV36A, B, C, and D shut, in violation of the 72 hour action statement, on June 4, 1995. The review also shows 3FWA*HV36A, B, C, and D shut, in violation of mode change restriction, going to MODE 3 on June 1, 1995, going to MODE 2 on June 3, 1995, going to MODE 2 on December 15, 1995, and going to MODE 1 on December 15, 1995.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1) Millstone Nuclear Power Station Unit 3	DOCKET NUMBER (2) 05000423	LER NUMBER (6)			PAGE (3) 3 of 5
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
		96	-- 004 --	00	

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

II. Cause of Event

The cause of this event was a misinterpretation of Technical Specifications. Technical Specification Surveillance Requirement 4.7.1.2.1.a.2 requires "Verifying that each auxiliary feedwater control and isolation valve in the flow path is in the fully open position when above 10% RATED THERMAL POWER." On May 13, 1994, the plant interpreted this Surveillance Requirement to mean that the control and isolation valves could be shut to isolate portions of the auxiliary feedwater system which were not qualified for use during normal start-ups, shut-downs, or hot standbys (as reported in LER 94-006-00). On March 19, 1996, it was determined that the Surveillance Requirement is meant to allow the use of an auxiliary feedwater pump to feed the steam generators at less than 10% power. Feeding the steam generators requires the running pump to have its control and isolation valves in the throttled or shut position and the Surveillance Requirement allows this without declaring the pump inoperable. The Surveillance Requirement is not meant to allow isolation of a standby pump. The isolation of a standby pump is not allowed by Technical Specification LCO section 3.7.1.2, which requires that "At least three independent steam generator auxiliary feedwater pumps and associated flow paths shall be OPERABLE" in MODEs 1, 2, or 3.

III. Analysis of Event

This is a report of a historical condition, reported under 10CFR50.73(a)(2)(i)(B) as a condition prohibited by the Technical Specifications.

The auxiliary feedwater system (FWA) consist of two 50% motor driven auxiliary feedwater pumps (3FWA*P1A and B) and one 100% turbine driven auxiliary feedwater pump (3FWA*P2). In MODE 1, 2, or 3, all three pumps and their associated flow paths must be operable or the associated Technical Specification action statement must be entered. Contrary to these requirements, the plant made 3FWA*P2's flow path inoperable, in MODE 1, below 10% power, or in MODE 2, or 3, and failed to follow the requirements of the action statement.

The procedure change that allowed closing 3FWA*P2 discharge valves (3FWA*HV36A, B, C, and D) below 10% power, was supported by a safety evaluation which read: "Closing the AFW turbine driven pump discharge valves is only allowed below 10 percent rated thermal power per Technical Specification 4.7.2.1.a.4. Prior to increasing power above 10 percent, all AFW control and isolation valves are opened and verified open per existing procedures. Below 10 percent power, the lower Reactor Coolant System residual heat and higher removal capability in the steam generators provides adequate time for operators to manually align the AFW pumps to the unaffected steam generators. Having the AFW control valves closed at power levels below 10 percent has a negligible effect on the AFW reliability analysis."

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1) Millstone Nuclear Power Station Unit 3	DOCKET NUMBER (2) 05000423	LER NUMBER (6)				PAGE (3) 4 of 5
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		96	-- 004	-- 00		

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

The above safety evaluation was a misinterpretation of Technical Specifications when it stated that closing the valves is allowed by Technical Specification. However, it is a valid conclusion that closing the valves, at power levels below 10 percent, has a negligible effect on the AFW reliability analysis. Therefore, although this misinterpretation of Technical Specifications led to Technical Specification violations, it did not significantly affect the reliability of 3FWA*P2.

IV. Corrective Action

As immediate action the plant determined not to close 3FWA*P2 discharge valves (3FWA*HV36A, B, C, and D), without entering the appropriate action statement. Specifically, the plant will only use the auxiliary feedwater pumps during normal start-ups, shut-downs, or hot standbys in accordance with the Technical Specifications.

As action to prevent recurrence, this event will be identified in the Operating Experience (OE) message, on the Nuclear Network, to caution others on using Technical Specification Surveillance requirements to alter Technical Specification LCOs. It will also be included in the OE minutes distributed to Millstone, Connecticut Yankee, and Seabrook Station.

V. Additional Information

During the investigation into this LER, the plant discovered that the 3FWA*P2 discharge valves (3FWA*HV36A, B, C, and D), would not hold a back-pressure. This raised questions concerning the ability of the valves to perform their intended design functions. This issue will be addressed under a separate LER.

Similar Events

A review of recent LERs identified no other cases where Technical Specification Surveillance requirements were used to alter the meaning of the Technical Specification LCO. However, several LERs reported misinterpretations of Technical Specifications:

LER 95-004-01 reported "Historical Breaches Affecting Control Room Pressurization and Secondary Containment Vacuum, due to Misinterpretation of Technical Specifications." The plant had entered the immediately applicable Action Statement, but should have also entered additional Action Statements for supported and affected systems.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1) Millstone Nuclear Power Station Unit 3	DOCKET NUMBER (2) 05000423	LER NUMBER (6)				PAGE (3) 5 of 5
		YEAR	SEQUENTIAL NUMBER		REVISION NUMBER	
		96	--	004	--	

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

LER 94-013-00 reported "Main Steam Isolation Valves and Turbine Driven Auxiliary Feedwater Pump, Inadequate Technical Specifications for Mode Change." Plant historical startups had been performed with several Tech. Spec required operability tests not capable of being performed prior to entry into MODEs 4 and 3. The noncompliance was a misinterpretation of operability requirements which has been corrected in the new Westinghouse Standard Technical Specifications.

LER 89-017-00 reported "Non Compliance With Action Statement Due to Inadequate Administrative Guidance". Inadequate guidance was provided on a definition of containment isolation valves which led to a misinterpretation of Technical Specification 3.6.3 and the FSAR. Containment isolation valve 3RSS*MOV20D had not been operable for 27 hours. Technical Specification 3.6.3 requires that a containment isolation valve be made operable within 4 hours.

Manufacturer Data

System

BA -Auxiliary/Emergency Feedwater System

Component

None