

Dominion Nuclear Connecticut, Inc.
Millstone Power Station
Rope Ferry Road, Waterford, CT 06385



Dominion®

JUN 11 2008

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

Serial No. 08-0269
MPS Lic/GJC R0
Docket No. 50-336
License No. DPR-65

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 2
LICENSEE EVENT REPORT 2008-002-00,
UNPLANNED LCO ENTRY – THREE CHARGING PUMPS
ALIGNED FOR INJECTION WITH THE REACTOR COOLANT
SYSTEM TEMPERATURE LESS THAN 300 DEGREES F.

This letter forwards Licensee Event Report (LER) 2008-002-00 which documents a condition identified at Millstone Power Station Unit 2 on April 13, 2008. This LER is being submitted pursuant to 50.73(a)(2)(i)(B), as an operation or condition prohibited by Technical Specifications.

If you have any questions or require additional information, please contact Mr. William D. Bartron at (860) 444-4301.

Very truly yours,


J. Alan Price
Site Vice President - Millstone

JEDD
NRC

Attachments: 1

Commitments made in this letter: None.

cc: U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406-1415

Ms. C. J. Sanders
Project Manager
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Mail Stop 08B3
Rockville, MD 20852-2738

NRC Senior Resident Inspector
Millstone Power Station

1. FACILITY NAME Millstone Power Station - Unit 2	2. DOCKET NUMBER 05000336	3. PAGE 1 OF 3
---	-------------------------------------	--------------------------

4. TITLE
 Unplanned LCO Entry – Three Charging Pumps Aligned for Injection With the Reactor Coolant System Temperature Less than 300 Degrees F.

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
04	13	2008	2008-002-00			06	11	2007	FACILITY NAME	DOCKET NUMBER 05000

9. OPERATING MODE	6	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)			
		20.2201(b)	20.2203(a)(3)(ii)	50.73(a)(2)(ii)(B)	50.73(a)(2)(ix)(A)
10. POWER LEVEL	0%	20.2201(d)	20.2203(a)(4)	50.73(a)(2)(iii)	50.73(a)(2)(x)
		20.2203(a)(1)	50.36(c)(1)(i)(A)	50.73(a)(2)(iv)(A)	73.71(a)(4)
		20.2203(a)(2)(i)	50.36(c)(1)(ii)(A)	50.73(a)(2)(v)(A)	73.71(a)(5)
		20.2203(a)(2)(ii)	50.36(c)(2)	50.73(a)(2)(v)(B)	OTHER
		20.2203(a)(2)(iii)	50.46(a)(3)(ii)	50.73(a)(2)(v)(C)	Specify in Abstract below or in NRC Form 366A
		20.2203(a)(2)(iv)	50.73(a)(2)(i)(A)	50.73(a)(2)(v)(D)	
		20.2203(a)(2)(v)	X 50.73(a)(2)(i)(B)	50.73(a)(2)(vii)	
		20.2203(a)(2)(vi)	50.73(a)(2)(i)(C)	50.73(a)(2)(viii)(A)	
20.2203(a)(3)(i)	50.73(a)(2)(ii)(A)	50.73(a)(2)(viii)(B)			

12. LICENSEE CONTACT FOR THIS LER

NAME William D. Bartron, Supervisor Nuclear Station Licensing	TELEPHONE NUMBER (Include Area Code) 860-444-4301
---	---

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED	<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE). <input checked="" type="checkbox"/> NO	15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR

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

On April 13, 2008 at 0805 with the plant shut down in MODE 6, while performing control room operator rounds, a Licensed Operator identified three charging pumps were aligned so they were capable of injection with the Reactor Coolant System temperature less than 300 degrees F. The plant was in this configuration for approximately six hours. Upon discovery of this condition, Technical Specification Action Statement 3.1.1.3.b was immediately entered and then exited when the swing charging pump was made incapable of injection into the Reactor Coolant System.

The cause of this event was determined to be inadequate configuration control because the tag for the charging pump removed from service to comply with the Boron Dilution TS 3.1.1.3.b. did not provide adequate guidance. Subsequent reconfiguration of the charging system to support electrical work activities aligned three charging pumps so they were capable of injection with the Reactor Coolant System temperature less than 300 degrees F.

Since the plant was in a configuration prohibited by the Technical Specifications, this event is reportable in accordance with 10CFR50.73(a)(2)(i)(B) as any operation or condition prohibited by the plant's Technical Specifications.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)	
Millstone Nuclear Power Station - Unit 2	05000336	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2	OF 3
		2008	- 002	- 00		

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

1. Event Description:

Technical Specification (TS) 3.1.1.3.b (Reactivity Control Systems - Boron Dilution) states a maximum of two charging pumps [P] shall be capable of injecting into the Reactor Coolant System (RCS) [AB] whenever the temperature of one or more of the Reactor Coolant System (RCS) cold legs is less than 300 degrees F. With more than two charging pumps capable of injecting into the RCS and the temperature of one or more of the RCS cold legs less than 300 degrees F, take immediate action to comply with TS 3.1.1.3.b. This Technical Specification allows a maximum of two charging pumps to be OPERABLE when RCS cold leg temperature is less than 300 degrees F, thus ensuring the maximum dilution flow rate assumed in the boration analysis is not exceeded.

On April 13, 2008 at 0805 with the plant shut down in MODE 6, while performing control room operator rounds, a Licensed Operator identified three charging pumps were aligned so they were capable of injection with the RCS temperature less than 300 degrees F. TS Action Statement 3.1.1.3.b was immediately entered and then exited when the swing charging pump was made incapable of injecting. The plant was in the prohibited configuration for approximately six hours. With the plant in the prohibited configuration there was no impact on reactivity since primary make-up water had been isolated and tagged. Additionally low temperature overpressure protection (LTOP) conditions were not applicable because the reactor vessel head was removed.

Since the plant was in a configuration not allowed by the Technical Specifications, this event is reportable in accordance with 10CFR50.73(a)(2)(i)(B) as any operation or condition prohibited by the plant's Technical Specifications.

2. Cause:

A Root Cause Evaluation was conducted. The cause of this event was determined to be inadequate configuration control because the tag for the charging pump removed from service to comply with the Boron Dilution TS 3.1.1.3.b. did not provide adequate guidance. To ensure the third charging pump is not capable of injecting into the RCS, it is electrically isolated. The underlying basis for tagging and removing one of the charging pumps from service was not clearly indicated on the tag for the charging pump removed from service to comply with TS 3.1.1.3.b. Subsequent reconfiguration of the charging system was not prevented when subsequent work activities to support electrical work activities in the outage aligned three charging pumps so they were capable of injection with the RCS temperature less than 300 degrees F.

3. Assessment of Safety Consequences:

This event is judged to be of very low safety significance. In accordance with TS 3.1.1.3, with the cold leg temperature less than 300 degrees F, a configuration with a maximum of two charging pumps capable of injecting into the RCS is permitted. This specification limits the maximum number of charging pumps assumed to deliver un-borated water to the RCS in the FSAR Chapter 14 Boron Dilution Event Analysis. In MODE 6, the Technical Specifications require the RCS boron concentration must be maintained so Keff is less than or equal to 0.95. During the time when all three charging pumps were available in MODE 6, no actual event occurred resulting in a reduction in the RCS boron concentration. Additionally primary make-up water had been isolated and tagged. This event occurred prior to core offload. The procedurally required boron concentration during this timeframe was 2097 ppm. This boron concentration is adequate to maintain Keff less than or equal to 0.95 following the core reload with new fuel in the reactor vessel and all control element assemblies withdrawn. During this event, the actual RCS boron concentration was approximately 2240 ppm. Prior to core offload (end of Cycle 18 conditions), the required RCS boron concentration to maintain Keff less than or equal to 0.95 is 1133 ppm with all control element assemblies withdrawn. Since all control element assemblies were inserted during this event, the required boron concentration to maintain Keff less than or equal to 0.95 is even further reduced. Given the above factors, with three charging pumps operating, the time to decrease the RCS boron

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
Millstone Nuclear Power Station - Unit 2	05000336	2008	- 002	- 00	3	OF 3

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

concentration from 2240 ppm to the point the reactor becomes critical would be considerably longer than 30 minutes, and bounded by the existing FSAR Chapter 14 boron dilution analyses.

4. Corrective Action:

Upon discovery of the condition where three charging pumps were aligned so they were capable of injection with the RCS temperature less than 300 degrees F, TS Action Statement 3.1.1.3.b was immediately entered and then exited when the swing charging pump was made incapable of injection into the RCS. The plant was in the prohibited configuration for approximately six hours.

Additional corrective actions to address this event will be evaluated in accordance with the station's Corrective Action Program.

5. Previous Occurrences:

No previous similar events/conditions were identified.

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