

Dominion Nuclear Connecticut, Inc.  
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Mailing Address: P.O. Box 128  
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dom.com



JAN 07 2016

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

Serial No. 16-002  
MPS Lic/LES R0  
Docket No. 50-336  
License No. DPR-65

**DOMINION NUCLEAR CONNECTICUT, INC.**  
**MILLSTONE POWER STATION UNIT 2**  
**LICENSEE EVENT REPORT 2015-003-00**  
**VALID ACTUATION OF THE REACTOR PROTECTION SYSTEM**

This letter forwards Licensee Event Report (LER) 2015-003-00 documenting an event at Millstone Power Station Unit 2 on November 8, 2015. This LER is being submitted pursuant to 10 CFR 50.73(a)(2)(iv)(A).

If you have any questions or require additional information, please contact Mr. Thomas G. Cleary at (860) 444-4377.

Sincerely,

  
John R. Daugherty  
Site Vice President – Millstone

Attachments: 1

Commitments made in this letter: None

IEZZ  
NRR

cc: U.S. Nuclear Regulatory Commission  
Region I  
2100 Renaissance Blvd, Suite 100  
King of Prussia, PA 19406-2713

R. V. Guzman  
NRC Project Manager Millstone Units 2 and 3  
U. S. Nuclear Regulatory Commission  
One White Flint North  
Mail Stop O8 C-2  
11555 Rockville Pike  
Rockville, MD 20852-2738

NRC Senior Resident Inspector  
Millstone Power Station

Verification of Accuracy Basis:

1. RCE 3015891, Unit 2 'C' RCP Oil Leak Causes Plant Shutdown
2. CR1017568, P40C, 'C' RCP Oil Leaking in the Lower Oil Reservoir.

Action Plan: None

Commitments made in this letter: None

Required Changes to the UFSAR or QA Topical Report: None

Serial No. 16-002  
Docket No. 50-336  
Licensee Event Report 2015-003-00

**ATTACHMENT**

**LICENSEE EVENT REPORT 2015-003-00**  
**VALID ACTUATION OF THE REACTOR PROTECTION SYSTEM**

**MILLSTONE POWER STATION UNIT 2**  
**DOMINION NUCLEAR CONNECTICUT, INC.**



**LICENSEE EVENT REPORT (LER)**

(See Page 2 for required number of digits/characters for each block)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

<b>1. FACILITY NAME</b> Millstone Power Station Unit 2	<b>2. DOCKET NUMBER</b> 05000336	<b>3. PAGE</b> 1 OF 3
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**4. TITLE**  
Valid Actuation of the Reactor Protection System

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
11	08	2015	2015	003	00	01	07	2016		05000
									FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)			
1	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)
	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)
10. POWER LEVEL  19.0	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input checked="" type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)
	<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER
	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

**12. LICENSEE CONTACT FOR THIS LER**

LICENSEE CONTACT Thomas Cleary, Manager Nuclear Station Licensing	TELEPHONE NUMBER (Include Area Code) (860) 444-4377
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**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

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

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

On November 8, 2015 during reactor start-up from refueling outage 2R23 with the reactor in mode 1 at approximately 57.5 percent power the operators received indication of an oil leak on the 'C' reactor coolant pump (RCP) motor lower oil reservoir. The operators monitored the 'C' RCP oil level and bearing temperatures. Upon noting the RCP oil level dropping at a rate of approximately 1.7percent per hour and the lower RCP guide bearing temperature rising, the operators entered abnormal operating procedure (AOP) 2575, Rapid Downpower, and commenced a rapid downpower. The operators manually tripped the reactor at approximately 19percent power in accordance with AOP 2575 and entered emergency operating procedures. The reactor trip was uncomplicated. All safety systems operated as designed.

The cause of the valid actuation of the reactor protection system (RPS) was the operators manually tripping the reactor via the manual reactor trip push button switches. The AOP was entered due to an oil leak from the tubing to the level transmitter on the 'C' RCP motor lower oil reservoir. The tubing failure mechanism was determined to be high cyclic fatigue. Repairs were completed, the unit was restarted, and returned to service. Additional corrective actions are being taken in accordance with the station's corrective action program.

This event is being reported pursuant to 10 CFR 50.73(a)(2)(iv)(A), as any event or condition that resulted in manual or automatic actuation of any of the systems (RPS) listed in paragraph 10 CFR 50.73 (a)(2)(iv)(B).



**LICENSEE EVENT REPORT (LER)  
CONTINUATION SHEET**

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to [infocollects.Resource@nrc.gov](mailto:infocollects.Resource@nrc.gov), and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Millstone Power Station Unit 2	05000336	YEAR	SEQUENTIAL NUMBER	REV NO.	2 OF 3
		2015	- 003	- 00	

**NARRATIVE**

**1. EVENT DESCRIPTION:**

On November 8, 2015 during Millstone Power Station Unit 2 (MPS2) reactor start-up from refueling outage 2R23 with the reactor in mode 1 at approximately 57.5 % power, the operators received indication of an oil leak on the 'C' reactor coolant pump (RCP) motor lower oil reservoir. The operators monitored the 'C' RCP oil level and bearing temperatures. Upon noting the RCP oil level dropping at a rate of approximately 1.7% per hour and the lower RCP guide bearing temperature rising, the operators entered abnormal operating procedure (AOP) 2575, Rapid Downpower, and commenced a rapid down-power to return MPS2 to mode 3. The operators manually tripped the reactor at approximately 19% power in accordance with AOP 2575 and entered emergency operating procedures. The reactor trip was uncomplicated. All safety systems operated as designed.

The operators manually tripped the reactor, Dominion reported this event pursuant to 10 CFR 50.72(b)(2)(iv)(B) as any event or condition that results in actuation of the reactor protection system (RPS) when the reactor is critical except when the actuation results from and is part of a pre-planned sequence during testing or reactor operation. (NRC Event Number: 51521).

The reactor trip was in response to degrading plant equipment, not preplanned, and the operator actions were directed by an AOP. Dominion is reporting this event pursuant to 10 CFR 50.73(a)(2)(iv)(A), as any event or condition that resulted in manual or automatic actuation of any of the systems (RPS) listed in paragraph 10 CFR 50.73 (a)(2)(iv)(B).

**BACKGROUND:**

The reactor trip pushbutton switches on the control panel causes interruption of the AC power to the control element drive mechanism (CEDM) power supplies. De-energizing the CEDM coils allows the shutdown and regulating Control Element Assemblies (CEAs) to drop into the core by gravity.

**2. CAUSE:**

The cause of the valid actuation of the RPS was the operators manually tripping the reactor via the manual reactor trip push button. The AOP was entered due to an oil leak from the tubing to the level transmitter on the 'C' RCP motor lower oil reservoir. The tubing failure mechanism was determined to be high cyclic fatigue.

**3. ASSESSMENT OF SAFETY CONSEQUENCES:**

The shutdown of MPS2 was conducted in accordance with plant procedure AOP 2575 and proceeded in an orderly controlled manner. As directed in the procedure, the reactor was manually tripped. The reactor trip was uncomplicated. All safety equipment operated as designed and as expected.

**LICENSEE EVENT REPORT (LER)  
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**NARRATIVE**

**4. CORRECTIVE ACTION:**

Repairs were completed, the unit was restarted, and returned to service. Additional corrective actions are being taken in accordance with the station's corrective action program.

**5. PREVIOUS OCCURRENCES:**

- MPS2, & MPS3 LER 2014-006-00, Millstone Power Station Dual Unit Reactor Trip on Loss of Offsite Power
- MPS2, LER 2013-004-00, Reactor Trip While Backwashing 'D' Waterbox
- MPS3 LER 2013-007-00, Reactor Trip on Low-Low Steam Generator Level

**6. Energy Industry Identification System (EIIIS) codes:**

- Reactor Coolant System – AB
- Control Rod Drive System – AA
- Pump – P
- Motor – MO
- Transmitter, indicating level – LIT
- Tubing – TBG

**LICENSEE EVENT REPORT (LER)  
CONTINUATION SHEET**

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