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dom.com



DEC 19 2013

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


Serial No. 13-656
MPS Lic/LES R0
Docket No. 50-336
License No. DPR-65

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 2
LICENSEE EVENT REPORT 2013-004-00
REACTOR TRIP WHILE BACKWASHING D WATERBOX

This letter forwards Licensee Event Report (LER) 2013-004-00 documenting an event that occurred at Millstone Power Station Unit 2 on November 9, 2013. 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. William D. Bartron at (860) 444-4301.

Sincerely,


Stephen E. Scace
Site Vice President – Millstone

Attachments: 1

Commitments made in this letter: None

TE22
NRK

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

J. S. Kim
Project Manager - Millstone Power Station
U.S. Nuclear Regulatory Commission
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NRC Senior Resident Inspector
Millstone Power Station

ATTACHMENT

LICENSEE EVENT REPORT 2013-004-00

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

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION (10/2010)		APPROVED BY OMB: NO. 3150-0104		EXPIRES: 10/31/2016																																					
LICENSEE EVENT REPORT (LER) (See reverse for required number of digits/characters for each block)																																									
1. FACILITY NAME Millstone Power Station - Unit 2			2. DOCKET NUMBER 05000336		3. PAGE 1 OF 3																																				
4. TITLE Reactor Trip While Backwashing D Waterbox																																									
5. EVENT DATE <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:33%;">MONTH</th> <th style="width:33%;">DAY</th> <th style="width:33%;">YEAR</th> </tr> <tr> <td style="text-align: center;">11</td> <td style="text-align: center;">09</td> <td style="text-align: center;">2013</td> </tr> </table>			MONTH	DAY	YEAR	11	09	2013	6. LER NUMBER <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:33%;">YEAR</th> <th style="width:33%;">SEQUENTIAL NUMBER</th> <th style="width:33%;">REV NO.</th> </tr> <tr> <td style="text-align: center;">2013</td> <td style="text-align: center;">004</td> <td style="text-align: center;">00</td> </tr> </table>		YEAR	SEQUENTIAL NUMBER	REV NO.	2013	004	00	7. REPORT DATE <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:33%;">MONTH</th> <th style="width:33%;">DAY</th> <th style="width:33%;">YEAR</th> </tr> <tr> <td style="text-align: center;">12</td> <td style="text-align: center;">19</td> <td style="text-align: center;">2013</td> </tr> </table>		MONTH	DAY	YEAR	12	19	2013																	
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FACILITY NAME William D. Barton, Supervisor Nuclear Station Licensing			TELEPHONE NUMBER (Include Area Code) 860-444-4301																																						
13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT																																									
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ABSTRACT <i>(Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)</i> <p>On November 9, 2013, at 1514, Millstone Power Station Unit 2 (MPS2) experienced a turbine trip and an automatic reactor trip from 95% power MODE 1 due to loss of condenser vacuum. The Unit was in the process of condenser backwashing operations when condenser vacuum was lost due to unexpected pump ramp-down of the 'C' circulating water pump (CWP) when the 'D' CWP was secured as required by procedure.</p> <p>All control rods inserted on the reactor trip. An auxiliary feedwater (AFW) automatic start occurred post trip, as expected per design, and all other safety systems functioned as required.</p> <p>The direct cause of the event was the MPS2 'C' CWP ramped off due to failure of contacts on a time-delay relay to deenergize as designed.</p> <p>The defective relay was replaced. Additional corrective actions are being taken in accordance with the station's corrective action program.</p> <p>This event is being reported per 10 CFR 50.73(a)(2)(iv)(A) as an event that resulted in a manual or automatic actuation of systems listed in 10 CFR 50.73(a)(2)(iv)(B). Actuators of the reactor protection system and the AFW system are reportable under this paragraph.</p>																																									

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

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Millstone Power Station - Unit 2	05000336	YEAR	SEQUENTIAL NUMBER	REV NO.	2 OF 3
		2013	- 004	- 00	

NARRATIVE

1. EVENT DESCRIPTION

On November 9, 2013, at 1514, Millstone Power Station Unit 2 (MPS2) experienced a turbine trip and an automatic reactor trip from 95% power MODE 1 due to loss of condenser vacuum.

The Unit was in the process of condenser backwashing operations in accordance with plant procedures. The loss of condenser vacuum was due to unexpected pump ramp-down of the 'C' circulating water pump (CWP) when the 'D' CWP was secured as required by procedure. This resulted in both CWPs being secured in the 'B' condenser. This caused the condenser vacuum to drop resulting in a turbine trip which immediately caused the reactor trip breakers to open. All the control rods inserted into the reactor core. Reactor coolant (RCS) and main steam systems responded as expected. There were no indications of safety valve actuation. Steam generator (SG) pressures were maintained below 920 psia. RCS temperature response was as expected post trip and returned to its nominal no-load Tcold of 532 degrees F. An auxiliary feedwater (AFW) automatic start occurred post trip, as expected and SG water level was recovered. All safety systems functioned as required.

This event is being reported per 10 CFR 50.73(a)(2)(iv)(A) as an event that resulted in a manual or automatic actuation of systems listed in 10 CFR 50.73(a)(2)(iv)(B). Actuators of the reactor protection system and the AFW system are reportable under this paragraph.

2. CAUSE

Post trip troubleshooting revealed that the direct cause of the event was the MPS2 'C' CWP ramped off due to failure of contacts on a time-delay relay to deenergize as designed. This relay is a pump permissive relay designed to de-energize when the 'D' CWP is fully secured.

3. ASSESSMENT OF SAFETY CONSEQUENCES

The operating crew responded to the reactor trip by completing EOP 2525, Standard Post Trip Actions, and entering EOP 2526 Reactor Trip Recovery. The AFW system started in response to low steam generator level as designed.

All control rods inserted on the reactor trip. With the 'A' and 'B' CWPs still running, condenser vacuum remained adequate for operation of the condenser dump valves following the reactor trip. Both main and auxiliary feedwater provided makeup to the SGs.

Based on the above discussion, there were no safety consequences for the event.

4. CORRECTIVE ACTION

The defective relay was replaced. Additional corrective actions are being taken in accordance with the station's corrective action program.

5. PREVIOUS OCCURRENCES

Similar events are documented in the following LERs:

- MPS2 LER 2010-003-00, Reactor Trip on Low Condenser Vacuum.

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Millstone Power Station - Unit 2	05000336	YEAR	SEQUENTIAL NUMBER	REV NO.	3 OF 3
		2013	- 004 -	00	

NARRATIVE

6. Energy Industry Identification System (EIS) codes are

- Circulating Water System - SG
- Circulating Water Pump –SG, P
- Main Condenser – COND
- Reactor Protection System – JC
- Reactor Trip Breakers –JC, BKR
- Reactor Coolant System – AB
- Main Steam System – SB
- Auxiliary Feedwater System – BA