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JUN 02 2014

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

Serial No. 14-253
MPS Lic/TGC R0
Docket No. 50-336
License No. DPR-65

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 2
LICENSEE EVENT REPORT 2014-003-00
MILLSTONE POWER STATION UNIT 2 LOSS OF SAFETY FUNCTION DUE TO INOPERABLE ENCLOSURE BUILDING

This letter forwards Licensee Event Report (LER) 2014-003-00 documenting a condition at Millstone Power Station Unit 2 on April 5, 2014. This LER is being submitted pursuant to 10 CFR 50.73(a)(2)(v)(C) as a condition that could have prevented the fulfillment of the safety function of structures or systems to control the release of radioactive material and 10 CFR 50.73(a)(2)(v)(D), mitigate the consequences of an accident.

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

IE22
NRR

cc:

Nuclear Regulatory Commission, Region I
Regional Administrator
2100 Renaissance Blvd.
Suite 100
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M. C. Thadani
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NRC Senior Resident Inspector
Millstone Power Station

ATTACHMENT

LICENSEE EVENT REPORT 2014-003-00

MILLSTONE POWER STATION UNIT 2
DOMINION NUCLEAR CONNECTICUT, INC.

NRC FORM 366 (02-2014) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 01/31/2017

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.

LICENSEE EVENT REPORT (LER)

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

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Millstone Power Station Unit 2	05000336	1 OF 3

4. TITLE

Loss of Safety Function Due to Inoperable Enclosure Building

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
										05000
04	05	2014	2014	- 003	- 00	06	02	2014	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	☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(i)(C)	☐ 50.73(a)(2)(vii)
	☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)
	☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)
	☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)
10. POWER LEVEL	☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
	☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(A)	☐ 73.71(a)(4)
100	☐ 20.2203(a)(2)(iv)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
	☐ 20.2203(a)(2)(v)	☐ 50.73(a)(2)(i)(A)	☒ 50.73(a)(2)(v)(C)	☐ OTHER
	☐ 20.2203(a)(2)(vi)	☐ 50.73(a)(2)(i)(B)	☒ 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

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

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

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED	15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
☐ YES *(If yes, complete 15. EXPECTED SUBMISSION DATE)* ☒ NO				

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

On April 5, 2014, with Millstone Power Station Unit 2 at 100% power in Mode 1, the Enclosure Building was rendered inoperable during a maintenance activity. The condition was created at approximately 1025 and restored to operable status at 1300 on April 5, 2014. Plant Technical Specification (TS) 3.6.5.2 requires that the Enclosure Building shall be operable in Modes 1, 2, 3, and 4. The TS 3.6.5.2 Action is to restore the Enclosure Building to operable status within 24 hours or be in cold shutdown within the next 36 hours. Therefore, the TS 3.6.5.2 Action requirements were met.

Since the Enclosure Building was inoperable from approximately 1025 until restored at 1300, the safety function of the Enclosure Building to limit radiological releases or mitigate the consequences in the event of a design basis accident could not be assured. The condition was created as the result of a human performance error while performing a maintenance activity associated with the Enclosure Building boundary. Since this was a human performance error, the event and lessons learned were communicated to the Millstone Site as a Station Human Performance Clock Reset.

LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

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Millstone Power Station Unit 2	05000336	2014	- 003	- 00	2 OF 3

NARRATIVE

1. EVENT DESCRIPTION

On April 5, 2014, with Millstone Power Station Unit 2 (MPS2) at 100% power in Mode 1, the Enclosure Building was rendered inoperable during a maintenance activity. The condition was created at approximately 1025 and restored to operable status at 1300 on April 5, 2014. Plant Technical Specification (TS) 3.6.5.2 requires that the Enclosure Building shall be operable in Modes 1, 2, 3, and 4. The TS 3.6.5.2 Action is to restore the Enclosure Building to operable status within 24 hours or be in cold shutdown within the next 36 hours. Therefore, the TS 3.6.5.2 Action requirements were met.

Since the Enclosure Building was inoperable from approximately 1025 until restored at 1300, the safety function of the Enclosure Building to limit radiological releases or mitigate the consequences in the event of a design basis accident could not be assured.

This condition is being reported pursuant to 10CFR50.73(a)(2)(v)(C) as an event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to control the release of radioactive material and 10CFR50.73(a)(2)(v)(D), mitigate the consequences of an accident.

2. CAUSE

The condition was created as the result of a human performance error while performing a maintenance activity associated with the Enclosure Building boundary. Flexible boots are installed on the main steam safety valve vent pipes that extend through the Enclosure Building boundary. There are two sets of boots, upper and lower, on each main steam safety valve vent pipe. The upper boots are credited as the Enclosure Building boundary. Maintenance workers were sent out to remove the lower boots on eight main steam safety valve vent pipes to support a planned surveillance. The procedure also required that the upper boots be inspected to ensure they are installed. The workers were inattentive to the scope of the work activity and removed both the lower and upper boots. Removal of the upper boots rendered the Enclosure Building inoperable.

3. ASSESSMENT OF SAFETY CONSEQUENCES

The purpose of the Enclosure Building is to contain, collect, and process potential containment leakage prior to its release to the environment to minimize radioactivity levels and resulting dose consequences from a design basis loss-of-coolant-accident. The Enclosure Building Filtration System (EBFS) is designed to establish and maintain the required negative pressure of -0.25 inches wg within the Enclosure Building (secondary containment).

The flexible boots were removed from eight main steam safety valve vent pipes. Each main steam safety valve also has a sliding bushing that can be credited for sealing the associated boundary, if the bushing is properly seated. Proper seating of the sliding bushings has not been completely reliable historically (as described in LER 2011-001-00). The pipes were inspected to assess the condition of the sliding bushings and five of the eight were seated.

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NARRATIVE

Therefore, three of the main steam safety valve pipe boundaries were compromised. An Engineering Technical Evaluation was performed to estimate the system response based on the as-found condition of the main steam safety valve pipe boundaries. The Engineering Technical Evaluation concluded that the aggregate impact of the openings was too close to assure that the required negative pressure of -0.25 inches wg would be achieved. The condition existed for less than three hours.

NRC Branch Technical Position CSB 6-3 defines the secondary containment as "positive" for pressures less negative than -0.25 inch wg. This criterion accounts for wind loads and uncertainties in pressure measurements. With differential pressures less negative than -0.25 inch wg, a conservative assumption, consistent with design basis, is made that all primary containment leakage is released directly to the environment. Although NRC Branch Technical Position CSB 6-3 defines the secondary containment as "positive" for pressures less negative than -0.25 inch wg, it is estimated that a negative pressure close to -0.25 inches wg would have been achieved based on the as-found condition. Since this condition existed for less than three hours and estimated pressure would have been close to the -0.25 inches wg pressure acceptance criteria, the safety consequences are considered low.

4. CORRECTIVE ACTION

The Enclosure Building was restored to operable status. Since this was a human performance error, the event and lessons learned were communicated to the Millstone Site as a Station Human Performance Clock Reset.
Additional corrective actions are being taken in accordance with the station's corrective action program.

5. PREVIOUS OCCURRENCES

LER 2011-001-00 describes a condition in which the Enclosure Building was rendered inoperable due to failed barriers. The corrective action associated with LER 2011-001-00 was to modify the barrier design to credit the upper flexible boots described above.

6. ENERGY INDUSTRY IDENTIFICATION SYSTEM (EIIS) CODES

Enclosure Building Filtration System (EBFS) [BD]