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

Dominion℠

MAY 24 2011

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

Serial No. 11-208
MPS Lic/TGC R0
Docket No. 50-336
License No. DPR-65

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 2
LICENSEE EVENT REPORT 2011-001-00
MILLSTONE POWER STATION UNIT 2 ENCLOSURE BUILDING RENDERED INOPERABLE DUE TO DISLODGED BUSHINGS

This letter forwards Licensee Event Report (LER) 2011-001-00 documenting a condition discovered at Millstone Power Station Unit 2 on April 3, 2011. 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.

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

Sincerely,

A. J. Jordan
Site Vice President – Millstone

Attachments: 1

Commitments made in this letter: None

IE22
NRR

cc: U.S. Nuclear Regulatory Commission
Region I
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NRC Senior Resident Inspector
Millstone Power Station

Serial No. 11-208
Docket No. 50-336

ATTACHMENT

LICENSEE EVENT REPORT 2011-001-00

MILLSTONE POWER STATION UNIT 2
DOMINION NUCLEAR CONNECTICUT, INC.

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION
(9-2007)

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 08/31/2010

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 Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@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 reverse for required number of digits/characters for each block)

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

4. TITLE

Enclosure Building Rendered Inoperable Due to Dislodged Bushings

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	03	2011	2011	–001–	00	05	24	2011	FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE

5

10. POWER LEVEL

000

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check all that apply)*

☐ 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)
☐ 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)
☐ 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

FACILITY NAME	TELEPHONE NUMBER (Include Area Code)
William D. Bartron, 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

☐ YES (If yes, complete 15. EXPECTED SUBMISSION DATE) ☒ NO

15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR

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

On April 3, 2011, with Millstone Power Station Unit 2 (MPS2) in a refueling outage at 0% power in Mode 5, data taken during plant shutdown indicated that the Enclosure Building Filtration System had not met acceptance criteria rendering the Enclosure Building inoperable while MPS2 was in Mode 4. 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 requirements were met. Since the Enclosure Building did not meet the acceptance criteria, the safety function of the Enclosure Building to limit radiological releases in the event of a design basis accident could not be assured.

The direct cause for not meeting the Enclosure Building acceptance criteria was that sliding bushings on the main steam safety valves (MSSVs) exhaust piping had dislodged and not reseated. The apparent cause of this event was determined to be a design/application deficiency in the use of MSSV exhaust piping sliding bushings as an Enclosure Building boundary. A design change was implemented that no longer relies on the MSSV sliding bushings as Enclosure Building boundaries. Instead, improved boot seals located on the MSSV exhaust piping form the boundary for the MSSVs.

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.

NARRATIVE

1. Event Description

On April 3, 2011, with Millstone Power Station Unit 2 (MPS2) in a refueling outage at 0% power in Mode 5, data taken during plant shutdown indicated that the Enclosure Building Filtration System (EBFS) [BD] had not met acceptance criteria rendering the Enclosure Building inoperable while MPS2 was in Mode 4. Plant Technical Specification (TS) 3.6.5.2 requires that the Enclosure Building shall be operable in Modes 1, 2, 3, and 4. 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. The EBFS drawdown test was commenced at 04:49 on April 3, 2011 and Mode 5 (cold shutdown) was entered at 05:08 on April 3, 2011. Therefore, the TS 3.6.5.2 Action requirements were met.

Since the EBFS did not meet the acceptance criteria for establishing 0.25" water gauge (wg) negative pressure, the safety function of the Enclosure Building to limit radiological releases 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.

2. Cause

The direct cause for not meeting the Enclosure Building drawdown acceptance criteria was that sliding bushings on the main steam safety valves (MSSVs) exhaust piping had dislodged and not reseated. Review of the event did not identify any specific time of occurrence.

The apparent cause of this event was determined to be a design/application deficiency in the use of main steam safety valve (MSSV) exhaust piping sliding bushings as an Enclosure Building boundary.

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 (LOCA). The EBFS is designed to establish and maintain the required negative pressure of -0.25 inches wg within the Enclosure Building (secondary containment). The functional test is performed with one train of EBFS fans and conditions as close to design as possible. The Facility 1 test recorded a pressure differential of -0.22 inches wg. As such, the ability of this train of EBFS to draw sufficient negative pressure in secondary containment could not be assured.

NRC Branch Technical Position CSB 6-3 defines the secondary containment as "positive" for pressures greater 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. The Facility 1 test measurement of -0.22 inch wg is within 0.03 inches wg from the defined limit and represents some degree of negative pressure achieved in the secondary containment. Although leakage during 'positive pressure' periods cannot be determined, it is reasonable to assume that a fair amount of containment leakage that could leak from a design basis LOCA into the secondary containment under -0.22 inch wg would be captured and processed before release. The safety consequences associated with not achieving a negative pressure differential of -0.25 inches wg in the secondary containment is considered low.

4. Corrective Action

A design change was implemented that no longer relies on the MSSV exhaust piping sliding bushings as Enclosure Building boundaries. Instead, improved boot seals located on the MSSV exhaust piping form the boundary for the MSSVs.

Additional corrective actions are being taken in accordance with the station's corrective action program.

5. Previous Occurrences

Condition Report CR342330 describes a similar condition on July 19, 2009 in which the Enclosure Building did not meet acceptance criteria.

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