

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



**Dominion™**

**FEB 21 2007**

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

Serial No.	07-0010
MPS Lic/GJC	R0
Docket No.	50-336
License No.	DPR-65

**DOMINION NUCLEAR CONNECTICUT, INC.**  
**MILLSTONE POWER STATION UNIT 2**  
**LICENSEE EVENT REPORT 2006-006-01,**  
**SCAFFOLDING BUILT FOR WORK ON MAIN**  
**STEAM ISOLATION VALVE (2-MS-64A)**  
**PREVENTED THE VALVE FROM CLOSING**

This letter forwards Licensee Event Report (LER) 2006-006-01. This is revision 1 to LER 2006-006-00, which documented an event that occurred at Millstone Power Station Unit 2, on October 7, 2006. 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. David W. Dodson at (860) 447-1791, extension 2346.

Very truly yours,

D. J. JORDAN FOR D. PRICE

J. Alan Price  
Site Vice President - Millstone

JE22

Attachments: 1

Commitments made in this letter: None.

cc: U.S. Nuclear Regulatory Commission  
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Mr. V. Nerses  
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U.S. Nuclear Regulatory Commission  
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Mr. S. M. Schneider  
NRC Senior Resident Inspector  
Millstone Power Station

**Attachment 1**

**Licensee Event Report 2006-006-01,**  
**Scaffolding Built For Work On Main Steam Isolation Valve**  
**(2-MS-64A) Prevented The Valve From Closing**

**Millstone Power Station Unit 2**  
**Dominion Nuclear Connecticut, Inc. (DNC)**

NRC FORM 366 (6-2004)		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB NO. 3150-0104		EXPIRES 06/30/2007	
<b>LICENSEE EVENT REPORT (LER)</b> (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 Scaffolding Built For Work On Main Steam Isolation Valve (2-MS-64A) Prevented The Valve From Closing							
5. EVENT DATE			6. LER NUMBER			7. REPORT DATE	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MO	DAY
10	07	2006	2006 - 006 - 01			02	21
						8. OTHER FACILITIES INVOLVED	
						FACILITY NAME	
						DOCKET NUMBER 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)					
3		20.2201(b)		20.2203(a)(3)(ii)		50.73(a)(2)(ii)(B)	
		20.2201(d)		20.2203(a)(4)		50.73(a)(2)(iii)	
10. POWER LEVEL		20.2203(a)(1)		50.36(c)(1)(i)(A)		50.73(a)(2)(iv)(A)	
000		20.2203(a)(2)(i)		50.36(c)(1)(ii)(A)		50.73(a)(2)(v)(A)	
		20.2203(a)(2)(ii)		50.36(c)(2)		50.73(a)(2)(v)(B)	
		20.2203(a)(2)(iii)		50.46(a)(3)(ii)		50.73(a)(2)(v)(C)	
		20.2203(a)(2)(iv)		50.73(a)(2)(i)(A)		50.73(a)(2)(v)(D)	
		20.2203(a)(2)(v) <input checked="" type="checkbox"/>		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 David W. Dodson, Supervisor Nuclear Station Licensing						TELEPHONE NUMBER (Include Area Code) 860-447-1791	
13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT							
CAUSE	SYSTEM	COMPONENT	MANU- FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT
14. SUPPLEMENTAL REPORT EXPECTED						15. EXPECTED	
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE).						<input checked="" type="checkbox"/> NO	
						SUBMISSION DATE	
						MONTH	
						DAY	
						YEAR	
16. ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)							
<p>On October 7, 2006, with the plant in Mode 3, scaffolding built on August 25, 2006 to support work on the #1 steam generator main steam line isolation valve 2-MS-64A prevented the valve from fully closing during surveillance testing. The obstruction was removed within approximately one hour of discovery. An immediate report per 10 CFR 50.72(b)(3)(v)(D) was made to the NRC. A review of valve closure under design basis conditions with the scaffolding interference in place concludes that the valve would not have closed for small steam line breaks downstream of the MSIV and steam generator tube rupture conditions due to insufficient pressure drop across the valve disc. An engineering evaluation determined the area around the MSIV would remain accessible to the operators and the scaffolding interference could be removed in time to complete the safety function.</p> <p>The root cause investigation for this event determined that supplementary instructions provided for the construction of scaffolding in the vicinity of the MSIV lacked sufficient specific information to ensure MSIV operability was not impacted. The station's scaffold evaluation process will be modified to ensure specific information is provided to maintain operability of safety related and other critical safety related systems, structures or components potentially impacted by the proposed scaffold.</p> <p>The scaffolding was in place for more than the TS allowed outage time, therefore this event is being reported pursuant to 10 CFR 50.73(a)(2)(i)(B), as an operation or condition prohibited by Technical Specifications.</p>							

**LICENSEE EVENT REPORT (LER)**

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		2006	-- 006	-- 01	

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

On October 7, 2006, with the plant in Mode 3, scaffolding built for work on 2-MS-64A, the #1 steam generator (SG) [SB] main steam isolation valve (MSIV) [ISV] prevented the valve from fully closing during surveillance testing. The MSIV is a 34 inch 600 # Atwood Morrill swing check valve with an air operated actuator. The scaffold installation interfered with the valve actuator such that it prevented full closure of the valve. Construction of the scaffold to support replacement of the valve operating cylinder began on August 25, 2006. Within approximately one hour of discovery of the condition, the scaffold was modified to remove the interference thereby restoring the valve to an operable status. The unit operated in Mode 1 at approximately 100% power during the period the interference was in place.

Technical Specification (TS) 3.7.1.5 requires each MSIV be OPERABLE in MODES 1, 2 and 3. In Modes 1, 2 and 3, with one or more MSIVs inoperable, subsequent operation may continue provided the inoperable valve is restored to OPERABLE status or the isolation valve is closed within 4 hours, otherwise the unit must be taken to Mode 2 within the next 6 hours.

Since the scaffolding interference was in place for approximately 44 days, the maximum allowed TS outage time of 10 hours was exceeded, therefore this event is being reported pursuant to 50.73(a)(2)(i)(B), as an operation or condition prohibited by Technical Specifications.

2. Cause

The root cause investigation for this event determined that supplementary instructions provided for the construction of scaffolding in the vicinity of the MSIV lacked sufficient specific information to ensure MSIV operability was not impacted.

3. Assessment of Safety Consequences

The safety consequences associated with this event were low.

The safety function of the MSIVs upon receipt of a main steam isolation signal is to prevent blow-down of the SGs during a steam line break (SLB) outside of containment downstream of the MSIVs. For the steam generator tube rupture (SGTR), the affected SG MSIV is manually closed to isolate the SG, thereby terminating the radioactivity release.

Dominion has determined that under full flow conditions within the main steam system, the load on the disc would be sufficient to close the MSIV despite the scaffolding interference. However, for a small SLB (i.e., for break sizes less than approximately 6 inch equivalent diameter) or a SGTR, the pressure drop across the open MSIV would not be sufficient to close the MSIV.

Dominion has evaluated the radiological consequences of a SGTR using an initial condition corresponding to the limiting reactor coolant system (RCS) activity at the time the scaffolding was installed. Using this initial activity, a postulated event initiated iodine spike was assumed and allowed to persist for 8 hours. The evaluation determined that the affected SG release could continue for 18 hours beyond the current FSAR Chapter 14 affected SG isolation time without doses to the exclusion area boundary (EAB), low population zone (LPZ), and MP2 Control Room exceeding the limits specified in Regulatory Guide 1.183 and 10 CFR 50.67.

The radiological and thermal-hydraulic consequences of small steam line breaks downstream of the MSIV are bounded by the steam line break results presented in FSAR Section 14.1.5. The consequences of small breaks

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

downstream of the MSIV in the enclosure building would be equivalent to that of a break upstream of the MSIV. For small steam line breaks in the turbine building, the equipment required to isolate auxiliary feed water to the affected SG and to maintain the RCS decay heat removal and vital auxiliaries safety functions would continue to function. In addition, for small steam line breaks in the turbine building, and in the event of a SGTR, the area around the MSIV would remain accessible to the operators and the scaffolding interference could be removed to close the MSIV and isolate the break.

In summary, for full flow conditions within the main steam system, the load on the MSIV disc would be sufficient to close the MSIV despite the scaffolding interference. The radiological consequence of a SGTR with the MSIV open was assessed. Using the RCS activity at the time the scaffolding was installed, it was determined that even after 18 hours with the SG not isolated, the affected release would not exceed the dose limits to the EAB, LPZ, and MP2 Control Room specified in Regulatory Guide 1.183 and 10 CFR 50.67. It was also concluded that the MSIV would remain accessible to the operators and the scaffolding interference could be removed to allow closure of the MSIV. Within approximately one hour of discovery of the condition, the scaffold was modified to remove the interference. Based on the above, the safety function of the MSIV was never lost.

4. Corrective Action

Upon discovery, the scaffolding was modified to remove the interference. The scaffold evaluation process will be modified to ensure specific information is provided to maintain operability of safety related and other critical safety related systems, structures or components (SSCs), potentially impacted by the proposed scaffold. As a compensatory measure, for scaffolding built near safety related SSCs, a pre-construction walkdown by Operations with the Scaffold Lead will be required. Pre-and post construction walkdowns will be conducted by Engineering and Operations for all scaffolding that has the potential to impact safety related SSCs. These walkdowns will continue until the revised process is in place. Additional corrective actions are being taken 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].