

Docket No. 50-336  
B17914

**Attachment 2**

**Millstone Nuclear Power Station, Unit No. 2**

**LER 99-014-00**

**November 1999**

**LICENSEE EVENT REPORT (LER)**

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

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503. If 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>FACILITY NAME (1)</b> Millstone Nuclear Power Station Unit 2	<b>DOCKET NUMBER (2)</b> 05000336	<b>PAGE (3)</b> 1 OF 4
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**TITLE (4)**  
Failure to Enter The Limiting Condition for Operation of Containment Isolation Valves Technical Specification

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
10	21	99	99	014	00	11	22	99	FACILITY NAME	DOCKET NUMBER
<b>OPERATING MODE (9)</b>		1	<b>THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more) (11)</b>							
<b>POWER LEVEL (10)</b>		100	20.2201(b)		20.2203(a)(2)(v)			<input checked="" type="checkbox"/>	50.73(a)(2)(i)	50.73(a)(2)(viii)
			20.2203(a)(1)		20.2203(a)(3)(i)				50.73(a)(2)(ii)	50.73(a)(2)(x)
			20.2203(a)(2)(i)		20.2203(a)(3)(iii)				50.73(a)(2)(iii)	73.71
			20.2203(a)(2)(ii)		20.2203(a)(4)				50.73(a)(2)(iv)	OTHER
			20.2203(a)(2)(iii)		50.36(c)(1)				50.73(a)(2)(v)	Specify in Abstract below per NRC Form 366A
			20.2203(a)(2)(iv)		50.36(c)(2)				50.73(a)(2)(vii)	

**LICENSEE CONTACT FOR THIS LER (12)**

<b>NAME</b> R. Joshi, MP2 Acting Regulatory Compliance Supervisor	<b>TELEPHONE NUMBER (Include Area Code)</b> (860) 440-2080
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**COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)**

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

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

**ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)**

On October 21, 1999 at 1845, it was discovered that plant operators failed to enter the Limiting Condition for Operation (LCO) of Containment Isolation Valves (CIV) Technical Specification (TS) while performing monthly surveillance testing on a CIV (valve 2-SI-628). This valve supports the Low Pressure Safety Injection and High Pressure Safety Injection and the Safety Injection test lines. The forty-eight hour Technical Specification Action Statement for ECCS SUBSYSTEMS - T<sub>avg</sub> ≥ 300° F was previously invoked, at 0052, when the valve failed the TS Surveillance stroke test.

The cause of this event was human error. Plant operators failed to recognize 2-SI-628 as a CIV hence failed to enter the LCO of CIV Technical Specification while performing the monthly surveillance testing on CIV 2-SI-628.

As a result of this event, applicable Operations department personnel are being briefed on this event.

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

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		99	- 014 -	00	

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

I. Description of Event

On October 21, 1999 at 1845, it was discovered that plant operators failed to enter the Limiting Condition for Operation (LCO) of Containment Isolation Valves (CIV) [ISV] Technical Specification (TS) while performing monthly surveillance testing on a CIV (valve 2-SI-628). This valve supports the Low Pressure Safety Injection (LPSI) and High Pressure Safety Injection (HPSI) [BQ] and the Safety Injection (SI) test lines. The forty-eight hour Technical Specification Action Statement (TSAS) for ECCS SUBSYSTEMS -  $T_{avg} \geq 300^\circ \text{F}$  was previously invoked, at 0052, when the valve failed the TS Surveillance stroke test.

At the time of this event, the plant was in Mode 1 at approximately one hundred percent power. The plant operators were performing a surveillance procedure to verify that valve 2-SI-628 will complete one full cycle of travel in accordance with TS Surveillance Requirements for ECCS SUBSYSTEMS -  $T_{avg} \geq 300^\circ \text{F}$  (4.5.2.a.6).

The following is the sequence of events:

Prior to October 21, 1999:

1. Early 1970's: The original plant design basis considered valve 2-SI-628 to be a CIV.
2. Early - mid 1970's: It was determined that valves 2-SI-217, 227, 237 & 247 did not meet containment isolation valve requirements for missile protection. Other valves were added as CIVs (2-SI-706A,B,C,D) to maintain an inner isolation valve for penetrations six, seven, eight, and nine. Valves 2-SI-618, 628, 638 & 648 should have been removed from the FSAR for penetrations seven, nine, eight and six respectively since they were no longer considered as CIVs, however they were maintained in the CIV list.
3. Mid 1975: Millstone Unit No. 2 Operating License was issued.
4. Mid 1975 to 1997: The original TS 3.6.3.1b table of CIVs did not list valve 2-SI-628 as a CIV.
5. Early 1997 - The CIV table was relocated from the Technical Specifications to the Technical Requirements Manual (TRM). The CIV valve list was expanded by adding other valves that were considered part of the containment boundary. Based on guidance from Generic Letter 91-08, four valves (2-SI-618, 628, 638 & 648) were added to this list to capture the valves identified in the FSAR.

On October 21, 1999:

1. At 0052, valve 2-SI-628 failed the surveillance stroke test while testing was being performed in accordance with TS Surveillance Requirements for ECCS Subsystems (4.5.2.a.6). The valve had opened (after being stroked open) but the indicating lights did not show that.
2. At 0052, the forty-eight hour action statement for ECCS SUBSYSTEMS -  $T_{avg} \geq 300^\circ \text{F}$  was entered after the valve failed the TS surveillance testing (4.5.2.a.6).
3. At 1819, an Operability Determination (OD), Basis for Initial Reasonable Expectation of Continued Operability, was approved. This OD determined that the valve did stroke as designed but full travel could not be verified due to indication problems. The recommendation was to red tag the valve closed and remove the circuit fuses. Once the valve was disabled in the closed position, the surveillance (4.5.2.a.6) was not required. This constituted the basis for exiting the action statement.

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

4. At 1845 the valve was tagged out. TSAS 3.5.2c was exited. At this time Operations recognized that the four hour action statement for CIV Technical Specification was missed and the applicable action statement (TS 3.6.3.1b) was entered. Although the tag out met the requirement of the CIV action statement, the action was not taken within the four hours required by TS 3.6.3.1b, Containment Isolation. The four hour CIV action statement was missed by approximately fifteen hours.

This event is being reported in accordance with 10 CFR 50.73(a)(2)(i)(B), any operation or condition prohibited by the plant's Technical Specifications.

II. Cause of Event

The cause of this event was human error. Plant operators failed to recognize 2-SI-628 as a CIV hence failed to enter the LCO of CIV Technical Specification while performing the monthly surveillance testing on CIV 2-SI-628.

III. Analysis of Event

Valve 2-SI-628 supports the LPSI and the HPSI and the SI test lines. Valve 2-SI-628 is normally closed, and receives a Safety Injection Actuation Signal (SIAS) to close. Penetration No. nine is one of four main process lines connecting the ECCS and the Reactor Coolant System (RCS) [AB]. Another valve (check valve 2-SI-706B) provides containment isolation inside containment for penetration No. nine. Containment isolation is maintained by the normally closed check valve (2-SI-706B). However, since the LPSI system is initiated at the onset of the design bases accident, check valve 2-SI-706B will allow the LPSI penetration to be open under accident condition to allow the initiation of ECCS. Therefore, valve 2-SI-628 had no impact on the isolation of penetration No. nine since the valve is not required for containment isolation of this penetration.

The SI test line, penetration No. eleven, is maintained isolated by a manual isolation valve (2-SI-463) which is located outside containment and is normally closed and locked closed. As identified in the FSAR, this penetration satisfies 10CFR50 Appendix A General Design Criterion 57, requiring one containment isolation valve (2-SI-463) for a closed system. This CIV is also in the Appendix J leak rate test program and is on an extended test frequency due to its leakage rate test performance. Therefore, the position of valve 2-SI-628 had no impact on the isolation of penetration No. eleven.

Failure to enter the LCO of CIV Technical Specification while performing monthly surveillance testing on valve 2-SI-628, which required the valve deactivation in the secured closed position within four hours, was not significant since the valve was in its secured closed position.

The position of valve 2-SI-628 had no impact on the isolation of penetration No. nine, neither did it have an impact on the isolation of penetration No. eleven. Additionally, there was no safety significance for the failure to enter the LCO of CIV Technical Specification. Therefore, this event was not safety significant.

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

**IV. Corrective Action**

As a result of this event, applicable Operations department personnel are being briefed on this event. This action will be completed by December 14, 1999.

**V. Additional Information**

**Similar Events**

**LER 96-005:** This LER identified an event in which the applicable Technical Specification Action Statement was not entered. A plant equipment operator was improperly utilized to replace the automatic backwash function of the service water strainer backwash system. The backwash system is a support system necessary to maintain the operability of the service water system (SWS). Hence, the use of a dedicated operator to replace the automatic function could only be implemented through the use of an approved procedure; otherwise the applicable Technical Specification Action Statement needs to be entered. The cause of the event was a programmatic failure to recognize that the automatic strainer backwash function is a support system necessary to maintain the operability of the SWS and the subsequent failure to utilize a dedicated operator in accordance with an approved procedure. The corrective action revised the appropriate procedures to recognize and reinforce that the automatic backwash function is a support system necessary for SWS operability.

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