

**LICENSEE EVENT REPORT (LER)**

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), 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.

FACILITY NAME (1)  
Dresden Nuclear Power Station, Unit 2

DOCKET NUMBER (2)  
05000237

PAGE (3)  
1 OF 5

TITLE (4)  
Main Steam Safety Valve 2-0203-4G As Found Lift Setpoint Outside Tech Spec Limit Due to Setpoint Drift

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
02	28	96	96	-- 004 --	00	03	22	96	None	
									FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
POWER LEVEL (10)	000	20.2201(b)		20.2203(a)(3)(i)		50.73(a)(2)(iii)		73.71(b)	
		20.2203(a)(1)		20.2203(a)(3)(ii)		50.73(a)(2)(iv)		73.71(c)	
		20.2203(a)(2)(i)		20.2203(a)(4)		50.73(a)(2)(v)		OTHER	
		20.2203(a)(2)(ii)		50.36(c)(1)		50.73(a)(2)(vii)		(Specify in Abstract below and in Text, NRC Form 366A)	
		20.2203(a)(2)(iii)		50.36(c)(2)		50.73(a)(2)(viii)(A)			
		20.2203(a)(2)(iv)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)(B)			
		20.2203(a)(2)(v)		50.73(a)(2)(ii)		50.73(a)(2)(x)			

LICENSEE CONTACT FOR THIS LER (12)		
NAME	TELEPHONE NUMBER (Include Area Code)	
Ralph M. Fenili, Operations Staff Ext.:2917	(815) 942-2920	

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
X	SB	RV	C568	Y						

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)		
X	YES (If yes, complete EXPECTED SUBMISSION DATE).	NO		MONTH	DAY	YEAR
				09	05	96

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

On October 5, 1995 at 1330 with Unit 2 in the Refuel mode with all fuel removed, during the performance of Dresden Maintenance Procedure (DMP) 0200-03, "Main Steam Safety Valve Pre-maintenance Test", Main Steam (SB) Safety Valve 2-0203-4G (Serial Number BK 7160) test opened at a conservative pressure in excess of the Technical Specification 4.6.E. This failure was attributed to setpoint drift. Valve disassembly and refurbishment did not reveal any mechanical reason for the out of tolerance setpoint lift pressure. Corrective actions included valve disassembly, overhaul, setpoint adjustment and retest prior to any reinstallation. The safety significance of this event is minimal based on an evaluation which shows that with the valve setpoint in the "as found" condition, the reactor pressure safety limit would not have been exceeded during any design basis event.

This event is being submitted beyond the required 30 day due date as a result of inadequate performance by Operators in the proper reportability screening of the event, and a failure of previous corrective actions to adequately institute valve testing procedural controls.

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TEXT CONTINUATION

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Dresden Nuclear Power Station, Unit 2	05000237	96	-- 004 --	00	2 OF 5

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

**EVENT IDENTIFICATION:**

Main Steam Safety Valve 2-0203-4G As Found Lift Setpoint Outside Tech Spec Limit due to setpoint drift

**A. PLANT CONDITIONS PRIOR TO EVENT:**

Unit: 2                                      Event Date: October 5, 1995                                      Event Time: 1330  
 Reactor Mode: N                                      Mode Name: Refuel                                      Power Level: 0%  
 Reactor Coolant System Pressure: 0 psig

**B. DESCRIPTION OF EVENT:**

This report is submitted in accordance with 10CFR50.73(a)(2)(i)(b), which requires the reporting of any operation or condition prohibited by the plant's Technical Specifications.

On October 5, 1995 at 1330 with Unit 2 in the Refuel mode with all fuel removed, during the performance of Dresden Maintenance Procedure (DMP) 0200-03, Unit 2/3 Six Inch Safety Valve Pre-Maintenance Testing, Main Steam (SB) Safety Valve 2-0203-4G (Serial Number BK 7160) opened at a pressure of 1225 psig. This lift setpoint is in excess of the Technical Specification 4.6.E which requires the safety valve setpoint of 1240 psig +/- 1% (1228 to 1252 psig). This failure is attributed to setpoint drift. No other out of tolerance conditions were identified for the other three safety valves.

This report is being submitted beyond the required 30 day reporting requirement as a result of an inadequate review and classification by operations during the initial screening of the event. Station operations failed to recognize, the reportability requirements of the event. The Shift Manager (Licensed SRO) did not recognize that the lift within the Technical Specification plus or minus 1 percent of setpoint was not met.

During the performance of the safety valve testing under DMP 0200-03, Maintenance personnel failed to adhere to the valve testing procedure. Step F.m.4 of DMP 0200-03 requires the user to "initiate a LER". This step was not understood by the mechanic as he believed it was a function of management to perform. He should have stopped and questioned supervision of what his role was in completing the step. Maintenance wrote a Performance Improvement Form (PIF) (step F.m.2 of DMP 0200-03) at the request of Engineering, informing shift management of the problem and continued the surveillance to completion without completing step F.m.4. The Station corrective action procedure focuses reportability determinations on shift operating personnel at the time of the event and therefore the maintenance mechanic could not have performed step F.m.4. The Maintenance mechanic and his Supervisor's failure to question their ability to perform the LER initiation was a personnel error which did not cause the event yet removed a procedural barrier intended to create the LER. Operations performed the reportability screening of the PIF provided by Maintenance and failed to identify the LER requirement.

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Dresden Nuclear Power Station, Unit 2	05000237	96	-- 004 --	00	3 OF 5

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

Investigation has identified that there is at least one additional historical instance where the Technical Specification tolerance was exceeded during testing and the event was not recognized as reportable pursuant to 10CFR 50.73. This review is ongoing and the results will be reported to the Commission using a Supplemental to this report.

C. CAUSE OF EVENT:

- C.1 Main Steam (SB) Safety Valve 2-0203-4G As Found Lift Setpoint Outside Tech Spec Limit

The cause for the conservative opening setpoint of the Safety valve is attributed to setpoint drift. The valve was successfully rebuilt through DMP-0200, "Reactor Main Steam Safety Valve Repair and Post Maintenance Testing" and station work request number 95006419703. This activity did not identify any mechanical reason for the valve's failure to lift at the required setpoint.

- C.2 Failure to submit LER within 30 day requirement.

The cause for the failure to report the event is primarily attributed to inadequate performance by Operations in the proper reportability screening of the event. The Shift Manager (Licensed SRO) did not recognize that the lift within the Technical Specification plus or minus 1 percent of setpoint was not met. Operations received the documentation regarding the safety valve failure to meet the Technical Specification tolerance for acceptance, as delineated in the DMP and the Technical Specifications. The Shift Manager held a lengthy discussion with the individual reporting the component failure, but was assured that reportability was not an issue since the pressure did not exceed the 3% +/- ASME standard. The Shift Manager did not display a questioning attitude and failed to reference the appropriate documents for reportability. In addition, a second review required by the station corrective action process failed to catch the reportability requirement. This second check failed to recognize the components' Equipment Piece Number as the Technical Specification Safety valve.

Inadequate corrective actions from a previous LER 90-021/Docket 50-237 contributed to the incorrect decision by the Shift Manager. This LER included a revision to DMP 200-03 which was designed to clarify the relationship between lift setpoint results and Technical Specification violations. LER 90-21/Docket 50-237 stated:

"DMP 200-03 will be revised to clarify the step requiring the initiation of a LER if the setpoints exceed the Technical Specification limits of +/- 1% of the design setpoint. The step containing the ASME section XI expansion requirements will also be clarified. These two clarifications will ensure proper action is taken when a safety valve setpoint is outside the Technical Specification limits."

The revision failed to clarify reportability guidance as required by the corrective action. As a result there was a misunderstanding of actions to be taken when the Technical Specification limits of +/- 1% of the design setpoint was exceeded.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Dresden Nuclear Power Station, Unit 2	05000237	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	4 OF 5
		96	-- 004 --	00	

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D. SAFETY ANALYSIS:

The safety valves are designed to relieve steam from the reactor vessel. The four Electromatic Relief valves and the Target Rock Safety/Relief valve are designed to automatically open prior to reactor pressure reaching the safety valve opening setpoints, relieving steam from the reactor vessel to the Torus. This action, for most events, precludes the opening of the safety relief valves.

The most limiting over-pressurization transient analysis is a Main Steam (SB) Line Isolation Valve (MSIV) closure at full power, in conjunction with a postulated failure of the MSIV 10% closure scram. With the setpoint for the safety valve drifted in the conservative direction, valve opening would occur earlier in the transient and reactor pressure would not exceed the current analyzed maximum calculated pressure. For this reason, the significance of this event is minimal.

E. CORRECTIVE ACTIONS:

- E.1 The valve has been disassembled, and overhauled.
- E.2 The Maintenance Mechanic and his Supervisor now understand their procedural adherence responsibilities, including the need to stop when the procedure can not be completed as written, and to bring any discrepancy to Supervision for resolution.
- E.3 The Operations individuals now understand their responsibilities toward proper usage of the Reportability Manual and attentiveness to screening for significant issues.
- E.4 DMP 200-03 will be revised to clearly identify guidance to the user when the Technical Specification limits of +/- 1% of the design setpoint was exceeded during valve setpoint testing (2371809600401).
- E.5 A review of safety valve setpoint testing results from 1988 will be performed to identify if additional safety valve out of tolerance events have occurred and were not reported through the LER system. (2371809600402)
- E.6 Operations will notify Quad Cities Nuclear Station, whose safety valves are tested at Dresden, making them aware of the missed reportability issue, for potential action at their site. (2371809600403)
- E.7 A supplemental report will be provided to document the results of corrective action 2371809600402. (2371809600400S1)

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Dresden Nuclear Power Station, Unit 2	05000237	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	5 OF 5
		96	-- 004 --	00	

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F. PREVIOUS OCCURRENCES:

LER 87-030/Docket 50-249

Main Steam Safety Valve 3-203-4H Setpoints Found Outside Technical Specification Limits Due to Setpoint Drift

The cause of that event was attributed to mishandling of the valves during transport from the drywell to the test boiler. As corrective action, the procedure for overhauling safety valves was substantially improved.

LER 88-10/Docket 50-249

Main Steam Safety Valve [SB] Setpoints Found Outside Technical Specification Limits Due to Setpoint Drift.

Main Steam (SB) (SB) Safety Valve 3-203-4H found outside technical specification limits while performing setpoint testing. Corrective actions were to significantly improve the procedure for overhauling the safety valves and to refurbish the valve.

LER 90-21/Docket 50-237

Main Steam Safety Valves 2-203-4E thru 4H setpoints found outside technical specification limits due to setpoint drift.

Main Steam (SB) Safety Valves 2-203-4E thru 4H setpoints found outside technical specification limits while performing setpoint testing. Corrective actions were to clarify the testing procedure and to refurbish the valve.

G. COMPONENT FAILURE DATA:

Manufacturer

Nomenclature

Model Number

Consolidated Valve Corp/Dresser

Main Steam Safety Valve

3777Q