

LICENSEE EVENT REPORT (LER)

Updated report. Previous report date 03/19/84

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Dresden Nuclear Power Station	0 5 0 0 0 2 3 7	1 OF 0 2

TITLE (4)
Failure of MO2-1401-25A to Operate

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 NAMES		DOCKET NUMBER(S)														
0	2	2	1	8	4	8	4	0	0	3	0	1	0	9	1	9	8	4	N/A	0	5	0	0	0	0
										N/A	0	5	0	0	0	0	0								

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)									
POWER LEVEL (10)	0	9	8	20.402(b)		20.406(c)		80.73(a)(2)(iv)		73.71(b)	
				20.406(a)(1)(i)		80.36(a)(1)		80.73(a)(2)(v)		73.71(c)	
				20.406(a)(1)(ii)		80.36(a)(2)		80.73(a)(2)(vi)		OTHER (Specify in Abstract below and in Text, NRC Form 366A)	
				20.406(a)(1)(iii)		X 80.73(a)(2)(i)		80.73(a)(2)(vii)(A)			
				20.406(a)(1)(iv)		80.73(a)(2)(ii)		80.73(a)(2)(vii)(B)			
				20.406(a)(1)(v)		80.73(a)(2)(iii)		80.73(a)(2)(ix)			

LICENSEE CONTACT FOR THIS LER (12)									
NAME									
Lawrence Coyle (X-526)									
TELEPHONE NUMBER									
8 1 5 9 4 2 - 1 2 9 2 1 0									

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																			
CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPDs	CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPDs										
X	B	M	I	I	V	L	2	1	0	0	Y								

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

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

During normal operation, Core Spray Valve MO2-1402-25A failed to operate from the control room. Safety significance was minimal since the redundant Core Spray "B" loop was operable to provide core cooling.

Cause of the event was a mechanical failure of the gear housing of the valve, probably caused by mechanical overload during operation. A contributing factor to this overload is the valve control circuitry, which can allow the valve to repeatedly close after already being closed. This creates a hammering effect on the valve and operator. Work requests (WR 33853 and 34302) have been written to modify the existing circuitry to prevent this effect. The modification for Unit 2 (M12-2-84-9) will be completed during the fall 1984 refueling outage. The modification for Unit 3 (M12-3-84-9) will be completed during the fall 1985 outage.

Finally as interim corrective action until the valve control circuitry is modified, Caution Cards were put on the 1402-25A and B valves for both Units 2 and 3. These Caution Cards will warn the operator not to hold onto the control switch when closing these valves in order to limit any hammering effect.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1) Dresden Nuclear Power Station	DOCKET NUMBER (2) 0 5 0 0 0 2 3 7	LER NUMBER (5)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 4	— 0 0 3	—	Q 1	0 2	OF 0 2

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

During normal operation, while DOS 1400-2, Core Spray Valve Operability Test was in progress, Core Spray Valve M02-1402-25A failed to operate from the control room. A GSEP unusual event was declared due to the Unit 2/3 diesel generator out of service for an inspection. A normal unit shutdown per procedure DGP 2-1 was initiated. Safety significance was minimal since the redundant Core Spray "B" loop was operable and capable of providing core cooling.

Investigation of the valve breaker revealed the thermals tripped. Investigation of the valve itself revealed a cracked bearing race and gear housing. Sections of these materials were sent to the Operational Analysis Department for metallurgical analysis. Results show the valve gear housing failed due to mechanical overload. The probable cause for this overload is the valve control circuitry which can allow the valve to repeatedly attempt to close after already being closed. This creates a hammering effect on the valve and operator. Modifications have been initiated to modify the valve control circuitry to prevent this effect. The modification for Unit 2 (M12-2-84-9) will be performed during the fall 1984 refueling outage. The modification for Unit 3 (M12-3-84-9) will be performed during the fall 1985 refueling outage.

Finally as interim corrective action until the valve control circuitry is modified, Caution Cards were put on the 1402-25A and B valves for both Units 2 and 3. These Caution Cards will warn the operator not to hold onto the control switch when closing these valves in order to limit any hammering effect.



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Telephone 815/942-2920

September 25, 1984

DJS Ltr #84-960

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Update to Licensee Event Report #84-003-1, Docket #050-237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73 (a)(2)(i), to include cause of failure and future corrective actions.

D.J. Scott
Station Superintendent
Dresden Nuclear Power Station

DJS/kjl

Enclosure

cc: J.G. Keppler, Regional Administrator, Region III
File/NRC
File/Numerical

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