

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Dresden Nuclear Power Station, Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 2 3 7	PAGE (3) 1 OF 0 2
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TITLE (4)  
Unit 2 Reactor Scram Caused by the RPS System

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)		
03	09	85	85	012	00	04	04	85	N/A			0 5 0 0 0		
									N/A			0 5 0 0 0		

OPERATING MODE (9) N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)											
POWER LEVEL (10) 0 0 0	20.402(b)			20.405(c)			X 50.73(a)(2)(iv)			73.71(b)		
	20.405(a)(1)(i)			50.38(c)(1)			50.73(a)(2)(v)			73.71(c)		
	20.405(a)(1)(ii)			50.38(c)(2)			50.73(a)(2)(vii)			OTHER (Specify in Abstract below and in Text, NRC Form 366A)		
	20.405(a)(1)(iii)			50.73(a)(2)(i)			50.73(a)(2)(viii)(A)					
	20.405(a)(1)(iv)			50.73(a)(2)(ii)			50.73(a)(2)(viii)(B)					
20.405(a)(1)(v)			50.73(a)(2)(iii)			50.73(a)(2)(ix)						

LICENSEE CONTACT FOR THIS LER (12)

NAME Joseph Welch (X-549)	TELEPHONE NUMBER AREA CODE 8 1 5 9 4 2 - 2 9 2 0
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPPDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPPDS
D				N					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

During reactor refueling with the mode switch in shutdown while performing Dresden Operating Procedure DOP 7000-1, Reactor Protection System (MG Set) Operating procedure to realign power sources, a full scram occurred. Because the reactor was depressurized and the main steam isolation valves closed, bypass circuitry is needed to maintain RPS electrical continuity. However, all four bypass circuit relays will de-energize and continuity lost, unless relay contacts are blocked, when switching a safety channel to its normal feed from its reserve. The styrofoam block inserted to block closed the 590-112 relay contacts was misaligned. This allowed the contacts to open resulting in a full scram rather than a half scram as anticipated. The safety significance was minimal as all protective systems functioned as designed in response to this event.

As a result of previous scram problems all Dresden Technical Staff calibration procedures were revised to require jumper wires rather than blocks. However, operating procedures were not revised to reflect this change. The corrective action will require the use of wire jumpers and not blocks in any situation where a full scram could occur if the block fails. Appropriate operating procedures will be revised. The last previous occurrence was reported under LER #84-4 on Docket #050-249.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8   5	-   0   1   2	-   0   0	0   2	OF	0   2

TEXT (If more space is required, use additional NRC Form 365A's) (17)

During reactor refueling with the mode switch in shutdown, while performing Dresden Operating Procedure - DOP 7000-1, Reactor Protection System (MG Set) operating procedure, to shift power from the reserve supply to the normal supply, a full scram occurred. Because the reactor was depressurized and the main steam isolation valves closed, bypass circuitry is needed to maintain RPS electrical continuity. However, all four bypass circuit relays will de-energize and continuity lost, unless relay contacts are blocked, when switching a safety channel to its normal feed from its reserve. The scram was the result of a misaligned styrofoam block which was installed to block the 590-112 relays in the picked up position. This allowed the relay to open which resulted in the full reactor scram. The safety significance of the event was minimal as all safety systems functioned as designed in response to this event. The safety significance of this event is lessened with the unit at power because the loss of a single RPS bus would only cause a half scram and not a full scram. This is in accordance with the RPS logic.

As a result of previous similar scrams during refueling testing all Dresden Technical Staff relay calibration procedures were revised to require a physical jumper be placed on the contact rather than the use of the styrofoam block. Because this procedure was an operational procedure and not a calibration technical procedure it was overlooked and not changed following the last occurrence (LER #84-4 Docket #050-249). Corrective action will be to revise appropriate operating procedures to require physically jumpering relays and contacts rather than using blocks in all cases where an improperly placed block could result in a full reactor scram.

The last occurrence of this type was reported on LER #84-4 on Docket #050-249.



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April 4, 1985

DJS Ltr #85-362

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

Licensee Event Report #85-012-0, Docket #050237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73 (a)(2)(iv).

D.J. Scott  
Station Manager  
Dresden Nuclear Power Station

DJS/kjl

Enclosure

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

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