NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

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

TITLE (4)

APRM Channel 1 Inoperable During Gain Changes

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)
									N/A	0 5 0 0 0
0 5	0 5	8 5	8 5	0 2 4	0 0	0 6	0 3	8 5	N/A	0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
	N	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	0 1 0	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	X 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)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
Tim Wojtulewicz (X-529)	8 1 5 9 4 2 - 2 9 2 0

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	
A				N							

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)

With the reactor in the startup mode, average power range monitor (APRM) gains were adjusted at 2247 on 5/5/85 while APRM #1 was inoperable because the power test potentiometer was operating erratically from 0 to 12 percent power. Three APRM's exist per each reactor protection system (RPS) channel. This design permits one APRM per RPS channel to be bypassed during operation for maintenance or calibration. The power test potentiometer of the APRM test circuitry allows the insertion of variable test voltages for verification of rod block, APRM hi hi, A/B channel scram, and channel A/B neutron alarms. APRM gain adjustments also require the bypassing of the individual APRM channel while the adjustment is made. Table 3.1.1 of the Technical Specifications require two operable APRM's per RPS channel in the startup mode. If this condition cannot be met the affected RPS channel must be tripped. Without tripping RPS channel A, gains were adjusted on APRM channels 1 through 6 thereby creating two inoperable APRM's on RPS channel A. This event was caused by personnel error. RPS channel A should have been tripped before proceeding with the gain adjustment. The Technical Specification requirements for APRM(s) inoperative and the proper use of caution cards will be scheduled for review in the six week Operator training course. At 2256 on 5/5/85, the mode switch was placed in the run position making APRM channel 1 operable based on a previous surveillance in the run mode [APRM Rod Block and Scram Functional Test (DOS 500-3)] at 0030 on 5/2/85.

This event was of minimal safety significance since only one APRM high flux signal on each RPS channel is necessary to cause a reactor scram. The intermediate range monitors which were operable at the time can also scram the reactor with a more conservative design logic of one out of four trip signals twice.

This is the first occurrence of this nature at Dresden.

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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	0 5 0 0 0 2 3 7	8 5	— 0 2 4	— 0 0	0 2 OF 0 2

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

With the reactor in the startup mode, average power range monitor (APRM) gains were adjusted at 2247 on 5/5/85 while APRM #1 was inoperable because the power test potentiometer was operating erratically from 0 to 12 percent power. Three APRM's exist per each reactor protection system (RPS) channel. This design permits one APRM per RPS channel to be bypassed during operation for maintenance or calibration. The power test potentiometer of the APRM test circuitry allows the insertion of variable test voltages for verification of rod block, APRM hi hi, A/B channel scram, and channel A/B neutron alarms. APRM gain adjustments also require the bypassing of the individual APRM while the adjustment is made. Table 3.1.1 of the Technical Specifications require two operable APRM's per RPS channel in the startup mode. If this condition cannot be met the affected RPS channel must be tripped. Without tripping RPS channel A, gains were adjusted on APRM channels 1 through 6 thereby creating two inoperable APRM's on RPS channel A. This event was caused by personnel error; the Operator involved should have tripped RPS channel A before allowing the gain adjustment to proceed. The Technical Specification requirements for APRM(s) inoperative and the proper use of caution cards will be scheduled for review in the six week Operator training course. At 2256 on 5/5/85, the mode switch was placed in the run position making APRM channel 1 operable based on a previous surveillance in the run mode [APRM Rod Block and Scram Functional Test (DOS 500-3)] at 0030 on 5/2/85.

This event was of minimal safety significance since only one APRM high flux signal on each RPS channel is necessary to cause a reactor scram. The intermediate range monitors which were operable prior to placing the mode switch to run can also scram the reactor with a more conservative design logic, one out of four trip signals twice. This is the first occurrence of this nature at Dresden Station.

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June 3, 1985

DJS Ltr #85-593

U.S. Nuclear Regulatory Commission
Document Control Desk
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Licensee Event Report #85-024-0, Docket #050237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73 (a)(2)(i)(B).

D.J. Scott
Station Manager
Dresden Nuclear Power Station

DJS/kjl

Enclosure

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

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