

**LICENSEE EVENT REPORT (LER)**

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

TITLE (4) Unit 2 Source Range Monitor Nos. 21, 22 and 23 Exceeded the Technical Specification Rod Block Setting Due to Instrument 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 NAMES		DOCKET NUMBER(S)
04	16	87	87	013	00	05	12	87	N/A		05000
									N/A		05000

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

OPERATING MODE (9) N	20.402(b)	20.405(a)	80.73a(2)(iv)	73.71(b)
POWER LEVEL (10) 0 0 0	20.405(a)(1)(i)	80.38(a)(1)	80.73a(2)(v)	73.71(a)
	20.405(a)(1)(ii)	80.38(a)(2)	80.73a(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 388A)
	20.405(a)(1)(iii)	X 80.73a(2)(i)	80.73a(2)(vii)(A)	
	20.405(a)(1)(iv)	80.73a(2)(ii)	80.73a(2)(vii)(B)	
	20.405(a)(1)(v)	80.73a(2)(iii)	80.73a(2)(viii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME: Lawrence Bihlman, Technical Staff Engineer  
TELEPHONE NUMBER: 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
X	I G	J X	G O 8 0	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)  NO

EXPECTED SUBMISSION DATE (15)

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

On April 16, 1987, with the reactor in the refuel mode, while performing Dresden Instrument Surveillance (DIS) 700-3, Source Range Monitor (SRM) Rod Block Calibration Check, SRM Nos. 21, 22 and 23 exceeded the Technical Specification (T.S.) Table 3.2.3 setpoint limit. The cause of the event was determined to be instrument drift. Based on the fact that only one rod may be withdrawn from the core in the refuel mode due to refuel mode interlocks which are verified once per shift with control rod movements in progress, and that all rod movements are prohibited in the shutdown mode, by a shutdown interlock, this event was deemed to be of minimal safety significance. The rod block setpoints were adjusted within the appropriate limits and tested satisfactorily. The periodic SRM calibration check will continue to be performed as required. A previous similar event is recorded on Reportable Occurrence 83-1 on Docket #050249.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		0 1 3	-	0 0	0 2	OF	0 3

TEXT (if more space is required, use additional NRC Form 388A's) (17)

PLANT AND SYSTEM IDENTIFICATION:

General Electric Boiling Water Reactor - 2527 MWt rated core thermal power. Energy Industry Identification System (EIIS) codes are identified in the text as [XX].

EVENT IDENTIFICATION:

Source Range Monitor (SRM) Nos. 21, 22 and 23 exceeded the Technical Specification rod block setting due to instrument drift.

A. PLANT CONDITIONS PRIOR TO EVENT:

Event Date: April 16, 1987                      Event Time: 1800 hours  
Reactor Mode: N - Refuel                      Reactor Power: 0%

B. DESCRIPTION OF EVENT:

On April 16, 1987 at 1800 hours, with the Unit 2 reactor in the refuel mode during the performance of Dresden Instrument Surveillance (DIS) 700-3, Source Range Monitor (SRM) Rod Block Calibration Check, SRM [IG] Nos. 21, 22 and 23 exceeded the Technical Specification (T.S.) setpoint of 1.0 E 5 counts per second (cps). The rod block settings were found to be 1.001 E 5 cps, 1.184 E 5 cps, and 1.005 E 5 cps respectively. The as found settings were verified through repeatability. The rod block settings were then adjusted to 0.944 E 5 cps, 0.941 E 5 cps, and 0.950 E 5 cps respectively in accordance with DIS 700-3 and tested satisfactorily.

C. CAUSE OF EVENT:

This event is being reported to comply with Title 10 of the Code of Federal Regulations Part 50.73 (a)(2)(i)(B) which requires the reporting of any operation or condition prohibited by the plant's Technical Specifications. The Dresden T.S. Section 3.2 requires the four SRMs to be operable at all times, when required, with the exception that one may be bypassed for calibration or maintenance. The root cause of the three SRMs exceeding the T.S. rod block setpoint limit was determined to be instrument drift.

D. SAFETY SIGNIFICANCE:

DIS 700-3 was being performed as required per Dresden T.S. Section 4.2 Table 4.2.1 prior to the initial startup of the unit after a refueling outage. With the reactor in the shutdown mode a rod block prevents the withdrawal of any control rods. With the reactor in the refuel mode only one rod may be withdrawn from the core. This rod block is verified operable once per shift in the refuel mode if control rod movements are in progress. The shutdown margin analysis is performed such that withdrawal of any one rod would not result in criticality. Based on the fact that the reactor was in either the shutdown or refuel mode since February 2, 1987, when the SRMs were last calibrated, and that the SRMs are calibrated prior to startup, this event was judged to be of minimal safety significance.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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TEXT IF more space is required, use additional NRC Form 388A's (17)

E. CORRECTIVE ACTIONS:

The SRM rod block setpoints were adjusted within the Dresden Station limit of 1.0 E 5 plus or minus 0.02 E 5 cps. The periodic SRM calibration check will continue to be performed as required by T.S. Table 4.2.1.

F. PREVIOUS OCCURRENCE OF EVENT:

A previous occurrence of an SRM exceeding the rod block setpoint limit due to instrument drift was documented in Reportable Occurrence 83-1 on Docket #050249.

G. FAILURE DATA:

Manufacturer: General Electric

Nomenclature: Source Range Monitor

Model Number: 194X400G13



Commonwealth Edison  
Dresden Nuclear Power Station  
R.R. #1  
Morris, Illinois 60450  
Telephone 815/942-2920

May 12, 1987

EDE LTR #87-314

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

Licensee Event Report #87-013, Docket #050237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73 (a)(2)(i)(B).

E.D. Eenigenburg  
Station Manager  
Dresden Nuclear Power Station

EDE/kjl

Enclosure

cc: A. Bert Davis, Regional Administrator, Region III  
File/NRC  
File/Numerical

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