

LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Dresden Nuclear Power Station, Unit 2 Docket Number (2) 0 5 10 10 10 12 13 17 Page (3) 1 of 0 3

Title (4) Unexpected Reactor Scram During Bus Undervoltage Test Due to Spurious Intermediate Range Monitor Spike

Event Date (5) 0 2 0 4 8 9 8 9 LER Number (6) Sequential Number 0 0 4 Revision Number 0 0 Report Date (7) Month 0 Day 3 Year 0 6 8 9 Other Facilities Involved (8) Facility Name(s) N/A Docket Number(s) 0 5 10 10 10 1 1 1

OPERATING MODE (9) N THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)

20.402(b)	20.405(c)	X	50.73(a)(2)(iv)	73.71(b)
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)
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)(x)	

LICENSEE CONTACT FOR THIS LER (12) Name Raymond Magrow, Technical Staff Engineer Ext. 2491 TELEPHONE NUMBER AREA CODE 8 1 5 9 4 2 1 -2 19 12 10

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS	
X	I G	C B L 1	R 3 15 2	Y							

SUPPLEMENTAL REPORT EXPECTED (14) Expected Submission Date (15) X NO

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

On February 4, 1989 at 2249 hours, while in cold shutdown, the Unit 2 reactor scrambled during the performance of Dresden Operating Surveillance (DOS) 6600-6, Bus Undervoltage and ECCS Integrated Functional Tests for Unit 2/3 Diesel Generator. The bus undervoltage test was expected to generate a half scram on Reactor Protection System (RPS) Channel B. After RPS Channel B was tripped, an unexpected half scram on RPS Channel A, due to Intermediate Range Monitor (IRM) 13 spiking high-high, resulted in the unplanned Engineered Safety Feature (ESF) actuation.

The cause of the unexpected half scram was due to an induced signal picked up on IRM 13 as a result of Standby Gas Treatment (SBGT) System initiation (as expected) during the test and not as a result of neutron flux response. To prevent any further induced signals on IRM 13, the cable from the pre-amplifier to the detector was replaced with a new, triple shielded signal cable. A similar event had previously occurred as reported by LER 85-006 on Docket 050237. In that event an unexpected half scram on low water level and subsequent full scram took place as a result of a design deficiency in the RPS power supply. The design deficiency was subsequently corrected.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [XX]

E. CORRECTIVE ACTIONS:

Work Request 82002 was generated to investigate the cause of the IRM spike. The investigation revealed that the high-high spike on IRM 13 could be prevented whenever SBTG was initiated if the signal cable going from the pre-amplifier to the detector was interchanged with the cable from another IRM. Work Request 82227 was therefore generated to replace the IRM 13 cable going from the pre-amplifier to the detector with a new, triple shielded cable. Following the cable replacement, IRM 13 has exhibited satisfactory performance.

F. PREVIOUS EVENTS:

A similar event has been previously reported in:

LER Number/Docket Number Title

85-006/050237 Reactor Scram During Undervoltage Test.

In this event, during the performance of the bus undervoltage test, an unexpected half scram on reactor water low level was received resulting in a full scram. The cause was a design deficiency in the RPS power supply divisions to the trip units. The corrective action was to redesign the power supply.

G. COMPONENT FAILURE DATA:

<u>Manufacturer</u>	<u>Nomenclature</u>	<u>Model Number</u>	<u>Mfg. Part Number</u>
Rockbestos	Coaxial Cable	N/A	RSS6-116

A search of NPRDS revealed 18 events in which an IRM gave a false indication due to either a breakdown in the cable or the cable connectors.



Commonwealth Edison

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March 6, 1989

EDE LTR #89-180

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

Licensee Event Report #89-004-0, Docket #050237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73(a)(2)(iv).

A handwritten signature in cursive script, appearing to read 'E.D. Eenigenburg'.

E.D. Eenigenburg
Station Manager
Dresden Nuclear Power Station

EDE/ade

Enclosure

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

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