

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 4

Title (4) Inadvertent Engineered Safety Feature (ESF) Actuation Due to Procedural Deficiency

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	1	2	1	8	9	8	9	0	2	2	1	8	9	N/A	0 5 10 10 10 12 13 17
														N/A	0 5 10 10 10 12 13 17

OPERATING MODE (9) N

POWER LEVEL (10) 0 0 0

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

<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input checked="" type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)
<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)
<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> Other (Specify in Abstract below and in Text)
<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	
<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	
<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

Name: Rory L. Mosley, Technical Staff Engineer Ext. 2348

TELEPHONE NUMBER: AREA CODE 8 1 5 9 4 2 - 12 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	E   C	B   K   R	G   D   B   D	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)

At 0433 hours, on January 21, 1989, with Unit 2 shutdown for a refuel outage and a drywell ventilation performance test in progress, an unanticipated reactor scram and a Group II Primary Containment Isolation occurred due to the loss of both 2A and 2B Reactor Protection System (RPS) Motor Generator (MG) sets. This was caused by a time overcurrent trip of the Bus 29 main feed breaker from Bus 24-1. The cause of this unanticipated Engineered Safety Feature (ESF) actuation has been determined to be a result of an improper relay setting due to a procedural deficiency. The time overcurrent relay for the Bus 29 feed breaker had been tested on November 11, 1988 as part of routine refueling outage testing and was inadvertently left with an improper tap setting. The relay calibration procedure utilized did not include a step instructing the Operational Analysis Department (OAD) Engineer to verify the proper tap setting following the performance of the relay calibration and circuit trip test. Since the taps for the Bus 29 time overcurrent relay were not verified following calibration, the bus tripped when additional electrical loads on the bus were energized. A revision to the OAD Protective Relay Calibration procedure will be made to include the steps necessary to independently verify the "as left" relay settings following calibration and testing, and other similar relays which required OAD testing during the refuel outage will be inspected to verify proper tap settings. The safety significance of this event was minimal as the reactor was shut down at the time of the event with all control rods inserted. The tap setpoint discrepancy was conservative in that adequate overcurrent protection was not violated. All the protective trips functioned as expected for the existing configuration. This was a first occurrence of this type.

*IF 22  
11*

8902280008 890221  
PDR ADDCK 05000237  
S FIC



FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)						Page (3)							
		Year	///	Sequential Number	///	Revision Number									
Dresden Nuclear Power Station	0   5   0   0   0   2   3   7	8	9	-	0	0	1	-	0	0	0	3	OF	0	4

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

D. Safety Analysis of Event:

At the time of the event the reactor was in cold shutdown with all control rods [AA] fully inserted. The RPS was subsequently reset following the reenergization of Bus 28 and Bus 29, and the 2A and 2B RPS busses. Additionally during normal reactor power operation Bus 28 and Bus 29 are fed from their respective 4 KV busses. For these reasons and the short duration that Bus 28 and Bus 29 were deenergized, the safety significance of this event was considered minimal.

E. CORRECTIVE ACTIONS:

The Operational Analysis Department Protective Relay Calibration Procedure was reviewed. As a result of this event the procedure will be revised by OAD to include an independent verification of the "as left" relay settings following relay calibration (237-200-89-00901). Additionally, the current relay settings of those overcurrent relays with high current testing requirements which may have required relay tap changes during testing will be inspected to verify that the current tap settings are correct (237-200-89-00902). Electrical Maintenance performed the following actions under Work Request 81657 regarding the 2B RPS Bus normal feed breaker.

1. The thermal overload relays were tested and replaced.
2. A contactor contact assembly was replaced, and
3. The breaker was then operated satisfactorily.

F. PREVIOUS EVENTS:

This is the first reported occurrence involving a breaker tap setting discrepancy at Dresden Station.

G. COMPONENT FAILURE DATA:

The tap setting discrepancy is not reportable to the NPRDS data base as it did not involve a component failure. An industry-wide NPRDS data base search regarding the 2B RPS bus normal feed breaker indicated that approximately 31 events involving the overload relay were listed at other sites. The root causes included setpoint drift, sticking, loose screws, and coil failure. The Maintenance Staff is reviewing the previous maintenance records and evaluating a preventative maintenance program.

FACILITY NAME (1)

DOCKET NUMBER (2)

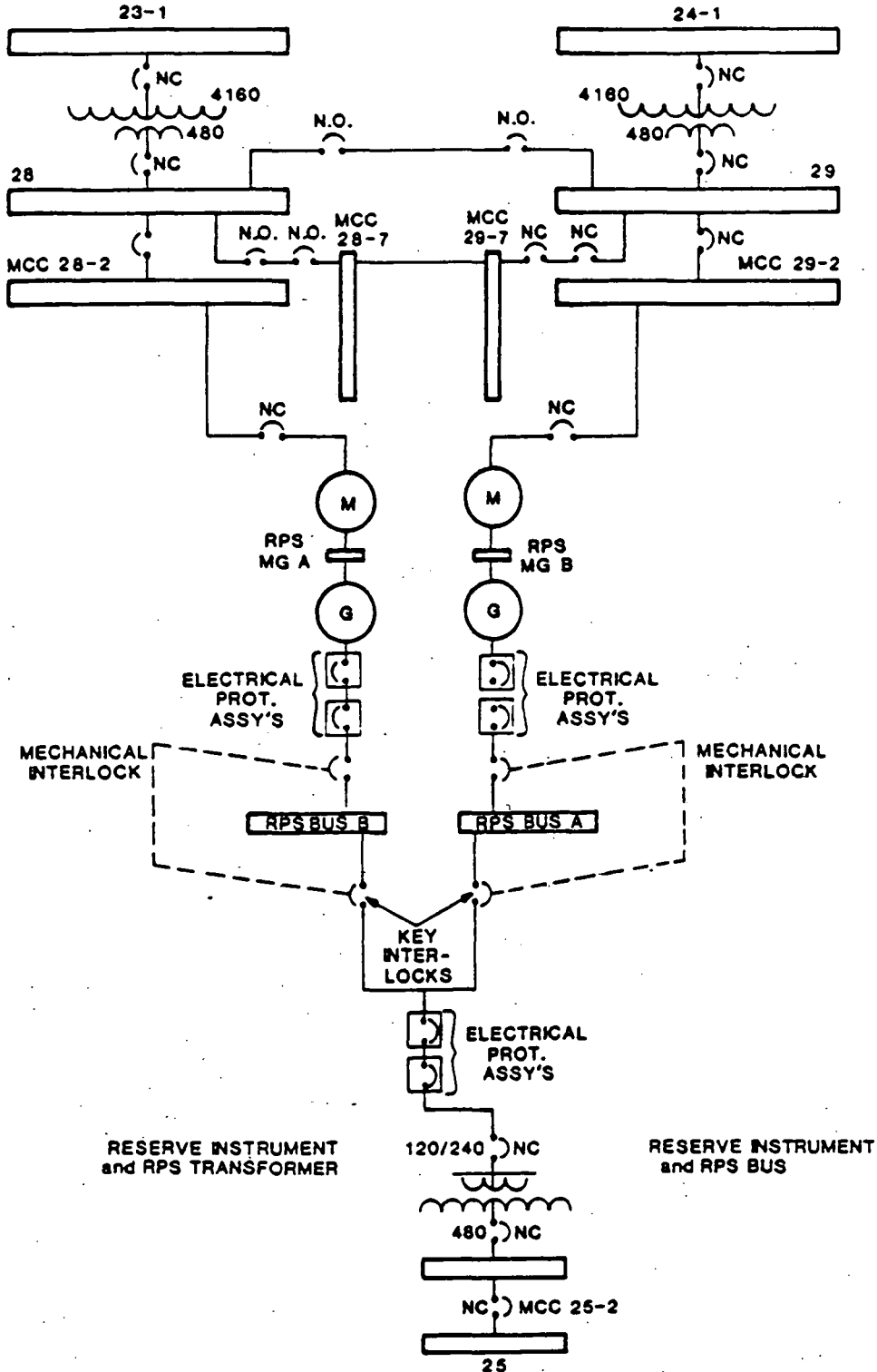
LER NUMBER (6)

Page (3)

Year	///	Sequential Number	///	Revision Number
------	-----	-------------------	-----	-----------------

Dresden Nuclear Power Station 0 | 5 | 0 | 0 | 0 | 2 | 3 | 7 8 | 9 | - | 0 | 0 | 1 | - | 0 | 0 0 | 4 | OF | 0 | 4

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



REACTOR PROTECTIVE SYSTEM DISTRIBUTION

Figure 1



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

February 21, 1989

EDE LTR #89-141

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

Licensee Event Report #89-001-0, Docket #050237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73(a)(2)(iv).

E.D. Eenigenburg  
Station Manager  
Dresden Nuclear Power Station

EDE/ade

Enclosure

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

0486k

*TE22*  
11