



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

DCD

October 22, 1991

EDE LTR #91-653

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

Licensee Event Report #83-62/01X-2, Docket #050-237 is being submitted as required by Technical Specification 6.6 and NUREG 1022. This revised report is submitted in order to provide an update concerning further investigation into this event, which concerned failure of a High Pressure Coolant Injection Motor Gear Unit signal converter operational amplifier.

*E. D. Eenigenburg*

E. D. Eenigenburg  
Station Manager  
Dresden Nuclear Power Station

EDE/dwh

Enclosure

cc: A. Bert Davis, Regional Administrator, Region III  
NRC Resident Inspector's Office  
File/NRC  
File/Numerical

1022

ZDVR/350

9111050219 840216  
PDR ADOCK 05000237  
S PDR

NOV 1 1991

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

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LICENSE CODE      LICENSE NUMBER      LICENSE TYPE      CAT

CON'T

REPORT SOURCE: L 6 0 5 0 0 0 2 3 7 7 0 8 1 9 8 3 8 0 2 1 6 8 4 9

DOCKET NUMBER: 60 81 66 69 74 75 80

EVENT DATE: 60 81 66 69 74 75 80

REPORT DATE: 60 81 66 69 74 75 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES	(10)
1. The aircraft was flying at a low altitude (approximately 100 feet) over a residential area.	
2. The aircraft was flying in a southerly direction.	
3. The aircraft was flying in a straight line.	
4. The aircraft was flying at a constant speed.	
5. The aircraft was flying at a constant altitude.	
6. The aircraft was flying at a constant heading.	
7. The aircraft was flying at a constant rate of turn.	
8. The aircraft was flying at a constant rate of climb.	
9. The aircraft was flying at a constant rate of descent.	
10. The aircraft was flying at a constant rate of acceleration.	

012 | During normal operation, the HPCI motor gear unit (MGU) was observed to  
013 | be moving between the high and low speed stops without Operator action.  
014 | This event is of minimal safety significance because HPCI could still  
015 | automatically initiate, and Operator action was taken to manually set  
016 | flow at the high speed stop. There was no effect on public health or  
017 | safety. A previous event of this type was reported on R.O. 82-27 on  
018 | Docket 50-237.

SYSTEM CODE 0 9		CAUSE CODE S F		CAUSE SUBCODE A		COMPONENT CODE I N S T R U				COMP. SUBCODE C		VALVE SUBCODE Z	
9 10		11 12		13 14		15 16				17 18		19 20	
EVENT YEAR 8 3		SEQUENCE REPORT NO. 0 6 2		OCCURRENCE CODE 0 1		REPORT TYPE X		REVISION NO. 2		ACTION TAKEN A		FUTURE ACTION X	
21 22		23 24		25 26		27 28		29 30		31 32		33 34	
EFFECT ON PLANT Z		SHUTDOWN METHOD Z		HOURS 0 0 0 0		ATTACHMENT SUBMITTED Y		NPRD-4 FORM SUB. Y		PRIME COMP. SUPPLIER N		COMPONENT MANUFACTURER T 1 0 9	
35 36		37 38		39 40		41 42		43 44		45 46		47 48	

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 1 0 The cause was failure of a MGU signal converter operational amplifier,  
1 1 1 which was replaced. Elevated ambient temperatures were originally  
1 1 2 suspected to be a contributing factor; however, further investigation  
1 1 3 concluded that this electronic circuit board component failure was random  
1 1 4 in nature.

FACILITY STATUS (28) 1 0 0 0 (29) N/A (30) OTHER STATUS

METHOD OF DISCOVERY (31) A Operator Observation (32) DISCOVERY DESCRIPTION

ACTIVITY CONTENT (33) Z (34) Z (35) N/A (36) LOCATION OF RELEASE

RELEASED OF RELEASE AMOUNT OF ACTIVITY

PERSONNEL EXPOSURES (37) 0 0 0 (38) Z (39) N/A

NUMBER TYPE DESCRIPTION

PERSONNEL INJURIES (40) 0 0 0 (41) N/A

NUMBER DESCRIPTION

LOSS OF OR DAMAGE TO FACILITY (42) Z (43) N/A

TYPE DESCRIPTION

PUBLICITY (44) N (45) N/A

ISSUED DESCRIPTION

NRC USE ONLY

NAME OF PREPARER Mark Churilla

PHONE: (815) 942-2920 X 2788

ATTACHMENT TO LICENSEE EVENT REPORT 83-62/01X-2  
COMMONWEALTH EDISON COMPANY (CWE)  
DRESDEN UNIT 2 (ILDRS 2)  
DOCKET # 050-237

During normal operation, an Operator observed the High Pressure Coolant Injection (HPCI) motor gear unit (MGU) moving between the high speed stop and low speed stop. The safety significance was considered minimal because HPCI could still initiate automatically, and the flow was manually controllable.

Elevated ambient temperatures were originally believed to be a contributing factor to this event. However, upon further investigation, it was concluded that this electronic circuit board component failure was random in nature. Failures of this type have not been a recurring adverse trend. Insulation improvements have been made to the HPCI piping in order to help limit heat input to the HPCI room and periodic thermography inspections have been instituted in order to monitor high/low pressure interfaces. Therefore, no further actions concerning the signal converter are required at this time.