

LICENSEE EVENT REPORT

CONTROL BLOCK:

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(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0	1	N	E	F	C	S	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3	4	1	1	1	1	4		5
7	8	LICENSEE CODE						14	LICENSE NUMBER												25	LICENSE TYPE					30	57 CAT 58	

CON'T

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

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 During normal steady state power operation, "B" channel reactor protective system (RPS)

0 3 variable overpower trip reset demand alarm actuated and would not reset. Shortly

0 4 after this alarm came in, the Hi power and thermal margin/low pressure trip units for

0 5 "B" channel RPS failed to the tripped condition. The three remaining RPS channels

0 6 remained operable throughout this event. See LER 78-026 Revision 0.

0 7

0 8

SYSTEM CODE I A (11)		CAUSE CODE E (12)		CAUSE SUBCODE G (13)		COMPONENT CODE I N S T R U (14)						COMP. SUBCODE P (15)		VALVE SUBCODE Z (16)													
EVENT YEAR 7 8 (17)		SEQUENTIAL REPORT NO. 0 2 6 (18)		OCCURRENCE CODE 0 3 (19)		REPORT TYPE L (20)		REVISION NO. 1 (21)		ACTION TAKEN C (22)		FUTURE ACTION Z (23)		EFFECT ON PLANT Z (24)		SHUTDOWN METHOD Z (25)		HOURS 0 0 0 0 (26)		ATTACHMENT SUBMITTED Y (27)		NPRD-4 FORM SUB. N (28)		PRIME COMP. SUPPLIER N (29)		COMPONENT MANUFACTURER D 1 4 2 (30)	

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 The Devar Model 19-601A, 18 volt power supply was the component which failed. It is
11 believed to have been an intermittent failure of this power supply which resulted in
12 the failure of two amplitude selector modules (see LER 78-026 Revision 0) as the power
13 supply output was noted to be as high as 27 volts while troubleshooting this failure.
14

3 9 FACILITY STATUS (28) 0 9 9 (29) NA (30) METHOD OF DISCOVERY (31) Operator Observation (32) DISCOVERY DESCRIPTION

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

ACTIVITY CONTENT RELEASED OF RELEASE (33) Z (34) NA (35) AMOUNT OF ACTIVITY (36) LOCATION OF RELEASE

1 6 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

PERSONNEL EXPOSURES									
NUMBER			TYPE	DESCRIPTION					
1	7	0	0	0	37	Z	38	NA	39

PERSONNEL INJURIES	
NUMBER	DESCRIPTION
00040	NA

LOSS OF OR DAMAGE TO FACILITY (43)
TYPE DESCRIPTION
1 9 Z (42) NA

10
PUBLICITY
ISSUED (44) DESCRIPTION (45)
N NA
58 59 60
NRC USE ONLY

NRC USE ONLY

7 LDDR

NAME OF PREPARER

J. Connolly/G. Peterson

PHONE _____

402-426-4011

7810 110117

PDR ADOCK 050-285 S 780925

LER 78-026 Revision 1
Omaha Public Power District
Fort Calhoun Station Unit No. 1
Docket No. 05000285

Attachment No. 1

Safety Analysis

The reactor protective system (RPS) is so designed that no single failure can prevent the safe shutdown of the plant if required.

During the time the "B" channel RPS for High power and thermal margin/low pressure were considered inoperable, the RPS was in a 2 out of 3 logic providing adequate protection of the reactor.

The apparent cause of this failure was a faulty 18 volt power supply. The output of this power supply was noted, at times during this event, to be as high as 27 volts (or approximately 10 volts over rating) which is ample overload to have caused the previous failure of two amplitude selector modules (rated at 18 volts). See LER 78-026 Revision 0. However, the higher than rated output voltage of this power supply was not seen during the amplitude selector module failures of August 21, 1978.

The RPS will continue to be checked by visual inspection and by surveillance testing in an effort to discover and correct future events of this type.

LER 78-026 Revision 1
Omaha Public Power District
Fort Calhoun Station Unit No. 1
Docket No. 05000285

Attachment No. 2

Failure Data

See LER 78-026 Revision 0. This is the first reportable event for an
18 volt Devar power supply.

11/1/78