

LICENSEE EVENT REPORT

CONTROL BLOCK:

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 (1)

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

1	N	E	F	C	S	1	2	0	0	-	0	0	0	0	-	0	0	3	4	1	1	1	1	4			5			
8	9	LICENSEE CODE					14	15	LICENSE NUMBER										25	26	LICENSE TYPE					30	57	CAT	58	

W'T

1 8 REPORT SOURCE 60 61 L 6 0 5 0 0 0 2 8 5 7 1 1 1 1 1 8 3 8 1 1 2 9 8 3 9 68 69 74 75 80 DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

2 While operating at approximately 100% power and during performance of annual surveil-

3 lance test ST-ESF-6, F.5, "Diesel Generator Inspection", diesel generator DG-1 failed

4 to field flash. Diesel generator DG-2 had been proven operable at the start of the

5 surveillance test, ST-ESF-6, F.5. The 161 KV and 345 KV supplies were available

6 throughout the incident.

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8 9

	SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE						COMP. SUBCODE		VALVE SUBCODE								
(9)	E	E	(11)	E	(12)	A	(13)	I	N	S	T	R	U	(14)	X	(15)	Z	(16)					
8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25						
(17)	EVENT YEAR			SEQUENTIAL REPORT NO.			OCCURRENCE CODE		REPORT TYPE			REVISION NO.											
LER/RO REPORT NUMBER	8	3	(21)	--	(22)	0	1	1	(23)	/	(24)	0	3	(25)	L	(26)	--	(27)	0	(28)			
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41			
ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS				ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.		PRIME COMP SUPPLIER		COMPONENT MANUFACTURER										
A	(18)	Z	(19)	Z	(20)	Z	(21)	0	0	0	0	(22)	Y	(23)	Y	(24)	A	(25)	Z	9	9	9	(26)
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

0 The failure of the field flashing circuit was investigated and repaired under Main-
1 tenance Order 22210. Additional alarm and amperage stability problems were resolved
2 under Maintenance Orders 22154 and 22157. The diesel was then satisfactorily tested
3 per ST-ESF-6, F.5 and declared operational on 11/12/83 (see Attachment No. 2).
4

5 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

FACILITY STATUS (5) E (28) % POWER (1) 0 (0) (29) OTHER STATUS (30) NA METHOD OF DISCOVERY (B) (31) DISCOVERY DESCRIPTION (32) Surveillance Testing

ACTIVITY CONTENT
RELEASED OF RELEASE AMOUNT OF ACTIVITY (35) LOCATION OF RELEASE (36)

6 Z 33 Z 34 NA NA

8 9 10 11 44 45 80

PERSONNEL EXPOSURES									
NUMBER			TYPE	DESCRIPTION					
7	0	0	0	37	Z	38	NA	39	
8	9	11	12	13					80

PERSONNEL INJURIES		DESCRIPTION	
NUMBER			
8	0 0 0	40	NA

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

8 9 10 99

000000 021129

PUBLICITY
 ISSUED DESCRIPTION (45)
 (0) (N) (44) NA
 8312210044 831127
 PDR ADOCK 05000285
 S PDR
 NRC USE ONLY
 68 69 80

NAME OF PREPARER

J. Foley

PHONE

402-426-4011

LER No. 83-011
Omaha Public Power District
Fort Calhoun Station Unit No. 1
Docket No. 05000285

ATTACHMENT NO. 1

Safety Analysis

The Fort Calhoun Station Unit No. 1 electrical distribution system is so designed that no single failure could prevent safe shutdown of the plant if required.

During the time when diesel generator DG-1 was inoperable, the redundant diesel generator DG-2 was operable and available, as were the 161 KV and 345 KV power supplies, and would have been sufficient to mitigate all consequences of an accident, if required to do so.

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ATTACHMENT NO. 2

Corrective Action

On 11/11/83 and during performance of annual surveillance test, ST-ESF-6, F.5, "Diesel Generator Inspection", diesel generator DGI was started in an attempt to verify operability following its annual overhaul inspection. The diesel generator DGI engine started and ran up to operating speed but the generator field failed to flash.

Maintenance Order 22210 was written to investigate and/or correct problems associated with the field flashing circuitry. Subsequently, it was noted that two field flashing circuit rectifying diodes and a relay socket associated with relay 103C, the speed sensing relay, were all found to be damaged and needing replacement. (It is postulated that the failure of all components listed above was caused by failure of diode "D2").

The diesel generator was restarted, the generator field flashed as designed and the generator was synchronized or paralleled onto the 4160 volt bus (bus 1A3). However, at this point, the diesel generator DGI amperage was noted to be unstable.

The diesel generator was shutdown and Maintenance Order 22157 was initiated to investigate and/or correct the problem. It was determined that a zener diode (Sylvania Model ECG5264A-2), located in the diesel generator exciter regulator circuitry, was operating out-of-tolerance. The zener diode was replaced with a spare and the regulator was adjusted to compensate for the operating characteristics of the newly initiated diode.

The diesel generator was successfully restarted and loaded onto bus 1A3. The surveillance test, ST-ESF-6, F.5, was completed without further incident and the diesel generator was returned to service at approximately 1430 on 11/12/83.

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ATTACHMENT NO. 3

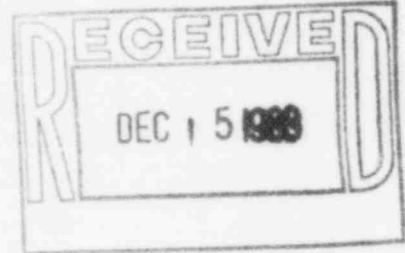
Failure Data

The failure of the zener diode was the fifth reportable failure of this type at Fort Calhoun Station Unit No. 1.

The failure of the diode S/B (D2) was the first reportable failure of this type at Fort Calhoun Station Unit No. 1.

Omaha Public Power District
1623 Harney Omaha, Nebraska 68102
402/536-4000

December 12, 1983
FC-955-83



Mr. J. E. Gagliardo, Director
Division of Resident Reactor Project
& Engineering Programs
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76011

Subject: Fort Calhoun Station Unit No. 1
Docket No. 05000285

Dear Mr. Gagliardo:

In accordance with the Fort Calhoun Station's Technical Specifications, the Omaha Public Power District, as holder of facility operating license DPR-40, submits three copies of licensee event report 83-011, (regarding Technical Specification 5.9.2(b)2) to satisfy requirements of Regulatory Guide 1.16.

Sincerely,

W. C. Jones
Division Manager
Production Operations

WCJ/MRC:jbk

Enclosures

xc: Director, Office of Management
Information and Program Control (3)
Director, Office of Inspection and
Enforcement (30)
Institute of Nuclear Power Operations

SARC Chairman
PRC Chairman
Fort Calhoun File (2)
Mr. Lawrence A. Yandell
NRC Senior Resident Inspector

14-22
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