NRC FORM 366
(7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

EXHIBIT A

CONTROL BLOCK: | | | | | | | (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 | O R T N P 1 (2) | 0 0 - 0 0 0 0 0 - 0 0 (3) | 4 1 1 1 1 (4) | | (5)
LICENSEE CODE | LICENSE NUMBER | LICENSE TYPE | CAT

CON'T 01 REPORT SOURCE | L (6) | 0 5 0 - 0 3 4 4 (7) | 0 9 1 6 8 3 (8) | 1 0 1 4 8 3 (9)
DOCKET NUMBER | EVENT DATE | REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 DURING ROUTINE TESTING OF 'A' TRAIN EMERGENCY DIESEL GENERATOR (EDG) THE
03 UNIT FAILED TO CONTROL VOLTAGE AS REQUIRED AND THE FIELD FLASH CIRCUIT
04 WOULD NOT DEENERGIZE RENDERING THE 'A' EDG INOPERABLE. THIS OCCURRENCE HAD
05 NO EFFECT ON PLANT OR PUBLIC SAFETY.
06
07
08

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
09	E E (11)	E (12)	A (13)	R E L A Y X (14)	A (15)	Z (16)

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	8 3	—	0 1 4	/	0 3	L	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
B (18)	Z (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	Y (24)	A (25)	G 1 0 0 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 THE CAUSE OF THIS OCCURRENCE WAS COMPONENT FAILURE. THE UNLATCHING COIL FOR
11 THE FIELD FLASH CIRCUIT FAILED DUE TO INCORRECT COIL APPLICATION PREVENTING
12 THE CIRCUIT FROM DEENERGIZING. IMMEDIATE CORRECTIVE ACTION WAS TO VERIFY
13 OFF-SITE AND ON-SITE POWER AVAILABILITY. SUBSEQUENT CORRECTIVE ACTIONS WERE
14 TO REPAIR THE FIELD FLASH CIRCUIT ON 'A' EDG, AND CHECK 'B' EDG FOR SIMILAR PROBLEMS.

15 FACILITY STATUS: F (28) % POWER: C 9 6 (29) OTHER STATUS (30): NA METHOD OF DISCOVERY: B (31) DISCOVERY DESCRIPTION (32): OPERATOR OBSERVATION

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

PERSONNEL EXPOSURES
17 NUMBER: 0 0 0 (37) TYPE: Z (38) DESCRIPTION (39): NA

PERSONNEL INJURIES
18 NUMBER: 0 0 0 (40) DESCRIPTION (41): NA

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

PUBLICITY
20 ISSUED: N (44) DESCRIPTION (45): NA

NRC USE ONLY

NAME OF PREPARER Gary G. Bair (FJU) PHONE: 503/556-3713 Extension 234

8310250444 831014
PDR ADOCK 05000344
S PDR

IE22

Portland General Electric Company
Trojan Nuclear Plant
P.O. Box 439
Rainier, Oregon 97048
(503) 556-3713

October 14, 1983
CPY-710-83

Mr. John B. Martin
Regional Administrator - V
US Nuclear Regulatory Commission
1450 Maria Lane - Suite 210
Walnut Creek, California 94596-5368

Dear Sir:

In accordance with the Trojan Plant Operating License, Appendix A, USNRC Technical Specifications 6.9.1.9.b, Licensee Event Report No. 83 - 14 concerning the failure of the 'A' train emergency diesel generator's field flash circuitry rendering the generator unit inoperable, is attached.

Sincerely,

C P Yundt

C. P. Yundt
General Manager

CPY/GGB/FJU:ga

Attachments

c: LER Distribution
File 93.24a (Q)

1/1 IE-22

REPORTABLE OCCURRENCE

1. Report No: 83-14

2. Report Date: October 14, 1983

3. Occurrence Date: September 16, 1983

4. Facility: Trojan Nuclear Plant, PO Box 439, Rainier, Oregon 97048

5. Identification of Occurrence:

During performance of routine surveillance testing on September 16, 1983 it was discovered that the 'A' emergency diesel generator (EDG) output voltage could not be adjusted. In addition when the EDG was shut down, the field flashing circuit remained energized and overheated.

6. Conditions Prior to Occurrence:

The Trojan Nuclear Plant was operating in Mode 1 at 96% of full power.

7. Description of Occurrence:

While performing POT-12-1, "Manual Start and Loading of EDG", on the 'A' EDG unit the generator voltage could not be controlled. The generator field flash circuit energized as required when the diesel started but failed to deenergize after the generator field had been excited. Because the field flash circuit remained energized, voltage could not be adjusted in accordance with the test procedure. The EDG was stopped and its control power was deenergized to remove power from the field flash circuit. Appropriate personnel were notified to start repairs on the EDG.

8. Designation of Apparent Cause of Occurrence:

The cause of this occurrence was component failure. The unlatching coil for the relay which energizes and then deenergizes the field flash circuit failed, preventing the field flash circuit from deenergizing as designed. Upon investigation, the coil was found to be designed for AC electrical systems whereas the diesel control power system is a DC system. This use of the AC coil contributed to premature aging since in the DC circuit application, the coil may see a slightly higher current loading. The two coils are nearly the same in specifications. The AC coil was supplied with the unit originally and operated successfully for almost nine years.

9. Significance of Occurrence:

This event had no effect on plant or public safety. Off-site and on-site power sources were continuously available. The other emergency diesel generator was operable if required. Repairs were performed within the 72 hours allowed by the Technical Specifications.

10. Corrective Action:

Immediate corrective actions were to verify the 'B' EDG operability and off-site power availability. Maintenance personnel were notified to investigate and repair 'A' EDG. On September 16, 1983 the failed coil was replaced with the proper coil and the 'A' EDG was successfully tested for proper operation. A check of the 'B' EDG for similar problems showed that the proper DC coil was in use.