NRC Form 366 (9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Surry Power Station, Units 1 & 2	0 5 0 0 0 2 8 0	1 OF 0 3

TITLE (4)

Unplanned Auto Start Of #3 EDG Due To Failed Diode

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	0 6	8 9	8 9	0 0 1	0 0	0 1	3 1	8 9		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
N		20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
0 0 0		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
M. R. Kansler, Station Manager	AREA CODE 8 0 4 — 3 5 7 - 3 1 8 4

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
X	E K	X X X X	E 1 4 7	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)

On January 6, 1989 at 1715 hours, with Unit 1 at Cold Shutdown and Unit 2 in Refueling Shutdown, the #3 Emergency Diesel Generator (EDG) started automatically when the control switch position was changed from the exercise position to the automatic position. This event is being reported as an unplanned actuation of an Engineered Safety Features (ESF) component. The cause of the auto-start of #3 EDG was a failed diode in the engine control circuit. The control switch was placed in the exercise position and the EDG was shutdown per the appropriate procedure. The failed diode was replaced, and the engine control circuit was verified to operate correctly. The EDG control switch was returned to the automatic position.

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PDR ADOCK 05000280
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NRC Form 366A
(9-83)

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

1.0 Description of the Event

On January 6, 1989 at 1715 hours, with Unit 1 at Cold Shutdown (CSD) and Unit 2 in Refueling Shutdown (RSD), the #3 Emergency Diesel Generator (EDG) {EIIS-EK} started automatically when the control switch position was changed from the exercise position to the automatic position.

Operators were performing the normal EDG shutdown procedure following the performance of a special test. This procedure requires placing the EDG control switch to the automatic position after the stop pushbuttons have been depressed. This event is being reported as an unplanned actuation of an Engineered Safety Features (ESF) component.

2.0 Safety Consequences and Implications

The #3 EDG is designed to supply emergency power to either the Unit 1 (1J) emergency bus or the Unit 2 (2J) emergency bus. Throughout the duration of this event, the #3 EDG was capable of performing this function. Therefore, the health and safety of the public were not affected.

3.0 Cause

The cause of the auto-start of #3 EDG was a failed diode in the engine control circuit. The failed diode caused the engine start failure relay to actuate when the control switch was placed in the automatic position after the stop pushbuttons had been depressed. The start failure relay is designed to actuate both sets of air start motors in the event the first set fails to start the engine.

The failure of the diode has been attributed to normal aging.

4.0 Immediate Corrective Action(s)

The control switch was placed in the exercise position and the EDG was shut down per the appropriate procedure.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

5.0 Additional Corrective Action(s)

The failed diode was replaced, and the engine control circuit was verified to operate correctly. The EDG control switch was returned to the automatic position.

6.0 Action(s) Taken to Prevent Recurrence

None required.

7.0 Similar Events

Unit 1 87-037. The diesel started due to a blown DC fuse.

8.0 Manufacturer/Model Numbers

General Motors Electromotive Division.

VIRGINIA ELECTRIC AND POWER COMPANY
Surry Power Station
P. O. Box 315
Surry, Virginia 23883

January 31, 1989

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

Serial No.: 89-002
Docket Nos.: 50-280
50-281
License Nos: DPR-32
DPR-37

Gentlemen:

Pursuant to Surry Power Station Technical Specifications, Virginia Electric and Power Company hereby submits the following Licensee Event Report for Units 1 and 2.

REPORT NUMBER

89-001-00

This report has been reviewed by the Station Nuclear Safety and Operating Committee and will be reviewed by Safety Evaluation and Control.

Very truly yours,

M. R. Kansler
Station Manager

Enclosure

cc: Regional Administrator
Suite 2900
101 Marietta Street, NW
Atlanta, Georgia 30323

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