

NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) **SURRY POWER STATION, UNIT 2** DOCKET NUMBER (2) **0 5 0 0 0 2 8 1** PAGE (3) **1 OF 0 3**

TITLE (4) **POTENTIAL FAILURE OF NO. 3 EDG**

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
0	4	17	8	4	8	4	0	5	0
0	4	17	8	4	8	4	0	5	0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)	
POWER LEVEL (10)	0 8 5	20.402(b)	20.405(c)
		20.405(a)(1)(i)	50.36(c)(1)
		20.405(a)(1)(ii)	50.36(c)(2)
		20.405(a)(1)(iii)	50.73(a)(2)(i)
		20.405(a)(1)(iv)	50.73(a)(2)(ii)
		20.405(a)(1)(v)	50.73(a)(2)(iii)
		50.73(a)(2)(iv)	50.73(a)(2)(v)
		50.73(a)(2)(vi)	50.73(a)(2)(vii)
		50.73(a)(2)(viii)(A)	50.73(a)(2)(viii)(B)
		50.73(a)(2)(ix)	50.73(a)(2)(x)

LICENSEE CONTACT FOR THIS LER (12)		TELEPHONE NUMBER	
NAME	J. L. WILSON, 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 NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	
YES (If yes, complete EXPECTED SUBMISSION DATE)	NO	MONTH	DAY

ABSTRACT (Limit to 1400 spaces - i.e. approximately fifteen single-space typewritten lines) (16)

During a review of 10 CFR 50, Appendix R compliance, Vepco was informed of a potentially significant deficiency in the No. 3 Emergency Diesel Generator (EDG) louver control system that would result in an unanalyzed condition. During a design basis event on Unit 2, the No. 3 EDG could overheat within 5-7 minutes due to the failure of the engine louvers to open. During the original design of the units, the condition was not identified. Upon discovery, the engine louvers for No. 3 EDG were mechanically blocked open. Appropriate modifications will be evaluated and implemented as necessary.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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EXPIRES: 9/31/85

FACILITY NAME (1) SURREY POWER STATION, UNIT 2	DOCKET NUMBER (2) 0 5 0 0 0 2 8 1 8 4	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		— 0 1 1	— 0 1	0 2	OF	0	3

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

1. Description of the Event

During a review of 10 CFR 50, Appendix R compliance, Vepco was informed by a contractor of a potentially significant deficiency in the No. 3 Emergency Diesel Generator (EDG) louver control system that would result in an unanalyzed condition. Specifically, during a design basis event on Unit 2, including a loss of off-site power and accompanied by a failure of the No. 2 EDG to start, the No. 3 EDG could overheat within 5-7 minutes due to the failure of the engine louvers to open. Electrical power to open the louvers is supplied by Unit No. 1 1J emergency bus, which would be de-energized in this situation.

2. Safety Consequences and Implications

Surry has three EDGs which will supply power to two units. The No. 3 EDG is a swing diesel that can supply power to either Unit 1 or 2 emergency buses. During an accident, the No. 3 EDG will be automatically dedicated to the unit experiencing the accident. The safety analysis requires the assumption of a single failure of the emergency power system, hence the postulated failure of No. 2 EDG. The accident analysis also requires the assumption of worst case parameters or conditions such as environment, loading and loss of all off-site power. Due to the arrangement of the switchyard, i.e. multiple rights-of-way, any one of three transformers is capable of supplying power to the unit 1 and 2 electrical system. It is very unlikely, as experience has shown, that Unit 1 and 2 would experience a complete loss of off-site power. In addition, Surry has procedures in place designed to detect premature failures of EDG.

3. Cause

During the original design of the units, this situation was not identified.

4. Immediate Corrective Action

Upon discovery of the condition, the engine louvers for No. 3 EDG were mechanically blocked open.

5. Additional Corrective Action

The appropriate modifications will be evaluated to provide the required reliability for EDG operation.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

6. Action Taken to Prevent Recurrence

None.

7. Generic Implications

None.

Vepco

VIRGINIA ELECTRIC AND POWER COMPANY

Surry Power Station
P. O. Box 315
Surry, Virginia 23883

JUN 8 1984

Serial No: 84-023

Docket No: 50-281

License No: DPR-37

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

Gentlemen:

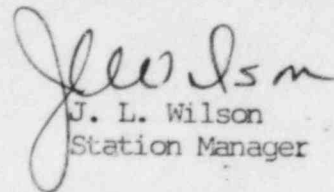
Pursuant to Surry Power Station Technical Specifications, the Virginia Electric and Power Company hereby submits the following Licensee Event Report for Surry Unit 2.

REPORT NUMBER

84-011-01

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,


J. L. Wilson
Station Manager

Enclosure

cc: Mr. James P. O'Reilly
Regional Administrator
Suite 2900
101 Marietta Street, NW
Atlanta, Georgia 30303

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