

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					DOCKET NUMBER(S)			
														0 5 0 0 0			
0 4 1	7 8	4 8 4		0 1 1	0 0 0	5 1 7	8 4							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)				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 8 5		20.405(a)(1)(ii)				50.36(c)(2)				50.73(a)(2)(vii)				OTHER (Specify in Abstract below and in Text, NRC Form 355A)			
		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)(ix)							
LICENSEE CONTACT FOR THIS LER (12)																	
NAME J. L. WILSON, STATION MANAGER										TELEPHONE NUMBER							
										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	MANUFAC. TURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFAC. TURER	REPORTABLE TO NPROS								
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)		MONTH		DAY		YEAR	
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)										<input checked="" type="checkbox"/> NO							

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) lower 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

APPROVED OMB NO. 3150-0104

EXPIRES: 9/31/85

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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TEXT (If more space is required, use additional NRC Form 365A'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. 3 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 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 EDGs.

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.

NRC Form 365A
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION

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APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

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6. Action Taken to Prevent Recurrence

None.

7. Generic Implications

None.