

NRC Form 386
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

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
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TITLE (4)

Inoperable Control Rods Due To Failed Phase Control Card

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	3	0	5	8	8	8	8	8		0 5 0 0 0
0	3	0	5	8	8	0	0	3		0 5 0 0 0

OPERATING MODE (9) N		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)							
POWER LEVEL (10) 1 0 0		20.402(b)		20.405(c)		50.73(a)(2)(iv)		73.71(b)	
		20.405(a)(1)(i)		50.38(c)(1)		50.73(a)(2)(v)		73.71(c)	
		20.405(a)(1)(ii)		50.38(c)(2)		50.73(a)(2)(vii)		OTHER (Specify in Abstract below and in Text, NRC Form 366A)	
		20.405(a)(1)(iii)	<input checked="" type="checkbox"/>	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 D. L. Benson, Station Manager	TELEPHONE NUMBER 8 0 4 3 5 7 - 3 1 8 4
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDs	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDs

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)

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

At 0102 hours on March 5, 1988, with Unit 2 operating at 100% power, a control rod {EIIS-ROD} urgent failure alarm was received in the control room. It was determined that the failure was in the 1BD power cabinet. Technical Specification (T.S.) 3.12.C.3 requires that the control rods be returned to operable status within two hours or the unit be placed in hot shutdown. At 0302 hours, a unit shutdown was initiated in accordance with Technical Specifications. An unusual event was declared at 0307 due to a power reduction required by T. S. limiting conditions for operation.

At 0409 hours, the Instrument Technicians replaced a card in the power cabinet and the urgent failure alarm was cleared. The ramp was stopped at 92.5% power to facilitate testing of the control rods. During the testing, the replaced card failed and was replaced and tested satisfactorily at 0548.

The cards will be returned to the vendor for analysis and rework.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Surry Power Station, Unit 2	0 5 0 0 0 2 8 1	8 8	— 0 0 5	— 0 0	0 2	OF	0 3

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

1.0 Description of the Event

At 0102 hours on March 5, 1988, with Unit 2 operating at 100% power, a control rod {EIIS-ROD} urgent failure alarm was received in the control room. It was determined that the failure was in the 1BD power cabinet. Technical Specification (T.S.) 3.12.C.3 requires that the control rods be returned to operable status within two hours or the unit be placed in hot shutdown. At 0302 hours, a unit shutdown was initiated in accordance with Technical Specifications. An unusual event was declared at 0307 due to a power reduction required by T. S. limiting conditions for operation.

At 0409 hours, the Instrument Technicians replaced a card in the power cabinet and the urgent failure alarm was cleared. The ramp was stopped at 92.5% power to facilitate testing of the control rods.

During the testing, the replaced card failed and was replaced and tested satisfactorily at 0548.

2.0 Safety Consequences and Implications

The control rods are designed to drop into the core to shutdown the reactor when necessary. Although the control rods could not be manipulated, they were capable of being dropped at all times during this event. Therefore, the health and safety of the public were not affected.

3.0 Cause

A failed phase control card in the 1BD power cabinet caused the urgent failure alarm to annunciate in the control room. This failure also prevented normal rod movement of the B and D control rod banks.

4.0 Immediate Corrective Action(s)

The control room operator placed the rods in manual in accordance with the abnormal procedure for rod control system malfunction.

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

5.0 Additional Corrective Action(s)

When repairs could not be completed within the two hour period, a ramp to hot shutdown was started. The phase control card was replaced, and after successful testing, the unit was returned to 100% power.

6.0 Action Taken to Prevent Recurrence

The cards will be returned to the vendor for analysis and rework.

7.0 Similar Events

Unit 2 LER: 85-014

8.0 Manufacturer/Model Number

Westinghouse Phase Control P.C. card.
Assembly/6050D11G01

VIRGINIA ELECTRIC AND POWER COMPANY

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

March 30, 1988

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

Serial No.: 88-011
Docket No.: 50-281
Licensee No.: DPR-37

Gentlemen:

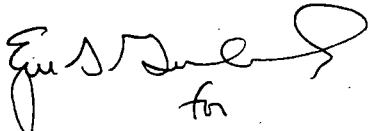
Pursuant to Surry Power Station Technical Specifications, Virginia Electric and Power Company hereby submits the following Licensee Event Report for Surry Unit 2.

REPORT NUMBER

88-005-00

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,



David L. Benson
Station Manager

Enclosure

cc: Dr. J. Nelson Grace
Regional Administrator
Suite 2900
101 Marietta Street, NW
Atlanta, Georgia 30323

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