

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Surry Power Station, Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 2 8 0 1	PAGE (3) OF 0 3
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TITLE (4)

Low Head Safety Injection Pump Inoperable Due To Failed Motor Leads

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 9	8 8	8 8	0 0 8	0 0	0 4	0 8	8 8			0 5 0 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)												
OPERATING MODE (9) N		20.402(b)			20.405(c)			50.73(a)(2)(iv)			73.71(b)	
POWER LEVEL (10) 0 9 8		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)			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 - 1 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
X	BIP	P 1 1	W 1 1 2 1 0	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

<input checked="" type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)		<input type="checkbox"/> NO		EXPECTED SUBMISSION DATE (15) MONTH DAY YEAR 0 6 3 0 8 8
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On March 9, 1988 at 2256 hours, with Unit 1 at 98% power, one of the two Low Head Safety Injection pumps, 1-SI-P-1B {EIIS-BP P} was declared inoperable due to a phase to phase fault between two of its motor leads. Technical Specification 3.3.B.3 requires that this pump be restored to operable status within 24 hours or the unit must be brought to hot shutdown. Pump 1-SI-P-1B could not be returned to operable status within the 24 hour time limit. Therefore, a rampdown of the unit was commenced at 2203 hours on March 10, 1988. The unit was placed in hot shutdown at 0334 hours on March 11, 1988, which satisfied the requirements of Technical Specifications. The redundant pump, 1-SI-P-1A, was tested at regular intervals to ensure its operability while repair work commenced on 1-SI-P-1B. The damaged motor leads were repaired and an operability test was performed, during which high temperatures on one of the repaired leads prevented the pump from being returned to operable status. The motor for 1-SI-P-1B was replaced with a new motor, was tested satisfactorily and returned to service status at 2252 hours on March 12, 1988. An analysis is being performed to determine the root cause of this failure. Any further action will be based on the results of the analysis.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

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Surry Power Station, Unit 1	0 5 0 0 0 2 8 0 8 8	—	0 0 8	—	0 0	0 2	OF 0 3

TEXT (If more space is required, use additional NRC Form 365A's) (17)

1.0 Description of the Event

On March 9, 1988 at 2256 hours, with Unit 1 at 98% power, one of the two Low Head Safety Injection pumps, 1-SI-P-1B {EIIS-BP P} was declared inoperable. Technical Specification 3.3.B.3 requires that this pump be restored to operable status within 24 hours or the unit must be brought to hot shutdown. Pump 1-SI-P-1B could not be returned to operable status within the 24 hour time limit. Therefore, a rampdown of the unit was commenced at 2203 hours on March 10, 1988. The unit was placed in hot shutdown at 0334 hours on March 11, 1988, which satisfied the requirements of Technical Specifications.

2.0 Safety Consequences and Implications

The purpose of the two Low Head Safety Injection (LHSI) pumps is to supply borated water to the suction of the High Head Safety Injection pumps and to the reactor core in the event of a loss of coolant accident. A single LHSI pump being inoperable does not negate the ability of the system to perform its function since each pump is designed for 100% capacity. While 1-SI-P-1B was out of service, the redundant pump, 1-SI-P-1A, was tested at regular intervals to provide maximum assurance of its operability. Therefore, the health and safety of the public were not affected.

3.0 Cause

Pump 1-SI-P-1B was declared inoperable when it experienced a phase to phase fault between two motor leads.

4.0 Immediate Corrective Action(s)

When 1-SI-P-1B was declared inoperable, the redundant pump, 1-SI-P-1A, was tested at regular intervals to ensure its operability while repair work commenced on 1-SI-P-1B. The damaged motor leads were repaired and an operability test was performed, during which high temperatures on one of the repaired leads prevented the pump from being returned to operable status.

NRC Form 366A
(9-83)

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

5.0 Additional Corrective Action(s)

The motor for 1-SI-P-1B was replaced with a new motor. The pump was tested satisfactorily and returned to operable status at 2252 hours on March 12, 1988.

6.0 Action(s) Taken to Prevent Recurrence

An analysis is being performed to determine the root cause of this failure. Any further action will be based on the results of the analysis.

7.0 Similar Events

None.

8.0 Manufacturer/Model Number

Westinghouse/Type VSS-509 UP

VIRGINIA ELECTRIC AND POWER COMPANY

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

April 8, 1988

U.S. Nuclear Regulatory Commission
Document Control Desk
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Licensee No.: DPR-32

Gentlemen:

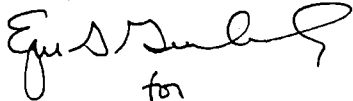
Pursuant to Surry Power Station Technical Specifications, Virginia Electric and Power Company hereby submits the following Licensee Event Report for Surry Unit 1.

REPORT NUMBER

88-008-00

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,



for
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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