

VIRGINIA ELECTRIC AND POWER COMPANY

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

December 13, 1989

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

Serial No.: 89-057  
Docket No.: 50-280  
License No.: DPR-32

Gentlemen:

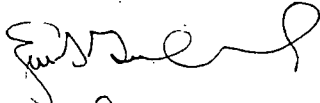
Pursuant to Surry Power Station Technical Specifications, Virginia Electric and Power Company hereby submits the following Licensee Event Report for Unit 1.

REPORT NUMBER

89-039-00

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

Very truly yours,

  
fa

M. R. Kansler  
Station Manager

Enclosure

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

LICENSEE EVENT REPORT (LER)

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

TITLE (4) "A" Steam Generator Header to Line Differential Pressure Input to SI Inoperable Due to Malfunctioning Relay Contact

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)
1	1	14	8	9	039	0	0	12			0 5 0 0 0
											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)			50.36(c)(1)			50.73(a)(2)(v)			73.71(e)	
	20.405(a)(1)(ii)			50.36(c)(2)			50.73(a)(2)(vii)			OTHER (Specify in Abstract below and in Text, NRC Form 365A.)	
	20.405(a)(1)(iii)			X 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 M. R. Kansler, Station Manager	TELEPHONE NUMBER 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	J E R L Y		W 3 5 1	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)  NO

EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

At 1745 hours on November 14, 1989, with Unit 1 at 100% power, the "A" Steam Generator train "B" Channel IV steam line to header differential pressure comparator channel was declared inoperable due to a malfunctioning relay contact. With this contact inoperable and the channel not in the trip mode, the degree of redundancy requirement of Technical Specification (T.S.) Table 3.7-2, was not met and T.S. 3.0.1 was in effect. The cause of the relay contact malfunction was not determined. Leads were removed from the malfunctioning contacts and placed on spare contacts on the relay. The relay was tested satisfactorily and the channel was returned to service. Appropriate documents will be revised to reflect this modification.

**LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION**

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  Surry Power Station, Unit 1	DOCKET NUMBER (2)  0 5 0 0 0 2 8 0 8 9	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		0 3 9	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 1745 hours on November 14, 1989, with Unit 1 at 100% power, during the performance of the required monthly periodic test of the safety injection and feedwater control isolation logic, contacts 12/16 of pressure comparator relay PC-476-XB failed to close. These contacts close when the relay (EIIS-RLY) de-energizes upon an "A" Steam Generator (S/G) (EIIS-SG) channel IV high differential pressure condition between the steam line and steam header and provide an input to the two out of three matrix for the header to line differential pressure Safety Injection (SI) (EIIS-JE) logic. With these contacts inoperable and the respective channel not in the trip mode, the degree of redundancy requirement of T.S. Table 3.7-2 was not met and T.S. 3.0.1 was in effect.

At 2055 hours, electricians removed the leads from contacts 12/16 and placed them on spare contacts 10/14 on the same relay. Instrument technicians tested the relay satisfactorily and the channel was returned to service.

2.0 Safety Consequences and Implications

The failed contacts on the pressure comparator relay provide an input into the train "B" header to line high differential pressure safety injection logic. The header to line safety injection provides protection for a steam line break upstream of the main steam non-return valves. During the time the relay contacts were inoperable, the T.S. required minimum channels for train "B", that provide an input to the above protection logic, remained operable. In addition, the protection logic for header to line SI train "A" remained fully operable. Consequently, a safety injection would have occurred if required. Therefore, the health and safety of the public were not affected.

3.0 Cause

The pressure comparator relay de-energized as designed upon injection of the test signal. However, contacts 12/16 failed to close when the relay de-energized. The cause of the contact failure could not be determined.

**LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION**

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  Surry Power Station, Unit 1	DOCKET NUMBER (2)  0 5 0 0 0 2 8 0	LER NUMBER (6)			PAGE (3)	
		YEAR 8 9	SEQUENTIAL NUMBER 0 3 9	REVISION NUMBER 0 0	0 3	OF 0 3

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

4.0 Immediate Corrective Action(s)

The leads were removed from the 12/16 contacts and placed on the spare contacts 10/14 on the relay in accordance with a temporary modification. The relay was tested satisfactorily and the channel was returned to service.

5.0 Additional Corrective Action(s)

Engineering Work Request 89-723 was approved to permanently document the use of the spare contacts (10/14). The electrical drawings will be revised to reflect the change and contacts 12/16 will be indicated as not available for use.

6.0 Action(s) Taken to Prevent Recurrence

This is an isolated event and does not require any additional actions.

7.0 Similar Events

None.

8.0 Manufacturer/Model Number(s)

Westinghouse Electric / BF48F.