

VIRGINIA ELECTRIC AND POWER COMPANY

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

November 22, 1989

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

Serial No.: 89-054
Docket No.: 50-280
License No.: DPR-32

Gentlemen:

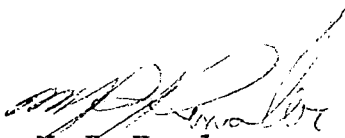
Pursuant to Surry Power Station Technical Specifications, Virginia Electric and Power Company hereby submits the following Licensee Event Report for Unit 1.

REPORT NUMBER

89-040-00

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,



M. R. Kansler
Station Manager

Enclosure

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

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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 3
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TITLE (4) Unplanned ESF Component Actuation, TV-VG-109A Failed Closed Due to Loose Connections in the Close Switch

EVENT DATE (5)			L.R. NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		
10	29	89	89	040	00	11	22	89			
									DOCKET NUMBER(S) 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	<input type="checkbox"/> 20.402(b)	<input checked="" type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)						
	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.38(e)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)						
	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.38(e)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)						
	<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)							
	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)							
<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)								

LICENSEE CONTACT FOR THIS LER (12)

NAME M. R. Kansler, Station Manager	TELEPHONE NUMBER AREA CODE: 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 NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

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

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

At 2350 hours on October 29, 1989 with Unit 1 at 100% power, the Unit 1 Control Room Operator (CRO) observed that the inside containment isolation trip valve for the Primary Drains Transfer Tank (PDTT) vent had closed. Operators made an attempt to reopen the valve, but the valve could not be reopened and was declared inoperable. The valve is designed to close upon initiation of a Safety Injection (SI) signal. At the time of the event no actual SI signal was present. This event is being reported as an unplanned Engineered Safety Feature (ESF) component actuation. A four hour non-emergency report was made to the Nuclear Regulatory Commission in accordance with 10CFR50.72.b.2.ii. The PDTT is vented to the gaseous vent header for processing in the gaseous waste system (EIIIS-WE). The valve failed closed due to a loss of continuity in the electrical circuit to the trip valve's solenoid-operated air supply valve. This loss of continuity was created by loose connections on the normally closed contacts of the valve close pushbutton. The loose connections were tightened, and the valve was satisfactorily tested and returned to service.

**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	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 9	- 0 4 0	- 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 2350 hours on October 29, 1989 with Unit 1 at 100% power, the Unit 1 Control Room Operator (CRO) observed that the inside containment isolation trip valve (EIIS-ISV) for the Primary Drains Transfer Tank (PDTT) (EIIS-TK) vent, TV-VG-109A, had closed. Operators made an attempt to reopen the valve, but the valve could not be reopened and was declared inoperable. A six hour action statement to place the unit in hot shutdown was initiated per Technical Specification 3.0. The valve is designed to close and isolate containment upon initiation of a Safety Injection (SI) (EIIS-JE) signal. At the time of the event no actual SI signal was present or required. This event is being reported as an unplanned ESF component actuation. A four hour non-emergency report was made to the Nuclear Regulatory Commission in accordance with 10CFR50.72.b.2.ii.

2.0 Safety Consequences and Implications

The PDTT is vented to the gaseous vent header for processing in the gaseous waste system (EIIS-WE). The vented gases pass through two series trip valves, one on each side of the containment wall, which act as the containment isolation valves for the header. The valves shut upon receipt of a containment isolation signal generated by an SI, upon loss of instrument air, or upon loss of power. During this event the valve failed to its safe position, and the redundant valve remained operable. Therefore, the health and safety of the public were not affected.

3.0 Cause

The valve failed closed due to a loss of continuity in the electrical circuit to the trip valve's solenoid-operated air supply valve. This loss of continuity was created by loose connections on the normally closed contacts of the valve close pushbutton. The loss of power deenergized the solenoid valve, isolating instrument air from the valve, causing the valve to close.

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

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 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)		
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		8 9	— 0 4 0	— 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 trip valve was declared inoperable, and a six-hour action statement to reach hot shutdown condition was entered per Technical Specification 3.0. The redundant outside trip valve, TV-VG-109B, was closed and an investigation to determine the cause of the event was initiated.

5.0 Additional Corrective Action(s)

Electricians checked the voltage and continuity on the valve electrical circuit and found all conditions for the solenoid valve satisfactory. However, they noted that the connections on the normally closed contacts to the valve's close pushbutton were loose. These connections were tightened, the valve was tested satisfactorily and returned to service at 0221 hours on October 30, 1989, and the six-hour action statement to hot shutdown was terminated.

6.0 Action(s) Taken to Prevent Recurrence

This event is considered to be isolated; therefore, no additional actions are required.

7.0 Similar Events

LER 2-89-008 documents a similar failure of a containment isolation valve due to a loss of continuity in the control circuit. In LER 2-89-008 the cause was determined to be a loose fuse terminal clip and not a loose connection on the pushbutton.

8.0 Manufacturer/Model Number(s)

N/A.