POW 28-06-01-01

NRC Form 366 (9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

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

TITLE (4)
Inadvertent ESF Component Actuation Due To Personnel Error

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 0	0 6	8 8	8 8	0 2 3	0 0	1 1	0 4	8 8		0 5 0 0 0
										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)	X 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 0 0		20.405(a)(1)(ii)	50.36(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)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
D. L. Benson, Station Manager	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	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

On October 6, 1988 at 0407 hours with Unit 2 at Cold Shutdown (CSD), it was discovered that three containment trip valves had closed within the previous hour. In addition, the radiation monitor sample pump for the containment gas and particulate monitor had stopped due to a trip valve interlock. The affected trip valves are part of the containment isolation system and are Engineered Safety Features (ESF) components. Although no ESF signal was present at the time, this event is being reported as an unplanned actuation of an ESF component.

The cause of the event was due to personnel error. An electrician had misinterpreted an electrical drawing and had incorrectly identified a lead that was lifted to support maintenance activities. The trip valves were opened and the radiation monitor sample pump was restarted. The electricians identified the reason for valve closure and verified that the affected wiring was returned to the "as found" position. A periodic test (radiation monitoring equipment check) was performed to verify operability of the containment radiation monitors. Administrative controls will be initiated to ensure that an independent review is performed prior to lifting leads.

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NRC Form 366A
(9-83)

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

1.0 Description of the Event

On October 6, 1988 at 0407 hours with Unit 2 at Cold Shutdown (CSD), it was discovered that the following containment trip valves had closed within the previous hour:

TV-RM-200A - Containment gas and particulate monitor sample discharge outside trip valve. {EIIS-JM, IL}.

TV-RM-200C - Containment gas and particulate monitor sample intake outside trip valve. {EIIS-JM, IL}.

TV-SS-203B - Residual heat removal system sample outside trip valve. {EIIS-JM, BP}.

In addition, the radiation monitor sample pump for the containment gas and particulate monitor had stopped due to a trip valve interlock. Approximately 50 minutes prior to this observation, electricians had been lifting leads from valves which were powered from the same electrical bus.

The affected trip valves are part of the containment isolation system and are Engineered Safety Features (ESF) {EIIS-JE} components. Although no ESF signal was present at the time, this event is being reported as an unplanned actuation of an ESF component.

2.0 Safety Consequences and Implications

The containment trip valves are designed to close on a containment isolation signal to prevent leakage to the atmosphere. The trip valves functioned as designed by closing to isolate containment. In addition, the unit was in CSD with no refueling activities in progress, therefore, the containment gas and particulate radiation monitors were not required at the time. Therefore, the health and safety of the public were not affected.

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

3.0 Cause

The cause of this event was due to personnel error. The three trip valves closed due to an interruption of power to the valve solenoids. This occurred when an electrician was lifting a lead from a terminal in support of maintenance activities on another trip valve. This required the momentary lifting of a second lead on the same terminal. The electrician had misinterpreted an electrical drawing and had incorrectly identified the second lead as a power supply to a computer multiplexing unit. However, the the second lead was actually a power lead to additional valve solenoids. Consequently, when the second lead was momentarily lifted, power to the three valves was interrupted, causing the valves to close.

4.0 Immediate Corrective Action(s)

The trip valves were opened and the radiation monitor sample pump was restarted. The electricians identified the reason for valve closure and verified that the affected wiring was returned to the "as found" position.

5.0 Additional Corrective Action(s)

A periodic test (radiation monitoring equipment check) was performed to verify operability of the containment radiation monitors.

6.0 Action(s) Taken to Prevent Recurrence

Administrative controls will be initiated to ensure that an independent review is performed prior to lifting leads.

7.0 Similar Events

None.

8.0 Manufacturer/Model Number

N/A

★U.S.GPO:1986-0-624-538/455

VIRGINIA ELECTRIC AND POWER COMPANY
Surry Power Station
P. O. Box 315
Surry, Virginia 23883

November 4, 1988

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

Serial No.: 88-058
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

88-023-00

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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