

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 1	DOCKET NUMBER (2) 0 5 0 0 0 2 8 0	PAGE (3) 1 OF 0 3
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TITLE (4) Control/Relay Room Chiller Tripped Due to Valve Positioning 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)
0	3	26	8	7	0	0	4	2		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 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 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)(ix)	

LICENSEE CONTACT FOR THIS LER (12)	
NAME R. F. Saunders, Station Manager	TELEPHONE NUMBER 8 0 4 3 5 7 - 1 3 1 8 4

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)									
CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPDs		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO					

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

On March 26, 1987 at 1021 hours with Units 1 and 2 at 100% power, one of the three control/relay room chiller (1-VS-E-4A) {EIIS-CHU} tripped. The 'B' chiller had previously been removed from service for cleaning of its service water (SW) suction strainer {EIIS-STR}. The 'C' chiller was operable but not in service due to a seal leak on its SW supply pump (1-VS-P-1C) {EIIS-P}. The 'B' control/relay room chiller was returned to service at 1028 hours and verified operating to supply chilled water to the air handling units. The 'A' chiller tripped due to high condenser discharge pressure. This occurred when an operator was attempting to decrease chiller condenser pressure by opening the condenser SW discharge valve {EIIS-ISV}. This is a quick throw ball type valve installed in a vertical run of pipe. The valve handle is removable and is used on corresponding valves for the 'B' and 'C' chiller units. Because he was standing behind the valve, the operator could not see that the valve handle had been installed 90 degrees out of position. Consequently, as he aligned the valve handle to the flow direction, the valve actually closed. Additional valve handles will be installed and permanently attached to each of the chiller condenser SW discharge valves.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

1.0 Description of the Event

On March 26, 1987 at 1021 hours with Units 1 and 2 at 100% power, one of the three control/relay room chiller (1-VS-E-4A) {EIIS-CHU} tripped. The 'B' chiller had previously been removed from service for cleaning of its service water (SW) suction strainer {EIIS-STR}. The 'C' chiller was operable but not in service due to a seal leak on its SW supply pump (1-VS-P-1C) {EIIS-P}. This event is contrary to Technical Specification 3.14 which requires one control/relay room chiller to be operating and another to be operable.

2.0 Safety Consequences and Implications

The control/relay room air conditioning system consists of three 100% capacity chiller units and two trains of 100% capacity air handler units {EIIS-AHU}. The design temperature range of the control/relay rooms is from 40 degrees Fahrenheit to 120 degrees Fahrenheit. Normal operating temperatures are from 65 degrees Fahrenheit to 100 degrees Fahrenheit.

During this event, one chiller unit and all four control/relay room air handlers remained operable or operating and there was no noticeable increase in control or relay room temperatures. Therefore, this event did not constitute an unreviewed safety question and the health and safety of the public were not affected.

3.0 Cause

The 'A' chiller tripped due to high condenser discharge pressure. This occurred when an operator was attempting to decrease chiller condenser pressure by opening the condenser SW discharge valve {EIIS-ISV}. This is a quick throw ball type valve installed in a vertical run of pipe. The valve handle is removable and is used on corresponding valves for the 'B' and 'C' chiller units. Because he was standing behind the valve, the operator could not see that the valve handle had been installed 90 degrees out of position. Consequently, as he aligned the valve handle parallel to the flow direction, the valve actually closed.

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

4.0 Immediate Corrective Action

The 'B' control/relay room chiller was returned to service at 1028 hours and verified operating to supply chilled water to the air handling units. The 'A' chiller SW discharge valve was opened, and the chiller was reset and returned to service at 1030 hours. The 'B' chiller was then secured.

5.0 Additional Corrective Action

None.

6.0 Actions Taken to Prevent Recurrence

Additional valve handles will be installed and permanently attached to each of the chiller condenser SW discharge valves.

7.0 Similar Events

None.

8.0 Manufacturer/Model Number

N/A



VIRGINIA ELECTRIC AND POWER COMPANY

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

April 24, 1987

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

Serial No: 87-008
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 Surry Unit 1.

REPORT NUMBER

87-008-00

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,

A handwritten signature in cursive script that reads "R. F. Saunders".

R. F. Saunders
Station Manager

Enclosure

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