

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) Spurious Auto Start of Aux. Vent Emergency Fans I-VS-F-58A & B
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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	2	1	8	5	8	5	0	2	2	0	0	5	0	0	0	0
1	1	2	1	8	5	8	5	0	2	2	0	0	5	0	0	0	0

OPERATING MODE (9) N		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 8. (Check one or more of the following) (11)									
POWER LEVEL (10) 0 1 8 7		<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input checked="" type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)						
		<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(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"/> 50.36(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)		TELEPHONE NUMBER	
NAME R. F. Saunders, Station Manager		AREA CODE 8 0 4	3 5 7 1 - 3 1 1 8 4

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

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)

ABSTRACT

On November 21, 1985 at 0219 hours with Unit 1 at 87% and Unit 2 at 100% power, an 'Aux. Vent System Safety Mode Initiated' alarm was received in the control room and several components on the aux. vent system realigned to the safety mode. Immediately after this alarm, the Unit 1 operator noted that the 'A' main feed flow was decreasing and quickly placed the 'A' Main Feed Reg. Valve (MFRV) in manual control. In addition, the letdown outside containment trip valve, TV-1204, closed and the 'B' MFRV began to close and subsequently opened.

The exact cause of the event has not been determined. Although no indication of a decrease of instrument air (IA) pressure was observed at the time, it is speculated that a drop in the IA header pressure may have occurred and realigned the components since all the components affected operate via the IA system. In addition, it has been verified that the aux. vent safety mode realignment signal was not initiated through the SI logic relays.

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NRC Form 366A
(9-83)

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

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

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

SPURIOUS AUTO START of AUX. VENT EMERGENCY FANS 1-VS-F-58A & B1. Description of the Event

On November 21, 1985 at 0219 hours with Unit 1 at 87% power and Unit 2 at 100% power, an 'Aux. Vent System Safety Mode Initiated' alarm was received in the control room. Immediately after this alarm, the Unit 1 operator received an 'A Steam Flow-Feed Flow Mismatch' alarm and noted that the 'A' main feed flow was decreasing and quickly placed the 'A' Main Feed Reg. Valve (MFRV) in manual control. In addition, the letdown outside containment trip valve, TV-1204, closed and the 'B' MFRV began to close and subsequently opened with no operator action.

The following components were affected:

<u>Component</u>	<u>Action</u>
1-VS-F-58A & B (Emergency Ventilation Fans)	Auto Started
1-VS-HV-1A & B (Aux. Bldg. Supply Fans)	Tripped off
1-VS-F-4A & B (Containment Supply)	Received trip signal (They were off at time)
1-VS-F-8A & B (Aux. Bldg. general exhaust)	Tripped off
AOD-VS-112A & B (Isolation dampers to normal vent stack)	Closed
AOD-VS-107A & B (Dampers from Aux. Bldg. Central to Emergency Filters)	Opened
AOD-VS-110 (Damper to Suction of 1-VS-F-8A & B)	Closed
TV-1204 (Letdown Trip Valve)	Closed
FRV-FW-1478 & 1488 (A & B MFRV)	(Started to close and then reopened)

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Surry Power Station, Unit 1	0500028085	—	022	—00	03	OF	03

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

2. Probable Consequences

The auxiliary feedwater system remained operable during the event and would have actuated in conjunction with the reactor protection system to minimize the consequences of the decreased feedwater flow if the low steam generator level setpoint had been reached. Also, the pressurizer level remained within the normal operating band during the event. Therefore, this event did not constitute an unreviewed safety question and the health and safety of the public were not affected.

3. Cause

The exact cause of the event has not been determined. Although no indication of a decrease of instrument air (IA) pressure was observed at the time, it is speculated that a drop in the IA header pressure may have occurred and realigned the components since all the components affected operate via the IA system.

In addition, it has been verified that the aux. ventilation safety mode realignment signal was not initiated through the Safety Injection (SI) logic relays since none of the aux. vent SOV's, which depressurize the IA header to the aux. vent system, operated during the event.

4. Immediate Corrective Actions

The unit 1 operator placed the 'A' MFRV in manual to return the steam generator level to normal and the letdown trip valve TV-1204 was opened.

5. Additional Corrective Actions

Emergency Procedure 1.03, 'SI Termination Following Spurious SI' was used to realign the affected systems since the original indications appeared to be a spurious safety injection signal.

6. Action Taken to Prevent Recurrence

The pressure switches associated with the aux. ventilation system controls will be calibrated to ensure setpoints of switches are correct.

7. Generic Implications

None.

Vepco

VIRGINIA ELECTRIC AND POWER COMPANY

Surry Power Station
P. O. Box 315
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December 20, 1985

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

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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

85-022-00

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,

J. L. Benson
for

R. F. Saunders
Station Manager

Enclosure

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