

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Surry Power Station, Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 2 8 1 1	PAGE (3) 1 OF 0 B
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TITLE (4)
Turbine Trip/ Reactor Trip From High Steam Generator Level

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)																																																																																															
MONTH	DAY	YEAR	YEAR	SEQUENCE NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)																																																																																													
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LICENSEE CONTACT FOR THIS LER (12)

NAME R. F. Saunders, Station Manager	TELEPHONE NUMBER AREA CODE: 8 1 0 4 3 1 5 1 7 - 1 3 1 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 NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS
X	S I J	H I C V F	1 3 1 0	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH DAY YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On February 16, 1986, at 16% Reactor Power, during a unit 2 rampdown, the turbine tripped due to a high level in "B" steam generator which resulted in a reactor trip.

The high steam generator level occurred when the "B" main feedwater bypass valve (EIIS HCV) apparently failed to close on a demand. The failure is believed to have been caused by a blockage in the air pilot relay which prevented proper air flow to the valve operator. Following the trip, the blockage was dislodged and the valve cycled satisfactorily.

Engineering is evaluating methods for controlling contamination in the instrument air system supplying the air pilot relays. Procedures will be revised to verify proper operation of the main feedwater bypass valves prior to using them.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

Reactor Trip From High Steam Generator Level

1. Description of the Event

On February 16, 1986, a unit 2 ramp down was in progress for a scheduled outage. With the unit at approximately 16% power, operators were transferring steam generator level control from the main feedwater valves to the main feedwater bypass valves. Following a level increase in 'B' steam generator, the operator closed the 'B' main feedwater bypass valve from the control room. However, with 'B' main feedwater valve closed and the bypass closed, level continued to increase and at 1709 hours the turbine tripped due to a high level in 'B' steam generator which resulted in a reactor trip.

2. Safety Consequences and Implications

The turbine trip and feedwater isolation on the high steam generator level occurred as designed to prevent water from entering the main steam line and turbine. Also, all safety related systems remained operable and plant parameters remained within the bounds of the safety analysis. Therefore, an unreviewed safety question was not created and the health and safety of the public was not affected.

3. Cause

The high steam generator level occurred when the 'B' main feedwater bypass valve apparently failed to close on demand. The valve failure is believed to have been due to a blockage in an air pilot relay which prevented proper air flow to the valve operator.

4. Immediate Corrective Action

Operators locally verified that the 'B' main feedwater control valve, series block valve and bypass valve were in the closed position. Appropriate procedures were used to quickly stabilize the plant, and steam generator level was returned to normal. The shift technical advisor monitored the critical status trees to ensure that plant parameters remained within safe bounds.

5. Additional Corrective Action

Instrument air was cycled to the 'B' feedwater bypass valve and the valve was observed to operate erratically. Further cycling of air to the valve apparently removed the blockage, and the valve responded properly.

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6. Action Taken to Prevent Recurrence

An engineering review is being conducted to evaluate the most effective method for controlling contaminants in the instrument air system. Procedures will be revised to verify proper operation of the main feedwater bypass valves prior to using them.

7. Generic Implications

For a similar event see LER 86-009 (unit 1).