

# LICENSEE EVENT REPORT

CONTROL BLOCK: (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

V A S P S 1 0 0 - 0 0 0 0 0 - 0 0 4 1 1 1 1 4 5  
 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 37 CAT 38

REPORT SOURCE L 0 5 0 0 0 2 8 0 7 1 2 2 1 8 2 8 0 1 2 1 8 3 9  
 DOCKET NUMBER 60 61 EVENT DATE 74 75 REPORT DATE 80

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES 10

With Unit one at full power, PT 2.1 revealed that the output of the "A" loop  
 Delta T summator was below acceptable limits. This event is contrary to T.S.2.3A  
 and reportable pursuant to T.S.-6.6.2.b(1). The "B" and "C" loop AT circuits were  
 operational throughout this event and would have tripped at less than the T.S.  
 limits. The health and safety of the public would not have been affected.

SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE  
 I B 11 E 12 E 13 I N S T R U 14 Y 15 Z 16  
 LER/RO REPORT NUMBER 17 8 2 1 2 5 0 3 L 0  
 ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NRC-4 FORM SUB. PRIME COMP. SUPPLIER COMPONENT MANUFACTURER  
 E 18 Z 19 Z 20 Z 21 0 0 0 0 Y 23 N 24 N 25 W 1 2 0 26

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS 27

This event was caused by instrument drift. The bistables were placed in trip, the  
 summator was recalibrated and returned to service.

FACILITY STATUS % POWER OTHER STATUS 30 METHOD OF DISCOVERY DISCOVERY DESCRIPTION 32  
 E 28 1 0 0 29 N/A B 31 Periodic Test  
 ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY 35 LOCATION OF RELEASE 36  
 Z 33 Z 34 N/A  
 PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION 39  
 0 0 0 37 Z 38 N/A  
 PERSONNEL INJURIES NUMBER DESCRIPTION 41  
 0 0 0 40 N/A  
 LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION 43  
 Z 42 N/A  
 PUBLICITY ISSUED DESCRIPTION 45  
 N 44 N/A

ATTACHMENT 1  
SURRY POWER STATION, UNIT NO. 1  
DOCKET NO: 50-280  
REPORT NO: 82-125/03L-0  
EVENT DATE: 12-22-82

TITLE OF THE EVENT: LOOP 'A'  $\Delta T$  DRIFT

1. Description of the Event

With unit one at 100 percent power, the performance of Periodic Test 2.1 revealed that the output of the 'A' loop Delta T summator, TM-1-412J, had drifted below acceptable limits. This event is contrary to Technical Specification 2.3.A and reportable pursuant to Technical Specification 6.6.2.b.(1).

2. Probable Consequences and Status of Redundant Equipment

The Delta T summator provides input to the OP $\Delta T$  and OT $\Delta T$  alarm and Reactor Trip Circuits. The overtemperature  $\Delta T$  Reactor Trip provides core protection against DNB for all combinations of pressure, power, coolant temperature, and axial power distribution, provided only that the transient is slow with respect to piping transit delays from the core to the temperature detectors and pressure is within the range between high and low Reactor Trips. The overpower  $\Delta T$  Reactor Trip prevents power density anywhere in the core from exceeding 118% of design power density and includes corrections for axial power distribution, change in density and heat capacity of water with temperature, and dynamic compensation for piping delays from the core to the temperature detectors.

The overpower and overtemperature delta T reactor trips provide protection for slow moving transients within the bounding condition stated above. Before exceeding the T.S. limit, the operator would have been alerted by (1) an overpower alarm and/or an overtemperature alarm, (2) an overpower turbine run-back and alarm and/or an overtemperature turbine runback and alarm.

Additionally, the Overpower and Overtemperature Delta T Reactor Trips from 'B' and 'C' loops were operational and would have tripped at less than the Technical Specification limit.

Analysis performed since the steam generator replacement project indicates that the Delta T limits of 1.07%, which was based on 28% of the S/G tubes plugged, is extremely conservative. A Technical Specification change has been prepared and reviewed by the Surry SNSOC requesting this limit be returned to the original value.

For the reasons stated above, the health and safety of the public would not have been affected.

3. Cause

The cause of this event was instrument drift.

4. Immediate Corrective Action

The bistables were placed in trip.

5. Subsequent Corrective Action

The Delta T summator was recalibrated in accordance with PT 2.1B and returned to service.

6. Action Taken to Prevent Recurrence

None required.

7. Generic Implications

None.