NRC FORM 366
(7-77)

LICENSEE EVENT REPORT

CONTROL BLOCK: | | | | | | | (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 | V A S P S 2 (2) | LICENSEE CODE | 0 0 - 0 0 0 0 0 - 0 0 (3) LICENSE NUMBER | 4 1 1 1 1 (4) LICENSE TYPE | CAT (5)

CONT 0 1 | REPORT SOURCE L (6) | 0 5 0 0 0 2 8 1 (7) DOCKET NUMBER | 0 3 0 9 8 3 (8) EVENT DATE | 0 4 0 7 8 3 (9) REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 On March 9, 1983, with Unit 2 at 100%, the performance of PT-27B revealed amp
0 3 readings less than the acceptance criteria for heat tracing circuits 6A, panel 11;
0 4 21A, panels 8 and 9. This is contrary to T.S.-3.2.C.5 and T.S.-3.3.A.4 and is
0 5 reportable pursuant to T.S.-6.6.2.b.(2). The redundant circuit for circuit 6A was
0 6 verified operable. The flow paths affected by circuits 21A were verified operable and
0 7 circuits were returned to service with time limits of T.S. Therefore, the health and
0 8 safety of the public were not affected.

SYSTEM CODE (11)	CAUSE CODE (12)	CAUSE SUBCODE (13)	COMPONENT CODE (14)	COMP. SUBCODE (15)	VALVE SUBCODE (16)
S F	X	Z	H E A T E R	Z	Z

(17) LER/RO REPORT NUMBER

EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
8 3	—	0 1 2	/	0 3	L	—	0

ACTION TAKEN (18)	FUTURE ACTION (19)	EFFECT ON PLANT (20)	SHUTDOWN METHOD (21)	HOURS (22)	ATTACHMENT SUBMITTED (23)	NPRD-4 FORM SUB. (24)	PRIME COMP. SUPPLIER (25)	COMPONENT MANUFACTURER (26)
A	H	B	Z	0 0 0 0	Y	Y	A	T 1 8 5

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The failure of circuit 6A was due to excessive heat. The failure of circuits 21A
1 1 was due to unintentional damage by construction personnel. The heat tape was replaced
1 2 and the circuits returned to service.
1 3
1 4

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 RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
Z (33)	Z (34)	N/A	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

8304190312 830407
PDR ADOCK 05000281
S PDR

LOSS OF OR DAMAGE TO FACILITY (43)

TYPE	DESCRIPTION
Z (42)	N/A

PUBLICITY

ISSUED	DESCRIPTION (45)	NRC USE ONLY
N (44)	N/A	

NAME OF PREPARER J. L. Wilson PHONE: (804) 357-3184

ATTACHMENT 1
SURRY POWER STATION, UNIT NO. 2
DOCKET NO: 50-281
REPORT NO: 83-012/03L-0
EVENT DATE: 03-09-83

TITLE OF THE EVENT: LOW CURRENT ON HEAT TRACING

1. Description of the Event

With Unit No. 2 steady at 100% power, performance of Unit 1 PT-27B revealed that the amp readings for heat tracing panels 8 and 9, circuit 21A ('C' transfer pump discharge, 'C' and "D" transfer pump discharge cross connection, and #2 Boric Acid Filter Inlet) were below the acceptance criteria.

In addition, unit 2 PT-27B revealed that amp reading for Panel 11, circuit 6A, (Manual Borate and Boric Acid to Blender Line) was below the acceptance criteria.

Inoperability of circuit 21A is contrary to T.S.3.2.C.5 and failure of one channel of circuit 6A is contrary to T.S.3.3.A.4. Both events are reportable in accordance with T.S.6.6.2.b.(2).

2. Probable Consequences and Status of Redundant Equipment

The heat tracing is intended to maintain a temperature above that needed for flow. The flow path through the blender was functionally verified and the flow path from the RWST and the BIT were operable. The redundant circuit for circuit 6A was verified operable. Therefore, the health and safety of the public were not affected.

3. Cause

The loss of Panel 11, circuit 6A heat tracing was due to excessive heat. The loss of panels 8 and 9, circuit 21A heat tracing was due to physical damage to the tape. Construction personnel had been working in the nearby area; it is therefore possible that the tape was unintentionally damaged by construction workers.

4. Immediate Corrective Action

The required flow paths heat traced by both circuits 21A were verified operable. The redundant circuit 6A was verified operable.

5. Subsequent Corrective Action

The defective heat tracing circuit was replaced within the time span specified by the Technical Specifications.

6. Action Taken to Prevent Recurrence

New heat tracing is being installed on Unit 1 CVCS flow paths during the current refueling outage. This new heat tracing will be operable prior to returning Unit 1 to service. The new heat tracing will provide improved physical protection and a different thermostat control principle. Additionally, construction forces and other personnel will be reminded of the sensitivity of the components near which they work.

7. Generic Implications

A Task Force has reviewed the total spectrum of the Heat Tracing System and a Design Change has been prepared as a result of the Task Force Study. Installation of this Design Change has commenced.