

LICENSEE EVENT REPORT
UPDATED REPORT

PREVIOUS REPORT DATE 12-11-79

CONTROL BLOCK: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 V A S P S 1 2 0 0 - 0 0 0 0 0 0 - 0 0 3 4 1 1 1 1 4 5
7 8 9 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 57 CAT 58

CON'T
0 1 REPORT SOURCE L 6 0 5 0 0 0 2 8 0 7 1 1 1 9 7 9 8 1 2 1 1 7 9 9
7 8 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 During normal operation, routine surveillance revealed the failure of heat tracing
0 3 circuit 13A (Panels 8 & 9) #1 & #2 Boron Injection Recirc to Boric Acid Tanks. This is
0 4 a degraded mode of operation permitted by T.S. 3.3.B.5, and is reportable as per T.S.
0 5 6.6.2.b.(2). The health and safety of the public were not affected.
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0 9 SYSTEM CODE S H 11 CAUSE CODE B 12 CAUSE SUBCODE A 13 COMPONENT CODE H E A T E R 14 COMP. SUBCODE Z 15 VALVE SUBCODE Z 16
7 8 9 10 11 12 13 14 15 16 17 18 19 20
17 LER/RO REPORT NUMBER 7 9 21 22 EVENT YEAR 23 24 SEQUENTIAL REPORT NO. 0 3 7 25 26 OCCURRENCE CODE 0 3 27 28 29 REPORT TYPE X 30 31 REVISION NO. 1 32
ACTION TAKEN A 18 FUTURE ACTION Z 19 EFFECT ON PLANT Z 20 SHUTDOWN METHOD Z 21 HOURS 0 0 0 0 22 ATTACHMENT SUBMITTED Y 23 NPRD-4 FORM SUB. N 24 PRIME COMP. SUPPLIER X 25 COMPONENT MANUFACTURER T 1 8 5 26
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 A review of the heat tracing circuit showed that failure was caused by excessive heating
1 1 of the heat tracing tape. The corrective action implemented was to replace the heat
1 2 tracing tape, and to initiate a design change to correct the design deficiency.
1 3
1 4

1 5 FACILITY STATUS E 28 % POWER 1 0 0 29 OTHER STATUS NA 30 METHOD OF DISCOVERY B 31 DISCOVERY DESCRIPTION Electrician observation 32
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
1 6 ACTIVITY CONTENT Z 33 RELEASED OF RELEASE Z 34 AMOUNT OF ACTIVITY NA 35 LOCATION OF RELEASE NA 36
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
1 7 PERSONNEL EXPOSURES NUMBER 0 0 37 TYPE Z 38 DESCRIPTION NA 39
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
1 8 PERSONNEL INJURIES NUMBER 0 0 40 DESCRIPTION NA 41
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
1 9 LOSS OF OR DAMAGE TO FACILITY TYPE Z 42 DESCRIPTION NA 43
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
2 0 PUBLICITY ISSUED N 44 DESCRIPTION NA 45
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

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NRC USE ONLY

NAME OF PREPARER W. I. Stewart

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(UPDATE REPORT)

(ATTACHMENT), PAGE 1 OF 1
SURRY POWER STATION, UNIT 1
DOCKET NO: 50-280
REPORT NO: 79-037/03X-1
EVENT DATE: 11/19/79
TITLE OF EVENT: Low Current on Heat Tracing

1. DESCRIPTION OF EVENT:

With the unit in normal operation at rated power, operator surveillance found that Heat Tracing Circuit 13A was operating at less than the current specified in the surveillance document. No low temperature alarms were indicated.

Investigation for faulty heat tracing tape was initiated on the affected circuit. Faults were found on circuit 13A (panels 8, 9) #1 & #2 Boron Injection recirculation to the Boric Acid Tank and were identified as being the result of excessive heat. The tape was replaced and circuit current verified to be within specs of the surveillance document.

This is a degraded mode of operation permitted by T.S. 3.3.B.5 and is reportable in accordance with T.S. 6.6.2.b.(2).

2. PROBABLE CONSEQUENCES AND STATUS OF REDUNDANT SYSTEMS:

At all times during the event, the temperature of the affected line was maintained as required. The redundant circuit was operable. There were at all times two operable flow paths for boric acid to the reactor. Therefore, the health and safety of the public were not affected.

3. CAUSE:

The reduced currents were due to excessive heating of the heat tracing tape through poor circuit design.

4. IMMEDIATE CORRECTIVE ACTION:

The heat tracing tape was replaced.

5. SCHEDULED CORRECTIVE ACTION:

The problem was corrected immediately and a design change has been initiated to correct a design deficiency.

6. ACTION TAKEN TO PREVENT RECURRENCE:

Continuous surveillance is maintained on the Heat Tracing System. No additional action is considered necessary.

7. GENERIC IMPLICATIONS:

In view of the number of failures of this heat tracing tape, a task force has been established to examine the heat tracing system and determine corrective action.