

LICENSEE EVENT REPORT

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

VIA S P S 1 2 0 0 - 0 0 0 0 0 - 0 0 3 4 1 1 1 1 4 5

LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 31 CAT 56 57

REPORT SOURCE L 6 0 5 0 0 0 2 8 0 7 0 7 0 8 8 1 8 0 7 2 1 8 1 9

DOCKET NUMBER 56 59 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES 10

With the unit returning to service following steam generator replacement, delta T protection channel T-1-422A was found to indicate zero. The channel was inoperable and not placed in the tripped mode for a total of about 12 hours, before it was returned to service. This is contrary to the degree of redundancy requirements of T.S. 3.7, Table 3.7-1, and is reportable per T.S. 6.6.2a(2). The two redundant protection channels remained operable; therefore the health and safety of the public were not affected.

SYSTEM CODE A 11 CAUSE CODE A 12 CAUSE SUBCODE C 13 COMPONENT CODE I N S I T R U 14 COMP SUBCODE X 15 VALVE SUBCODE Z 16

LER/RO REPORT NUMBER 17 EVENT YEAR 8 1 SEQUENTIAL REPORT NO. 0 2 3 OCCURRENCE CODE 0 1 REPORT TYPE T REVISION NO. 0

ACTION TAKEN X 18 FUTURE ACTION Z 19 EFFECT ON PLANT Z 20 SHUTDOWN METHOD Z 21 HOURS 0 0 0 0 ATTACHMENT SUBMITTED Y 23 NPROG FORM SUB. N 24 PRIME COMP. SUPPLIER A 25 COMPONENT MANUFACTURER R 3 6 9 26

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS 27

The Tc and TH RTD's were wired incorrectly following completion of a design change. Personnel failed to recognize that the required degree of redundancy for OP OT Delta T was not being maintained. The channel was later placed in trip, the RTD's wired correctly and the channel verified operable.

FACILITY STATUS E 28 % POWER 0 4 2 29 OTHER STATUS N/A 30 METHOD OF DISCOVERY B 31 DISCOVERY DESCRIPTION Operational Event 32

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

PERSONNEL EXPOSURES NUMBER 0 0 0 37 TYPE Z 38 DESCRIPTION N/A 39

PERSONNEL INJURIES NUMBER 0 0 0 40 DESCRIPTION N/A 41

LOSS OF OR DAMAGE TO FACILITY TYPE Z 42 DESCRIPTION N/A 43

PUBLICITY ISSUED N 44 8107310505 810721 PDR ADDOCK 05000280 PDR

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NRC USE ONLY

ATTACHMENT 1
SURRY POWER STATION, UNIT 1
DOCKET NO: 50-280
REPORT NO: 81-023/OIT-0
EVENT DATE: 07-08-81

PROTECTION DELTA T READING ZERO

1. DESCRIPTION OF EVENT:

On July 8, at 1630, Unit One was returned to service following the Steam Generator Replacement. Delta T protection channel T-1-422A was found to indicate zero. Technicians placed the bistables in trip at 2130 as they began their investigation using the functional Periodic Test.

At 0045, July 9, the technicians were requested to perform the HiHi CLS logic Periodic Test (8.5) in order to continue Power Escalation of Unit One. In accordance with their normal procedures, the technicians took the bistables out of trip and restored the circuit with T-1-422A still indicating zero.

The protection Delta T was not placed in trip again until approximately 0800 when the Day Shift began investigating the problem.

The Protection channel was inoperative and not in the tripped mode for approximately 12 hours. This event is contrary to the Redundancy Requirements of Technical Specification 3.7, Table 3.7-1, and is reportable in accordance with T.S. 6.6.2a(2).

2. PROBABLE CONSEQUENCES AND STATUS OF REDUNDANT EQUIPMENT:

The Delta T trip circuits provide protection from DNB and power density in excess of 118%.

During this event the Redundant Delta T channels remained operable and therefore the health and safety of the public were not affected.

3. CAUSE:

The Tc and TH RTD's were wired incorrectly when they were returned to service following completion of a design change during the steam generator replacement. The failure to place and maintain the channel in trip was personnel error.

4. IMMEDIATE CORRECTIVE ACTION:

The Delta T bistables were placed in trip.

5. SUBSEQUENT CORRECTIVE ACTION:

RTD's were reconnected to the correct Delta T inputs and the functional Periodic Test was performed to verify operability.

5. ACTION TAKEN TO PREVENT RECURRENCE:

Personnel will be reinstructed on the Technical Specification requirements for redundant channels.

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7. GENERIC IMPLICATIONS:

None.