

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

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 9 6

CODE
P 11 C 12

SUBCODE
X 13

COMPONENT CODE
Z 14 Z 15 Z 16

SUBCODE
Z 17

SUBCODE
Z 18

17 LER/RO REPORT NUMBER

EVENT YEAR
8 3

SEQUENTIAL REPORT NO.
0 1 5

OCCURRENCE CODE
0 3

REPORT TYPE
L

REVISION
0

ACTION TAKEN
B 18

FUTURE ACTION
Z 19

EFFECT ON PLANT
A 20

SHUTDOWN METHOD
A 21

HOURS
0 0 2 5

ATTACHMENT SUBMITTED
Y 23

NPWD FORM SUB
Y 24

PRIME COMP SUPPLIER
Z 25

COMPONENT MANUFACTURER
Z 9 9 9 26

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

FACILITY STATUS (1) 5 (2) E (3) 23 (4) 10 (5) 0 (6) 0 (7) 29 (8) N/A (9) 30 (10) 44

METHOD OF DISCOVERY (11) A (12) 31 (13) 45 (14) 46 (15) Observation of temperature recorder (16) 48

DISCOVERY DESCRIPTION (17) 32 (18) 49

| ACTIVITY | | CONTENT | | RELEASED OF RELEASE | | AMOUNT OF ACTIVITY | | LOCATION OF RELEASE | |
|----------|---|---------|----|---------------------|----|--------------------|--|---------------------|--|
| 1 | 6 | Z | 33 | Z | 34 | N/A | | N/A | |

| PERSONNEL EXPOSURES | | | | | | | | | |
|---------------------|---|---|------|-------------|--|--|--|--|--|
| NUMBER | | | TYPE | DESCRIPTION | | | | | |
| 0 | 0 | 0 | Z | N/A | | | | | |

| PERSONNEL INJURIES | | DESCRIPTION | |
|--------------------|---|-------------|-----|
| NUMBER | | | |
| 0 | 0 | 0 | N/A |

| LOSS OF OR DAMAGE TO FACILITY | | DESCRIPTION | | 40 | |
|-------------------------------|----|-------------|------------|--------|----------|
| Z | 42 | N/A | 8507310206 | 831011 | |
| | | | 808 | ADOCK | 05000250 |

PUBLIC (15)
 S PDR ADDUCK 05000250 PDR
 N/A
 NRC USE ONLY

NAME OF PREPARER Z. E. Berry

305/245-2910 ext. 353

NFC USE ONLY

IE22
1/1
63 retrofit

Additional Event Description and Probable Consequences

Beginning on 9/8/83, it was noticed that heat tracing recorder #72 was not functioning properly. Also, on 9/8/83, heat tracing circuit #20 was observed to have higher than normal temperature and a plant work order was submitted to investigate. On 9/9/83, adjustments were made to recorder #72 to attempt to correct the problem noted on 9/8/83.

The first time circuit #20 dropped below the minimum required temperature of 145°F, coincident with the time when log readings were being taken, was on 9/10/83. The nuclear operator contacted the control room and asked if any steps were being taken to correct the problem on critical circuit #20. He was told that there was a Plant Work Order written for the circuit, so no further action was taken. (This PWO, as mentioned above, was for high temperature). Again on 9/11/83, the temperature of circuit #20 was noted as low. At this time, the misunderstanding was resolved and the Electrical Department was called in to determine the extent of the problem. Ammeter readings on train A of circuit #20 indicated that it was drawing excessive amperage. Train B exhibited very low ammeter readings. The entire critical circuit was declared inoperable and unit shutdown was commenced in accordance with T.S.3.6.c.5.

The last heat tracing periodic test performed on 8/11/83 revealed no problem with circuit #20.

Additional Cause Description and Corrective Action

As the inspection of the circuit progressed, it was discovered that train A had a faulty power supply connection and also a faulty splice in the heat tracing itself. The lagging was removed from the line near MOV-350 (emergency boration valve), revealing that train B heat tracing was cut. Temperature readings along the line showed that train B heat tracing was functioning and maintaining temperature on the section of line from its power supply to MOV-350. Because the thermocouples were positioned in this section of the line, it seemed that the temperature recorder should have continued to indicate normal, not low, temperature readings for this circuit. Malfunction of the recorder was suspected and a review of the previous recorder charts revealed that the recorder gears apparently went out of step by two when the adjustments were made to it on 9/9/83. As a result, every point that was printed on the chart was actually indicating the temperature for the circuit number two greater than the printed point number. When the recorder gears malfunctioned, point #20 began to show the temperature for circuit #22. Circuit #22 typically cycles between low and high temperature because it is on the line normally used to dilute and borate the RCS. The low temperatures observed for circuit #20 were actually circuit #22 responding to chemical additions to the RCS. Temperature readings for circuit #20, as indicated by recorder point for circuit #18, was indicating 180°F for the duration of the event.

During the entire event, no boric acid blockage occurred in any of the affected lines. The critical heat tracing circuit and the recorder were repaired in approximately 20 hours.

Additional corrective actions were deemed necessary in order to verify that all heat tracing circuits were performing as required. First, Technical and Operations

personnel checked that the heat tracing recorder points were indicating the correct circuit and correct temperature. Electrical and Operations are presently performing continuity checks of all critical heat tracing circuits. An inspection of the insulation on all critical heat tracing circuits has been completed and found to be satisfactory. Plant procedures will be changed to require a check of the circuit continuity monitoring light and the verification of recorded heat tracing temperature when assessing the status of a heat tracing circuit. Also, a plant change and modification was prepared and submitted earlier this year for the replacement of existing heat tracing recorders with new digital type recorders. Implementation is expected to be complete in the next few months.



October 11, 1983
PNS-LI-83-662

3 OCT 18 P 3:27

U.S. NRC FCN-II
ALBANY, NY

Mr. James P. O'Reilly
Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street N.W., Suite 2900
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

REPORTABLE OCCURRENCE 250-83-15

TURKEY POINT UNIT 3

DATE OF OCCURRENCE: SEPTEMBER 11, 1983

TECHNICAL SPECIFICATION 3.6.c.5

HEAT TRACING CIRCUIT

The attached Licensee Event Report is being submitted in accordance with Technical Specification 6.9 to provide 30-day notification of the subject occurrence.

Very truly yours,

J. W. Williams, Jr.
Vice President
Nuclear Energy

PROCESSED ORIGINAL
Certified BY Caroline Scott

JWW/PLP/js

Attachment

cc: Director, Office of Inspection and Enforcement (30)
Harold F. Reis, Esquire
File 933.1 TP

1E22
*1/1
83 RETROFIT