

ABNORMAL OCCURRENCE REPORT

Handwritten initials/signature

CONTROL BLOCK: 000721

FACILITY: PEB2 CATEGORY: REPORT

SOURCE: L DOCKET # 50-077 EVENT DATE: 010574 REPORT DATE: 011574

DESCRIPTION OF EVENT:
 REACTOR HIGH WATER LEVEL SWITCH
 LIS-2-2-3-101C #3 TRIPPED AT
 48.5 INCHES RATHER THAN THE REQUIRED
 EQUAL TO OR LESS THAN 45 INCHES,
 (50-277-74-1)

STATUS NO: 08 PROXIMATE CAUSE CODE: E COMPONENT NUMBER: 29

A-PERSONNEL ERROR
 B-DESIGN ERROR
 C-EXTERNAL CAUSE
 D-PROCEDURES DEFECTIVE
 E-COMPONENT FAILURE
 F-OTHER

DESCRIPTION OF CAUSE:
 THE CAN FOLLOWER ON THE SWITCH
 ACTUATOR WAS BINDING AND PREVENTED
 PROPER CAN FOLLOW.

STATUS OF REACTOR CODE:
 A-CONSTRUCTION
 B-PERFORMANCIAL, INITIAL STARTUP AND POWER ASCENSION TESTS
 C-ROUTINE STARTUP OPERATION
 D-ROUTINE SHUTTING DOWN OPERATION
 E-STeady STATE OPERATION AT _____ % POWER
 F-LOW POWER DURING ROUTINE POWER OPERATION
 G-SHUTDOWN (HOT OR COLD, EXCEPT REPELLING)
 H-REPELLING
 I-OTHER, INCLUDING SPECIAL TESTS (DESCRIBE)

METHOD OF DISCOVERY (DESCRIBE):
 A-OPERATIONAL EVENT
 B-ROUTINE TEST/INSPECTION
 C-SPECIAL TEST/INSPECTION
 D-EXTERNAL SOURCE

STATUS: G POWER: 10 OTHER STATUS: 11 DISC: 12 DESCRIPTION:

FORM OF ACTIVITY RELEASED: LIQUID CONTENT OF RELEASE: HEAVY OIL

PERSONNEL EXPOSURE: _____

PERSONNEL INJURIES: _____

OFFSITE CONSEQUENCES: _____

DAMAGE TO FACILITY: _____

PUBLICITY: _____

ADDITIONAL FACTORS: _____

REV. (2/1/73)

ABNORMAL OCCURRENCE REPORT

CONTROL BLOCK: 000722

FACILITY: PEG2 CATEGORY: REPORT TYPE: SOURCE: DOCKET #: 0520277 EVENT DATE: 010574 REPORT DATE: 011574

DESCRIPTION OF EVENT:

CONDENSER LOW VACUUM SWITCHES PS-2-5-11A AND D TRIPPED AT 22.2 AND 22.4 INCHES OF MERCURY RESPECT VACUUM THAN THE REQUIRED 15.0 INCHES OR GUARANTEE THAN 23 INCHES. (50-277-74-1)

SYSTEM NO.:

PROXIMATE CAUSE CODE:

A-PERSONNEL ERROR B-DESIGN ERROR C-EXTERNAL CAUSE D-PROCEDURES DEFECTIVE E-COMPONENT FAILURE F-OTHER

COMPONENT NUMBER:

05

E

30

DESCRIPTION OF CAUSE:

SEIPOSE DRIFT

STATUS OF REACTOR CODE:

A-CONSTRUCTION B-PREOPERATIONAL, INITIAL STARTUP AND POWER ASCENSION TESTS C-ROUTINE STARTUP OPERATION D-ROUTINE SHUTTING DOWN OPERATION E-STeady STATE OPERATION AT % POWER F-LOAD CHANGES DURING ROUTINE POWER OPERATION G-SHUTDOWN (HOT OR COLD, EXCEPT REFUELLING) H-REFUELLING I-OTHER, INCLUDING SPECIAL TESTS (DESCRIBE)

METHOD OF DISCOVERY (DISC.):

A-OPERATIONAL EVENT B-ROUTINE TEST/INSPEC. C-SPECIAL TEST/INSPEC. D-EXTERNAL SOURCE

STATUS:

% POWER

OTHER STATUS:

DISC.:

DESCRIPTION:

FORM OF ACTIVITY RELEASED:

1 LIQUID 2 SOLID 3 GAS

CONTENT OF RELEASE:

1 STEAM 2 HALOGEN 3 PARTICULATE

AMOUNT OF ACTIVITY:

LOCATION OF RELEASE:

PERSONNEL EXPOSURES:

NUMBER: DESCRIPTION:

PERSONNEL INJURIES:

NUMBER: DESCRIPTION:

OFFSITE CONSEQUENCES:

DAMAGE TO FACILITY:

PUBLICITY:

ADDITIONAL FACTORS:



PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

PHILADELPHIA, PA 19101

(215) 841-4000

7121 7122

January 15, 1974

Mr. A. Giambusso
Deputy Director of Reactor Projects
United States Atomic Energy Commission
Directorate of Licensing
Washington, D.C. 20545

Dear Mr. Giambusso:

Subject: Abnormal Occurrence

The following occurrence was reported to Mr. R. T. Carlson, A.E.C. Region I Regulatory Operations Office.

In accordance with Section 6.7.2.A of the Technical Specifications, Appendix A of DPR-44 for Unit 2 Peach Bottom Atomic Power Station, the following report is being submitted to the Directorate of Licensing as an Abnormal Occurrence.

Reference: License Number DPR-44, Amendment Number 1
Technical Specifications Table 3.1.1

Report No: 50-277-74-1
Report Date: 1-15-74
Occurrence Date: 1-5-74
Facility: Peach Bottom Atomic Power Station - Unit 2
R.D. 1, Delta, Pennsylvania 17314

Identification of Occurrence:

- A. Setpoint shift on LIS-2-2-3-101C which provides a Reactor High Water Level turbine trip input to the RCIC and the Main Turbine trip logics.
- B. Setpoint shift on PS-2-5-11A & D which provides an R.P.S. trip input on Condenser Low Vacuum.

Conditions Prior to Occurrence:

Reactor critical and vented at 160°F coolant temperature.

Description of Occurrence:

- A. During instrument surveillance testing, LIS-2-2-3-101C, switch #3 tripped at approximately 48.9" Reactor Level instead of ≤ 49" Reactor Level as specified in the Technical Specifications.

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- B. During instrument surveillance testing, PS-2-5-11A & D switches tripped at 22.2" Hg and 22.4" Hg respectively instead of >23" Hg as specified in the Technical Specifications.

Designation of Apparent Cause of Occurrence:

- A. LIS-2-2-3-101C, Switch #3: The cam follower (on the switch actuator) for switch #3 was found to be binding sufficiently with the cam to prevent proper following of the cam contour.
- B. PS-2-5-11A & D: The investigation to determine the cause of setpoint drift is still in progress.

Analysis of Occurrence:

The setpoint shifts of the subject switches would not have defeated the logic to produce the required safety actions. The other operable switches would have caused trips at the proper setpoints. These setpoint shifts were minor and have no safety implications.

Corrective Actions:

- A. LIS-2-2-3-101C, Switch #3: Switch #3 was replaced. The instrument was then calibration checked, the setpoint reset and checked, the switch functionally tested, and the instrument restored to service. A representative of the manufacturer's design engineering section was brought on site to aid in this investigation. No major cause for the setpoint shifts were identified. Some minor suggestions as to the manner of finely adjusting the switches and the switch actuators for position and roller pressure were made. A minor change in the calibration check procedure to provide better repeatability of setpoint reading was also suggested. Investigation by Philadelphia Electric Company Engineering & Research Department is continuing.
- B. PS-2-5-11A & D: The setpoints were reset to 23.7" Hg and 23.5" Hg respectively, and checked repeatedly with no evidence of further setpoint shift. The manufacturer has been contacted to provide technical assistance in this continuing investigation.

Failure Data:

- A. LIS-2-2-3-101C, Switch #3: These differential pressure switches have required frequent re-calibrations to correct setpoint shifts. During the past 20 weeks,


Mr. A. Giambusso
Jan. 15, 1974

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surveillance tests performed monthly on these devices have identified shifts in setpoint on 12 occasions. Shifts to values in excess of Technical Specification limits occurred 4 times including this occurrence.

- B. PS-2-5-11A & D: There have been no previous calibration or functional problems associated with these particular devices. These switches have been surveillance tested monthly for 5 months and have required no re-calibrations until the test performed on January 5, 1974.

Very truly yours,


M. J. Cooney
Ass't Gen'l Supt.
Generation Division

cc: Mr. J. P. O'Reilly
Director, Region I
United States Atomic Energy Commission
631 Park Avenue
King of Prussia, PA 19406