NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

# LICENSEE EVENT REPORT (LER)

| FACILITY NAME (1) | DOCKET NUMBER (2) | PAGE (3) |
|---|---|---|
| Peach Bottom Atomic Power Station - Unit 2 | 0 5 0 0 0 2 7 7 | 1 OF 0 3 |

TITLE (4)
Containment Isolation Caused by Reactor Protection System M-G Set Trip

| EVENT DATE (5) | | | LER NUMBER (6) | | | REPORT DATE (7) | | | OTHER FACILITIES INVOLVED (8) | |
|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | MONTH | DAY | YEAR | FACILITY NAMES | DOCKET NUMBER(S) |
| 0 2 | 2 7 | 8 6 | 8 6 | — 0 0 8 | — 0 0 | 0 3 | 2 5 | 8 6 | | 0 5 0 0 0 |
| | | | | | | | | | | 0 5 0 0 0 |

| OPERATING MODE (9) | N | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11) | | | |
|---|---|---|---|---|---|
| POWER LEVEL (10) | 1 0 0 | 20.402(b) | 20.405(c) | X 50.73(a)(2)(iv) | 73.71(b) |
| | | 20.405(a)(1)(i) | 50.36(c)(1) | 50.73(a)(2)(v) | 73.71(c) |
| | | 20.405(a)(1)(ii) | 50.36(c)(2) | 50.73(a)(2)(vii) | OTHER (Specify in Abstract below and in Text, NRC Form 366A) |
| | | 20.405(a)(1)(iii) | 50.73(a)(2)(i) | 50.73(a)(2)(viii)(A) | |
| | | 20.405(a)(1)(iv) | 50.73(a)(2)(ii) | 50.73(a)(2)(viii)(B) | |
| | | 20.405(a)(1)(v) | 50.73(a)(2)(iii) | 50.73(a)(2)(x) | |

LICENSEE CONTACT FOR THIS LER (12)

| NAME | TELEPHONE NUMBER |
|---|---|
| W. C. Birely, Senior Engineer - Licensing Section | AREA CODE 2 1 5 8 4 1 5 0 1 4 8 |

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

| CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPRDS | | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPRDS | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |
| | | | | | | | | | | | |

| SUPPLEMENTAL REPORT EXPECTED (14) | | EXPECTED SUBMISSION DATE (15) | MONTH | DAY | YEAR |
|---|---|---|---|---|---|
| YES (If yes, complete EXPECTED SUBMISSION DATE) | X NO | | | | |

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)


Abstract: 2-86-08

On February 27, 1986 at 0908 hours, a Group II and III outboard isolation occurred and a half-scram signal was generated while Unit 2 was at 100% power. The cause of the event was erratic voltage control associated with use of the rheostat for adjustment of the "B" Reactor Protection System (RPS) Motor Generator (M-G) set output voltage. This caused an undervoltage trip of the M-G set and resulted in the isolation, and half-scram signal. The trips were promptly reset and the M-G set was returned to service. There were no adverse safety consequences and no control rod insertion occurred.

An event similar to this occurred on February 3, 1986 and was reported in LER 2-86-07. A Maintenance Request Form was issued on March 3, 1986 (before submittal of the previous report) to inspect the rheostat and take appropriate corrective action.

Unit Conditions Prior to the Event

100% Power
Run Mode

Description of the Event:

On February 27, 1986 at 0908 hours, a Group II and III outboard isolation occurred and a half scram signal was generated when the "B" Reactor Protection System (RPS) motor generator (M-G) set tripped. Group II and III isolations include Reactor Water Cleanup System and Residual Heat Removal System isolations as well as selected containment and Reactor Building ventilation trips.

The "B" RPS M-G set tripped on undervoltage when the M-G set voltage rheostat was adjusted during performance of Surveillance Test (ST) 9.20, "RPS M-G Set Output Data." During performance of ST 9.20 (completed once each shift), it is not uncommon for the RPS M-G set output voltage to be adjusted to the desired range using the rheostat.

The "B" RPS M-G set trip, resulting isolations and pump trip were promptly reset. The M-G set was returned to service at 0910 hours on February 27.

The EIIS codes for the affected systems are JM, Primary Containment Isolation System (PCIS), and JC, RPS.

Consequences of the Event:

There were no adverse safety consequences. The PCIS logic and Reactor Protection System functioned properly during the event. No control rod insertion occurred because only a half-scram signal was generated.

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| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | |
| Peach Bottom Atomic Power Station - Unit 2 | 0 5 0 0 0 2 7 7 | 8 6 | — 0 0 8 | — 0 0 | 0 3 OF 0 3 |

TEXT (If more space is required, use additional NRC Form 366A) (17)

Cause of the Event:

During performance of ST 9.20, the "B" RPS M-G set output voltage was found to be lower than desired. In an attempt to increase the voltage to the desired range of 120-122.5 volts, the non-licensed plant operator turned the rheostat knob in the "increase" direction. However, the voltage decreased to the undervoltage trip setpoint.

Corrective Actions:

A Maintenance Request Form (MRF) was issued to inspect the rheostat and repair it as necessary. This work will take place during an upcoming outage. In addition, S.T. 9.20 has been revised to require the operator to notify the control room operators prior to adjusting the rheostat. Therefore, the operating shift will be forewarned of a potential RPS M-G set trip.

Previous Similar Occurrences:

A similar event occurred on February 3, 1986 and was reported in LER-2-86-07.

PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

(215) 841-4000

March 25, 1986

Docket No. 50-277

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555

SUBJECT: Licensee Event Report
Peach Bottom Atomic Power Station - Unit 2

This LER concerns a Group II and III outboard isolation due to an undervoltage trip of the 'B' Reactor Protection System M-G set.

| | |
|---|---|
| Reference: | Docket No. 50-277 |
| Report Number: | 2-86-08 |
| Revision Number: | 00 |
| Event Date: | February 27, 1986 |
| Report Date: | March 25, 1986 |
| Facility: | Peach Bottom Atomic Power Station<br>RD 1, Box 208, Delta, PA 17314 |

This LER is being submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(iv).

Very truly yours,

W. T. Ullrich
Superintendent
Nuclear Generation Division

cc: Dr. Thomas E. Murley, Administrator, Region I, USNRC
T. P. Johnson, NRC Resident Inspector

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