



PEACH BOTTOM—THE POWER OF EXCELLENCE

**PHILADELPHIA ELECTRIC COMPANY**

PEACH BOTTOM ATOMIC POWER STATION

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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 Technical Specification violation concerning the failure to log reactor coolant temperatures due to personnel error.

Reference: Docket No. 50-277  
Report Number: 2-91-008  
Revision Number: 00  
Event Date: 04/07/91  
Report Date: 05/03/91  
Facility: Peach Bottom Atomic Power Station  
RD 1, Box 208, Delta, PA 17314

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

Sincerely,

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## LICENSEE EVENT REPORT (LER)

On 4/7/91 at 1915, Shutdown Cooling (SDC) was removed from service to allow performance of Surveillance Testing. At this time, 15 minute reactor vessel skin temperature readings were started. At 2130 it was discovered that the reactor vessel coolant temperatures were required rather than the reactor vessel skin temperatures. The correct readings were then started and review of the applicable temperature recorders verified that no heat-up violations had occurred. The cause of the event was personnel error in that the involved operator used the incorrect data sheet for temperature monitoring. This event has been reviewed by the involved shift team and other shift teams will also review this event. Applicability of the process computer to assist the operator will be investigated. There were no previous similar events.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED DMB NO. 3150-0104

EXPIRES 8/31/88

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

Peach Bottom Atomic Power Station  
Unit 2

0 5 0 0 0 2 7 7 9 1 - 0 0 8 - 0 0 0 2 OF 0 3

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

Requirements for the Report

This report is required per 10 CFR 50.73 (a)(2)(i)(B) because of a failure to perform surveillance required by Technical Specifications (Tech Specs).

Unit Condition at Time of Event

Unit 2 was in the REFUEL mode of operation. The 'A' Recirculation (Recirc)(EIIS:AD) loop was in service and the 'B' Recirc loop was off. Shutdown Cooling (SDC) was on through the 'B' Recirc loop. There were no structures, components or systems which were inoperable that contributed to the event.

Event Description

On 4/7/91 at 1915, SDC was removed from service in preparation for performance of Residual Heat Removal (RHR)(EIIS:BO) system functional surveillance testing. At this time Surveillance Test (ST) 9.12, data sheet 2, Reactor Vessel Temperature and Pressure, was started by the Reactor Operator (RO). As a result of a Shift Supervisor (SSV) review, it was discovered that the data sheet 2 readings had been started in error and that Tech Spec 4.6.A.1 surveillance requirements had not been met. Tech Spec 4.6.A.1 states that during reactor heat-up or cooldowns, bottom head drain and Recirc 'A' and 'B' loop temperatures shall be permanently logged at least every 15 minutes until the difference between any 2 readings over a 15 minute period is less than 5 degrees F. These points were not logged by the RO. Data sheet 2 monitors reactor skin temperatures. ST 9.12, data sheet 1, Reactor Heat-Up and Cooldown Temperatures, was immediately started at 2130.

Review of reactor vessel (EIIS:RPV) temperature recorder (EIIS:TR), reactor pressure vessel (RPV) drain temperature, and Recirc loop 'A' and 'B' coolant temperatures, verified that heat-up rates were less than 20 degrees/15 minute period. Increases of 3 degrees on RPV drain temperature and 9 degrees on Recirc 'A' loop temperature were noted during the 2 1/4 hour period.

Cause of the Event

The cause of the event was personnel error in failure to follow procedure. ST 9.12, Step 1 directs the RO (Utility - Licensed) to log coolant temperatures on data sheet 1 every 15 minutes during heat-ups and cooldowns. Data sheets 1 and 2 also specify the conditions under which the respective readings should be taken. However, the RO incorrectly used data sheet 2 instead of data sheet 1.

Analysis of Event

No safety consequences occurred as a result of this event. Tech Spec 4.6.A.1 states that during reactor heat-up or cooldowns, bottom head drain and Recirc 'A' and 'B' loop temperatures shall be permanently logged at least every 15 minutes until the difference between any 2 readings over a 15 minute period is less than 5 degrees F. These points were not logged by the RO.

Review of the associated temperature recorder pen traces indicated that during the 2 1/4 hour period in question, no change in temperature exceeded the 20 degrees/15

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U.S. NUCLEAR REGULATORY COMMISSION

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FACILITY NAME (1)  Peach Bottom Atomic Power Station Unit 2	DOCKET NUMBER (2)  0 5 0 0 0 2 7 7	LER NUMBER (6)			PAGE (3)		
		YEAR  9 1	SEQUENTIAL NUMBER  0 0 8	REVISION NUMBER  0 0			OF 0 3

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minute administrative limit. The changes over 2 1/4 hours were 3 degrees F on RPV drain temperature, 9 degrees F on Recirc 'A' loop temperature and no change on Recirc 'B' loop. The 'B' loop was out-of-service and isolated.

Had this event occurred soon after plant shutdown rather than after a core reload, decay heat would have resulted in increased heatup rates. Data sheet 2 does include Reactor Water Cleanup (RWCU) inlet temperature, thus the operator would have been alerted to the possible violation. In the absence of RWCU system flow, only vessel skin temperatures would have been available for temperature monitoring. Under these conditions, the 100 degree per hour heat-up rate or 212 degrees coolant temperature limits could have been exceeded. These parameters, however would have been discovered and limited due to RO routine surveillance of plant parameters, RO plant walkdowns during turnover, or by SSV monitoring of procedure/ST compliance, as did occur in this case.

#### Corrective Actions

The involved shift team has discussed this event in detail and will review the proper usage of ST 9.12 at a shift meeting.

Other shift teams will review this event during their respective shift turnover meetings.

The applicability of the process computer to assist the RO in performing periodic logging will be investigated.

#### Previous Similar Events

There were no previous similar events identified involving failure to log data as a result of using wrong data sheets. Previous events in LER's 2-89-027, 3-90-009, 3-90-015, and 3-91-004 involved not taking any data rather than using wrong data sheets.