

## LICENSEE EVENT REPORT (LER)

APPROVED OMB NO. 3160-0104  
EXPIRES 6/31/85FACILITY NAME (1)  
Peach Bottom Atomic Power Station - Unit 2

DOCKET NUMBER (2)

05000277

PAGE (3)

1 OF 03

TITLE (4)

Reactor Water Cleanup (RWCU) System Isolation on Unit 2

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)
04	03	84	84	007	00	04	27	84		050000
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)										
OPERATING MODE (9)			20.402(b)			20.406(e)			<input checked="" type="checkbox"/> 60.73(a)(2)(iv)	
POWER LEVEL (10)			20.406(a)(1)(i)			60.36(a)(1)			<input type="checkbox"/> 73.71(b)	
			20.406(a)(1)(ii)			60.36(a)(2)			<input type="checkbox"/> 73.71(a)	
			20.406(a)(1)(iii)			60.73(a)(2)(iii)			<input type="checkbox"/> 60.73(a)(2)(vi)	
			20.406(a)(1)(iv)			60.73(a)(2)(iv)			<input type="checkbox"/> 60.73(a)(2)(viii)(A)	
			20.406(a)(1)(v)			60.73(a)(2)(v)			<input type="checkbox"/> 60.73(a)(2)(viii)(B)	
			20.406(a)(1)(vi)			60.73(a)(2)(vi)			<input type="checkbox"/> 60.73(a)(2)(ix)	
OTHER (Specify in Abstract below and in Text, NRC Form 364A)										

LICENSEE CONTACT FOR THIS LER (12)

NAME  
B. L. Clark, Senior Engineer - Special Projects

TELEPHONE NUMBER

AREA CODE

2158411-5017

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

Abstract: 2-84-07

On April 3, 1984, at 9:15 a.m., with Unit 2 at 92% power level, the Reactor Water Cleanup (RWCU) system isolated on high temperature. Investigation revealed that the isolation occurred as the result of the loss of electrical power to temperature indicating switch, TIS-12-99, which isolates the RWCU system on high temperature at the outlet of the non-regenerative heat exchangers. The actual outlet temperature was approximately 90 degrees F. Maintenance, working on TIS-12-89B ("B" RWCU Recirc. Pump Trip on High Cooling Water Temp.), shorted the hot lead to ground causing fuse 12A-F1 to blow. This fuse also supplies electrical power to TIS-12-99. The fuse was replaced, and the RWCU system was returned to service by 9:50 a.m. on April 3, 1984.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Peach Bottom Atomic Power Station Unit 2	DOCKET NUMBER (2) 0   5   0   0   0   2   7   7   8   4   -   0   0   7   -   0   0   2   OF   0   3	LER NUMBER (3)			PAGE (4)
		YEAR	SEQUENTIAL NUMBER	ALLOCATION NUMBER	

TEXT (If more space is required, use additional NRC Form 368a (1))

Description of the Event:

On April 3, 1984, at 9:15 a.m., with Unit 2 at 92% power level, the Reactor Water Cleanup (RWCU) system isolated on high temperature. Temperature indicating switch, TIS-12-99, closes the RWCU system isolation valves (MO2-12-15, MO2-12-18 and MO2-12-68) when the water temperature at the outlet of the non-regenerative heat exchangers exceeds 200 degrees F. The actual outlet temperature was approximately 90 degrees F. Investigation revealed that the RWCU system isolation occurred as the result of loss of electrical power to temperature switch, TIS-12-99.

Consequences of the Event:

Since the Reactor Water Cleanup System valves are listed as Primary Containment Isolation Valves in Technical Specification Table 3.7.1, temperature switch, TIS-12-99, is listed as instrumentation that initiates Primary Containment Isolation in Technical Specification Table 3.2.A. However, the basic intent for isolating the RWCU system on high temperature at the outlet of the non-regenerative heat exchangers is to protect the ion exchange resin in the RWCU filter demineralizers from damage due to high temperature. The actual water temperature at the outlet of the non-regenerative heat exchangers during this event was approximately 90 degrees F, far from the Technical Specification limit of 200 degrees F. Likewise, since the Primary Containment Isolation System is designed as a fail-safe system, the loss of electrical power to temperature switch, TIS-12-99, caused the system to operate as designed by isolating the Reactor Water Cleanup System.

Cause of the Event:

While the Maintenance Engineering staff was working on temperature indicating switch, TIS-12-89B, which trips the "B" Reactor Water Cleanup Recirculation Pump on cooling water high temperature, the hot lead to the temperature switch was shorted to ground causing fuse 12A-F1 to blow. This fuse also supplies electrical power to TIS-12-99. As a result of the loss of power, TIS-12-99 failed safe and caused the RWCU system to isolate.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)  Peach Bottom Atomic Power Station Unit 2	DOCKET NUMBER (2)  0 5 0 0 0 2 7 7 8 4 - 0 0 7 - 0 0	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	ALVISION NUMBER			
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TEXT (If more space is required, use additional NRC Form 368A) (17)

Corrective Actions:

Fuse 12A-F1 was replaced and the operators returned the Reactor Water Cleanup System to service by 9:50 a.m. on April 3, 1984. The Maintenance Engineering staff was informed of the importance of being careful when working on equipment and, in particular, that which may cause actuation of an Engineered Safety Feature.

PHILADELPHIA ELECTRIC COMPANY

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PHILADELPHIA, PA. 19101

(215) 841-4000

April 27, 1984

Docket No. 50-277

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Washington, DC 20555

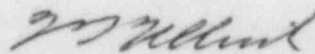
SUBJECT: Licensee Event Report

This LER deals with the isolation of the Reactor Water Cleanup (RWCU) System on Unit 2.

Reference:	Docket No. 50-277
Report Number:	2-84-07
Revision Number:	00
Event Date:	April 3, 1984
Report Date:	April 27, 1984
Facility:	Peach Bottom Atomic Power Station RD #1, Box 208, Delta, PA 17314

This LER is 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

Mr. A. R. Blough  
Site Inspector

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11