

LICENSEE EVENT REPORT (LER)

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

TITLE (4) Reactor Water Cleanup Isolation due to Moving a Cable with Worn Insulation Causing the Exposed Wire to be Grounded

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 (8)
06	13	88	88	005	01	08	30	88			0 5 0 0 0
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)											

OPERATING MODE (9) N	20.402(a)	20.408(a)	X	80.73(a)(2)(iv)	75.71(b)
POWER LEVEL (10) 0 1 0 0	20.408(a)(1)(ii)	80.38(a)(1)		80.73(a)(2)(v)	75.71(c)
	20.408(a)(1)(iii)	80.38(a)(2)		80.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)
	20.408(a)(1)(iv)	80.73(a)(2)(i)		80.73(a)(2)(vii)(A)	
	20.408(a)(1)(v)	80.73(a)(2)(ii)		80.73(a)(2)(vii)(B)	
	20.408(a)(1)(vi)	80.73(a)(2)(iii)		80.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12) NAME: W. C. Birely, Senior Engineer - Licensing Section TELEPHONE NUMBER: 2 1 5 8 4 1 1 - 5 0 4 8

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
X	C/E	ICBL	I2D/H	Y					

SUPPLEMENTAL REPORT EXPECTED (14) YES (if you complete EXPECTED SUBMISSION DATE) X NO

EXPECTED SUBMISSION DATE (15) MONTH DAY YEAR

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

Abstract: 3-88-05 Revision 1

On June 13, 1988 with Unit 3 in the cold condition and the reactor mode switch in the "REFUEL" position, a Reactor Water Cleanup (RWCU) outboard isolation valve logic actuation occurred on a false system high flow signal. Prior to the event electricians were inspecting cable splices in accordance with an approved procedure in the vicinity of the RWCU outboard logic differential pressure switch in conjunction with modification work. There were no adverse consequences as a result of this event because the RWCU isolation valves were blocked closed thereby preventing any potential radioactive effluent releases. The cause of the event was equipment failure. An investigation revealed that a small piece of the insulation on the differential pressure indicating switch cable was missing. When electricians moved the exposed cable, it momentarily touched the metal conduit, causing a ground and generating the isolation signal. The isolation was reset. The insulation will be replaced as part of a modification to inspect and rework similar cable splices. This modification is scheduled to be completed for both units by February 15, 1989.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

TEXT (If more space is required, use additional NRC Form 365A's (17))

Unit Conditions Prior to the Event:

Unit 3 was in cold condition with the reactor mode switch in the 'REFUEL' position.

Reactor Water Cleanup was out-of-service to accommodate modification work.

Description of the Event:

On June 13, 1988 at 1533 hours, the Unit 3 Reactor Water Cleanup (RWCU) outboard isolation valve logic was unexpectedly actuated on a false RWCU high flow signal. The unexpected actuation of an engineered safety feature is reportable to the NRC under 10 CFR 50.73(a)(2)(iv).

Prior to the event, electricians were inspecting cable splices in the area of the RWCU outboard logic differential pressure switch (DPIS-3-12-124B) as part of modification work which required the inspection and resplicing of Class 1E (environmentally qualified) cable. During the inspection, relay 16A-K63 was momentarily de-energized, generating an outboard Group II/III isolation signal.

Consequences of the Event:

There were no adverse consequences of this event. The RWCU isolation logic actuated as designed; however, no valve motion occurred because RWCU was out-of-service, with its associated isolation valves blocked closed. The purpose of the differential pressure switch is to sense high flow in the event of a pipe rupture downstream of the isolation valves. Actuation of the isolation feature with the reactor at power and the RWCU in service would have isolated the RWCU from the primary coolant system. Closure of the isolation valves prevents any potential release of radioactive effluents from the primary coolant system to the RWCU system. Short term isolation of the RWCU system during shutdown or at power has a negligible affect on primary coolant chemistry.

FACILITY NAME (1) Peach Bottom Atomic Power Station Unit 3	DOCKET NUMBER (2) 0 5 0 0 0 2 7 B	LER NUMBER (6)			PAGE (3)	
		YEAR 8 8	SEQUENTIAL NUMBER - 0 0 3	REVISION NUMBER - 0 1	0 3	OF 4

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

Cause of the Event:

The cause of the event was equipment failure. An investigation revealed that a small piece of the insulation on the lead wire from a differential pressure switch DPIS-3-12-124B was missing. The switch and wire are manufactured by ITT Barton, serial number 289A-3920. When the lead was moved during an approved procedural inspection, the exposed area contacted the metal conduit causing a ground which resulted in the PCIS logic actuation. The reason for the missing insulation could not be determined.

Corrective Actions:

The isolation was reset at 1700 hours. The isolation signal existed for 87 minutes.

Actions Taken to Prevent Recurrence:

Modification No. 2355 has been initiated to inspect and rework Unit 2 cable splices, and rework Unit 3 cable splices for safety-related instrumentation and 480V motors (except for motors for motor operated valves which will be examined under modification nos. 1915, 2231, and 2533 prior to restart). The repair of the insulation will be incorporated into modification number 2355. This modification is scheduled to be completed by October 1, 1988 for Unit 2 and February 15, 1989 for Unit 3.

EIIS Codes for Systems and Components:

The EIIS codes for the systems and components discussed in this LER are as follows: Containment Isolation Control System (PCIS) - JM; Reactor Water Cleanup System (RWCU) - CE; isolation valves - ISV; cable (wire) - CBL; differential pressure indicating switch - PDIS.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO 3150-0104
EXPIRES 8/31/85

FACILITY NAME (1) Peach Bottom Atomic Power Station Unit 3	DOCKET NUMBER (2) 0 5 0 0 0 2 7 8 8 8	LER NUMBER (5)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		88	005	01	04	OF 04

TEXT (if more space is required, use additional NRC Form 3054's) (17)

Previous Similar Occurrences:

LERs 2-87-13 and 2-87-27 addressed PCIS actuations as a result grounds caused by moving cables. However, neither of these events involved missing cable insulation.

PHILADELPHIA ELECTRIC COMPANY

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August 30, 1988

Docket No. 50-278

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

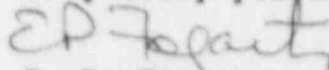
SUBJECT: Licensee Event Report
Peach Bottom Atomic Power Station - Unit 3

This report addresses a Reactor Water Cleanup System isolation caused by grounding a cable.

Reference: Docket No. 50-278
Report Number: 3-88-05
Revision Number: 01
Event Date: June 13, 1988
Report Date: August 30, 1988
Facility: Peach Bottom Atomic Power Station
RD 1, Box 208, Delta, PA 17314

This revised LER is being submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(iv). The original report stated in "Actions Taken to Prevent Recurrence" that all Unit 2 and Unit 3 Class 1E in-line splices will be inspected and reworked under Modification No. 2355. This revised report is being submitted to more accurately identify the scope of the work to be performed and to state that the insulation will be replaced as part of the modification. The changes have been identified by a bar in the margin adjacent to the changes.

Very truly yours,



E. P. Fogarty
Manager
Nuclear Support Division

cc: W. T. Russell, Administrator, Region I, USNRC
T. P. Johnson, NRC Senior Resident Inspector
T. E. Magette, State of Maryland
INPO Records Center

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11