



PEACH BOTTOM—THE POWER OF EXCELLENCE

PHI ADELPHIA ELECTRIC COMPANY

PEACH BOTTOM ATOMIC POWER STATION

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Delta, Pennsylvania 17314

(717) 456-7014

November 29, 1990

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 LER concerns an unexpected ESF actuation of the Primary Containment Isolation System due to personnel error.

Reference: Docket No. 50-278
Report Number: 3-90-014
Revision Number: 00
Event Date: 11/03/90
Report Date: 11/29/90
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)(iv).

Sincerely,

cc: J. J. Lyash, USNRC Senior Resident Inspector
T. T. Martin, USNRC, Region I

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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 3 PAGE (3)

TITLE (4) Unexpected ESF Actuation of the Primary Containment Isolation System Due to Personnel Error

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)
1	1	03	90	014	001	1	29	90			0 5 0 0 0
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THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)

OPERATING MODE (9) N	20.402(b)	20.405(c)	X	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 0 0 0	20.405(a)(1)(i)	50.38(e)(1)		50.73(a)(2)(v)	73.71(c)
	20.405(a)(1)(ii)	50.38(e)(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)(ix)	

LICENSEE CONTACT FOR THIS LER (12)
NAME: A. A. Fulvio, Regulatory Engineer
TELEPHONE NUMBER: 7 1 7 4 5 6 - 7 0 1 4
AREA CODE: 7 1 7 4 5 6 - 7 0 1 4

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRDS

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

ABSTRACT (Limit to 7400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)
On November 3, 1990, at 1850 hours, with Unit 3 in cold shutdown, a Primary Containment Isolation System (PCIS) outboard Group III isolation occurred as a result of a loss of power on the 3B Reactor Protection System (RPS) bus. The loss of power on the RPS bus was caused when the feed was transferred from the alternate to the normal supply. The event occurred when a chief operator directed a plant operator to use an inappropriate procedure as the result of a cognitive error. The outboard Group III isolation was reset after one hour and there were no adverse consequences as a result of this event. Appropriate equipment functioned as designed. The operator involved in this event has been counseled and a human performance evaluation system (HPES) investigation is in progress to identify the causal factors which led to this event. No previous similar LER's were identified.

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

Requirement for the Report

This report is required per 10 CFR 50.73 (a)(2)(iv) because of the unexpected actuation of an Engineered Safety Feature (ESF).

Unit Conditions Prior to the Event

Unit 3 was in the cold shutdown condition for scheduled surveillance testing. The 3B Reactor Protection System (RPS)(EIIS:JC) bus was being fed via the alternate power source for surveillance testing.

Description of the Event

On November 3, 1990, at 1850 hours, a Primary Containment Isolation System (PCIS)(EIIS:JM) outboard Group III isolation occurred as the result of the Chief Operator (Licensed, Utility) directing a Plant Operator (Non-Licensed, Utility) to use an inappropriate procedure.

The Chief Operator was attempting to transfer the 3B RPS power supply from the alternate source to the normal source, but committed a cognitive error when he selected an inappropriate procedure to perform the task. When the Plant Operator executed the procedure, the output breakers (EIIS:BKR) from the alternate RPS power source were opened. Since the alternate RPS power source was providing power to the 3B RPS bus at the time, the 3B RPS bus became de-energized resulting in closure of the Group III outboard ventilation isolation valves along with the initiation of the Standby Gas Treatment System (SBGT)(EIIS:BH).

The Unit 3 Reactor Operator (Licensed, Utility) verified the actuations were either tripped, isolated, or operating as required by plant procedures.

The isolation signal lasted for approximately one hour while operations personnel determined the correct procedures to use to restore power to the 3B RPS bus. At 1950 hours, the 3B RPS bus was returned to the normal power supply and the Group III outboard isolation was reset. All of the affected equipment functioned as designed during this event.

Cause of the Event

This event was caused when a Plant Operator was directed to use an inappropriate procedure to transfer power supplies on the 3B RPS bus. This was a cognitive error on the Chief Operator's part. A formal Human Performance Evaluation System (HPES) investigation is currently being performed to identify the causal factors which led to the cognitive error.

Analysis of the Event

There were no actual or potential adverse consequences resulting from this event. The appropriate equipment operated as designed.

An outboard Group III isolation is anticipated whenever RPS power supplies are transferred, but in this instance the isolation occurred sooner than expected because

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

an inappropriate procedure was used. Since an inappropriate procedure was used due to a cognitive error, the decision was made to consider this event an unplanned ESF actuation, and the appropriate reports were made as a result.

Since operations personnel were generally aware that a Group III isolation would occur when the RPS power supply was transferred, and since procedures exist to deal with a loss of power on an RPS bus, it is not felt that the consequences of this event would have been any different had the unit been at power.

Corrective Actions

The isolation was reset at 1950 hours. The Chief Operator involved in this event was counseled about the importance of attention to detail while performing critical evolutions. In addition, a HPES investigation is in progress to identify the causal factors which led to the personnel error.

Previous Similar Events

No previous LER's were identified which involved an inappropriate procedure resulting in a PCIS actuation.