



PEACH BOTTOM—THE POWER OF EXCELLENCE

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM ATOMIC POWER STATION

R. D. 1, Box 208

Delta, Pennsylvania 17314

(717) 456-7014

June 13, 1991

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 an unexpected Engineered Safety Feature actuation which occurred during the performance of a Surveillance Test as a result of a leaking isolation valve.

Reference:	Docket No. 50-277
Report Number:	2-91-014
Revision Number:	00
Event Date:	05/21/91
Report Date:	06/13/91
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)(1)(iv).

Sincerely,

A handwritten signature in dark ink, appearing to be "J. J. Lyash".

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

JE22
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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Peach Bottom Atomic Power Station Unit 2										DOCKET NUMBER (2) 0 5 0 0 0 2 7 7										PAGE (3) 1 OF 0 3				
TITLE (4) Engineered Safety Feature Actuation During Surveillance Testing Due to a Leaking Isolation Valve																								
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 NUMBERS									
0	5	2	1	9	1	9	1	0	1	4	0	0	0	6	1	3	9	1	0 5 0 0 0					
															0 5 0 0 0									
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)																						
N		20.402(b)				20.405(c)				<input checked="" type="checkbox"/> 50.73(a)(2)(iv)				73.71(b)										
POWER LEVEL (10)		0 2 5				20.405(a)(1)(ii)				50.38(c)(1)				50.73(a)(2)(v)				73.71(c)						
		20.405(a)(1)(iii)				50.38(c)(2)				50.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)										
		20.405(a)(1)(iv)				50.73(a)(2)(vii)				50.73(a)(2)(viii)(A)														
		20.405(a)(1)(v)				50.73(a)(2)(viii)(B)				50.73(a)(2)(ix)														
		20.405(a)(1)(vi)				50.73(a)(2)(x)				50.73(a)(2)(xi)														
LICENSEE CONTACT FOR THIS LER (12)																								
NAME Albert Fulvio, Regulatory Engineer										TELEPHONE NUMBER 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	MANUFAC TURE	REPORTABLE TO NRC																				
x	J	F	I	S	V	C	2	3	2	N														
SUPPLEMENTAL REPORT EXPECTED (14)																								
YES (If yes, complete EXPECTED SUBMISSION DATE)										X NO										EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR

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

On 5/21/91, at 1815 hours, with Unit 2 operating at 25% power, an isolation of the High Pressure Coolant Injection (HPCI) system occurred unexpectedly during the performance of a Surveillance Test (ST). This is an Engineered Safety Feature (ESF) actuation. The cause of the event was a leaking isolation valve which allowed the switch being tested to become pressurized, causing the isolation signal to occur sooner than expected. There were no actual safety consequences as a result of this event. The isolation valve was replaced on 6/8/91 and the ST was performed satisfactorily. There were four previous similar events.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 6/31/88

FACILITY NAME (1) Peach Bottom Atomic Power Station, Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 2 7 7 9 1 —	LER NUMBER (5)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		0 1	4	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 being submitted to satisfy the requirements of 10 CFR 50.73(a)(2)(iv) due to an unexpected Engineered Safety Feature (ESF) actuation.

Unit Conditions at Time of the Event

Unit 2 was in the RUN mode operating at approximately 25% power. There were no systems, structures or components that were inoperable which contributed to this event.

Description of the Event

On 5/21/91, at 1815 hours, an isolation of the High Pressure Coolant Injection (HPCI) (EIIIS:BJ) system occurred unexpectedly during the performance of a Surveillance Test (ST). This is an Engineered Safety Feature (ESF) actuation. At the time of the event, Instruments and Controls (I&C) Technicians (Utility, non-licensed) were performing surveillance test SI2F-23-76-XXFM, which functionally checks the HPCI high steam flow isolation function of differential pressure indicating switch (DPIS) (EIIIS:PDIS) 2-23-76. As directed by the ST, the technicians closed the isolation valves (EIIIS:ISV) for DPIS 2-23-76 and connected test equipment to allow a simulated high flow signal to be generated. At this point, the technicians paused in order to inform the unit operator that an isolation signal was going to occur. Just as the technicians were about to provide an input pressure signal using the test equipment, DPIS 2-23-76 actuated causing a HPCI isolation to occur sooner than expected. It was determined by the technicians that one of the isolation valves for DPIS 2-23-76, which was closed during this ST, was leaking through allowing the switch to become pressurized.

At 2033 hours on 5/21/91, a prompt notification was made to the NRC in accordance with 10 CFR 50.72(b)(2)(ii).

Cause of the Event

The cause of this event was a leaking isolation valve. The failure is believed to be due to normal wear. The isolation valve is manufactured by Dragon Valve Inc., Model P500F856.

Analysis of the Event

There were no actual safety consequences as a result of this event.

DPIS 2-23-76 provides an isolation signal to HPCI turbine steam supply line on sensed high flow conditions. Such conditions could be indicative of a break in the steam supply line. The ability of DPIS 2-23-76 to sense a valid high flow condition was unaffected by the leaking isolation valve since this valve is open during normal operating conditions. Although the isolation signal occurred sooner than expected, the purpose of the ST being performed was to generate a simulated high flow condition to verify the operability of DPIS 2-23-76.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

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

Corrective Actions

The isolation valve was replaced on 6/8/91, and SI2F-23-76-XXFM was subsequently performed satisfactorily.

Previous Similar LER's

Four previous similar LER's were identified. LER's 2-85-15, 2-87-26, 2-88-30 and 2-89-03 reported unexpected ESF actuations during surveillance testing activities due to leaking isolation valves. Since the corrective actions taken as a result of the above events consisted of replacing or repairing the specific valves involved, they could not have been expected to have prevented this event.