

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)
Peach Bottom Atomic Power Station - Unit 2DOCKET NUMBER (2)
0 5 0 0 0 2 7 7PAGE (3)
1 OF 1TITLE (4)
Actuation of RPS and PCISEVENT DATE (5)
MONTH DAY YEAR
0 6 2 2 8 5

LER NUMBER (6)

SEQUENTIAL
NUMBERREVISION
NUMBER

REPORT DATE (7)

MONTH DAY YEAR
0 0 0 7 2 2 8 5

OTHER FACILITIES INVOLVED (8)

FACILITY NAME

DOCKET NUMBER (8)

0 5 0 0 0 1 1

0 5 0 0 0 1 1

OPERATING
MODE (9)

N

POWER
LEVEL
(10)

0 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)

20.403(a)

20.406(a)

X 90.73(a)(3)(iv)

75.71(a)

20.406(a)(1)(i)

90.30(a)(1)

90.73(a)(2)(iv)

75.71(a)

20.406(a)(1)(ii)

90.30(a)(2)

90.73(a)(2)(v)

OTHER (Specify in Appendix
B and in Test, NRC Form
306A)

20.406(a)(1)(iii)

90.73(a)(2)(ii)

90.73(a)(2)(iv)(A)

20.406(a)(1)(iv)

90.73(a)(2)(iv)

90.73(a)(2)(iv)(B)

20.406(a)(1)(v)

90.73(a)(2)(iii)

90.73(a)(2)(ii)

LICENSEE CONTACT FOR THIS LER (12)

TELEPHONE NUMBER

NAME

J. C. Nagle, Senior Engineer - Special Projects

AREA CODE

2 15 8 4 1 7 5 1 8 4

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	S	J I M E C L	2 0 1 0	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

EXPECTED
SUBMISSION
DATE (15)

MONTH DAY YEAR

YES (If yes, complete EXPECTED SUBMISSION DATE)

X NO

ABSTRACT (Limit to 1000 words; i.e., substantially longer single-space typewritten text) (16)

Abstract: 2-85-04

On June 22, 1985, while Unit 2 was in cold shutdown, two separate, similar events occurred that initiated the reactor protection and primary containment isolation systems. Both events resulted in the generation of full scram signals and Group II/III isolations. Because Unit 2 was in the cold shutdown condition, no control rod movement occurred as a result of the events. The first event occurred when a reactor level transmitter was being returned to service following calibration. The second event occurred when a reactor level transmitter was being backfilled. During the first event, all systems operated properly. During the second event, one valve failed to close to the isolation position. After each event, the scram signal and Group II/III isolation signals were reset and the affected systems were returned to service. There were no adverse consequences.

8508020263 850722
PDR ADOCK 05000277
S PDR

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/86

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (3)			PAGE (3)																
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER																	
		0	5	0	0	0	2	7	7	8	5	-	0	0	4	-	0	0	0	2	OF

TEXT (If more space is required, use additional NRC Form 266a (17))

Description of the Event:

On June 22, 1985, at 9:06 a.m., while Unit 2 was in cold shutdown, a full scram signal was initiated by the reactor protection system as a result of receiving an inadvertent reactor low level signal. Additionally, the Primary Containment Isolation System (PCIS) initiated Group II and Group III isolation signals as a result of receiving the same reactor low level signal. Because Unit 2 was in the cold shutdown condition, no control rod movement occurred as a result of the event. All affected systems responded properly. The inadvertent signal was generated when reactor level transmitter LT-2-6-52C was being returned to service following calibration. The scram signal and Group II/III isolation signals were reset and all affected systems were returned to service.

At 10:47 a.m., on the same date, a full scram signal was initiated by the reactor protection system as a result of receiving a second inadvertent reactor low level signal. The PCIS again initiated Group II and Group III isolation signals. Because Unit 2 was in the cold shutdown condition, no control rod movement occurred as a result of the event. During this event, however, startup recirculation valve MO-2-2-38B did not close to the isolation position upon receiving an isolation signal. All other affected components responded properly. The low level signal that initiated this event was generated when reactor level transmitter LT-2-6-52B was being backfilled. The scram signal and Group II/III isolation signals were reset; an investigation was initiated into the cause of MO-2-2-38B failure to isolate properly, and all other affected systems were returned to service.

Consequences of the Event:

During the first event, at 9:06 a.m., the reactor protection system logic and the primary containment isolation system operated properly. Therefore, there were no adverse consequences.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3250-0104

EXPIRES 8/31/86

FACILITY NAME (1):

Peach Bottom Atomic Power
Station - Unit 2

DOCKET NUMBER (2):

LER NUMBER (6):

PAGE (3):

YEAR

SEQUENTIAL
NUMBERREVISION
NUMBER

0 5 0 0 0 2 7 7 8 5 - 0 0 4 - 0 0 0 3 OF 0 4

TEXT (If more space is required, use additional NRC Form 365A 2) (17):

During the second event, at 10:47 a.m., the reactor protection system logic again operated properly. The primary containment isolation system, with the exception of MO-2-2-38B failure to isolate, responded properly.

Primary containment was not required at the time of the event; however, MO-2-2-38B has a redundant series isolation valve, feedwater check valve 2-6-28B. The local leak rate test results of this check valve, obtained on April 24, 1985, were acceptable; therefore, containment integrity would have been maintained if required.

Cause of the Event:

At the time of the first event, reactor level transmitter LT-2-6-52C was being returned to service following calibration. LT-2-6-52C is connected to the same instrument rack (2AC65) as reactor level transmitters LT-2-2-3-101A and LT-2-2-3-101B. These latter two transmitters actuate the RPS and PCIS systems during a reactor low level condition. When LT-2-6-52C was valved into service, a pressure spike occurred on rack 2AC65 thereby causing LT-2-2-3-101A and LT-2-2-3-101B to generate low level signals. The spike occurred as a result of the instrument's block valves being opened too quickly. Simultaneous low level signals from LT-101A and LT-101B generate a full scram signal and Group II/III isolation signals.

At the time of the second event, reactor level transmitter LT-2-6-52B was being backfilled. LT-2-6-52B is connected to the same instrument rack (2BC65) as reactor level transmitters LT-2-2-3-101C and LT-2-2-3-101D. These latter two transmitters actuate the RPS and PCIS systems during a reactor low level condition. During backfilling, a pressure spike occurred on rack 2BC65 thereby causing LT-2-2-3-101C and LT-2-2-3-101D to generate low level signals. Simultaneous low level signals from LT-101C and LT-101D generate a full scram signal and Group II/III isolation signals.

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 2	DOCKET NUMBER (2) 0 5 0 0 0 2 7 7 8 5 - 0 0 4 - 0 0 0 4 OF 0 4	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

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

The backfilling was being performed using a new backfilling device. The device is essentially a portable, pressurized water supply that is used to purge air from instrument lines. When the device was connected into the instrument rack, an excessive amount of water pressure was applied to the rack thereby causing perturbations in the instrument sensing lines. These perturbations caused LT-101C and LT-101D to generate reactor low level signals.

MO-2-2-38B failed to close to the isolation position as a result of what is believed to be a failed torque switch. The torque switch operated to stop the valve as it moved in the closing direction; however, inspection of the torque switch did not reveal any defects.

Corrective Actions:

The instrument technicians involved with the first event were reminded of the importance of carefully returning instrumentation to service.

To prevent recurrence of the second event, continued use of the new backfilling device has been suspended. Instrument Technicians have been instructed to use the plant demineralized water header with proper valving to ensure a slow introduction of backfilling water into the instrument rack.

The MO-2-2-38B torque switch was replaced. The valve was cycled and proper operating currents and operating times were verified.

Previous Similar Events

None.

PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

(215) 841-4000

July 22, 1985

Docket No. 50-277

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

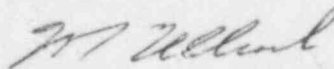
SUBJECT: Licensee Event Report
Peach Bottom Atomic Power Station - Unit 2

This LER concerns two separate, similar actuations of the reactor protection and primary containment isolation systems while Unit 2 was in the cold shutdown condition.

Reference:	Docket No. 50-277
Report Number:	2-85-04
Revision Number:	00
Event Date:	June 22, 1985
Report Date:	July 22, 1985
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).

Very truly yours,



W. T. Ullrich
Superintendent
Nuclear Generation Division

cc: Dr. Thomas E. Murley, Administrator, Region I, USNRC
T. P. Johnson, Resident Site Inspector

IE22
41