

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM ATOMIC POWER STATION

R. D. 1, Box 208

DELTA, PA 17314

(717) 456-7014



KEN POWERS
PLANT MANAGER

September 16, 1992

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 a reactor scram due to a less than adequate Load Dispatcher Permit in the Substation.

Reference:	Docket No. 50-277
Report Number:	2-92-015
Revision Number:	00
Event Date:	08/17/92
Report Date:	09/16/92
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

2104-
9209230018 920916
PDR ADOCK 05000277
S PDR

IE22
1/1

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-330), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

Fusach Bottom Atomic Power Station - Unit 2

DOCKET NUMBER (2)

0 5 0 0 0 2 7 7

PAGE (3)

1 OF 0 4

TITLE (4)

Reactor Scram Due to a Less Than Adequate Load Dispatcher Permit in the Substation

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)																														
0	8	17	92	015	00	0	9	16	92		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			<table border="0"><tr><td>20.402(b)</td><td>20.405(c)</td><td><input checked="" type="checkbox"/></td><td>50.73(a)(2)(iv)</td><td>73.71(b)</td></tr><tr><td>20.406(a)(1)(i)</td><td>50.36(c)(1)</td><td></td><td>50.73(a)(2)(v)</td><td>73.71(c)</td></tr><tr><td>20.406(a)(1)(ii)</td><td>50.36(c)(2)</td><td></td><td>50.73(a)(2)(vi)</td><td>OTHER (Specify in Abstract below and in Text, NRC Form 366A)</td></tr><tr><td>20.406(a)(1)(iii)</td><td>50.73(a)(2)(i)</td><td></td><td>50.73(a)(2)(viii)(A)</td><td></td></tr><tr><td>20.406(a)(1)(iv)</td><td>50.73(a)(2)(ii)</td><td></td><td>50.73(a)(2)(viii)(B)</td><td></td></tr><tr><td>20.406(a)(1)(v)</td><td>50.73(a)(2)(iii)</td><td></td><td>50.73(a)(2)(ix)</td><td></td></tr></table>									20.402(b)	20.405(c)	<input checked="" type="checkbox"/>	50.73(a)(2)(iv)	73.71(b)	20.406(a)(1)(i)	50.36(c)(1)		50.73(a)(2)(v)	73.71(c)	20.406(a)(1)(ii)	50.36(c)(2)		50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)	20.406(a)(1)(iii)	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		20.406(a)(1)(iv)	50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)		20.406(a)(1)(v)	50.73(a)(2)(iii)		50.73(a)(2)(ix)	
20.402(b)	20.405(c)	<input checked="" type="checkbox"/>	50.73(a)(2)(iv)	73.71(b)																																					
20.406(a)(1)(i)	50.36(c)(1)		50.73(a)(2)(v)	73.71(c)																																					
20.406(a)(1)(ii)	50.36(c)(2)		50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)																																					
20.406(a)(1)(iii)	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)																																						
20.406(a)(1)(iv)	50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)																																						
20.406(a)(1)(v)	50.73(a)(2)(iii)		50.73(a)(2)(ix)																																						

LICENSEE CONTACT FOR THIS LER (12)

NAME

Albert A. Pulvio, Regulatory Supervisor

TELEPHONE NUMBER

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 NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

SUPPLEMENTAL REPORT EXPECTED (14)

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

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

On 8/17/92 at 0712 hours, during the application of a Substation Load Dispatcher (LD) permit on Circuit Breaker (CB-205), a reactor scram occurred following a Main Generator Lock Out. PCIS Group II/III isolations occurred as expected. The cause of the event has been determined to be less than adequate generation and approval of a Substation LD permit. Following the event, the scram and isolations were reset and the affected systems were restored to normal. As an interim corrective action, Substation LD permits will be reviewed by Station personnel for reliability. Approved blocking sequences will then be generated for Substation equipment. No actual safety consequences occurred as a result of this event. No previous similar events have been identified.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 2	— 0 1 5	— 0 0	0 2	OF	0 4

TEXT (If more space is required, use additional NRC Form 386A/s) (17)

Requirements for the Report

This report is submitted to satisfy the requirements of 10 CFR 50.73(a)(2)(iv) because of unplanned Engineered Safety Feature (Reactor Protection System [RPS][EIIS:JC] and Primary Containment Isolation System [PCIS][EIIS:JM]) Actuations.

Unit Conditions at Time of Event

Unit 2 was in the RUN mode at 97% of rated thermal reactor (EIIS:RPV) power. There were no systems, structures, or components that were inoperable that contributed to the event.

Description of Event

On 8/17/92 at 0712 hours, during the application of a Substation Load Dispatcher (LD) permit on a Circuit Breaker (CB-205) (see attached diagram), a reactor scram occurred following a Main Generator Lock Out. CB-205 was being removed from service for maintenance activities. The maintenance activities included circuit breaker muffler replacements. The event occurred when the Substation operator opened the "5014 Line Relay Block Switch" located on the Main Generator Output Breaker (CB-215) rather than "5014 Line Back Up Relay Block Switch" on CB-205. The combination of the relay block switch open on CB-215 and the breaker open on CB-205 simulated a CB-215 breaker failure. With the CB-215 breaker failure signal and the breaker not open, a CB-215 failure signal was sent to the other Main Generator Output Breaker (CB-225) and to the Main Generator Lock Out circuitry which tripped CB-215. The actuation was recreated later that day to ensure understanding of the event.

After the scram, PCIS Group II/III isolations occurred as expected due to the Reactor water level dropped below 0" as a result of void collapse upon insertion of the control rods. Three Main Steam Relief Valves (EIIS:RV) momentarily lifted and the Alternate Rod Insertion system actuated as Reactor pressure increased. The NRC was notified of the event via ENS at 0850 hours. The scram actuation and PCIS Group II/III isolations were reset.

Cause of Event

The cause of the event has been determined to be the following:

Less than adequate generation and approval of a Substation LD permit on CB-205. The LD permit had an unnecessary step which caused the event. The "5014 Line Back Up Relay Block Switch" on CB-205, which should have been opened, was an unnecessary step to perform the specified maintenance activity. LD permits on the Transmission and Distribution system are controlled and administered by the LD. The LD is the individual in charge of Transmission and Distribution of electrical power produced and transmitted within the Philadelphia Electric Company system. No pre-approved blocking sequences, similar to those used at the plant, were available for CB-205. In addition, the LD permit did not include equipment locations.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE: 100 HRS. FORWARD
INFORMATION COLLECTION REQUEST. COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS
AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR
REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO
THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE
OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

Peach Bottom Atomic Power Station
Units 2

YEAR

SEQUENTIAL
NUMBERREVISION
NUMBER

0 5 0 0 0 2 7 7 9 2 - 0 1 5 - 0 0 0 3 OF 0 4

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

A contributing factor to this event was less than adequate labels on Substation equipment. The relay block switches were poorly labeled with pencil markings. Had the "5014 Line Relay Block Switch" on CB-215 and the "5014 Line Back Up Relay Block Switch" on CB-205 been labeled in a uniform method similar to those used at the plant, the Substation operator may have realized that he was performing a step at the wrong circuit breaker.

Analysis of Event

No actual safety consequences occurred as a result of this event. All isolations, initiations, and transfers functioned as designed.

Corrective Action

Following the event, the scram and isolations were reset and the affected systems were restored to normal.

As an interim corrective action, Substation LD permits are being reviewed by Station personnel for reliability prior to LD permit application. In the future, approved blocking sequences will be generated and labeling will be enhanced for Substation equipment which could impact plant reliability.

The event has been discussed with the involved individuals. The pertinent information from this event will be provided to the appropriate Operations personnel.

Previous Similar Events

No previous similar LERs have been identified which involved inadequate LD permits.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

Peach Bottom Atomic Power Station
Unit 2

DOCKET NUMBER (2)

0 5 0 0 0 2 7 7 9 2 — 0 1 5 — 0 0 0 4 OF 0 4

LER NUMBER (6)

PAGE (3)

YEAR SEQUENTIAL REVISION
NUMBER NUMBER NUMBER

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

SIMPLIFIED UNIT 2 SUBSTATION ELECTRICAL DIAGRAM