



PECO ENERGY

Garrett D. Edwards
Plant Manager
Peach Bottom Atomic Power Station

PECO Energy Company
1848 Lay Road
Delta, PA 17314
717 456 4244

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

Docket Nos. 50-277 & 278

SUBJECT: Licensee Event Report, Peach Bottom Atomic Power Station
Units 2 & 3

This LER concerns a Technical Specification violation as a result of operation with one off-site electrical source inoperable.

Reference:	Docket Nos. 50-277 & 278
Report Number:	2-96-005
Revision Number:	00
Event Date:	3/2/96
Discovery Date:	5/7/96
Report Date:	6/7/96
Facility:	Peach Bottom Atomic Power Station 1848 Lay Road, Delta, PA 17314

This LER is being submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(i)(b).

Sincerely,

GDEJHG:jhg

enclosure

cc: B. Gorman, Public Service Electric & Gas
R. R. Janati, Commonwealth of Pennsylvania
INPO Records Center
T. T. Martin, US NRC, Administrator, Region I
R. I. McLean, State of Maryland
W. L. Schmidt, US NRC, Senior Resident Inspector
A. F. Kirby III, DelMarVa Power
H. C. Schwemm, VP - Atlantic Electric

IFZP
11

9606140055 960607
PDR ADOCK 05000277
S PDR

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.6 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.

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

NRC Form 366 (6-89)

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)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

Peach Bottom Unit 2

0 5 0 0 0 2 7 7 9 6 - 0 0 5 - 0 0 0 2 OF 0 3

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

Requirements of the Report

This report is submitted pursuant to 10 CFR 50.73 (a)(2)(i)(B) as a result of a Technical Specification (Tech Spec) noncompliance due to a failure to maintain two offsite electrical sources operable.

Unit Conditions at Time of Discovery

Units 2 and 3 were in Mode 1 (RUN) at approximately 100% thermal reactor power. There were no other systems, structures, or components that were inoperable that contributed to the event.

Description of the Event

On 5/08/96, it was determined that Units 2 & 3 had been operated in a condition prohibited by Technical Specification (Tech Spec) 3.8.1 for approximately 49 days. Tech Spec 3.8.1 requires two offsite electrical sources be operable with Units 2 & 3 in Modes 1, 2 and 3. However, on 4/19/96, it was discovered that the 3SU off-site electrical source step-down transformer load tap changer (LTC) was not automatically responding to load changes on the 3SU bus and therefore would not have been able to maintain adequate voltage on the bus in the event of an emergency. Further investigation following the discovery of this event indicated the 3SU LTC had become inoperable during November of 1995. However, the 3SU, which is one of three available offsite sources, was only supplying emergency bus loads from 3/2/96 until 4/19/96. Therefore the period of Tech Spec noncompliance only existed between these two dates.

Cause of the Event

The cause of the LTC inoperability was determined to be the result of an actuation of the LTC surge protection circuitry (EIS:LAR). This circuitry is designed to protect the LTC in the event of a lightning strike. It is suspected that the surge protection circuitry actuated due to an actual lightning event.

An investigation was performed to determine why the LTC inoperability was not detected in a timely manner following its failure in November, 1995. The following contributing factors were identified:

1. During normal operating conditions, the 3SU bus load remains relatively constant. Because of this, the failure of the LTC had only a minor impact on the bus voltage and therefore did not make the failure obvious to the control room operators.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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-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 Unit 2	DOCKET NUMBER (2) 0 5 1 0 0 0 2 7 7 9 6	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		— 0	0 5	— 0 0	0 3	OF	0 3

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

2. The design of the LTC circuit does not provide a method, such as a supervisory circuit, to alert operations when a problem has occurred.
3. The number of automatic load changes indicated at the LTC is recorded during routine operator rounds. However the round sheets did not have an operability criteria associated with this reading. When the past round sheet information was reviewed by the system manager following the discovery of this event, it indicated a step change decrease in the number of automatic load changes starting in November, 1995.

Analysis of the Event

No actual safety consequences occurred as a result of this event.

During normal operating conditions, the Units 2 and 3 4KV emergency buses (4 buses per unit) are powered via two startup power buses. These startup buses are powered by two of three available offsite electrical power sources. In the event of a loss of one of the two startup power buses, the attached loads automatically transfer to the other bus via a normal dead bus transfer. However, had this startup bus not been able to handle this additional load, adequate on-site electrical sources were available to provide backup electrical power to the emergency 4KV buses and safely control the plant.

Corrective Actions

The 3SU offsite electrical source was removed from service on 4/19/96 and an alternate source was placed in service to meet the requirements of Tech Spec 3.8.1.

An evaluation will be performed to determine the appropriate corrective actions to ensure timely identification of LTC trouble. The corrective actions being evaluated include installation of a LTC supervisory circuit and procedural testing of the LTC. In the interim, until final corrective actions are implemented, trending of LTC status has been implemented for the three offsite electrical sources.

Previous Similar Events

No previous similar LERs were identified in which an offsite electrical source was rendered inoperable due to a failure of its associated load tap changer.