CCN: 91-14075

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

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 Technical Specification violation which was a result of a failure to perform an adequate Local Leak Rate Test on the Traversing Incore Probe Purge system due to an inadequate system piping review.

Reference:	Docket No. 50-277
Report Number:	2-91-012
Revision Number:	00
Event Date:	05/14/91
Report Date:	06/10/91
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)(2)(i).

Sincerely,

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

IE22
1/1

bcc: R. A. Burricelli, Public Service Electric & Gas
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NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Peach Bottom Atomic Power Station -- Unit 2	0 5 0 0 0 2 7 7	1 OF 0 3

TITLE (4)
Technical Specification Violation due to Failure to Perform Testing as a result of Improper Development of Original Procedure

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 5	1 4	9 1	9 1	—	0 1 2	— 0 0	0 6	1 0	9 1	PBAPS -- Unit 3	0 5 0 0 0 2 7 8
											0 5 0 0 0

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	0 0 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	X 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)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
A. A. Fulvio , Regulatory Engineer	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 NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

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

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

On 5/14/91 during the performance of a Local Leak Rate Test (LLRT), it was discovered that a primary containment isolation valve on both the Unit 2 and 3 Traversing Incore Probe (TIP) System purge lines was not being leak rate tested. This is a violation of Technical Specification 4.7.A.2.F, which requires that LLRT's be performed on primary containment isolation valves once each operating cycle. Although LLRT's had been performed each operating cycle on the TIP System purge line isolation valves, the outboard isolation valve (SV-109) was not actually being leak rate tested due to a rotometer type flow indicator (FI-110) installed between the test input tap and SV-109. The cause of the event was an inadequate review of the TIP system purge piping configuration during the development of the LLRT procedure. No actual safety consequences occurred as a result of this event. The SV-109's on both Unit 2 and 3 were subsequently tested and leakage was verified to be within acceptable limits. The LLRT procedure for SV-109 will be revised to allow leak rate testing downstream of FI-110. A modification will be considered to either relocate the test tap or FI-110 to provide a more suitable means of adequately leak rate testing SV-109. No previous similar events were identified.

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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)(i) due to a violation of Technical Specifications.

Unit Conditions at Time of the Event

Unit 2 was in the refueling mode; Unit 3 was in the shutdown mode. There were no systems, components, or structures that were inoperable which contributed to this event.

Description of the Event

On 5/14/91 during the performance of a Local Leak Rate Test (LLRT) on the Unit 3 Traversing Incore Probe (TIP) System purge line isolation valves, it was discovered that one of the isolation valves (SV-109) was not actually being leak rate tested. This is a violation of Technical Specification 4.7.A.2.F which requires that LLRT's be performed on primary containment isolation valves once each operating cycle. Although LLRT's had been performed on the TIP purge line isolation valves during each of the past operating cycles, SV-109 had been essentially isolated during the test by a rotometer type flow indicator (FI-110) which is installed in the piping between the test tap and SV-109 (see attached figure). The same condition was subsequently identified to exist on the Unit 2 TIP purge piping.

During the performance of ST 30.133, "TIP Purge Supply", the technician (Utility, non-licensed) performing the test requested the unit operator to stroke SV-109 to prove its operability since its solenoid operator had recently been replaced. With measured leakage reading zero on the installed test equipment, SV-109 was opened. Measured leakage, which should have gone off-scale with the valve open, remained at zero. The technician realized at this point that the ball which indicates flow in FI-110 was forced downscale on its seat since the LLRT was applying pressure on the outlet side of the rotometer. Since previous LLRT's performed on SV-109 on both Unit 2 and 3 used the same method, true leakage rates had not been measured. This method of leak rate testing SV-109 has been used since the LLRT requirements for these valves became effective in 1985.

Cause of the Event

The cause of this event was an inadequate review of the TIP System purge piping configuration during the original development of the LLRT procedure. The effects of reverse flow on FI-110 during the LLRT was not fully recognized.

Analysis of the Event

There were no actual safety consequences as a result of this event. The TIP System purge line is a 3/8 inch stainless steel pipe which is isolated from primary containment during accident conditions via a check valve (CHK-7F-4[5]1504) and an electrically operated solenoid valve (SV-109). LLRT's are performed on these valves each operating cycle to ensure primary containment integrity is maintained. Previous LLRT's on CHK-7F-4(5)1504, which is located upstream from SV-109, verified leakage to be within acceptable limits on both Unit 2 and 3. Additionally, following the

discovery of this event, the Unit 2 and 3 SV-109 valves were properly leak tested using a valid test configuration and leakage was verified to be within acceptable limits.

Corrective Actions

Following the discovery of this event, the LLRT procedures for SV-109 on both Unit 2 and 3 were temporarily modified to allow leak rate testing downstream of FI-110. Leakage through SV-109 on both Unit 2 and 3 was verified to be within acceptance limits.

A review of other systems was performed to determine if similar conditions exist. None were identified.

The LLRT procedures for SV-109 on both Unit 2 and 3 will be permanently revised to allow leak rate testing downstream of FI-110.

A modification will be considered to either relocate the test tap or FI-110 to provide a more suitable means of adequately leak rate testing SV-109.

Previous Similar Events

No previous similar events were identified concerning a missed surveillance due to an improper LLRT procedure.

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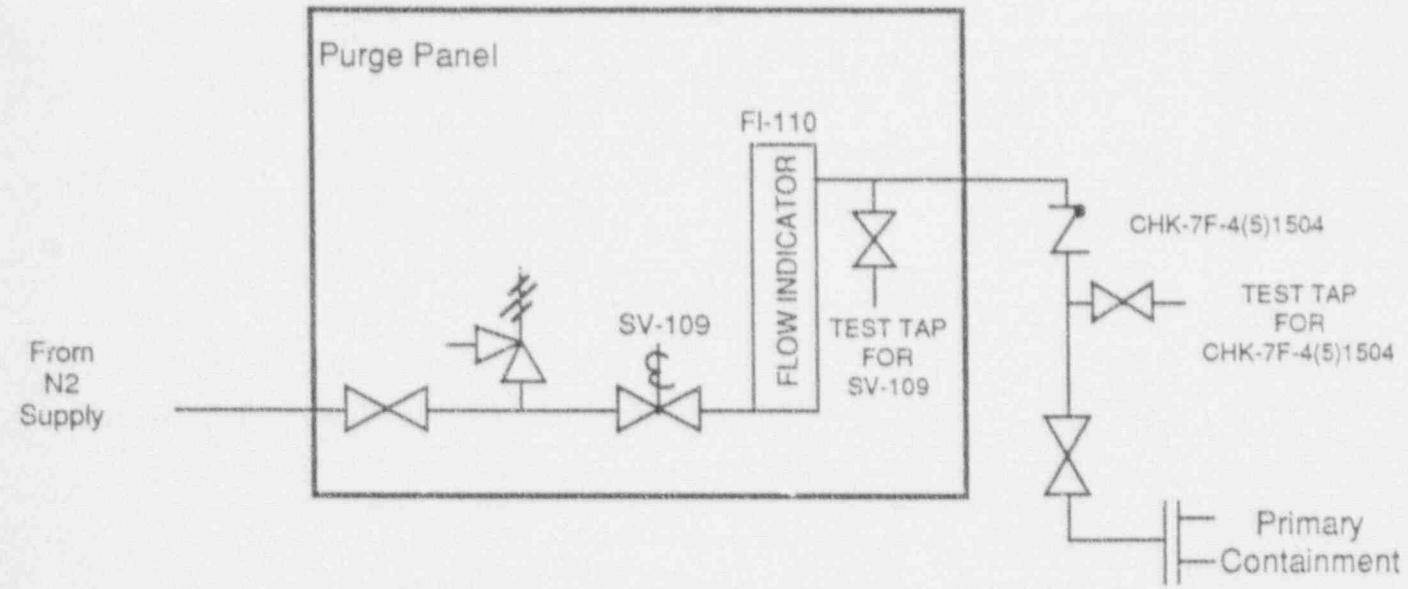
TEXT (If more space is required, use additional NRC Form 366A's) (17)

ATTACHMENT 1
SIMPLIFIED
TIP PURGE LINE



LICENSEE EVENT REPORT for Peach Bottom
LERNO 2-91-012

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