CCN-89-14127

PEACH BOTTOM ATOMIC POWER STATION PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM—THE POWER OF EXCELLENCE

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D. M. Smith
Vice President

August 14, 1989

Docket No. 50-277
50-278

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

SUBJECT: Licensee Event Report
Peach Bottom Atomic Power Station - Units 2 and 3

This revised LER concerns a report, required by the Technical Specifications, not being submitted due to personnel error. This revision provides new information regarding the event and the corrective actions. Changes are indicated by a vertical bar in the page margins.

Reference:	Docket No. 50-277 and 50-278
Report Number:	2-88-012
Revision Number:	02
Event Date:	04/02/88
Report Date:	08/15/89
Facility:	Peach Bottom Atomic Power Station RD 1, Box 208A, Delta, PA 17314

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

Sincerely,

D M Smith

cc: T. P. Johnson, USNRC Senior Resident Inspector
W. T. Russell, USNRC, Region I

IE22
1/1

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 5

TITLE (4)
Report Required by Technical Specifications on Inoperable Drywell Radiation Monitors not Submitted.

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)
									Peach Bottom - Unit 3	0 5 0 0 0 2 7 8
0 4	0 2	8 7	8 8	0 1 2	0 2	0 8	1 5	8 9		0 5 0 0 0

OPERATING MODE (9): N

POWER LEVEL (10): 0 0 0

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

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)	X OTHER (Specify in Abstract below and in Text, NRC Form 366A)
20.405(a)(1)(iii)	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	
T. E. Cribbe - 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 05/24/88, it was discovered that the Unit 2 and Unit 3 drywell high range radiation monitors were out of service without being reported to the NRC as required by the Technical Specifications (TS). TS 3.2.F requires at least two of the four instrument channels (on each unit) to be operable. An alternate method of monitoring drywell radiation, weekly manual surveys, was in place in accordance with TS 3.2.F when the monitors were removed from service. The recorders for Unit 2 monitors (RE-8103 A, B, C and D) were turned off on 03/19/87. The Unit 3 RE-9103 A and C monitors were removed from service on 11/07/87 while the recorders for the B and D channels were turned off. These events were not reported because removal of the monitors from service was not properly documented as procedurally required. RE 9103 B and D and RE 8103 B and D were returned to service on 06/16/88 and 08/30/88 respectively. The remaining monitors will be returned to service prior to restart. An Operations Management Manual was developed and established controls for tracking Limiting Conditions for Operations. This manual along with the completed training should prevent recurrence of these events. A Plant Operations Review Committee Position has been issued which clarifies the Applicability requirements of the drywell high range radiation monitors consistent with Generic Letter 83-36 such that Operability is not required in the Cold Condition. There were two previous similar events.

Unit Conditions Prior to the Events:

- Units 2 and 3 in Cold Condition.

- Weekly Radiation Surveys of the Drywells Being Performed.

Description of the Events:

On May 24, 1988 a Shift Technical Advisor discovered, during a review of safety-related equipment, that the Unit 2 and Unit 3 drywell high range radiation monitors were out of service without being reported to the NRC as required by the Technical Specifications. Technical Specification 3.2.F requires these monitors to be Operable. If the number of Operable instrument channels is less than two, Technical Specification 3.2.F requires the preplanned alternate method of monitoring drywell radiation to be initiated within 72 hours and requires this condition to be reported to the NRC in writing within ten working days if the monitors remain out of service for more than seven days (Technical Specification Table 3.2.F, Note 7). Investigation has revealed that on May 20, 1987 the Unit 2 drywell high range radiation monitors (RE-8103A, B, C and D) were removed from service. The recorders for these monitors were turned off on March 19, 1987. On October 27, 1987 Unit 3 RE-9103B and D drywell high range radiation Control Room recorder was turned off and on November 7, 1987 Unit 3 RE-9103A and C drywell high range radiation monitors were removed from service. Weekly surveys of the drywells were being performed at these times. This served as the alternate method of monitoring drywell radiation as required by Technical Specification 3.2.F. However, a special report was not submitted to the NRC within ten working days after the Unit 2 recorders were turned off, or after the Unit 3 RE-9103 A and C channels were removed from service (with the RE-9103B and D channels recorder turned off). Special reports were due on April 2, 1987 and November 23, 1987 to reflect less than two Operable on Unit 2 and Unit 3, respectively.

The Unit 2 recorders were turned off due to the Unit 2 Outage. It is believed that the Cable Spreading Room indicator and the alarm functions were operational until May 20, 1987, at which time they were removed from service for source calibration of the detectors. It was later determined that the "shrink tight" on the detector cable connectors had to be replaced. The Unit 3 RE-9103 A and C monitors were removed from service due to detector conduit interference with pipe replacement work in the drywell. The Unit 3 RE-9103B and D detectors and cable spreading room indicators were operational; however, the associated recorder in the Control Room had been turned off. It could not be determined why this recorder was turned off. The recorder was returned to operation on June 16, 1988. The recorder was out of service for approximately 223 days.

Subsequent investigation into the Technical Specification Applicability requirements for these monitors has revealed that they are not required to be Operable in the Cold Condition. Therefore, a Special Report was not required and the Technical Specifications were not violated.

Consequences of the Events:

The drywell high range radiation monitors were installed to provide post-LOCA drywell dose rate monitoring capability (thereby addressing NUREG-0737, Item II.F.1.3). A design basis LOCA occurs while the reactor is at power. During the time period that the radiation monitors were out of service, Unit 2 was in the Cold Condition and Unit 3 was in the Cold Condition with no fuel in the reactor vessel. When the reactor is shutdown there are substantially less fission products available for release which greatly reduces the potential post-LOCA drywell dose rates. As a result, the drywell high range radiation monitors are not needed when the reactor is in the Cold Condition. This conclusion is supported by Generic Letter 83-36 (Pertaining to NUREG-0737 Technical Specifications) and the "Near Term Operating License Standard Technical Specifications for General Electric BWRs" which do not require the radiation monitors to be Operable when the reactor is in the Cold Condition. Consequently, having these monitors out of service for an extended period of time during an outage had minimal safety significance.

During power operation, instrument operability is confirmed by the observation and documentation of normal instrument readings (daily) and monthly instrument checks. Due to the frequency of these checks, it is unlikely that this event would occur during power operation. If the instruments were out of service during a Design Basis Accident, and they were found to be inoperable after being returned to service, they would be unavailable to aid in the classifications of various accident conditions. However, other instruments, including the Reactor Building Vent and Main Stack radiation monitors, Area Radiation Monitors, as well as drywell pressure indication, and the Post Accident Sampling System would still be available to support the emergency classification process.

Cause of the Events:

The cause of these events is a combination of personnel errors. When the monitors were removed from service, no notes were made in the LCO (Limiting Conditions for Operation) Log by the licensed operators (utility-employed). Administrative Procedure A-41, "Procedure for Control of Safety-Related Equipment", requires that Technical Specification considerations be addressed when removing safety-related equipment from service. Also, Administrative Procedure A-7, "Shift Operations" required that the LCO Log be updated whenever equipment status affecting Technical Specifications change.

Several factors existed that may have contributed to the personnel error. Unlike the other Technical Specification action statements on the same page, which were met when the units were shutdown, the action statement applicable to these monitors was non-mode dependant and therefore, may have been overlooked. Another factor may have been that it was generally understood by the shift crews that the monitors are used for accident monitoring and that they serve no purpose when the reactor is in cold condition. The Applicability requirements for these monitors as well as other accident monitoring instruments are not explicitly stated in the Technical Specifications. Further, a lack of procedural guidance and controls for use of the LCO Log may have also contributed to this oversight.

Corrective Actions:

The information required to be included in the special reports is provided in this LER.

The Unit 2 RE-8103B and D monitors were returned to service on August 30, 1988. The Unit 2 RE-8103A and C monitors will be returned to service prior to Unit 2 restart (after installing new "shrink tight" on the cable connectors), and the Unit 3 RE-9103A and C monitors will be returned to service prior to Unit 3 restart. As stated previously, the Unit 3 RE-9103B and D recorder in the Control Room was returned to operation on June 16, 1988.

Actions to Prevent Recurrence:

A Plant Operations Review Committee Position has been issued which clarifies the Applicability requirements of the drywell high range radiation monitors consistent with Generic Letter 83-36 such that Operability is not required in the Cold Condition. The NRC Safety Evaluation Report for the Amendment which placed these monitors in Technical Specifications confirms compliance with the Generic Letter 83-36 requirements.

An Operations Management Manual (OMM) has been developed to clearly delineate responsibilities within the Operations Section and establish more formal practices and controls for routine operational activities. The Shift Supervisors are delegated the responsibility for tracking LCOs and maintaining a revised, more detailed LCO Log. Proper use of the new LCO Log facilitates complete tracking and recording of the LCO status to closure. Section 12 of the OMM, "Limiting Conditions for Operation" and Section 3 of the OMM, "Shift Management Responsibilities and Authority" establish these administrative controls and were implemented on September 1 and September 30, 1988, respectively. Training has been conducted on these controls with the licensed operators. This training served, in part, to emphasize the importance of accurately documenting entry into LCO's, regardless of the significance of the change in equipment status.

EIIS Codes:

The EIIS Codes for the systems referred to in this LER are: IL (Radiation Monitoring), NH (Reactor Containment or Drywell) and IP (Post Accident Sampling System). The EIIS Codes for the components referred to in this LER are: DET (detector), RI (radiation indicator), MON (monitor), RR (radiation recorder), CHA (channel), CND (conduit), RCT (reactor), CON (connector), PI (Pressure Indicator) and CBL (cable).

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6) YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	PAGE (3)
Peach Bottom Atomic Power Station Unit 2	0 5 0 0 0 2 7 7	8 8	— 0 1 2	— 0 2	0 5 OF 0 5

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

Previous Similar Occurrences:

There have been two previous LERs on conditions that were not reported within the time required by the Technical Specifications. The report numbers are 2-88-08 and 2-85-21.

Actions to prevent recurrence described in LER 2-88-08 could not have prevented this event because the event described in LER 2-88-08 occurred nine months after the event described in this report. There were no corrective actions taken to prevent recurrence in regards to the untimely submittal of special reports at the time LER 2-85-21 was submitted.