

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Peach Bottom Atomic Power Station - Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 2 7 7	PAGE (3) 1 OF 0 4
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TITLE (4) Personal Error Resulting in Treated Liquid Radwaste Release Without Prior Sampling

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 4	0 4	8 8	8 8	0 0 9	0 0	0 5	0 2	8 8			0 5 0 0 0 2 7 8
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)											

OPERATING MODE (9) N	POWER LEVEL (10) 0 0 0	20.402(b)	20.406(a)	50.73(a)(2)(iv)	73.71(b)
		20.406(a)(1)(i)	50.36(a)(1)	50.73(a)(2)(v)	73.71(a)
		20.406(a)(1)(ii)	50.36(a)(2)	50.73(a)(2)(viii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.406(a)(1)(iii)	<input checked="" type="checkbox"/> 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)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME W. C. Birely, Senior Engineer - Licensing Section	TELEPHONE NUMBER 2 1 5 8 4 1 - 5 0 4 8
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS

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

Abstract:

On April 4, 1988, treated liquid radwaste effluent was released from the 'A' Waste Sample Tank (AWST) without prior sampling. This event occurred after a chemistry technician was directed to sample the AWST, but mistakenly sampled the Floor Drain Sample Tank (FDST). The sample was analyzed and recorded for the AWST. The AWST was then discharged on the basis of this sample from the FDST.

The consequences of this event are judged to be minimal since the activity levels released were below the levels originally recorded and approved for release. A sample from the instrument line on the AWST was analyzed and indicated activity levels about 200 times less than those of the FDST. The levels of both the instrument line and the FDST were below the maximum permissible concentration (MPC) limits defined in 10 CFR 20, Appendix B, Table II. The cause of the event was a personal error by the chemistry technician. Procedural deficiencies or inadequate labeling were not contributors to the cause. This individual was counseled on the importance of attention to detail. The details of this event were discussed at a meeting with chemistry personnel, and minutes of the meeting were distributed to all chemistry technicians. No further corrective actions are planned. This event is reportable pursuant to 50.73(a)(2)(i)(b).

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

Unit Conditions Prior to the Event:

Unit 2: Cold Shutdown

Unit 3: Refuel Mode with Core Offloaded

Description of the Event:

On April 4, 1988 at approximately 0535 hours, a treated liquid radwaste release was initiated from the 'A' Waste Sample Tank (AWST). The release was completed at approximately 1135 hours. Following the release, the radwaste group noticed that although the activity levels reported for the AWST were within the acceptable release limits, they were unusually high. Suspecting a problem with the AWST demineralizers, radwaste requested chemistry to investigate. The chemistry technician receiving this request was given the results of the AWST analysis. The chemistry technician was suspicious when he recognized that the results of the AWST analysis were almost identical to those of the Floor Drain Sample Tank (FDST) which he had recently sampled. After verifying that there was not a problem with the AWST demineralizer, the technician concluded that the FDST must have been mistakenly sampled prior to release of the AWST. The technician promptly informed his supervisor of his finding. The chemistry supervisor questioned the technician who was responsible for sampling the AWST. After a discussion and walk-through of the procedure with the technician, it was ascertained that the FDST had been mistakenly sampled and the analysis results recorded for the AWST. No inadequacies were observed with either the applicable procedure (HPO/CO-18) or the labeling of the sample taps. Failure to sample liquid radwaste effluent prior to release is a violation of Technical Specification 4.8.B.1b.

Consequences of the Event:

The consequences of this event are judged to be minimal since the actual activity levels released were below the levels originally recorded and approved for release. After discovery of the error, a liquid sample was taken from the instrument line located on the AWST. The instrument line was flushed prior to sampling, and the sample taken is assumed to be representative of the effluent

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

released from the AWST since no water had been added to the tank prior to sampling. Prior to a release from any tank, the liquid in the tank is recirculated to ensure adequate mixing and that any sample taken will be representative of the entire tank. However, the sample taken from the instrument line was not subjected to this recirculation process. An analysis of the instrument line sample indicated activity levels typical of those from a well-mixed waste sample tank. These levels were about 200 times less than those of the FDST which were actually recorded, and the levels of both the instrument line and the FDST were below the maximum permissible concentration (MPC) limits defined in 10 CFR 20, Appendix B, Table II. Approximately 25,488 gallons were released from the AWST. The effluent released was treated prior to discharge, and the components involved in the treatment were verified to be operable.

The potential consequences of this event are also judged to be minimal. The discharge from the 'A' and 'B' Waste Sample Tanks and the FDST enter a common discharge header prior to release to the environment. A radiation monitor is located on this discharge header. The alarm setpoints for this monitor are calculated for each batch of effluent by the radwaste operator, and are based on the results of the sample tank analysis. The setpoints are always below MPC limits, and they ensure that the actual activity levels of the effluent being released are not in excess of those anticipated by the sample analysis. If one of these setpoints is reached, it is annunciated in the radwaste control room and the main control room, and the discharge valve on the common header is automatically closed, thus aborting the release. For this event, the activity levels actually released were below the levels sampled, and consequently below the alarm setpoints. If the sampling error had been reversed in that a high-activity tank was released based on the sampling of a low-activity tank, then a high radiation alarm and closure of the discharge valve would have resulted.

Cause of the Event:

The cause of the event was a personal error by the chemistry technician who was responsible for sampling the AWST prior to its release. The chemistry technician, a non-licensed utility employee, mistakenly sampled the FDST and recorded the results for the AWST. This activity was covered by approved procedure HPO/CO-18. The sample taps for various sample tanks, including the AWST and FDST are located at a common remote sampling station. However, each sample tap is clearly and noticeably

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labeled. Neither procedural deficiencies nor inadequate labeling were contributors to the cause of this event. The personal error was exclusively a result of inattention to detail.

Corrective Actions:

The responsible technician was counseled, in accordance with the Philadelphia Electric Disciplinary Code, on the importance of attention to detail.

Actions Taken to Prevent Recurrence:

The details of this event were discussed at the weekly chemistry staff meeting on April 5 and the chemistry technician meeting on April 6, 1988. Minutes of the April 6 meeting were distributed to all technicians. In both meetings, the importance of attention to detail was stressed. Because no deficiencies were identified with the procedure or labeling of the sample taps and the event was an isolated occurrence, no additional corrective actions are planned.

EIIS Codes:

The EIIS code for the affected systems are WD-Liquid Radwaste Management System and IB-Annunciator System. The EIIS codes for the affected components are: RA-radiation alarm, ANN-annunciator, MON-monitor, V-valve, TK-tank, DRN-drain and FDM-demineralizer, filter.

Previous Similar Occurrences:

None.

Cause Code: A6 - Failure to properly identify equipment

PHILADELPHIA ELECTRIC COMPANY

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PHILADELPHIA, PA. 19101

(215) 841-4000

May 2, 1988

Docket No. 50-277  
278

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

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

This LER concerns the release of treated liquid radwaste without prior sampling.

Reference: Docket Nos. 50-277 and 278  
Report Number: 2-88-09  
Revision Number: 00  
Event Date: April 4, 1988  
Report Date: May 2, 1988  
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).

Very truly yours,



R. H. Logue  
Assistant to the Manager  
Nuclear Support Division

cc: W. T. Russell, Administrator, Region I, USNRC  
T. P. Johnson, USNRC Senior Resident Inspector  
T. E. Magette, State of Maryland

IE22  
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