

PHILADELPHIA ELECTRIC COMPANY

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May 13, 1982

Mr. R. C. Haynes, Administrator
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

SUBJECT: LER Narrative Description

Dear Mr. Haynes:

The following occurrence was reported to Mr. A. R. Blough, Region I, Office of Inspection and Enforcement on April 13, 1982.

Reference:	Docket Nos. 50-277/278
Report No.:	2-82-10/1X
Report Date:	May 13, 1982
Occurrence Date:	April 13, 1982
Facility:	Peach Bottom Atomic Power Station R.D. #1 Delta, PA 17314

Technical Specification Reference:

None

This LER is reported under the requirements of 10CFR 20.403(b) which requires notification to the NRC Regional Office of any incident "...which may have caused or threatens to cause:

(1) Exposure of the whole body of any individual to 5 rems or more of radiation;. . ."

Description of the Event

On April 13, 1982, Eberline Instrument Corporation telephoned Peach Bottom Atomic Power Station to report a 9.175 rem exposure to one of the TLD badges. Furthermore, they noted that the badge had two anomalies. The badge was coded for the month of February, but was processed for the month of March. The reason for the March processing was because the label with the wearer's name was coded for March. Also, the label was affixed upside down on the badge.

On April 14, 1982, the person whose name was on the label of the exposed badge was interviewed by station personnel. He could not explain how the exposure occurred. He had always signed in on an RWP before entering a controlled area and noted his self-reading dosimeter readings on the log sheet. He had not been in any areas during March which could have caused such a high exposure. He also had no idea of how the March badge was switched with a February badge.

On April 16, 1982, a special investigator from Philadelphia Electric Company Security questioned the individual. Security did not learn anymore about the incident and conjectured that the person was truthful in his testimony. Security would arrange for the individual to take a lie detector test which the individual agreed to do. This test was not necessary, due to the events that followed.

During the ensuing week, the crew working with the individual was interviewed. Two of them stated that one individual claimed knowledge of the incident. When that person was interviewed, he denied making any such statements. The special investigator was contacted to arrange for an interview.

On April 22, 1982, another crew member came forward and admitted to having tampered with an Eberline badge. The reported chain of events is as follows: On or about March 26, 1982, this individual was working in the laundry area, Radwaste Building 116' elevation. He noticed an Eberline badge lying on a radiation measuring instrument on top of a storage cabinet which was directly below a pipe line which transfers liquid radioactive waste. The label was partially torn off, but the name "ford" was still evident. A Mr. [REDACTED] lost his badge on February 25,

1982, reported it, and obtained another badge. He also works in the laundry area. The individual who found the badge decided to play a joke on a co-worker. He removed the torn label, managed to unclip the Eberline badge from a co-worker's clothing, place the man's name label onto the found badge and then clipped it back on the person without the person realizing what was happening. Thus the person who had the overexposed badge never knew how it occurred.

The person who switched the badge casually set aside the March badge which later disappeared. The individual signed a statement that he was the one who switched the badge and label.

Probable Consequences of the Occurrence:

Radiation Work Permits (RWPs) were reviewed and self-reading dosimeter entries were noted. The exposure summation for March for each individual agreed with their Harshaw badge readings. Other persons working on the same RWPs were reviewed for radiation exposure and their amount of exposure was basically the same. For the two individuals in question, the values recorded for March were 240 millirem and 59 millirem. Summaries of the daily exposure as recorded for the Harshaw badges and the self-reading dosimeters are shown in attached Tables I and II respectively.

The individual who switched the label and badge remembered the date as being near the end of March. He and his co-workers had worked on March 24, 25, 26, and 31, 1982. A date of March 26, 1982 was selected as most likely when the incident occurred. Assuming that the badge which was found belonged to [REDACTED], then the time the badge was exposed to the radiation source was from February 25 to March 26, or 30 days. The radiation field where the badge was reportedly found measured about 10 mr/hr on April 23, 1982. The calculated exposure to the badge during the time it lay on top of the storage cabinet is 7200 milliroentgens. Considering the changing conditions in the transfer pipe, the calculated value is in basic agreement with the reported value by Eberline Corporation of 9.175 rem. The exposure recorded for Mr. [REDACTED] by the Harshaw badge up to the time his Eberline badge was lost was only 13 millirem. It is therefore concluded that neither individual actually received an overexposure.

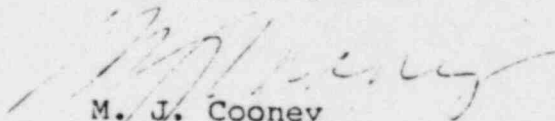
Cause of the Event:

The badge was deliberately tampered with after it was found near a radiation source. The individual who did the tampering testified that it was done to play a joke on a co-worker.

Corrective Action

The person who admitted to the offense has been permanently denied access to the site. GET will re-emphasize the importance of treating all matters related to personal dosimetry as a very serious matter. Failure to follow established procedures will result in disciplinary actions.

Very truly yours,



M. J. Cooney
Superintendent
Generation Division - Nuclear

cc: Director, NRC - Office of Inspection & Enforcement
Mr. Norman M. Haller, NRC - Office of Management &
Program Analysis
C. J. Cowgill, Site Inspector

TABLE I
DATES OF ATTENDANCE & HARSHAW BADGE READINGS

Person Who Found Mr. [REDACTED] Badge		Person Who Had His Badge Switched	
Days Worked	Maximum Harshaw Reading - MRem	Days Worked	Maximum Harshaw Reading - MRem
3/03/82	12	3/02/82	14
		3/03/82	38
3/04/82	22	3/04/82	15
3/05/82	12	3/05/82	31
3/06/82	9		
3/07/82	--		
3/10/82	9	3/09/82	11
		3/10/82	12
3/11/82	25	3/11/82	12
3/12/82	10	3/12/82	8
3/13/82	--		
3/17/82	15	3/15/82	16
		3/16/82	18
		3/17/82	5
3/18/82	12	3/18/82	8
3/19/82	10	3/19/82	15
3/20/82	10		
3/21/82	9		
3/24/82	19	3/22/82	13
		3/23/82	9
		3/24/82	13
3/25/82	11	3/25/82	9
3/26/82	9	3/26/82	9
3/27/82	8		
3/28/82	10		
3/29/82	11	3/29/82	20
		3/30/82	6
3/31/82	12	3/31/82	5

TABLE II
RADIATION WORK PERMIT ENTRIES

Person Who Found Mr. [REDACTED] Badge			Person Who Had His Badge Switched		
Date	RWP	Exposure by SRD	Date	RWP	Exposure by SRD
3/01/82	Off		3/01/82	Off	
3/02/82	Off		3/02/82	Turbine Hall	10
3/03/82	None	Pulled Trash	3/03/82	Turbine Hall Laundry	55 0
3/04/82	"	" "	3/04/82	Turbine Hall Laundry	10 0
3/05/82	"	" "	3/05/82	Turbine Hall Laundry	35 0
3/06/82	"	" "	3/06/82	Off	
3/07/82	"	" "	3/07/82	Off	
3/08/82	Off		3/08/82	Off	
3/09/82	Off		3/09/82	Turbine Hall Laundry	5 0
3/10/82	Laundry	0	3/10/82	Turbine Hall	10
3/11/82	None	Pulled Trash	3/11/82	Turbine Hall Laundry	10 0
3/12/82	"	" "	3/12/82	Turbine Hall	10
3/13/82	"	" "	3/13/82	Off	
3/14/82	Off		3/14/82	Off	
3/15/82	Off		3/15/82	Turbine Hall Laundry	10 0
3/16/82	Off		3/16/82	Turbine Hall	20
3/17/82	None	Pulled Trash	3/17/82	--	--
3/18/82	"	" "	3/18/82	Turbine Hall	
3/19/82	"	" "	3/19/82	Turbine Hall	10
3/20/82	"	" "	3/20/82	Off	
3/21/82	Respirator Laundry	0 0	3/21/82	Off	
3/22/82	Off		3/22/82	Turbine Hall	15

3/23/82	Off			3/23/82	Laundry	0
					Turbine Hall	5
					Laundry	0
3/24/82	None	Pulled Trash		3/24/82	Turbine Hall	15
					Laundry	0
3/25/82	"	"	"	3/25/82	Turbine Hall	
					Respirator	5
3/26/82	"	"	"	3/26/82	Turbine Hall	5
3/27/82	Laundry	0		3/27/82	Off	
3/28/82	Laundry	0		3/28/82	Off	
3/29/82	Off			3/29/82	Turbine Hall	15
3/30/82	Off			3/30/82	Laundry	0
					Respirator	0
3/31/82	None	Pulled Trash		3/31/82	Laundry	0
					Respirator	0