

PHILADELPHIA ELECTRIC COMPANY

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October 1, 1982

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

SUBJECT: Licensee Event Report Narrative Description

Dear Mr. Haynes:

The following occurrence was reported to Mr. A. R. Blough,  
Region I, Office of Inspection and Enforcement on September 17,  
1982.

Reference:	Docket Nos. 50-277/278
Report No.:	2-82-30/IT
Report Date:	October 1, 1982
Occurrence Date:	September 17, 1982
Facility:	Peach Bottom Atomic Power Station R.D. #1 Delta, PA 17314

Technical Specification Reference:

Technical Specification 3.8.B.1 states that, "The instantaneous gross radioactivity release concentration in liquid effluents prior to dilution in a natural body of water shall not exceed the values specified in 10 CFR Part 20, Appendix B for unrestricted areas."

Description of the Event:

On September 17, 1982, a small quantity of slightly contaminated water was released from the Recombiner Building into

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the storm drain system. At the time of the occurrence, it was not known if the liquid was released to the river.

Probable Consequences of the Occurrence:

It is estimated that 200 gallons of water escaped from the Recombiner Building, with a total activity of 13 microcuries during a period of approximately 1 1/2 hours. Samples near the drain where the water entered showed the activity to be  $4 \times 10^{-7}$  uCi/ml. with Cs137 the primary isotope present. This represents 2% of the MPC for Cs137. Downstream of that location there is a constant input to the storm drain system which provided sufficient dilution so that samples taken at the point of discharge to the river showed no detectable activity. Therefore, the consequences of this occurrence are considered minimal.

Cause of the Occurrence:

The source of the water was caused by the spurious actuation of the fire suppression system deluge valve in the 'B' recombining building ventilation exhaust filters plenum. The uncontaminated water which sprayed onto the filters drained to the recombining building sump causing it to overflow. The uncontaminated fire water which drained to the sump was contaminated by the normally radioactive content of the recombining equipment drain and floor drain sumps. The contaminated water leaked to the ground outside the building under two non-water tight exterior doors. A portion of this water entered the storm drain system which discharges to the river.

Corrective Actions:

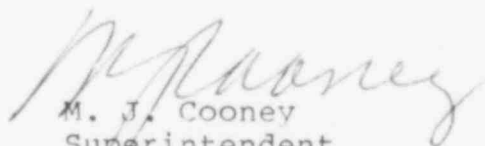
When the leakage under the door was detected, immediate actions were taken to block the door to prevent further leakage. Additionally, both the source of the water and the leakage path to the river were isolated. A sampling program was begun to determine the activity of the water that entered the storm drain system and to detect any activity released to the river. A section of the storm drain piping was flushed and approximately 100 gallons of contaminated liquid was removed from the storm drain system. Some top soil between the recombining building and

the storm drain that received low levels of contamination has been posted and covered. As soon as weather permits, this top soil will be removed and shipped as solid radwaste.

The fire suppression deluge valve was reset and tested satisfactorily following cleanup of the contamination.

Permanent dikes will be installed on the interior of the doors of the Recombiner Building as part of modifications being performed under the Liquid Leakage Control Study to prevent similar occurrences in the future. This portion of the modification is scheduled for completion before January 1983.

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  
and Program Analysis  
Peach Bottom Site Inspector