

PHILADELPHIA ELECTRIC COMPANY

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SHIELDS L. DALTROFF  
VICE PRESIDENT  
ELECTRIC PRODUCTION

June 23, 1982

Re: Docket Nos. 50-277  
50-278

Insp. Nos. 50-277/82-05  
50-278/82-05

Mr. Thomas T. Martin, Director  
Division of Engineering and Technical Programs  
U. S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

Dear Mr. Martin:

Your letter of May 28, 1982, forwarded combined Inspection Report 50-277/82-05 and 50-278/82-05. Appendix A addresses an apparent violation of an NRC requirement and is categorized as Severity Level IV in accordance with Federal Register Notice 47 FR 9987 (March 9, 1982). The apparent violation is restated below with our response.

- A.1 10 CFR 71.5 prohibits delivery of licensed materials to a carrier for transport unless the licensee complies with 49 CFR 170-189. 49 CFR 173.392(c) requires that the external radiation levels of packaged shipments of LSA radioactive material transported in sole use vehicles must comply with 49 CFR 173.393(J). 49 CFR 173.393(J)(4) specifies that the dose rate in a normally occupied position in the vehicle cannot exceed 2 millirem per hour.

Contrary to the above, on February 17, 1982, 463 millicuries of licensed LSA material was delivered to a carrier for transport and upon arrival at Barnwell, South Carolina, on February 18, 1982, the dose rate in the rear of the sleeper of the cab of the vehicle was determined to be 2.6 millirem per hour.

### Response

On February 18, 1982, a radioactive waste shipment from Peach Bottom Atomic Power Station arrived at the Barnwell, South Carolina burial site and was reported to have radiation levels in the truck cab 1 mr/hr. higher than the values indicated in the shipping papers. As a result of this reported difference, Philadelphia Electric sent two individuals experienced in radiation survey techniques to Barnwell to investigate the apparent discrepancy.

On February 19, 1982, using three Peach Bottom survey instruments the individuals performed a resurvey of the cab and vehicle. The resurvey of the cab indicated radiation levels of 2.1 mr/hr, 2.5 mr/hr and 3.0 mr/hr supporting the South Carolina value of a 2.6 mr/hr "hot spot" in the sleeper cab. The shipping papers had identified the radiation level in the cab to be 1.6 mr/hr prior to departing the Peach Bottom site. The survey instrument used for the pre-shipment survey was identified, cross checked with two other instruments and verified to have been recently calibrated.

Investigation into this matter leads us to conclude that, although the technician conducted two surveys of the vehicle cab, he did not detect the 2.6 mr/hr dose rate because of an apparent lack of attention to detail. The survey technicians were counseled and instructed to be more thorough when conducting surveys. Since this shipment, no further violations of cab dose rate has occurred during radioactive waste transportation.

Additionally, Procedure HPO/CO-17, Shipment of Radioactive Material, has been revised to include two different radioactive material shipment vehicle survey sheets. The revised sheets more fully document the surveys taken on the two types of vehicles used by dividing the truck into areas for survey purposes.

An independent survey using another instrument is currently being performed and has been added to Procedure HPO.CO-17. This survey is performed by the Waste Quality Control Inspector on all radwaste shipments prior to leaving the site.

Since a violation of this nature represents an isolated incident, and with the corrective actions taken, full compliance with 49 CFR 173.393(J) is presently assured.

Very truly yours,

A handwritten signature in cursive script, appearing to read "S. S. S. S.", is written in dark ink on the page.