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June 18, 1981

Docket Nos. 50-277
50-278

Inspection Nos. 50-277/80-36
50-278/80-29

Mr. Victor Stello, Jr., Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC

Dear Mr. Stello:

Your letter of May 20, 1981 referred to combined Inspection Report Nos. 50-277/80-36 and 50-278/80-29. Appendix A of your letter addresses one item from the inspection which does not appear to be in full compliance with Nuclear Regulatory Commission requirements. This item is categorized as a Severity Level III violation (Supplement V.C.1) in accordance with the Interim Enforcement Policy (45 FR 66754) of October 7, 1980. Based upon our review of the details relating to this item including its degree of significance from environmental and safety standpoints and the corrective action taken by the Company, we question whether this item should properly be classified as Severity Level III violation. It is the Company's view that the violation is of a significantly less severe level and we request that, in view of the information supplied herein, your conclusion as to the severity of this violations be reviewed and the violation be reclassified at a lower level. The item of non-compliance is restated below with our response.

As a result of an inspection conducted on November 5, 1980 at the Nuclear Engineering Company, Beatty, Nevada burial site, of a shipment of radioactive waste shipped from your facility in Delta, Pennsylvania on or about October 20, 1980, the following violation was observed:

10 CFR 71.5(a) requires that NRC licensees comply with the applicable packaging and transportation requirements

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of the Department of Transportation (DOT) in 49 CFR Parts 170-189.

49 CFR 173.392(c)(1) requires that packaged shipments of low specific activity (LSA) materials transported in exclusive use vehicles must be packaged in strong, tight packages so that there will be no leakage of radioactive material under conditions normally incident to transportation.

Contrary to the above, on or about October 20, 1980, the licensee delivered LSA radioactive material to a carrier for exclusive use vehicle transport in packages which were not strong tight packages in that the locking ring on drum number 107 was loose and the lid was open approximately 3/4 inch; and, the locking ring on drum number 69 was loose.

This a Severity Level III violation (Supplement V.C.1).

RESPONSE

Although drums 69 and 107 were discovered upon arrival at the Nuclear Engineering Company, Beatty, Nevada burial site to have loose locking rings, and the lid on drum 107 was found to be open approximately 3/4 inch, all drums of shipment PB-277-80, which included these two drums, were verified to be strong tight packages in accordance with DOT Specification 17H prior to the shipment leaving Peach Bottom.

During the two weeks prior to shipment, the lids were removed and all drums were inverted for 7 to 10 days to ensure that no freestanding liquid was present. All drums were then capped and the seal rings applied, tightened and checked. Prior to loading, all drums were inspected, and all locking ring bolts tightened twice. During loading, the station received telephone notification from the Beatty, Nevada burial site that several drum locking rings from a previous shipment had been found to be loose. To preclude repetition of this, the locking ring bolts were tightened still another time during loading of the shipment.

The event is believed to have been caused by two factors: First, prior to initial tightening of the bolts as discussed above, the locking ring bolts were lubricated as the threads were slightly oxidized. Second, vibration of the carrier vehicle during transport of the drums from Pennsylvania to Nevada allowed the locking ring bolts of drums 69 and 107 to back off slightly. Based on personal visual evaluation of a PECO representative dispatched to the Beatty, Nevada Burial Site, it appears that movement of drum 107 and drums adjacent to it may have occurred which then forced the lid of drum 107 slightly ajar.

On November 5, 1980, Nuclear Engineering Company informed PECO of the discrepancies in the arrival condition of drums 69 and 107 as discussed previously. On November 9, two PECO representatives arrived at the burial site, observed the partially unloaded shipment, and corrected the discrepancies. The drums were then buried the same day.

On November 10, 1980 the PECO burial permit at this site was suspended as a result of this event and certain corrective actions were required by the State of Nevada Bureau of Commonwealth Protection Services in order to have the permit reinstated. These corrective actions included development of an acceptable quality assurance program for radioactive waste packing operations, review of this program by the Bureau of Commonwealth Protective Services Division of Health, incorporation of this program into the Peach Bottom Quality Assurance Plan, and request for inspection by the NRC of the revised Peach Bottom radioactive waste packaging operation. In response to these requirements as well as PECO commitment that this event should not recur, the following corrective actions were taken:

1. Although the Peach Bottom Atomic Power Station Quality Assurance Plan had already contained requirements for handling and shipment of radioactive waste since its initial issuance in 1974, a revised Quality Assurance program for radwaste shipment incorporating a radwaste quality control inspector has been implemented.
2. The radioactive waste handling and shipping procedures used at Peach Bottom were revised and upgraded significantly. Several additional procedures covering various aspects of the radwaste packaging and shipping area have also been developed. These new procedures provide specific direction on the operations governing the loading of radioactive waste drums and containers, steps taken to verify that only permissible material is being loaded into the drums, and the closure of the drums. (Locking ring bolts are now required to either be tack welded to the locking ring lug, or secured with locking nuts) An independent radwaste quality control inspector is now assigned to monitor and sign off various in-progress hold points as various steps of the packaging, closing, and shipping procedures are performed. Overall responsibility for the proper packaging, closure, and shipment of each container is assigned to specific Peach Bottom staff personnel. The upgraded radioactive waste packing program was submitted to and approved by the State of Nevada Department of Resources Division of Health on January 2, 1981.
3. At the request of PECO a special inspection (Combined Inspection Report Nos. 50-277/81-06 and 50-278/81-06) was


performed by an NRC Region I inspector accompanied by a U.S. DOT Federal Highway Administration Safety Investigator on February 25-26, 1981, of the Peach Bottom management control systems regarding packaging and shipment of radioactive waste. The scope of this inspection included procedures, audits, training records, and observations by the inspector. No items of noncompliance were identified and subsequent to the inspection a memorandum was sent from Region I to the NRC Office of State Programs which stated that no inadequacies were identified by the inspector.

4. At the request of PECO on April 9-10, 1981 a Qualification Audit was performed by Nevada Inspection Services, Inc. (Audit Report No. 0115-81-1) to evaluate the Peach Bottom compliance with criteria for handling and packaging of low-level radioactive waste. Areas audited included in-plant procedures, QA/QC procedures, audit records, training documentation, the plant QA program, various shipping records and documents, and radwaste handling, loading and storage areas. No unacceptable findings or observations were noted.

In response to corrective actions as described above, a permit was issued to PECO on May 27, 1981 to authorize PECO to again use the Nevada State Radioactive Waste Disposal Site.

Philadelphia Electric Company believes that this event was the result of unforeseeable circumstances, and that adequate control of radioactive waste packaging and shipping appeared to be in effect at the time of this event. However, as a result of the event, as well as the potential for impact upon the public, however slight (for instance, the drums of shipment PB-277-80 contained a total of 5.94 millicuries distributed equally among the 66 drums) Philadelphia Electric Company has completed corrective actions which represent a major corporate commitment to quality radioactive waste packaging and shipment, and believes that the measures taken will prevent an event of this nature from recurring. Full compliance with corrective actions has been achieved at this time.

Very truly yours,



COMMONWEALTH OF PENNSYLVANIA :

SS.

COUNTY OF PHILADELPHIA :

S. L. Daltroff, being first duly sworn, deposes and
says:

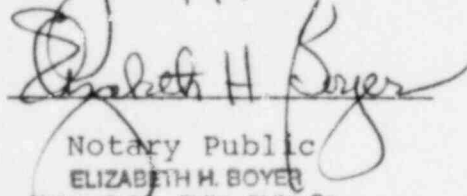
That he is Vice President of Philadelphia Electric
Company, the Applicant herein; that he has read the foregoing
response to NRC letter regarding combined Inspection Report Nos.
50-277/80-36 & 50-278/80-29 and knows the contents thereof; and
that the statements and matters set forth therein are true and
correct to the best of his knowledge, information and belief.



Subscribed and sworn to

before me this 19th day

of June, 1981



Notary Public
ELIZABETH H. BOYER

Notary Public, Phila., Phila. Co.
My Commission Expires Jan. 30, 1982