



PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

(215) 841-5001

SHIELDS L. DALTROFF
VICE PRESIDENT
ELECTRIC PRODUCTION

August 27, 1981

Docket Nos. 50-277

Re: Inspection No. 50-277/81-14
50-278/81-15

Mr. R. R. Keimig, Chief
Projects Branch #2
Division of Resident & Project Inspection
US Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Dear Mr. Keimig:

Your letter of July 29, 1981, forwarded combined Inspection Report Nos. 50-277/81-14 and 50-278/81-15 for Peach Bottom Atomic Power Station. Appendix A addresses one item with respect to Unit 2 which does not appear to be in full compliance with Nuclear Regulatory Commission requirements. This item of non-compliance has been categorized as a Severity Level IV and is restated below with our response.

Technical Specification 3.7.A.2 states in part:

"Primary Containment integrity shall be maintained at all times when the reactor water temperature is above 212 degrees F and fuel is in the reactor vessel...."

Contrary to the above, on May 18, 1981, with fuel in the reactor vessel, primary coolant temperature in the reactor vessel was raised above 212 degrees F from 12:45 p.m. to 3:15 p.m. without primary containment being in effect.

Response

As reported for Unit 2 by the Licensee in LER 2-81-31/3L, dated 6/17/81, the event occurred due to a lack of timely coordination between operations and maintenance personnel while shutdown cooling was out of service to repair the shutdown cooling suction outboard isolation valve (MO-2-10-17). At about 7:00 a.m., shutdown cooling was secured for a repair which was estimated to take four hours. Reactor coolant temperature, as monitored at the RWCU inlet, was about 110 degrees F. Maintenance was not completed in the four hour time period and the system remained blocked. At noon, the reactor coolant temperature had reached 170 degrees F at the RWCU suction inlet and steps were begun to restore shutdown cooling capability.

At 2:50 p.m., with RWCU suction temperature at 190 degrees F shutdown cooling was restored.

RWCU suction inlet temperature was 190 degrees F when shutdown cooling was restored, however, this was not a representative reactor coolant temperature. Neither reactor recirculation pump was in service to provide forced recirculation and reactor level was lower than that required for natural circulation to occur. Therefore, the RWCU inlet temperature was significantly lower than the reactor vessel water surface temperature. This was due to thermal stratification as evidenced by reactor vessel steam space metal temperatures peaking at 231 degrees F and a reactor pressure of about six psig. This inadequate mixing resulted in a portion of the reactor coolant exceeding 212 degrees F for approximately 2.5 hours. Overall coolant temperature was reduced below 212 degrees F in accordance with Tech. Spec. 3.7.A.3.

The original event was reviewed with operating personnel during beginning-of-shift meetings. Operating personnel have been instructed to review and be aware of the decay heat removal consideration which are discussed in IE Circular 81-11. Appropriate excerpts of IEC 81-11 have been distributed to all licensed personnel and Shift Technical Advisors. To prevent future occurrences of this nature existing procedures and administrative controls will be reviewed for adequacy in

Mr. R. R. Keimig, Chief

Page 3

monitoring and maintenance of primary coolant temperature, providing redundant or diverse decay heat removal methods during all modes of operation, and specifying responses to lost or degraded decay heat removal capability. Appropriate procedure and control changes will be made in accordance with IEC 81-11.

If you have any further questions, please do not hesitate to contact us.

Very truly yours,

A handwritten signature in cursive script, appearing to read "J. H. Fattig". The signature is written in dark ink and is positioned to the right of the typed name "Very truly yours,".

COMMONWEALTH OF PENNSYLVANIA :

SS.

COUNTY OF PHILADELPHIA

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

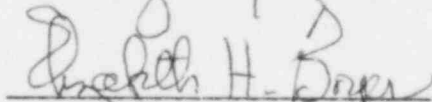
That he is Vice President of Philadelphia Electric
Company, the Applicant herein; that he has read the foregoing
response to Inspection Report Nos. 50-277/81-14 and 50-278/81-15
and knows the contents thereof; and that the statements and
matters set forth therein are true and correct to the best of his
knowledge, information and belief.



Subscribed and sworn to

before me this 28th day

of August, 1981.



Notary Public

ELIZABETH H. BOYER

Notary Public, Phila., Phila. Co.

My Commission Expires Jan. 30, 1982