



1881 - 1981

## PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

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PHILADELPHIA, PA. 19101

(215) 841-5001

SHIELDS L. DALTROFF  
VICE PRESIDENT  
ELECTRIC PRODUCTION

November 16, 1981

Docket Nos. 50-277  
50-278

Inspection Nos. 50-277/81-20  
50-278/81-22

Mr. R. R. Keimig, Chief  
Reactor Projects Branch 2  
Division of Resident and Project Inspection  
Region I  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

Dear Mr. Keimig:

Your letter of October 16, 1981, forwarded combined inspection reports 50-277/81-20 & 50-278/81-22. Appendix A addresses one activity which does not appear to be in full compliance with Nuclear Regulatory Commission requirements. This item is categorized as a Severity Level V violation and is restated below along with our response.

10 CFR 50, Appendix B, Criterion V, states, in part:  
"Activities affecting quality shall be prescribed by documented instructions, procedures or drawings. Instructions, procedures or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

The licensee's accepted Quality Assurance Plan, Revision 4, dated January 1980, Section 5, "Instructions, Procedures and Drawings," states, in part: "Activities affecting quality shall be prescribed by documented instructions, procedures,...of a type appropriate to the circumstances..."

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The activity may be prescribed in...operating or procedure manuals... Quantitative criteria, such as...operating limits...shall be specified."

Contrary to the above, procedures governing plant operations in the refuel or cold shutdown conditions were inadequate in that: there were no instructions specifying allowable temperatures for pressurization of reactor vessel; maintenance of reactor water vessel level; or maintaining vent paths with various reactor vessel water levels. This failure to provide adequate instructions contributed to pressurization of the reactor vessel to 78 psi with a temperature less than 120 degrees F on September 28, 1981. 120 degrees F is the minimum temperature allowable for pressurization of the reactor vessel specified in Technical Specification Figures 3.6.1 and 3.6.2.

#### Response

Operational details of this occurrence were provided in LER 3-81-14/1P and 1T and the inspection report. The event is accurately described in the subject NRC inspection report and basically involved a reactor water high level transient during a shutdown condition. The reactor operator during this period took several steps in an attempt to control reactor vessel level at the desired elevation. Level changes were not rapid and therefore extreme measures were not taken to prevent level increase. As a result of the increase in reactor level and the inadequate measures taken by the operator to prevent level increase, the reactor was pressurized on two occasions. The cold water injected into the vessel caused an increase in vessel level which closed off the vents and pressurized the vessel while at the same time lowering the vessel water temperature below the 120 degrees F limit.

Our investigation has indicated that the operator was aware of limitations on pressurizing the vessel as a function of temperature. Specific operating limits regarding minimum temperature for pressurization in this mode of operation were not provided by procedures. The operators involved in this event were attempting to control reactor level and were not aware that the reactor had been pressurized until it occurred a second time.

This event has been discussed with the specific operator and other shift personnel involved. In addition, procedural changes to the general plant procedures associated with reactor shutdown and core cooling are being made to provide for adequate venting at various vessel water levels and to prevent pressurization with temperatures outside the Technical Specification limits.

Revision of a reactor vessel temperature monitoring procedure (ST) will also be made to provide for monitoring of reactor vessel temperature and pressure conditions during periods when pressurization of the reactor vessel is possible. These procedural changes will be made and established by 12-1-81. These actions should prevent reoccurrence.

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 "A. H. Fattig".

cc: Site Inspector - Peach Bottom

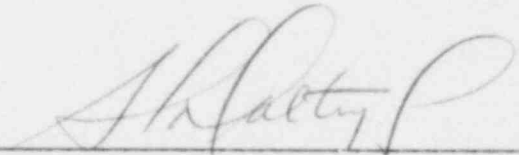
COMMONWEALTH OF PENNSYLVANIA :

SS.

COUNTY OF PHILADELPHIA :

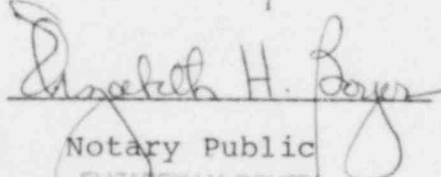
S. L. Daltroff, being first duly sworn, deposes and says:

That he is Vice President of Philadelphia Electric Company, the Applicant herein; that he has read the foregoing response to Inspection Report No. 50-277/81-20 and 50-278/81-22, 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.



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Subscribed and sworn to  
before me this 16<sup>th</sup> day  
of November, 1981.



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Notary Public

ELIZABETH H. BOYER

Notary Public, Phila., Phila. Co.

My Commission Expires Jan. 30, 1983