the

PHILADELPHIA ELECTRIC COMPANY

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PHILADELPHIA, PA. 19101

JOSEPH W. GALLAGHER
MANAGER
ELECTRIC PRODUCTION DEPARTMENT

(215) 841-5003

July 17, 1980

Re: Docket Nos. 50-277 50-278

IE Bulletin 80-17

Mr. Boyce H. Grier, Director Office of Inspection & Enforcement Region I US Nuclear Regulatory Commission 631 Park Avenue King of Prussia, PA 19406

Dear Mr. Grier:

This letter provides additional information with respect to item 6.c of our previous response to IE Bulletin 80-17, dated July 14, 1980, concerning the failure of 76 of 185 control rods to fully insert during a scram at a BWR. The "Action to be Taken by Licensees" and our response follows.

Action to be Taken by Licensees

- 6. In order to mitigate the consequences of an ATWS event, enhanced operability of HPCI, RCIC, SLCS, RPT/RHR/pool cooling and main steam bypass is essential.

 Accordingly, the following actions are requested:
 - c. Perform a 50.59 review to increase SLCS flow to the maximum consistent with safety (2 pumps, unless unsafe).

Response

Philadelphia Electric Company Engineering Department in conjunction with General Electric and Bechtel Power Corporation is performing a 50.59 review to determine the capability of Peach

Bottom Units 2 and 3 to increase the Standby Liquid Control System (SLCS) injection flow by operating two pumps.

The preliminary results of the review are as follows:

- 1) The SLCS pump discharge piping and components are adequate for two pump operation.
- 2) Section 3.8.3 of the FSAR (SLCS Description) describes an injection time of 50 to 125 minutes for one pump operation. The minimum injection time cannot be complied with since two pump operation results in a 100 gpm flow rate and an injection time of less than 50 minutes. The safety significance of the minimum injection time (i.e. maximum injection rate) is explained in Section 3.8.4 of the FSAR (SLCS Safety Evaluation) which states "... The upper limit injection rate assures that there is sufficient mixing so the boron does not recirculate through the core in uneven concentrations which could possibly cause the nuclear power to rise and fall cyclically".
- 3) The electrical circuitry for the SLCS pumps does not permit simultaneous two pump operation.
- 4) The evaluation of the SLCS pump suction piping requires a sophisticated analytical technique to determine whether the present system can provide adequate NPSH for two pump operation. The completion and review of the necessary calculations is anticipated to be complete by August 8, 1980.

The preliminary results indicate that simultaneous two pump operation without implementing modifications is not feasible at this time.

Should you have any questions or require additional information, please do not hesitate to contact us.

Jw Gullaghe

cc: US Nuclear Regulatory Commission Office of Inspection & Enforcement Division of Reactor Operations Inspection Washington, DC 20555

COMMONWEALTH OF PENNSYLVANIA :

SS.

COUNTY OF PHILADELPHIA

J. W. Gallagher, being first duly sworn, deposes and says:

That he is Manager of the Electric Production Department of Philadelphia Electric Company; that he has read the foregoing response to IE Bulletin 80-17 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.

Ju Ballaghan

Subscribed and sworn to before me this 18TM day of July 1980

Notary Public

Notary Public, Philadelphia, Philadelphia Co. My Commission Expires July 28, 1963