

PHILADELPHIA ELECTRIC COMPANY

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SHIELDS L. DALTROFF
VICE PRESIDENT
ELECTRIC PRODUCTION

October 5, 1979

Re: Docket Nos. 50-277
50-278

Mr. William Gammill, Acting Assistant
Director for Operating Reactors Project
Division of Operating Reactors
U.S. Nuclear Regulatory Commission
Washington, DC 20555

- Reference:
- 1) Letter S. L. Daltroff, PECO, to G. Lear, NRC, September 15, 1976. Response to NRC letter dated August 11, 1976.
 - 2) Letter S. L. Daltroff, PECO, to G. Lear, NRC, July 21, 1977. Response to NRC letter dated June 2, 1977.
 - 3) Application for Amendment of Facility Operating Licenses DPR-44 and DPR-56, Letter E. J. Bradley, PECO, to NRC, December 22, 1977. Requested by NRC letter dated June 2, 1977.

Dear Mr. Gammill:

This letter is in response to your letter dated August 8, 1979, concerning the Adequacy of Station Electric Distribution Systems Voltages. Philadelphia Electric Company has addressed some of your concerns in our letters of September 15, 1976, July 21, 1977, and the amendment to Technical Specifications request of December 22, 1977. In this correspondence, we have established that our system as designed and tested meets GDC - 17. Further, in our amendment request dated December 22, 1977, we agreed to add a second level of under-voltage protection. We recently received NRC approval to implement this modification.

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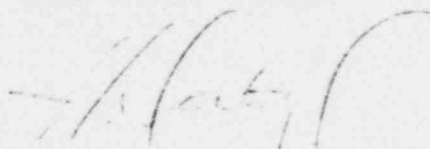
Your request of August 8, 1979, requires a more rigorous analysis of our power system for effects of degraded voltage conditions than was performed previously. Currently, our Electrical Engineering Division is conducting a voltage study using the rigorous approach detailed in your Enclosure 2. This study is of such depth that an additional 60 days will be required for its completion.

Your letter also asks that we verify the results of our analysis by tests. We are concerned about the safety and practicality of conducting such a test on the plant electrical system under degraded voltage conditions. However, we will determine the feasibility of such tests after we have finished the degraded voltage study.

Additionally, your letter requested that we again review our electrical power system for effects on conditions which could result in simultaneous loss of both off-site power sources. We have conducted this review and confirm that our previous response is correct. Since our sources are physically separated and diverse in origin (One from the 220 kv system and one from the 500 kv system), no potential for violation of GDC - 17 has been identified.

Should you have any additional questions or desire to discuss the specifics of our design, please feel free to contact us.

Very truly yours,

A handwritten signature in dark ink, appearing to be "H. Hart", is written over the typed name "H. Hart". The signature is fluid and cursive.

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