MAY 16 1984

DMB 016

Docket Nos. 50-277
and 50-278

Mr. Edward G. Bauer, Jr.
Vice President and General Counsel
Philadelphia Electric Company
2301 Market Street
Philadelphia, Pennsylvania 19101

Dear Mr. Bauer:

SUBJECT: NUREG-0737, SUPPLEMENT 1, I.D.2, SAFETY PARAMETER DISPLAY SYSTEM

Re: Peach Bottom Atomic Power Station, Units 2 and 3

By letter dated September 28, 1983, you provided the Safety Parameter Display System (SPDS) Safety Analysis Report (SAR) in response to our Generic Letter 82-33 dated December 17, 1982. We have reviewed your submittal and find we are unable to complete our evaluation of your SPDS-SAR.

We would like to suggest a meeting with your staff to discuss the need to document information in the following areas pertaining to the Peach Bottom SPDS:

- Conclusions regarding unreviewed safety questions or changes to Technical Specifications;
- Description of the methods used to validate display data; and
- Description of the human factors program and its implementation into the design of the SPDS to ensure that displayed information can be readily perceived and comprehended so as not to mislead operators.

This information needs to be provided in sufficient detail to allow our staff to perform an independent assessment of the proposed SPDS. We would like to meet with your staff in Bethesda, Maryland to discuss the above during the month of May. Meeting arrangements should be handled through your NRC Project Manager (G. Gears).

In addition, our review of your SPDS-SAR pertaining specifically to the adequacy of isolation devices used between the SPDS and sensors in use for safety system has led to the need for additional information (Enclosed). A response to this information request within 60 days of the receipt of this letter would be appreciated.

The reporting and/or recordkeeping requirements of this letter affect fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

"ORIGINAL SIGNED BY:"

George W. Rivenbark, Acting Chief
Operating Reactors Branch #4
Division of Licensing

Enclosure:
Request for Additional
Information

cc w/enclosure:
See next page

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Philadelphia Electric Company

cc w/enclosure(s):

Eugene J. Bradley
Philadelphia Electric Company
Assistant General Counsel
2301 Market Street
Philadelphia, Pennsylvania 19101

Troy B. Conner, Jr.
1747 Pennsylvania Avenue, N.W.
Washington, D. C. 20006

Regional Radiation Representative
EPA Region III
Curtis Building (Sixth Floor)
6th and Walnut Streets
Philadelphia, Pennsylvania 19106

M. J. Cooney, Superintendent
Generation Division - Nuclear
Philadelphia Electric Company
2301 Market Street
Philadelphia, Pennsylvania 19101

Thomas A. Deming, Esq.
Assistant Attorney General
Department of Natural Resources
Annapolis, Maryland 21401

Philadelphia Electric Company
ATTN: Mr. R. Fleishmann
Peach Bottom Atomic
Power Station
Delta, Pennsylvania 17314

Albert R. Steel, Chairman
Board of Supervisors
Peach Bottom Township
R. D. #1
Delta, Pennsylvania 17314

Mr. R. A. Heiss, Coordinator
Pennsylvania State Clearinghouse
Governor's Office of State Planning
and Development
P. O. Box 1323
Harrisburg, Pennsylvania 17120

Allen R. Blough
U.S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Peach Bottom Atomic Power Station
P. O. Box 399
Delta, Pennsylvania 17314

Thomas M. Gerusky, Director
Bureau of Radiation Protection
Pennsylvania Department of
Environmental Resources
P. O. Box 2063
Harrisburg, Pennsylvania 17120

Mr. Thomas E. Murley, Regional Administrator
U. S. Nuclear Regulatory Commission, Region I
Office of Inspection and Enforcement
631 Park Avenue
King of Prussia, Pennsylvania 19406

Enclosure

REQUEST FOR ADDITIONAL INFORMATION

NUREG-0737, SUPP. 1, ITEM I.D.1

SAFETY PARAMETER DISPLAY SYSTEM

DOCKETS NOS. 50-277 AND 50-278

a. For each type of device used to accomplish electrical isolation at Peach Bottom Units 1 and 2 describe the specific testing performed to demonstrate that the device is acceptable for its application(s). This description should include elementary diagrams where necessary to indicate the test configuration and how the maximum credible faults were applied to the devices.

b. Data to verify that the maximum credible faults applied during the test were the maximum voltage/current to which the device could be exposed, and define how the maximum voltage/current was determined.

c. Data to verify that the maximum credible fault was applied to the output of the device in the transverse mode (between signal and return) and other faults were considered (i.e., open and short circuits).

d. Define the pass/fail acceptance criteria for each type of device.

e. Provide a commitment that the isolation devices comply with the environmental qualifications (10 CFR 50.49) and the seismic qualifications which were the basis for plant licensing.

f. Provide a description of the measures taken to protect the safety systems from electrical interference (i.e., Electrostatic Coupling, EMI, Common Mode and Crosstalk) that may be generated by the SPDS.