December 7, 1960

Dr. Leslie Silverman
Chairman, Advisory Committee
on Reactor Safeguards
U. S. Atomic Energy Commission
Washington 25, D.C.

Dear Dr. Silverman:

Please add the enclosed addendum to our staff analysis and evaluation of the Peach Bottom Atomic Power Station, Philadelphia Electric Company, as a final section of the report dated December 5, 1960, and transmitted to you by memorandum dated December 6, 1960.

Sincerely yours,

Harold L. Price, Director
Division of Licensing and
Regulation

Enclosure:
18 copies of Addendum
to Hazards Analysis

OFFICE ▶	NES:DL:R	DL:D				
SURNAME ▶	CK Beck:vl	Price				
DATE ▶	12/7/60	12/7/60				

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December 7,1960

ATOMIC ENERGY COMMISSION

DIVISION OF LICENSING AND REGULATION

ADDENDUM TO

REPORT TO ADVISORY COMMITTEE ON REACTOR SAFEGUARDS

ON

PEACH BOTTOM ATOMIC POWER STATION
PHILADELPHIA ELECTRIC COMPANY

Note by Director, Division of Licensing and Regulation

The attached report has been prepared by the Staff of the Division of Licensing and Regulation for consideration by the Advisory Committee on Reactor Safeguards at its December 1960 meeting.

STAFF JUDGMENTS

Our review of the information available which relates to the various issues and design features discussed above leads to the following preliminary judgments:

1. If it can be assumed that the R & D program can yield information from which satisfactory and dependable design of components for a reactor of the general type, arrangement, and power level proposed can be achieved, we believe that the reactor could be constructed and operated at this site without undue hazard to the health and safety of the public. (In essence, this is the judgment which was reached by HEB and ACRS when the site for this reactor was considered).

2. There are characteristics of graphite, mobility and collection properties of fission products, etc., which will present difficult problems in the achievement of design goals now set, and a great deal of experimental verification must be provided on components eventually produced to insure that these problems have in fact been satisfactorily resolved. Furthermore, it is possible that some of the plans now being considered for details of fuel elements and control rods, for example, may have to be modified as the R & D program progresses to insure adequate dependability in the finished design. Basically, however, we now know of no inherent properties of graphite, mobility and collection properties of fission products, etc., which would present insurmountable barriers to the development of components along the general lines outlined in the conceptual plans for this reactor, and

the scope of the R & D program is such that there is reasonable probability that satisfactory solutions can be found to the basic safety problems involved. It cannot now be concluded, however, that satisfactory answers will be found to all these problems.

3. With respect to features not now proposed but suggested for study as possible additions, such as back-up control, emergency cooling, etc., we believe that reasonable expenditure of study effort as the R & D program progresses, can give clear indication of the safety necessity for these added features. Further, we believe that, if it is decided that such systems are required, suitable designs for them could be developed which would not require abandonment of the general plans and design concepts for this facility.