

January 28, 1992

Docket Nos. 50-277
and 50-278

Mr. George J. Beck
Manager-Licensing, MC 5-2A-5
Philadelphia Electric Company
Nuclear Group Headquarters
Correspondence Control Desk
P. O. Box No. 195
Wayne, Pennsylvania 19087-0195

Dear Mr. Beck:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION RE: STATION BLACKOUT RULE (10
CFR 50.63) FOR PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 (TAC
NOS. M68582 AND M68583)

By letter dated April 24, 1991, Philadelphia Electric Company (PECo) submitted
a revised response to the Station blackout (SBO) Rule, 10 CFR 50.63. After
reviewing your submittal, the staff has concluded that some additional
information is necessary to make a safety determination. The additional
information required is described in the enclosure.

Response to the enclosed Request for Additional Information (RAI) is requested
within 60 days from receipt of this letter.

This requirement affects fewer than ten respondents and, therefore, is not
subject to Office of Management and Budget Review under P.L. 96-511.

Should you have any questions regarding this RAI, please contact me at (301)
504-2426.

Sincerely, Original signed by
Richard J. Clark

Joseph W. Shea, Acting Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosure:

RAI

cc w/enclosure:

See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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Sincerely,

A handwritten signature in cursive script, appearing to read "Richard A. Clark" or similar, written over a horizontal line.

Joseph W. Shea, Acting Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosure:
RAI

cc w/enclosure:
See next page

Mr. George J. Beck
Philadelphia Electric Company

Peach Bottom Atomic Power Station,
Units 2 and 3

cc:

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Wilmington, DE 19899

REQUEST FOR ADDITIONAL INFORMATION (RAI) FROM THE REVIEW OF THE
REVISED APRIL 14, 1991 PEACH BOTTOM SBO SUBMITTAL

1. In light of the fact the licensee's projected EDG electrical loads summary shows a very small margin to the 3000 kW, 2000 hour rating of the EDGs, provide: 1) the timing for startup of the 1410 kW RHR pump and 2) an evaluation of the effect of pump startup power fluctuations and transients on the ability of the EDGs to maintain voltage and frequency within limits consistent with established electrical standards. A justification or test results which substantiates the new EDG 2000 hour rating, and testing requirements in support of the maximum stated load of 3000 kW should also be provided.
2. The licensee states that a "modest" number of operator actions are needed during an SBO and provides two tables which delineate these actions. For the minimum number of operators available, provide the time required for sequentially performing these actions and show that they can be performed within the required time frame.
3. On Page 7 of the licensee's revised SBO submittal, the terms "selected room ventilation, selected emergency lighting . . . , and necessary system controls and instrumentation" are used to describe some of the EDG electrical loads during an SBO event. What is the basis for these "selected and necessary loads?" How does the operator determine these loads? What systems and information are degraded in picking this subset of normal electrical loads?
4. Regarding decay heat removal condensate inventory, how is the RCIC or HPCI pump suction switched from the CST to the torus? Is this procedure different or in any way inhibited by the SBO event?
5. Provide the calculations in support of the control room, containment, and suppression pool heatup analyses for an SBO event. If a computer code is used, provide detailed information on its qualifications, input parameters with proper references, and the associated output.
6. Provide the results of an evaluation of RCIC and HPCI pump operability for the highest expected suppression pool temperature during an SBO event.
7. In Table 4 of the licensee's submittal, the operators are required to first trip EDG-1, the only EDG which starts, and later restart this same EDG. Provide a technical evaluation of the reliability of EDG restarting after being tripped. It appears that purposefully tripping an EDG which has successfully started during an SBO event with the intent of later restarting this same EDG constitutes a degradation of safety. Provide a technical justification for this action including an evaluation of alternatives.

8. In light of the fact that the licensee's projected EDG electrical load summary shows a very small margin to the 3000 kW rating of the EDG, provide an evaluation of the effect of the magnetizing current of the emergency auxiliary transformer on the ability of the EDG to maintain voltage and frequency within limits consistent with established electrical standards.