April 10, 1989

Docket Nos. 50-277/278

Mr. George A. Hunger, Jr.
Director-Licensing
Philadelphia Electric Company
Correspondence Control Desk
P.O. Box 7520
Philadelphia, Pennsylvania 19101

Dear Mr. Hunger:

SUBJECT: PECO FROSSTEY FUEL PERFORMANCE CODE (TAC NO. 65871)

RE: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 & 3

As a result of the staffs consultants continuing review of the PECo FROSSTEY fuel performance code described in the PECo report PECo-FMS-003 we find that additional information is needed. Specifically, it is understood that PECo wishes to use the FROSSTEY code for gadolinia rod analyses, as well as for UO_2 fuel rod analyses. In order for this code to be used for gadolinia rod analyses, PECo must submit the following: 1) the gadolinia material properties used in the code, 2) how gadolinia rod powers are determined as a function of burnup (including the radial power distribution in the gadolinia pellet) for the specific analyses to be performed, and 3) the upper level of gadolinia concentrations to be used by PECo. An example of the UO_2-Gd_2O_3 material properties that need to be addressed are theoretical density, thermal expansion, thermal conductivity, specific heat, and melting temperature, etc.

Should you have questions, please feel free to contact us.

Sincerely,

/s/

Robert E. Martin, Project Manager
Project Directorate I-2
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

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[HUNGER LETTER2]

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

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Sincerely,

Robert Martin

/Robert E. Martin, Project Manager
Project Directorate I-2
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Mr. George A. Hunger, Jr.
Philadelphia Electric Company

Peach Bottom Atomic Power Station,
Units 2 and 3

cc:

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