

June 8, 1994

Docket Nos. 50-277  
and 50-278

Mr. George A. Hunger, Jr.  
Director-Licensing, MC 52A-5  
PECO Energy Company  
Nuclear Group Headquarters  
Correspondence Control Desk  
P.O. Box No. 195  
Wayne, Pennsylvania 19087-0195

Dear Mr. Hunger:

SUBJECT: FOURTH REQUEST FOR ADDITIONAL INFORMATION REGARDING POWER RERATE  
REQUEST, PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 (TAC NOS.  
M86826 AND M86827)

This letter forwards a fourth request for additional information (RAI)  
regarding your June 23, 1993, license amendment request. The third RAI was  
given to your staff in a May 10, 1994 phone call. Your requested amendment  
would allow a power rerate to 3458 megawatts thermal.

You are requested to respond to this RAI within 30 days of receipt. This  
requirement affects less than ten respondents and, therefore, is not subject  
to Office of Management and Budget review under P.L. 96-511.

If you have any questions regarding this RAI, please call me at (301)  
504-1422.

Sincerely,

/s/  
Stephen Dembek, Project Manager  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosure:  
Request for Additional  
Information

cc w/enclosure:  
See next page

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DATE	6/8/94	6/8/94	6/8/94		

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

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Sincerely,

A handwritten signature in cursive script that reads "Stephen Dembek".

Stephen Dembek, Project Manager  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosure:  
Request for Additional  
Information

cc w/enclosure:  
See next page

Mr. George A. Hunger, Jr.  
PECO Energy Company

Peach Bottom Atomic Power Station,  
Units 2 and 3

cc:

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REQUEST FOR ADDITIONAL INFORMATION  
PROPOSED AMENDMENT FOR POWER UPRATE  
PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3

Mechanical Engineering Branch

1. (Section 2.5.1) The evaluation did not address the effects of the increase of the bottom head pressure and the high pressure scram setpoint on the structural and functional integrity of the control rod drive system (CRDS). Please state the basis for determining the acceptability of the CRDS regarding compliance with the design code. The information provided should include the code and edition, the code allowables, the calculated maximum stresses, deformation, and fatigue usage factor for the uprated power conditions, and assumptions used in the calculations.
2. (Section 3.3.2) The evaluation of reactor internals did not address the code and edition used for evaluating stresses and allowables for the reactor vessel and internals. Please provide such information and list the maximum stresses, fatigue usage factor and location of highest stressed areas for both the current design and the uprated power conditions.
3. (Section 3.3.3.2) This section states, "Elastic-plastic methods were implemented for some components; the code requirements for these methods were met." Table 3-4 shows that the fatigue usage factor for the feedwater nozzle is nearly 1 (= 0.997) for the power uprated conditions. Please provide a detailed discussion on the analysis methodology, assumptions and compliance with the code including edition, and the code allowables used, with regards to acceptability of stress levels and fatigue considerations.
4. (Section 3.11) This section states that the design adequacy evaluation results meet the requirements of ASME, Section III, Subsection NB and USAS B31.1.0 codes for the main steam and recirculation piping systems. Please explain how both ASME III and USAS codes were used for these two safety-related Class 1 systems. State the code of record, including edition, for these systems.
5. (Section 3.12) State the code and edition for the power uprate evaluation of piping and pipe supports including anchorages. List the limiting nuclear steam supply and balance of plant systems and components, with respect to the maximum stresses and safety margin as a result of the power uprate. Provide a discussion on the acceptability of auxiliary systems to operate at the uprated power level.
6. (Section 3.12.1) This section states "Large bore and small bore safety-related and nonsafety-related piping and supports were evaluated for acceptability at the rerated conditions and shown to be adequate as currently designed or with minor support modifications." Please specify piping systems and pipe supports that require modification and describe the modification to be performed.

7. (Table 3-5) Footnote (\*\*) of Table 3-5 states, "Refined fluid transient time history analysis was performed at rerate conditions to minimize predicted loading and required modifications. Values of percent changes are not meaningful due to the change in analysis methodology." Please provide a discussion on the methodology, assumptions and results of the refined transient analysis in comparison with the design basis time history analysis in predicting piping and pipe support loads.

Reference:

"Power Uprate Safety Analysis Report For Peach Bottom 2&3,"  
NEDC-32183P, Class III, May 1993. (proprietary)