

10 CFR 50.90



PECO ENERGY

PECO Energy Company  
 Nuclear Group Headquarters  
 965 Chesterbrook Boulevard  
 Wayne, PA 19087-5691

June 8, 1994

Docket Nos. 50-277  
 50-278  
 License Nos. DPR-44  
 DPR-56

U.S. Nuclear Regulatory Commission  
 Attn: Document Control Desk  
 Washington, DC 20555

Subject: Peach Bottom Atomic Power Station, Units 2 and 3  
 Submittal of Errata Sheets to General Electric Analyses  
 for Technical Specifications Change Request 93-01 and  
 Technical Specifications Change Request 93-12

References: 1) Letter from G. A. Hunger, Jr. (PECO Energy Company) to  
 U. S. Nuclear Regulatory Commission dated April 1, 1993

2) Letter from G. A. Hunger, Jr. (PECO Energy Company) to  
 U S. Nuclear Regulatory Commission dated June 23, 1993

Dear Sir:

In the above Reference 1 letter, PECO Energy Company submitted Technical Specifications Change Request (TSCR) 93-01 concerning the implementation of changes associated with the ARTS/MELLLA (Average Power Range Monitor, Rod Block Monitor, Technical Specifications Improvements/Maximum Extended Load Line Limit Analysis) analyses at Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3. Included in this package was the General Electric (GE) report NEDC-32162P, Revision 1, "Maximum Extended Load Line Limit and ARTS Improvement Program Analyses for Peach Bottom Atomic Power Station Units 2 and 3," dated February, 1993. Additionally, in the Reference 2 letter, PECO Energy Company submitted TSCR 93-12 concerning the implementation of the Power Rerate Program at PBAPS, Units 2 and 3. Included in this package was the GE report NEDC-32183P, "Power Rerate Safety Analysis Report For Peach Bottom 2 & 3," dated May, 1993.

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As a result of further review of the setpoints established in the General Electric documents, PECO Energy Company is providing the Attachment A and B errata sheets to the General Electric reports NEDC-32162P and NEDC-32183P associated with TSCR 93-01 and TSCR 93-12, respectively, and the following explanation for these changes.

Errata Sheets for GE Report NEDC-32162P

In the General Electric report NEDC-32162P, which supports the implementation of ARTS/MEILLA at PBAPS, Units 2 and 3, Items 6 and 7 on page 11-1/11-2 of Section 11 state:

- "(6) Change the analytical trip setpoint (ATSP) of the APRM flow-biased rod block to  $0.66W_d + 63\%$  with a maximum value of 108%, where  $W_d$  is the drive flow in percent of rated."
- "(7) Change the analytical trip setpoint (ATSP) of the APRM flow-biased flux scram to  $0.66W_d + 75\%$  with a maximum value of 120%, where  $W_d$  is the drive flow in percent of rated."

Also, Section 11 further states:

"The analytical trip setpoints indicated above are based on safety analyses requirements. The plant limits should be determined based on these analytical limits and instrumentation setpoint methodology applicable to PBAPS."

Instrument setpoint methodology is based upon establishing three limits as discussed in NEDC-31336, "General Electric Instrument Setpoint Methodology," dated October, 1986. The analytical limit is set so that appropriate licensing safety limits are not exceeded, as confirmed by plant performance analyses (i.e., plant transients analyses, accident analyses, etc.). An allowable value is determined from the analytical limit by providing allowances for the specified or expected calibration capability and accuracy of the instrumentation and measurement errors. This value may then be defined as a Technical Specification limit and prescribed as a license condition for the plant. The allowable value provides the limiting value for the trip setpoints and is the value for which action is taken. The instrument setpoints are periodically tested against the allowable value. The nominal trip setpoint value is calculated from the analytical limit by taking into account instrument drift in addition to the instrument accuracy, calibration and the measurement errors. The nominal trip setpoint is the actual trip setpoint which is utilized by plant personnel during instrument calibration.

As shown in Section 11 of NEDC-32162P, an ATSP of  $.66W_d + 63\%$  with a maximum value of 108% was provided for the APRM flow-biased rod block.

The plant performance analyses do not take credit for the APRM flow-biased rod blocks. Therefore, there are no analytical limits associated with the APRM flow-biased rod blocks. Instead, a Technical Specification value is chosen nominally 10% below the APRM scram allowable value. The 10% APRM flow-biased rod block to scram margin provides sufficient margin to scram and operating margin to avoid rod blocks during normal operation.

In order to provide consistency between the setpoint methodology and NEDC-32162P, the Analytical Trip Setpoint (ATSP) has been removed from NEDC-32162P and the allowable value for the APRM flow-biased rod block, which is the value contained in the revised Technical Specifications, has been redefined as the "nominal (Tech Spec) value." Additionally, the ATSP for the APRM flow biased flux scram (item 7 of Section 11 of Reference 1) has been redefined as the "Tech Spec Value (analytical limit)." The redefinition has no effect on any plant settings. The current PBAPS Technical Specifications do not define analytical trip setpoints, allowable values, or the nominal trip setpoint. Therefore, these redefinitions will not impact the APRM flow-biased rod block equation in the Technical Specification, which was originally intended as an allowable value.

These changes are identified in the Attachment A errata sheets to NEDC-32162P.

#### Errata Sheets for GE Report NEDC-32183P

Similar to the report supporting ARTS/MELLLA, the GE report supporting Power Rerate (NEDC-32183P) contained an analytical limit of  $.66W_d + 54\%$  with a maximum value of 108% for the APRM flow-biased rod block. This value was included in Table 5.1 of NEDC-32183P.

The plant performance analyses do not take credit for the APRM flow-biased rod blocks. Therefore, there are no analytical limits associated with the APRM flow-biased rod blocks. Instead, a Technical Specification value is chosen nominally 10% below the APRM scram allowable value. The 10% APRM flow-biased rod block to scram margin provides sufficient margin to scram and operating margin to avoid rod blocks during normal operation.

In order to provide consistency between the setpoint methodology and NEDC-32183P, the analytical limit for the APRM flow-biased rod block has been redefined in NEDC-32183P as the "nominal (Technical Specification) value." The redefinition has no effect on any current plant settings or the plant settings provided in the power rerate analysis which does not take credit for the APRM rod blocks. As stated previously, the current PBAPS Technical Specifications do not define analytical trip setpoints, allowable values, or the nominal trip setpoint. Therefore, this redefinition will not impact the APRM flow biased rod block equation in the power rerate portion of the PBAPS, Units 2 and 3, Technical Specification which was originally intended as an allowable value.

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These changes are identified in the Attachment B errata sheets to NEDC-32183P.

Attachments A and B contain information proprietary to General Electric. General Electric requests that the attached errata sheets be withheld from public disclosure in accordance with 10 CFR 2.790(a)(4). Affidavits supporting this request in accordance with 10 CFR 2.790(b)(1) were provided in References 1 and 2.

If you have any questions, please contact us.

Very truly yours,



G. A. Hunger, Jr., Director  
Licensing

Attachments, Affidavit

cc: T. T. Martin, Administrator, Region I, USNRC  
W. L. Schmidt, USNRC Senior Resident Inspector, PBAPS  
R. R. Janati, Commonwealth of Pennsylvania

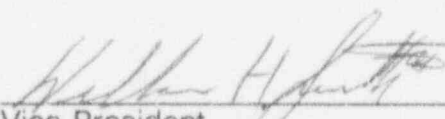
COMMONWEALTH OF PENNSYLVANIA :

: SS.

COUNTY OF CHESTER :

W. H. Smith, III, being first duly sworn, deposes and says:

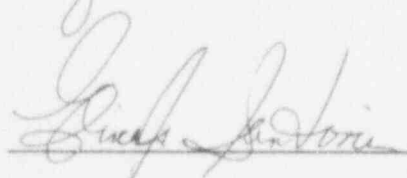
That he is Vice President of PECO Energy Company; the Applicant herein; that he has read the enclosed information concerning Technical Specifications Change Requests 93-01 and 93-12 for Peach Bottom Facility Operating Licenses DPR-44 and DPR-56, and knows the contents thereof; and that the statements and matters set forth therein are true and correct to the best of his knowledge, information and belief.

  
Vice President

Subscribed and sworn to

before me this 8<sup>th</sup> day

of June 1994.



Notary Public

Notarial Seal  
Erica A. Santori, Notary Public  
Tredyffrin Twp., Chester County  
My Commission Expires July 10, 1995