



**PECO NUCLEAR**  
A Unit of PECO Energy

10 CFR 50.46

Nuclear Group Headquarters  
200 Exelon Way  
Kennett Square, PA 19348

November 6, 2000

Docket Nos. 50-277  
50-278

License Nos. DPF-44  
DPF-56

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

**Subject:** Peach Bottom Atomic Power Station, Units 2 and 3  
Licensing Basis Peak Cladding Temperature Values

**Reference:** Letter from J. A. Hutton (PECO Energy Company) to  
U. S. Nuclear Regulatory Commission, dated July 22, 1999

Dear Sir/Madam:

In the Referenced letter, PECO Energy Company provided revisions to the licensing basis Peak Clad Temperatures (PCTs) for Peach Bottom Atomic Power Station (PBAPS), Unit 2 and 3, in accordance with 10 CFR 50.46 (a)(3)(i) and (ii). As a result of the addition of GE14 fuel to PBAPS, Unit 2, and the addition of the Recirculation Pump Trip (RPT) modification to PBAPS, Unit 3, PECO Energy Company is updating the table of licensing basis PCT values as shown in Tables 1 and 2 (attached). Tables 1 and 2 (attached) provide the revised licensing basis PCT values and the prior PCT error accumulation changes for Peach Bottom Atomic Power Station, Units 2 and 3, respectively.

PECO Energy Company is utilizing the GE14 fuel design at Peach Bottom Atomic Power Station, Unit 2, commencing with Reload 13 (October, 2000). As part of the introduction of this new fuel type, a SAFER/GESTR analysis was performed to establish the licensing basis peak clad temperature for both the Design Basis Accident (DBA) and small break loss of coolant accidents. The licensing basis PCT for the DBA LOCA is 1450° F with the GE14 fuel; the licensing basis PCT for the small break was equally limiting at 1450° F with the GE14 fuel. This value is shown in Table 1 as the baseline PCT for the GE14 fuel type. The GE14 upper bound PCT for the DBA LOCA is 1370° F, while the GE14 small break upper bound PCT is 1390° F.

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Table 1 summarizes, by fuel type, the baseline PCTs, the prior PCT error accumulations, and the resultant estimated licensing basis PCTs for the limiting and non-limiting fuel types for PBAPS, Unit 2. The estimated licensing basis PCT temperature for the most limiting fuel type (P8x8R) remains at 1795° F.

The referenced letter had provided the licensing basis PCT values for PBAPS, Unit 3 based on no Recirculation Pump Trip (RPT). The RPT modification was installed in PBAPS, Unit 3 during its R12 outage in 1999. The licensing basis PCT for PBAPS, Unit 3 will become the same as for PBAPS, Unit 2, which had RPT installed during its R12 outage in 1998. Table 2 provides the licensing basis PCT values for PBAPS, Unit 3 based on the use of RPT. The licensing basis PCT for the limiting fuel type (P8x8R) increases from 1755° F to 1795° F, consistent with PBAPS, Unit 2.

The licensing basis PCT values have more than a 400° F margin to the 2200° F limit specified in 10 CFR 50.46. Additionally, the upper bound peak clad temperature for all fuel types remains below the 1600° F limit specified in the NRC acceptance of the SAFER/GESTR methodology. Therefore, no action is required.

If you have any questions, please do not hesitate to contact us.

Very truly yours,



James A. Hutton  
Director - Licensing

**Attachments**

- c: H. J. Miller, Administrator, Region I, USNRC  
A. C. McMurtry, USNRC Senior Resident Inspector, PBAPS

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**bcc: PSEG, Financial Controls and Co-Owner Affairs**  
**R. I. McLean, State of Maryland**  
**A. F. Kirby, III, Delmarva Power & Light Company**  
**R. R. Janati, Commonwealth of Pennsylvania**  
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**C. P Lewis - KSA 1-E**  
**J. J. Hagan - KSA 3-N**  
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**G. L. Johnston - PB, A4-1S**  
**P. J. Davison - PB, SMB3-2A**  
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**G. C. Storey - KSA2-N**  
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**TABLE 1**

**CURRENT BASELINE PCT (°F) VALUES AND ERROR ACCUMULATION  
PEACH BOTTOM ATOMIC POWER STATION, UNIT 2  
(WITH RPT)**

	<b>P8x8R</b>	<b>GE8</b>	<b>GE9</b>	<b>GE 11/13</b>	<b>GE14</b>
<b>BASELINE PCT</b>	<b>1735</b>	<b>1624</b>	<b>1624</b>	<b>1645</b>	<b>1450</b>
<b>PCT Error Accumulation</b>	<b>60</b>	<b>85</b>	<b>115</b>	<b>95</b>	<b>0</b>
<b>NEW ESTIMATED LICENSING BASIS PCT VALUES</b>	<b>1795</b>	<b>1709</b>	<b>1739</b>	<b>1740</b>	<b>1450</b>

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**TABLE 2**

**CURRENT BASELINE PCT (°F) VALUES AND ERROR ACCUMULATION  
PEACH BOTTOM ATOMIC POWER STATION, UNIT 3  
(WITH RPT)**

	<b>P8x8R</b>	<b>GE8</b>	<b>GE9</b>	<b>GE 11/13</b>
<b>BASELINE PCT</b>	<b>1735</b>	<b>1624</b>	<b>1624</b>	<b>1645</b>
<b>PCT Error Accumulation</b>	<b>60</b>	<b>85</b>	<b>115</b>	<b>95</b>
<b>NEW ESTIMATED LICENSING BASIS PCT VALUES</b>	<b>1795</b>	<b>1709</b>	<b>1739</b>	<b>1740</b>