

Exelon Nuclear  
200 Exelon Way  
Kennett Square, PA 19348

www.exeloncorp.com

10 CFR 50.46 (a)(3)(i) and (ii)

December 18, 2002

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

Peach Bottom Atomic Power Station, Units 2 and 3  
Facility Operating License Nos. DPR-44 and DPR-56  
NRC Docket Nos. 50-277 and 50-278

**Subject:** 10 CFR 50.46 Reporting Requirements

**Reference:** Letter from S. A. Richards (NRC) to J. F. Klapproth (GE Nuclear Energy), "Review of NEDE-23785, Vol. III, Supplement 1, Revision 1, "GESTR-LOCA and SAFER models for Evaluation of Loss-of-Coolant Accident Volume III, Supplement 1, Additional Information for Upper Bound PCT Calculation" (TAC No MB2774)", February 1, 2002.

Dear Sir/Madam:

In accordance with 10 CFR 50.46 (a)(3)(i) and (ii), the following is a revision to the licensing basis Loss-of-Coolant Accident (LOCA) peak clad temperatures (PCTs) for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3. Table 1 (attached) provides the revised licensing basis PCT values and the prior PCT error accumulation changes for PBAPS, Unit 2. Table 2 (attached) provides the revised licensing basis PCT values and the prior PCT accumulations for PBAPS, Unit 3.

Exelon Generation Company, LLC (Exelon) received a 10 CFR 50.46 notification letter from Global Nuclear Fuel (GNF) ("SAFER Core Spray Injection Elevation Error"), which informed us of a PCT impact due to an error in a code input affecting the elevation of the core spray spargers. The error affects the buildup and draining of the water in the upper plenum region above the core. The correction of the error results in an estimated increase in the licensing basis PCT of 40°F for all fuel types.

A second 10 CFR 50.46 notification letter was also received from GNF ("Impact of SAFER Bulk Water Level Error on the Peak Clad Temperature (PCT)"), which informed us of a PCT impact due to an error affecting the initial water level in the bulk water region of the vessel. The error occurred due to failure to properly account for the effect of the steam dryer pressure drop on the initial inventory of water in the vessel. The correction of the error results in an estimated increase in the licensing basis PCT of 5°F for all fuel types.

In the referenced letter, the NRC approved the elimination of the 1600°F limit on the upper bound peak clad temperature. Exelon has confirmed that the Safety Evaluation Report attached to the reference letter is applicable to Peach Bottom Atomic Power Station, Units 2

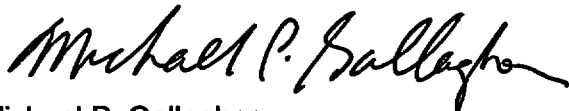
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and 3. Therefore, future 10 CFR 50.46 reports will no longer include a discussion of the upper bound peak clad temperature. The prior report noted that a MAPLHGR penalty had been implemented on the GE11 and GE13 fuel types, due to the upper bound PCT exceeding 1600°F. This MAPLHGR penalty has been removed consistent with the elimination of the 1600°F upper bound PCT limit.

The attached tables provide, 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. The estimated licensing basis peak clad temperature for the most limiting fuel type at PBAPS, Unit 2 (P8x8R) and Unit 3 (P8X8R) increases to 1890°F. The licensing basis PCT for both units has more than 300°F margin to the 2200°F limit specified in 10 CFR 50.46. No additional actions are required.

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

Very truly yours,



Michael P. Gallagher  
Director, Licensing and Regulatory Affairs  
Mid Atlantic Regional Operating Group

Attachments

cc: H. J. Miller, Administrator, Region I, USNRC  
A. C. McMurtry, USNRC Senior Resident Inspector, PBAPS  
J. Boska, Senior Project Manager, USNRC

**TABLE 1**

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

	<b>P8x8R</b>	<b>GE8</b>	<b>GE9</b>	<b>GE 11/13</b>	<b>GE14</b>
<b>BASELINE PCT</b>	1735	1624	1624	1645	1450
<b>Prior PCT Error Accumulation</b>	110	135	165	145	55
<b>50.46 Notification Core Spray Sparger Elevation Error</b>	40	40	40	40	40
<b>50.46 Notification Bulk Water Level Error</b>	5	5	5	5	5
<b>TOTAL</b>	155	180	210	190	100
<b>NEW ESTIMATED LICENSING BASIS PCT VALUES</b>	1890	1804	1834	1835	1550

**TABLE 2**

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

	<b>P8x8R</b>	<b>GE8</b>	<b>GE9</b>	<b>GE 11/13</b>	<b>GE14</b>
<b>BASELINE PCT</b>	1735	1624	1624	1645	1450
<b>Prior PCT Error Accumulation</b>	110	135	165	145	55
<b>50.46 Notification Core Spray Sparger Elevation Error</b>	40	40	40	40	40
<b>50.46 Notification Bulk Water Level Error</b>	5	5	5	5	5
<b>TOTAL</b>	155	180	210	190	100
<b>NEW ESTIMATED LICENSING BASIS PCT VALUES</b>	1890	1804	1834	1835	1550