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

June 4, 2001

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

10 CFR 50.46 Reporting Requirements

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. Based on the accumulated changes which result in a temperature difference of greater than 50°F from the calculated baseline temperature, this report is being submitted within 30 days of the 10 CFR 50.46 notification identified below.

On May 10, 2001, Exelon received two 10 CFR 50.46 notification letters from GE Nuclear Energy which impact PBAPS. The first of these letters ("Impact of SAFER Condensation Error on the Peak Clad Temperature (PCT)"), informed us of a PCT impact of an error in the SAFER condensation model. This error impacts the calculation of steam condensation for plants with LPCI injection into the vessel lower plenum. The correction of this error results in an estimated increase in the licensing basis PCT of 45°F for all fuel types.

The second of these letters ("Impact of SAFER Pressure Rate Inconsistency Error on the Peak Clad Temperature (PCT)"), informed us of a PCT impact due to an error in an equation used to calculate the pressure rate. The pressure rate impacts the calculated steam flashing and steam condensation rates in the vessel. The correction

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of the error results in an estimated increase in the licensing basis PCT of 10°F for all fuel types.

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 1845° F. The licensing basis PCT for both units has more than 350°F margin to the 2200°F limit specified in 10 CFR 50.46. The existing MAPLHGR limits are adequate to maintain compliance with the 1600°F upper bound PCT limit specified in the USNRC acceptance of the SAFER/GESTR methodology. No additional actions are required.

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

Very truly yours,

James A. Hutton Director - Licensing

Attachments

CC:

H. J. Miller, Administrator, Region I, USNRC

A. C. McMurtray, USNRC Senior Resident Inspector, PBAPS

TABLE 1

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

	P8x8R	GE8	GE9	GE 11/13	GE14
BASELINE PCT	1735	1624	1624	1645	1450
Prior PCT Error Accumulation	55	80	110	90	0
50.46 Notification SAFER Condensation Error	45	45	45	45	45
50.46 Notification SAFER Pressure Rate Error	10	10	10	10	10
TOTAL	110	135	165	145	55
NEW ESTIMATED LICENSING BASIS PCT VALUES	1845	1759	1789	1790	1505

TABLE 2

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

	P8x8R	GE8	GE9	GE 11/13
BASELINE PCT	1735	1624	1624	1645
Prior PCT Error Accumulation	55	80	110	90
50.46 Notification SAFER Condensation Error	45	45	45	45
EO 46 Notification	10	10	10	10
50.46 Notification SAFER Pressure Rate Error	10	10	10	10
TOTAL	110	135	165	145
NEW ESTIMATED LICENSING BASIS PCT VALUES	1845	1759	1789	1790