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10CFR50.71(e)(4)

August 14, 2009

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

Peach Bottom Atomic Power Station, Unit 1 Facility Operating License No. DPR-12

NRC Docket No. 50-171

Subject:

Peach Bottom Atomic Power Station, Unit 1

Updated Final Safety Analysis Report, Revision 5

In accordance with 10CFR50.71(e)(4) and 10CFR50.4(b)(6), this letter submits Revision 5 of the Updated Final Safety Analysis Report (UFSAR) for Peach Bottom Atomic Power Station (PBAPS), Unit 1.

The attached copy is being provided to the NRC with page revision listings that identify the latest revision date of all current pages in accordance with 10CFR50.71(e)(1). Page replacement instructions for incorporating Revision 5 into the UFSAR are also included in the Attachment. As required by 10CFR50.71(e)(5), each replacement page contains a bold vertical line in the margin adjacent to each area changed along with the date of the change. Two (2) Engineering Change Requests (ECRs) were incorporated in Revision 5 of the PBAPS, Unit 1, UFSAR (ECRs 09-00023 and 08-00414).

As required by 10CFR50.71(e)(2)(i), I certify that to the best of my knowledge, Revision 5 to the PBAPS Unit 1 UFSAR accurately reflects information and analyses submitted to the NRC, or prepared pursuant to NRC requirements as described above. In addition, as required by 10CFR50.71(e)(2)(ii), no changes under the provisions of 10CFR50.59, but not previously submitted to the NRC, have been made.

If you have any questions or require further information, please contact Tom Loomis at (610) 765-5510.

Very truly yours,

David P. Helker

J. A. X elhis

Manager - Licensing and Regulatory Affairs

Exelon Generation Company, LLC

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Attachment: Revision 5 of the Updated Final Safety Analysis Report (UFSAR) for Peach

Bottom Atomic Power Station (PBAPS), Unit 1

cc: USNRC Region I, Regional Administrator

USNRC Senior Resident Inspector, PBAPS

USNRC Project Manager, PBAPS

R. R. Janati, Bureau of Radiation Protection

S. T. Gray, State of Maryland L. Kauffman, USNRC, Region I

PBAPS

PEACH BOTTOM ATOMIC POWER STATION, UNIT 1 UPDATED FINAL SAFETY ANALYSIS REPORT

PAGE REPLACEMENT INSTRUCTIONS

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PEACH BOTTOM ATOMIC POWER STATION, UNIT 1 UPDATED FINAL SAFETY ANALYSIS REPORT

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PEACH BOTTOM ATOMIC POWER STATION, UNIT 1

UPDATED FINAL SAFETY ANALYSIS REPORT PAGE REVISION LISTING (Continued)

NRC SERs

Safety Evaluation Supporting Amendment No. 7		3/27/98
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water is required to prevent overheating of the delay beds. Therefore, the emergency cooling system for the water cooled delay beds will be removed from service soon after reactor shutdown to permit decommissioning work on this system early in the schedule.

- 3.4.7 All piping connections which penetrate the containment will be severed, capped and welded outside the containment, except for the containment vacuum breaker assembly and associated penetration.

 Electrical penetrations will be left as is. The ventilation supply and exhaust ducts will be severed and welded shut outside the containment.

 A six inch pressure equalization line equipped with a replaceable absolute filter will be installed on the containment to prevent a pressure differential from developing between the inside and outside of the containment. In addition, the containment vacuum breaker assembly was left as-is per NCR 95-00043.
- 3.4.8 The outer door of the emergency air lock and the equipment door on Elevation 116' will be welded closed. The inner doors of the personnel air lock on Elevation 116' and the access lock on Elevation 176'-6" will be welded in the open position. The interlock mechanisms in these two latter locks will be disabled and the outer door on each lock will be secured with a heavy duty padlock.
- 3.4.9 Flammable materials other than electrical cables and solid graphite left in the sealed reactor vessel will be removed from the containment.

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Other possible radiological hazards could occur in the event of a fire, flooding, or severe local storm damage. Since all readily flammable material has been removed as appropriate from the SAFSTOR facility, the chance of fire has been reduced considerably.

Flooding has been discussed in Section 4.2. Since this SAFSTOR facility is in the immediate vicinity of Units 2-3, which are operating, any local condition which may require emergency action will be apparent to the Unit 2-3 operating staff so that they can take appropriate, timely action.

4.4.7 Processing of Unit 1 Liquid Radwaste

Any liquid waste created or found at Unit 1 will be designated as Unit 1 waste and appropriately reported to the NRC in accordance with Technical Specifications. This waste will be transferred to the PBAPS radwaste facility located between Units 2 and 3 for processing. This waste will be clearly designated as belonging to the Unit 1 facility. This process will be controlled by written procedures.