

March 4, 2013

MEMORANDUM TO: Meena K. Khanna, Chief  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

FROM: Richard B. Ennis, Senior Project Manager */ra/*  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3,  
DRAFT REQUEST FOR ADDITIONAL INFORMATION (TAC NOS.  
ME7538 AND ME7539)

The attached draft request for additional information (RAI) was transmitted on March 4, 2013, to Mr. Thomas Loomis of Exelon Generation Company, LLC (Exelon, the licensee). This information was transmitted to facilitate an upcoming conference call in order to clarify the licensee's amendment request for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3, dated November 3, 2011, as supplemented on December 22, 2011, April 4, 2012, May 17, 2012, June 21, 2012, August 15, 2012, and November 13, 2012. The proposed amendment would modify the Technical Specifications (TSs) to include the use of neutron absorbing spent fuel pool (SFP) rack inserts for the purpose of criticality control in the SFPs at PBAPS, Units 2 and 3.

The draft RAI was sent to Exelon to ensure that the questions are understandable, the regulatory basis for the questions is clear, and to determine if the information was previously docketed. This memorandum and the attachment do not convey or represent an NRC staff position regarding the licensee's request.

Docket Nos. 50-277 and 50-278

Attachment: Draft RAI

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**ACCESSION NO.: ML13063A337**

OFFICE	LPL1-2/PM
NAME	REnnis
DATE	03/04/13

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DRAFT REQUEST FOR ADDITIONAL INFORMATION  
REGARDING PROPOSED LICENSE AMENDMENT  
USE OF NEUTRON ABSORBING SPENT FUEL POOL RACK INSERTS  
PEACH BOTTOM ATOMIC POWER STATION - UNITS 2 AND 3  
DOCKET NOS. 50-277 AND 50-278

By letter to the Nuclear Regulatory Commission (NRC) dated November 3, 2011, as supplemented on December 22, 2011, April 4, 2012, May 17, 2012, June 21, 2012, August 15, 2012, and November 13, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML113081441, ML113570208, ML12096A052, ML12139A404, ML12188A094, ML12228A474, and ML12319A230 respectively), Exelon Generation Company, LLC (Exelon, the licensee), submitted a License Amendment Request (LAR) for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3. The proposed amendment would modify the Technical Specifications (TSs) to include the use of neutron absorbing spent fuel pool (SFP) rack inserts for the purpose of criticality control in the SFPs at PBAPS, Units 2 and 3.

The NRC staff has reviewed the information the licensee provided that supports the proposed amendment and would like to discuss the following issues to clarify the submittal.

RAI-44

PBAPS has proposed a two tier approach for crediting degraded Boraflex until the NETCO-SNAP-IN<sup>®</sup> rack inserts are installed. The second tier, i.e., the 'Restricted' tier, credits Boraflex with more than 50% degradation. To account for the potential relocation of Boraflex during a seismic event, PBAPS has proposed an additional burnup requirement past the point of peak reactivity for the 'Restricted' tier. The NRC staff requires additional information regarding the 'Restricted' tier. Please provide the following information:

- a) Provide the  $k_{\text{eff}}$  of the Restricted storage cells both with and without the additional burnup requirement and with the Boraflex being credited.
- b) Provide the  $k_{\text{eff}}$  of the Restricted storage cells both with and without the additional burnup requirement but without the Boraflex being credited.
- c) Provide a description of the Monte Carlo models that are being used to provide those estimations of  $k_{\text{eff}}$ . The description can be in reference to the model that was used for the 'Unrestricted' tier.