



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

September 27, 2010

Mr. Michael J. Pacilio
President and Chief Nuclear Officer
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION (PBAPS), UNITS 2 AND 3 -
REQUEST FOR ADDITIONAL INFORMATION RELATED TO LICENSE
AMENDMENT REQUEST TO ALLOW RECEIPT AND STORAGE OF LOW-
LEVEL RADIOACTIVE WASTE GENERATED OFF-SITE (TAC NOS. ME3092
AND ME3093)

Dear Mr. Pacilio:

By letter to the Nuclear Regulatory Commission (NRC) dated January 6, 2010, as supplemented on August 20, 2010 (Agencywide Documents Access and Management System Accession Nos. ML100200009 and ML102350035), Exelon Generation Company, LLC (EGC) submitted a request to revise paragraph 2.B(5) of License Nos. DPR-44 and DPR-56 for PBAPS Units 2 and 3, respectively. The proposed change would enable PBAPS to possess byproduct and special nuclear material from Limerick Generating Station (LGS), Units 1 and 2. Specifically, the revised license paragraph would enable EGC to store low-level radioactive waste (LLRW) from LGS in the PBAPS LLRW Storage Facility. The PBAPS LLRW Storage Facility currently provides storage for LLRW generated at PBAPS. The NRC staff has reviewed the request and supplement submitted by the licensee and determined that additional information is needed as set forth in the Enclosure.

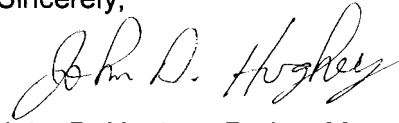
The draft questions were sent to Mr. John L. Schrage, of your staff, to ensure that the questions were understandable, the regulatory basis for the questions was clear, and to determine if the information was previously docketed. On September 14, 2010, Mr. Schrage indicated that the licensee will submit a response by October 14, 2010. Please note that if you do not respond to this letter by the agreed-upon date or provide an acceptable alternate date in writing, we may reject your application for amendment under the provisions of Title 10 of the *Code of Federal Regulations*, Section 2.108.

M. Pacilio

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If you have any questions, please contact me at (301) 415-3204.

Sincerely,

A handwritten signature in black ink, reading "John D. Hughey". The signature is written in a cursive style with a large initial "J" and "H".

John D. Hughey, Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-277 and 50-278

Enclosure:
As stated

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REQUEST FOR ADDITIONAL INFORMATION RELATED TO
LICENSE AMENDMENT REQUEST TO ALLOW RECEIPT AND STORAGE
OF LOW-LEVEL RADIOACTIVE WASTE GENERATED OFF-SITE
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 January 6, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML100200009), as supplemented by letter dated August 20, 2010 (ADAMS Accession No. ML102350035), Exelon Generation Company, LLC (EGC) submitted a request to revise paragraph 2.B(5) of License Nos. DPR-44 and DPR-56 for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3, respectively. The proposed change would enable PBAPS to possess byproduct and special nuclear material from Limerick Generating Station (LGS), Units 1 and 2. Specifically, the revised license paragraph would enable EGC to store low-level radioactive waste (LLRW) from LGS in the PBAPS LLRW Storage Facility. The PBAPS LLRW Storage Facility currently provides storage for LLRW generated at PBAPS. The NRC staff has reviewed Exelon's submittal and determined that additional information, as described below, is needed to complete the review.

- RAI-07: Will waste classified as "Greater Than Class C" (GTCC) be transferred and stored in the LLRW Storage Facility?
- RAI-08: Describe the reprocessing and repackaging capabilities in the Radwaste Building where waste from the LLRW Storage Facility would be transferred for reprocessing and repackaging if necessary due to loss of container integrity in order to meet storage, transportation and/or disposal requirements.
- RAI-09: Provide the justification for the lack of installed area radiation monitors in the LLRW Storage Facility to provide worker protection against unplanned radiation exposures.
- RAI-10: For onsite radiation protection purposes, describe the boundaries of the Title 10 of the *Code of Federal Regulations* Part 20 (10 CFR Part 20) controlled area (e.g., provide map and distances to the LLRW Storage Facility); describe whether members of the public are allowed in the controlled area, and describe how the dose limits of 10 CFR 20.1301(a) and (b) will be met.

Enclosure

- RAI-11: For offsite radiation protection considerations under 10 CFR 20.1301(e), explain the methods used in the Offsite Dose Calculation Manual methods to measure and/or calculate the net dose at the nearest residence attributable to the LLW Storage Facility and those doses attributable to the nuclear site from other sources of the direct radiation. For the environmental monitoring dosimeters, describe how the background (baseline) radiation dose will be (or has been) determined, how the standard deviation at each environmental dosimeter location has been determined, and the estimated Lower Limit of Detection for dosimeters that can be achieved at the 95% confidence level.
- RAI-12.a: How many plant-to-plant shipments of LLRW are projected in a year?
- RAI-12.b: How does the number of trips stated in the response to RAI-12.a compare to the past average annual number of trips to the Barnwell facility?
- RAI-13.a: Will there be any new construction (i.e., staging pads, shelters, support, or storage buildings) in any undisturbed land portions of either the Limerick or Peach Bottom plant sites?
- RAI-13.b: If the response to RAI-13.a is yes, please provide a discussion of the potential impact to the terrestrial and aquatic environment and your procedures for the protection of cultural and archeological artifacts.

M. Pacilio

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If you have any questions, please contact me at (301) 415-3204.

Sincerely,

/ra/

John D. Hughey, Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-277 and 50-278

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As stated

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ADAMS Accession No.: ML102580915

OFFICE	LPL1-2/PM	LPL1-2/LA	RERB/BC	IHPB/BC	LPL1-2/BC
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DATE	09/22/2010	09/22/2010	09/17/2010	09/17/2010	09/27/2010

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