



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

October 21, 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, UNITS 2 AND 3 - REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST RELATED TO LIQUID NITROGEN STORAGE (TAC NOS. ME4131 AND ME4132)

Dear Mr. Pacilio:

By letter to the Nuclear Regulatory Commission (NRC) dated June 25, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML101790114), Exelon Generation Company, LLC, (Exelon) submitted a request to revise the Technical Specifications (TS) for the Peach Bottom Atomic Power Station, Units 2 and 3. The proposed change would revise TS Surveillance Requirement (SR) 3.6.1.3, "Primary Containment Isolation Valves," and SR 3.6.1.5, "Reactor Building-to-Suppression Chamber Vacuum Breakers," to modify the required level for the liquid nitrogen storage tank. Exelon supplemented the amendment request on August 16, 2010, in response to the NRC staff's request for supplemental information dated July 30, 2010. 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 question was sent to Mr. Richard Gropp, of your staff, to ensure that the question was understandable, the regulatory basis for the question was clear, and to determine if the information was previously docketed. On October 20, 2010, Mr. Gropp indicated that the licensee will submit a response by December 6, 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.

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

Sincerely,

A handwritten signature in cursive script that reads "Peter Banford for".

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

cc w/encl: Distribution via ListServ

REQUEST FOR ADDITIONAL INFORMATION REGARDING
LICENSE AMENDMENT REQUEST RELATED TO LIQUID NITROGEN STORAGE
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 June 25, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML101790114), Exelon Generation Company, LLC, (Exelon) submitted a request to revise the Technical Specifications (TS) for the Peach Bottom Atomic Power Station, (PBAPS) Units 2 and 3. The proposed change would revise TS Surveillance Requirement (SR) 3.6.1.3, "Primary Containment Isolation Valves (PCIVs)," and SR 3.6.1.5, "Reactor Building-to-Suppression Chamber Vacuum Breakers," to modify the required level for the liquid nitrogen storage tank. Exelon supplemented the amendment request on August 16, 2010, in response to the NRC staff's request for supplemental information dated July 30, 2010. The NRC staff has reviewed Exelon's submittal and determined that additional information, as described below, is needed to complete the review.

The NRC supplemental information letter dated July 30, 2010 (ADAMS Accession No. ML102110061), requested that Exelon provide the calculations that determined the liquid nitrogen tank level/volume correlation for 16 inches of water column to 50,000 standard cubic feet (scf) and 22 inches of water column to 124,000 scf, as described in the application dated June 25, 2010. Exelon submitted supplemental information by letter dated August 16, 2010 (ADAMS Accession No. ML102310079). The Attachment associated with the supplemental information letter contained Calculation PM-0375, "To Establish Demand for N₂ for the CAD [containment atmospheric dilution] System and the SGIG [safety grade instrument gas] System for Dual Unit Operation," Revision 4. Page 23 of the calculation states that a vendor-supplied correlation from Process Engineering Inc. is used to perform the tank level calculations (Reference 18, to calculation PM-0375). This Reference 18 is included in the attachment and page 1 of the reference states the following regarding the charts containing the subject tank level/volume correlation:

All of these charts are based on very limited research into these now seventeen year old units, and should be used for reference only.

Title 10 of *The Code of Federal Regulations*, Part 50, Appendix B (10 CFR 50, App B), Section III, "Design Control," requires that design control measures shall provide for verifying or checking the adequacy of design, such as by the performance of design reviews, by the use of alternate or simplified calculation methods, or by the performance of suitable testing program.

RAI-01: Provide justification that the vendor-supplied information used in Exelon calculation PM-0375, Revision 4, to determine the liquid nitrogen tank level/volume correlation for 16 inches of water column to 50,000 standard cubic feet (scf) and 22 inches of water column to 124,000 scf, as described in the application dated June 25, 2010, meets the requirements of 10 CFR 50, App B, Section III, "Design Control."

Enclosure

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President and Chief Nuclear Officer
Exelon Generation Company, LLC
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Warrenville, IL 60555

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Sincerely,
/ra/

John D. Hughey, Project Manager
Plant Licensing Branch I-2
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ADAMS Accession No.: ML102861886 * by email

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