



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

July 12, 2010

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

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3: NON-ACCEPTANCE OF LICENSE AMENDMENT REQUEST RELATED TO EXTENDING COMPLETION TIME FOR TECHNICAL SPECIFICATION 3.1.7, "STANDBY LIQUID CONTROL SYSTEM" (TAC NOS. ME3598 AND ME3599)

Dear Mr. Pacilio:

By letter to the Nuclear Regulatory Commission (NRC) dated March 24, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML100840752), 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 Section 3.1.7, "Standby Liquid Control (SLC) System," to extend the completion time for Condition C (i.e., two SLC subsystems inoperable for reasons other than Condition A) from 8 hours to 72 hours. The purpose of this letter is to provide the results of the NRC staff's acceptance review of this amendment request. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

Consistent with Section 50.90 of Title 10 of the *Code of Federal Regulations* (10 CFR), an amendment to the license (including the technical specifications) must fully describe the changes requested, and following as far as applicable, the form prescribed for original applications. Section 50.34 of 10 CFR addresses the content of technical information required. This section stipulates that the submittal address the design and operating characteristics, unusual or novel design features, and principal safety considerations.

The NRC staff has reviewed your application and concluded that the information delineated in the enclosure to this letter is necessary to enable the NRC staff to make an independent assessment regarding the acceptability of the proposed amendment request in terms of regulatory requirements and the protection of public health and safety and the environment.

In order to make the application complete, the NRC staff requests that Exelon supplement the application to address the information requested in the enclosure by July 28, 2010. This will enable the NRC staff to complete its detailed technical review. If the information responsive to the NRC staff's request is not received by the above date, the application will not be accepted for review pursuant to 10 CFR 2.101, and the NRC staff will cease its review activities associated with the application. If the application is subsequently accepted for review, you will

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be advised of any further information needed to support the NRC staff's detailed technical review by separate correspondence.

The information requested and associated time frame in this letter was discussed with Mr. Doug Walker of your staff on July 9, 2010.

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

Sincerely,

A handwritten signature in black ink, appearing to read "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

cc: Distribution via Listserv

REQUEST FOR INFORMATION RELATED TO ACCEPTANCE REVIEW  
REGARDING LICENSE AMENDMENT REQUEST TO REVISE  
TECHNICAL SPECIFICATION 3.1.7 "STANDBY LIQUID  
CONTROL SYSTEM" COMPLETION TIME FOR CONDITION C  
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 March 24, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML100840752), 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 Section 3.1.7, "Standby Liquid Control (SLC) System," to extend the completion time for condition C (i.e., "Two SLC subsystems inoperable for reasons other than Condition A") from 8 hours to 72 hours.

Supplemental Request – 01:

The NRC staff requests that Exelon clarify the intended reliance on EOP actions as an alternate means of boration and provide evaluations that justify any credited actions related to the requirements of 10 CFR 50.67, as appropriate.

Page 6 of Attachment 1 to the license amendment request (LAR) describes alternative means for boration as additional redundancy in support of defense-in-depth measures to justify the proposed extension of the TS 3.1.7, condition C, completion time. These alternative means of boration consist of actions in the PBAPS Emergency Operating Procedures (EOP). Page 3 of Attachment 1 of the LAR states that the alternative means of boration support the station's ability to meet the requirements of Title 10 *Code of Federal Regulations* Part 50, Section 50.67 (10 CFR 50.67), "Accident source term."

The NRC staff has identified that the proposed alternate means of boration are not currently included in the PBAPS licensing basis. The LAR indicates that the licensee intends to credit the referenced EOP actions as an alternate boration pathway to meet the requirements of 10 CFR 50.67. If so, then additional justification is required to support reliance on these actions as a credited alternate boration pathway. The NRC document "Guidance on the Assessment of a BWR [boiling-water reactor] SLC System for pH Control," dated February 12, 2004 (ADAMS Accession No. ML040640364), provides an approach that is acceptable to the NRC staff for evaluating the alternative controls of the suppression pool pH against appropriate methodologies. If Exelon's intent is not to credit a new alternate boration pathway, then clarification is needed regarding the use of the EOP actions as an alternative means of boration with respect to defense-in-depth as related to 10 CFR 50.67.

Enclosure

Supplemental Request – 02:

Identify adequate defense-in-depth for mitigation of ATWS events for the extended 72-hour completion time period.

The SLC System mitigates an (anticipated transient without scram) ATWS event by delivering a concentrated borated solution to the reactor pressure vessel to shutdown the reactor. The TS Required Action being modified addresses the condition where both SLC trains are inoperable. In the event of an ATWS during this condition, there is no system available to inject concentrated borated solution into the reactor pressure vessel in a timely manner to achieve shutdown. The licensee submittal addresses the low probability of an ATWS event due to the reliability and diversity of the control rods, and also discusses the recirculation pump trip feature which reduces reactor power. However, there is no mechanism identified to assure safe shutdown to subcritical conditions as normally ensured by the operation of one of the two SLC trains.

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be advised of any further information needed to support the NRC staff's detailed technical review by separate correspondence.

The information requested and associated time frame in this letter was discussed with Mr. Doug Walker of your staff on July 9, 2010.

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

Enclosure: As stated

cc: Distribution via Listserv

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ADAMS Accession No. ML101450154

\* concurrence via email w/comments

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