



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

February 23, 2010

Mr. Charles G. Pardee
President and Chief Nuclear Officer
Exelon Generation Company, LLC
200 Exelon Way
Kennett Square, PA 19348

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNIT 2 - REQUEST FOR
ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT
REQUEST FOR ONE-TIME FIVE-YEAR CONTAINMENT TYPE A
INTEGRATED LEAK RATE TEST INTERVAL EXTENSION
(TAC NO. ME2159)

Dear Mr. Pardee:

By letter to the Nuclear Regulatory Commission (NRC) dated August 28, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML092440053), Exelon Generation Company, LLC, (Exelon) submitted a License Amendment Request (LAR) for Peach Bottom Atomic Power Station (PBAPS), Unit 2. The submittal seeks to revise Technical Specification 5.5.12 to reflect a one-time extension of the containment Type A Integrated Leak Rate Test (ILRT) from 10 to 15 years. The one-time extension would require a Type A ILRT to be performed no later than October of 2015. The NRC staff has reviewed the request submitted by the licensee and has identified a need for additional information as set forth in the Enclosure.

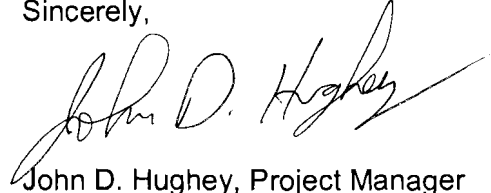
The draft questions were sent to Thomas Loomis, of your staff, to ensure that the questions were understandable, the regulatory basis for the questions was clear, and to determine if the information was previously docketed. On February 4, 2010, Mr. Loomis indicated that the licensee will submit a response by February 26, 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.

C. Pardee

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

Sincerely,

A handwritten signature in black ink that reads "John D. Hughey". The signature is written in a cursive style with a long, sweeping underline that extends to the right.

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

Docket Nos. 50-277

Enclosure: Request for Additional
Information

cc: Distribution via ListServ

REQUEST FOR ADDITIONAL INFORMATION RELATED TO
LICENSE AMENDMENT REQUEST FOR ONE-TIME FIVE-YEAR CONTAINMENT TYPE A
INTEGRATED LEAK RATE TEST (ILRT) INTERVAL EXTENSION
PEACH BOTTOM ATOMIC POWER STATION – UNIT 2
DOCKET NO. 50-277

By letter to the Nuclear Regulatory Commission (NRC) dated August 28, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML092440053), Exelon Generation Company, LLC, (Exelon) submitted a License Amendment Request (LAR) for Peach Bottom Atomic Power Station (PBAPS), Unit 2. The submittal seeks to revise Technical Specification 5.5.12 to reflect a one-time extension of the containment Type A Integrated Leak Rate Test (ILRT) from 10 to 15 years. The one-time extension would require a Type A ILRT to be performed no later than October of 2015. The NRC staff has reviewed Exelon's submittal and determined that additional information, as described below, is needed to complete the review.

Containment And Ventilation Branch Questions

RAI-01 Type B and Type C Combined Leakage Rate Totals:

The License Amendment Request provides the results of ILRTs performed in 1991 and 2000. On Page 6, you provide the Type B and C test leakage totals for the 2006 and 2008 refueling outages.

- RAI-01.1: Provide the Type B and Type C combined leakage rate totals associated with the ILRTs performed for the 1991 refueling outage and for refueling outages conducted from 2000 to the present.

RAI-02 Containment Pressure Credit For Pump Net Positive Suction Head:

The License Amendment Request indicates that the ILRT interval does not impact Core Damage Frequency (CDF). Section 5.2.4.3.2 of the Peach Bottom Updated Final Safety Analysis Report (UFSAR) indicates that the net positive suction head available (NPSHa) for the Core Standby Cooling System (CSCS) pumps takes partial credit for the pressure within the containment.

- RAI-02.1: Please address the impact of the proposed ILRT test interval extension on CDF given the assumption of reliance on containment pressure for CSCS NPSHa.

(Please see Section 3.2.2 of the NRC staff Safety Evaluation issued on June 25, 2008, (ADAMS Accession Number ML081140105) for additional information related to evaluating containment over-pressure credit impact using Electric Power Research Institute Report 1009325, Revision 2.

Enclosure

Probabilistic Risk Assessment (PRA) Licensing Branch Questions

RAI-03 Steel Liner Corrosion Events:

The assessment of corrosion-induced leakage of the steel liner in Section 4.4 of Attachment 4 was based on three observed corrosion events (at Oyster Creek, North Anna 2 and Brunswick Unit 2). There have been additional instances of liner corrosion that are relevant to this assessment, including a recent finding at Beaver Valley Unit 1 (LER 2009-003-00).

- RAI-03.1: Provide a more complete accounting corrosion events relevant to the Peach Bottom Unit 2 containment, and an evaluation of the impact on risk results.

RAI-04 PRA Technical Adequacy:

The discussion of PRA Technical Adequacy in Section A.2.2 of Appendix A to Attachment 4 includes a list of assessments of technical capability of the PBAPS PRA models.

- RAI-04.1: Please identify who conducted the 2004 gap analysis, and who performed the 2006 assessment of the extent to which previously-identified gaps had been addressed.

RAI-05 GAP Analysis:

Table A-2 of Attachment 4, "Status of Identified Gaps to Capability Category II of the ASME PRA Standard," indicates that Gap #25, related to test and maintenance pre-initiator errors, is "not significant" for this application.

- RAI-05.1: Describe and justify the basis for the statement that "Pre-initiator human actions do not contribute significantly to the risk significance results for this application", given that a detailed process was not employed for identifying and screening test and maintenance pre-initiators. Discuss whether this gap includes the modeling of pre-initiator errors related to test and maintenance of containment isolation valves, and if so, how resolution of the gap would impact the risk results for this license amendment request.

C. Pardee

- 2 -

If you have any questions, please contact John Hughey 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

Enclosure: Request for Additional
Information

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ADAMS Accession No.: ML100350735

*via memo dated

OFFICE	LPL1-2/PM	LPL1-2/LA	APLA/BC	SCVB/BC	LPL1-2/BC
NAME	JHughey	ABaxter	DHarrison*	RDennig*	HChernoff (w/comments)
DATE	2/17/2010	2/16/2010	12/10/2009	11/10/2009	2/23/2010

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