Exelon Generation

200 Exelon Way
Kennett Square, PA 19348
www.exeloncorp.com

10 CFR 50.90

October 20, 2015

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Peach Bottom Atomic Power Station, Unit 2 and 3
Renewed Facility Operating License Nos. DPR-44 and DPR-56
NRC Docket Nos. 50-277 and 50-278

Subject: Response to Draft Request for Additional Information Regarding Proposed Changes to the Technical Specifications to Address Secondary Containment Personnel Access Door Openings

References:

1. Letter from James Barstow (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "License Amendment Request - Proposed Changes to the Technical Specifications to Address Administrative Control of Secondary Containment Access Openings," dated February 23, 2015

2. Letter from David Helker (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "License Amendment Request – Supplement, Proposed Changes to the Technical Specifications to Address Secondary Containment Personnel Access Door Openings," dated August 12, 2015

3. Electronic mail message from Richard Ennis, U.S. Nuclear Regulatory Commission, to Stephanie J. Hanson, Exelon Generation Company, LLC, "Draft RAIs – Peach Bottom Units 2 and 3 - Administrative Control of Secondary Containment Access Openings (TACs MF5783 & MF5784)," dated September 15, 2015

By letter dated February 23, 2015 (Reference 1), as supplemented by letter dated August 12, 2015 (Reference 2), Exelon Generation Company, LLC (Exelon) submitted a license amendment request (LAR) for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3. The proposed amendment would allow for brief, inadvertent, simultaneous opening of redundant secondary containment personnel access doors during normal entry and exit conditions.

The NRC staff reviewed the information provided that supports the proposed amendment and identified the need for additional information in order to complete their evaluation of the amendment request. The draft request for additional information (RAI) was sent from the NRC to Exelon by electronic mail message on September 15, 2015 (Reference 3). Subsequent discussion with the NRC established October 23, 2015, as the due date for the response to the RAI. The response to the RAI is provided in the attachment to this letter.

Exelon has reviewed the information supporting a finding of no significant hazards consideration, and the environmental consideration, that were previously provided to the NRC in Attachment 1 of the Reference 1 and Reference 2 letters. Exelon has concluded that the information provided in this response does not affect the bases for concluding that the proposed license amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92. In addition, Exelon has concluded that the information in this response does not affect the bases for concluding that neither an environmental impact statement nor an environmental assessment needs to be prepared in connection with the proposed amendment.

There are no regulatory commitments in this letter.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), Exelon is notifying the Commonwealth of Pennsylvania of this RAI response by transmitting a copy of this letter and its attachments to the designated State Official.

If you have any questions or require additional information, please contact Stephanie J. Hanson at 610-765-5143.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 20th day of October 2015.

Respectfully,

James Barstow
Director, Licensing and Regulatory Affairs
Exelon Generation Company, LLC

Attachment: Response to Draft Request for Additional Information Regarding Proposed Changes to the Technical Specifications to Address Secondary Containment Personnel Access Door Openings

cc: Regional Administrator - NRC Region I w/ attachment
NRC Senior Resident Inspector - PBAPS "
NRC Project Manager, NRR - PBAPS "
Director, Bureau of Radiation Protection - Pennsylvania Department of Environmental Protection "

ATTACHMENT

Peach Bottom Atomic Power Station, Units 2 and 3

Renewed Facility Operating License Nos. DPR-44 and DPR-56

Docket Nos. 50-277 and 50-278

Response to Draft Request for Additional Information Regarding Proposed Changes to the Technical Specifications to Address Secondary Containment Personnel Access Door Openings

By application dated February 23, 2015 (Reference 1), as supplemented by letter dated August 12, 2015 (Reference 2), Exelon Generation Company, LLC (Exelon), submitted a license amendment request (LAR) for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3. The proposed amendment would allow for brief, inadvertent, simultaneous opening of redundant secondary containment personnel access doors during normal entry and exit conditions.

The NRC staff reviewed the information provided that supports the proposed amendment and determined that additional information was needed to complete their review. The following question was provided.

SCVB-RAI-6
Subject: Proposed Changes to Surveillance Requirement (SR) 3.6.4.1.2

Provide assurance that adequate administrative controls will be exercised to control secondary containment personnel door openings, specifically, to address how the door openings will be controlled to be "brief" for even "inadvertent" simultaneous openings as described in the proposed changes to the Technical Specification Bases for SR 3.6.4.1.2. Furthermore, provide assurance that the functional capability of the secondary containment will still be maintained when the personnel doors are simultaneously opened. Note that the frequency and door opening time of both planned activity and inadvertent events involved with simultaneous door openings should be subject to control. Provide justification for such a control.

Response:
The supplement letter, dated August 12, 2015 (Reference 2), stressed that the intent of the proposed change is to allow for brief, inadvertent, simultaneous opening of redundant secondary containment personnel access doors during normal entry and exit. The proposed change does not involve planned simultaneous opening of redundant secondary containment personnel access doors. For situations that involve planned simultaneous opening of the doors, secondary containment will be declared inoperable and the appropriate Technical Specification (TS) action will be followed.

For inadvertent, simultaneous opening of the doors, the administrative controls involve the fact that both doors are under continuous control of the individuals accessing the doors, and that the doors are promptly closed following entry and exit, restoring the secondary containment boundary. The phrase "being used for entry and exit" in the proposed change ensures that the time both doors may be open simultaneously is limited to the time it takes to traverse through a door, typically less than 10 seconds, which is insignificant.

Additionally, each secondary containment personnel access door is equipped with a position switch to support a monitoring system which consists of local indicating lights, a local audible alarm, and Main Control Room (MCR) annunciator lights and alarms. The monitoring system operates as follows:

1. When all doors are closed the indicating light located above each door is not lit.
2. When one inner door or one outer door is opened, the indicating lights above the opposing doors that are still closed are lit to warn against opening. The indicating light above the opened door is not lit.
3. When both an inner and an outer door are opened, the indicating lights above each door are lit, an instantaneous audible alarm is annunciated, and after a preset time delay, a

MCR alarm is annunciated to identify that secondary containment has been breached and personnel are dispatched to investigate. For PBAPS, this preset time delay has been established at 10 seconds.

The TS surveillance requirements require verification that at least one door is closed in each secondary containment penetration. The intent of these requirements is to not breach secondary containment at any time when secondary containment is required. Therefore, secondary containment personnel access doors are normally kept closed, except when the access doors are being used for entry and exit. As noted previously, secondary containment personnel access doors are equipped with a monitoring system to assist station personnel in complying with these requirements. The frequency of inadvertent, simultaneous opening events is minimized, when the access is being used for entry and exit, through required Nuclear General Employee Training (NGET) which provides guidance to station personnel to not open a secondary containment personnel access door if the indicating light is illuminated.

The functional capability of the secondary containment is maintained when the personnel access doors are inadvertently, simultaneously open for a brief period of time due to the fact that the minimal time the doors are open is substantially bounded by the current design analyses for the secondary containment in conjunction with the operation of the Standby Gas Treatment (SGT) subsystem. For a loss of coolant accident coincident with a loss of offsite power, SGT would not start until 16 seconds after the event. Sixteen seconds bounds the time, typically less than 10 seconds, that redundant secondary containment personnel access doors would be inadvertently, simultaneously open. As a result, there would not be any impact on the ability for the SGT to draw down secondary containment to the TS required vacuum condition. The dose analysis assumes that secondary containment is not drawn to a vacuum condition for 180 seconds during which time no credit for differential pressure or filtering is taken. Surveillance testing has shown that SGT can draw down secondary containment well under 60 seconds. Therefore, the functional capability of the secondary containment is maintained when the personnel access doors are inadvertently, simultaneously open for a brief period of time.

References:

1. Letter from James Barstow (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "License Amendment Request - Proposed Changes to the Technical Specifications to Address Administrative Control of Secondary Containment Access Openings," dated February 23, 2015.

2. Letter from David Helker (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "License Amendment Request – Supplement, Proposed Changes to the Technical Specifications to Address Secondary Containment Personnel Access Door Openings," dated August 12, 2015.