

July 14, 2008

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

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

Subject: License Amendment Request – Application of Alternative Source Term
Supplemental Response Related to Reconciliation of Technical Specifications
Page Changes

References:

1. Letter from Pamela B. Cowan, Exelon Generation Company, LLC, to U.S. Nuclear Regulatory Commission, "Exelon/AmerGen Application to Revise Technical Specifications Regarding Control Room Envelope Habitability in Accordance with TSTF-448, Revision 3, Using the Consolidated Line Item Improvement Process," dated April 12, 2007
2. Letter from Pamela B. Cowan, Exelon Generation Company, LLC, to U.S. Nuclear Regulatory Commission, "License Amendment Request – Application of Alternative Source Term," dated July 13, 2007
3. Letter from Christopher Gratton, U.S. Nuclear Regulatory Commission, to Charles G. Pardee Exelon Generation Company, LLC, Issuance of Amendments Regarding the Incorporation of TSTF-448, Revision 2, "Control Room Habitability," dated October 31, 2007

In Reference 1, Exelon Generation Company, LLC (Exelon) submitted an application requesting a change to the Technical Specifications (TS), Appendix A, of Renewed Facility Operating License Nos. DPR-44 and DPR-56 for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3, respectively. The proposed change would modify the TS requirements related to Control Room envelope habitability in accordance with Technical Specifications Task Force (TSTF) Traveler TSTF-448, Revision 3, "*Control Room Habitability*." In particular, this LAR proposed adding a new section to the administrative control requirements in the TS for PBAPS, Units 2 and 3 (i.e., Section 5.5.13, "*Control Room Envelope Habitability Program*").

By letter dated July 13, 2007 (Reference 2), Exelon submitted an application requesting a change to the TS, Appendix A, of Renewed Facility Operating License Nos. DPR-44 and DPR-56 for PBAPS, Units 2 and 3, to support implementation of Alternative Source Term (AST) methodology at PBAPS.

In Reference 3, the U.S. Nuclear Regulatory Commission (NRC) issued Amendment Nos. 264 and 268 for PBAPS, Units 2 and 3, respectively, modifying the TS requirements related to Control Room envelope habitability in accordance with TSTF-448 as requested in the Reference 1 letter. As a result of these amendments, Section 5.5.13, "*Control Room Envelope Habitability Program*," was added to the TS at PBAPS, which stipulate in part:

"A Control Room Envelope (CRE) Habitability Program shall be established and implemented to ensure that CRE habitability is maintained such that, with an OPERABLE Main Control Room Emergency Ventilation (MCREV) System, CRE occupants can control the reactor safely under normal conditions and maintain it in a safe condition following a radiological event, hazardous chemical release as applicable, or a smoke challenge. The program shall ensure that adequate radiation protection is provided to permit access and occupancy of the CRE under design basis accident (DBA) conditions without personnel receiving radiation exposures in excess of 5 rem whole body dose or its equivalent to any part of the body for the duration of the accident...."

As indicated above, the exposure limit currently described in TS for personnel in the Control Room is limited to *5 rem whole body dose or its equivalent to any part of the body*. This exposure limit is based on General Design Criterion (GDC) 19, "*Control room*," requirements.

The AST License Amendment Request (LAR) (Reference 2) proposed changes to the TS to implement AST methodology in accordance with the requirements of 10CFR50.67, "*Accident source term*," which describes radiological exposure limits in terms of Total Effective Dose Equivalent (TEDE). At the time the AST LAR was submitted, the LAR concerning Control Room habitability (Reference 1) had not been approved, and therefore, Section 5.5.13 was not included in the PBAPS TS. If the Control Room habitability had been approved and implemented when AST was submitted for PBAPS, TS Section 5.5.13 would have been included in the AST submittal requesting that *5 rem whole body dose or its equivalent to any part of the body* exposure limit be revised to reflect AST terminology (10CFR50.67) for expressing radiological exposure (i.e., 5 rem TEDE).

Therefore, Exelon is submitting the attached TS page mark-ups in order to reconcile the differences in the radiological exposure terminology used between AST (10CFR50.67) and GDC-19 requirements. Exelon considers the attached proposed TS changes administrative in nature and believes that it is appropriate to submit these changes at this time while AST is under review by the NRC. Submitting the attached TS changes in coordination with the NRC review of AST, will avoid the possibility of requesting a subsequent LAR to address the identified discrepancy in radiological exposure terminology used, and will ensure that the exposure terminology used is consistent with AST.

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In addition, also attached are TS pages 3.6-12 for PBAPS, Units 2 and 3, which were submitted in conjunction with the AST submittal (Reference 2). These TS pages are being re-submitted to correct a formatting discrepancy (refer to attached mark-ups) in the "Required Action" statements associated with Condition E. The proposed changes are strictly administrative and are intended to maintain consistency with Improved Technical Specification (ITS) number sequencing and formatting protocol.

Exelon has concluded that the information provided in this response does not impact the conclusions of the: 1) Technical Analysis, 2) No Significant Hazards Consideration under the standards set forth in 10 CFR 50.92(c), or 3) Environmental Consideration as provided in the AST submittal (Reference 2) for PBAPS.

There are no regulatory commitments contained within this letter. If you have any further questions or require additional information, please contact Richard Gropp at 610-765-5557.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 14th day of July 2008.

Respectfully,

DBK


Darin Benyak
Director – Licensing and Regulatory Affairs
Exelon Generation Company, LLC

Attachment: Technical Specifications Page Mark-ups

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

Technical Specifications Page Mark-ups

Unit 2 Unit 3

5.0-18 5.0-18

3.6-12 3.6-12

5.5 Programs and Manuals

5.5.12 Primary Containment Leakage Rate Testing Program (continued)

- b. Air lock testing acceptance criteria are:
- 1) Overall air lock leakage rate is ≤ 9000 scc/min when tested at $\geq P_a$.
- c. MSIV leakage acceptance criteria are as specified in SR 3.6.1.3.14.

The provisions of SR 3.0.2 do not apply to the test frequencies specified in the Primary Containment Leakage Rate Testing Program.

The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program.

5.5.13 Control Room Envelope Habitability Program

A Control Room Envelope (CRE) Habitability Program shall be established and implemented to ensure that CRE habitability is maintained such that, with an OPERABLE Main Control Room Emergency Ventilation (MCREV) System, CRE occupants can control the reactor safely under normal conditions and maintain it in a safe condition following a radiological event, hazardous chemical release as applicable, or a smoke challenge. The program shall ensure that adequate radiation protection is provided to permit access and occupancy of the CRE under design basis accident (DBA) conditions without personnel receiving radiation exposures in excess of ~~5 rem whole body dose or its equivalent to any part of the body~~ **5 rem total effective dose equivalent (TEDE)** for the duration of the accident. The program shall include the following elements:

- a. The definition of the CRE and the CRE boundary.
- b. Requirements for maintaining the CRE boundary in its design condition including configuration control and preventative maintenance.
- c. Requirements of (i) determining the unfiltered air inleakage past the CRE boundary into the CRE in accordance with the testing methods and at the Frequencies specified in Section C.1 and C.2 of Regulatory Guide 1.197, "Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors," Revision 0, May 2003, and (ii) assessing CRE habitability at the Frequencies specified in Section C.1 and C.2 of Regulatory Guide 1.197, Revision 0.

(continued)

5.5 Programs and Manuals

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(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. Purge/Vent flowpath open for an accumulated time of greater than 90 hours for the calendar year while in MODE 1 or 2 with Reactor Pressure greater than 100 psig.	E.1 Isolate the penetration	4 hours
	<u>OR</u> E.2.1 E.2 Be in MODE 3.	12 hours
	<u>AND</u> E.2.2 E.2 Be in MODE 4	36 hours
EF. Required Action and associated Completion Time of Condition A, B, C, or D not met in MODE 1, 2, or 3.	EF.1 Be in MODE 3.	12 hours
	<u>AND</u> EF.2 Be in MODE 4.	36 hours
FG. Required Action and associated Completion Time of Condition A, B, C, or D not met for PCIV(s) required to be OPERABLE during MODE 4 or 5.	FG.1 Initiate action to suspend operations with a potential for draining the reactor vessel.	Immediately
	<u>OR</u> FG.2 Initiate action to restore valve(s) to OPERABLE status.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.6.1.3.1 Verify Containment Atmospheric Dilution (CAD) System liquid nitrogen storage tank level is \geq 16 inches water column.	24 hours
SR 3.6.1.3.2 Verify Safety Grade Instrument Gas (SGIG) System header pressure is \geq 80 psig.	24 hours

(continued)

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	E.2 E.2.1 Be in MODE 3. <u>AND</u> E.2.2 Be in MODE 4.	12 hours 36 hours
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