

October 26, 2015

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

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

Subject: PBAPS MELLLA+ License Amendment Request – Supplement 7 Revision
Regarding Proposed Technical Specifications

Reference: 1. Exelon letter to the NRC, "License Amendment Request – Maximum
Extended Load Line Limit Analysis Plus," dated September 4, 2014
(ADAMS Accession No. ML14247A503)

In accordance with 10 CFR 50.90, Exelon Generation Company, LLC (EGC) requested amendments to Facility Operating License Nos. DPR-44 and DPR-56 for Peach Bottom Atomic Power Station (PBAPS) Units 2 and 3, respectively (Reference 1). Specifically, the proposed changes would revise the Renewed Operating Licenses to allow operation in the expanded Maximum Extended Load Line Limit Analysis Plus (MELLLA+) operating domain and the use of the Detect and Suppress – Confirmation Density (DSS-CD) stability solution.

This letter provides an update to the proposed Technical Specifications (TS) supporting the PBAPS MELLLA+ amendment request (Reference 1). Attachment 1, Page 8, Table 1, of the EGC license amendment request (Reference 1) identifies the proposed deletion of surveillance requirement (SR) 3.3.1.1.8 to calibrate the local power range monitors (LPRM), from TS Table 3.3.1.1-1 "Reactor Protection System Instrumentation," function 2f, Average Power Range Monitors (APRM) - Operating Power Range Monitor (OPRM) Upscale. A subsequent review of the SRs for the OPRM Upscale function, determined that SR 3.3.1.1.8 should be retained for MELLLA+ at PBAPS Units 2 and 3. Although the LPRM calibration would have been performed within its required periodicity through other APRM functions, the calibration is necessary to ensure the LPRM reading match actual core conditions for the OPRM Upscale function.

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Therefore, the requested deletion of SR 3.3.1.1.8 from the OPRM Upscale function 2f is withdrawn, and the SR will be retained in the Unit 2 and Unit 3 TS following MELLLA+ implementation. Attachment 1 of this letter provides the affected markup Unit 2 and Unit 3 TS Page 3.3-7.

There are no regulatory commitments contained in this letter.

Should you have any questions concerning this letter, please call me at (610) 765-5528.

Respectfully,



Kevin F. Borton
Manager, Power Uprate Licensing
Exelon Generation Company, LLC

Attachment:

1. Markup of Proposed Unit 2 and Unit 3 Technical Specifications Page 3.3-7

| | | |
|-----|--|--------------|
| cc: | USNRC Region I, Regional Administrator | w/attachment |
| | USNRC Senior Resident Inspector, PBAPS | w/attachment |
| | USNRC Project Manager, PBAPS | w/attachment |
| | R. R. Janati, Commonwealth of Pennsylvania | w/attachment |
| | S. T. Gray, State of Maryland | w/attachment |

Attachment 1

Peach Bottom Atomic Power Station Unit 2 and Unit 3

NRC Docket Nos. 50-277 and 50-278

Markup of Proposed Unit 2 and Unit 3 Technical Specifications Page 3.3-7

Table 3.3.1.1-1 (page 1 of 3)
Reactor Protection System Instrumentation

| FUNCTION | APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS | REQUIRED CHANNELS PER TRIP SYSTEM | CONDITIONS REFERENCED FROM REQUIRED ACTION D.1 | SURVEILLANCE REQUIREMENTS | ALLOWABLE VALUE |
|---------------------------------|--|-----------------------------------|--|---|--|
| 1. Wide Range Neutron Monitors | | | | | |
| a. Period-Short | 2 | 3 | G | SR 3.3.1.1.1 SR 3.3.1.1.5 SR 3.3.1.1.12 SR 3.3.1.1.17 SR 3.3.1.1.18 | ≥ 13 seconds |
| | 5(a) | 3 | H | SR 3.3.1.1.1 SR 3.3.1.1.6 SR 3.3.1.1.12 SR 3.3.1.1.17 SR 3.3.1.1.18 | ≥ 13 seconds |
| b. Inop | 2 | 3 | G | SR 3.3.1.1.5 SR 3.3.1.1.17 | NA |
| | 5(a) | 3 | H | SR 3.3.1.1.6 SR 3.3.1.1.17 | NA |
| 2. Average Power Range Monitors | | | | | |
| a. Neutron Flux-High (Setdown) | 2 | 3 ^(c) | G | SR 3.3.1.1.1 SR 3.3.1.1.8 SR 3.3.1.1.11 SR 3.3.1.1.12 | ≤ 15.0% RTP |
| b. Simulated Thermal Power-High | 1 | 3 ^(c) | F | SR 3.3.1.1.1 SR 3.3.1.1.2 SR 3.3.1.1.8 SR 3.3.1.1.11 SR 3.3.1.1.12 ^{(e),(f)} | ≤ 0.55 W + 63.3% RTP ^(b) and ≤ 118.0% RTP |
| c. | 1 | 3 ^(c) | F | SR 3.3.1.1.1 SR 3.3.1.1.2 SR 3.3.1.1.8 SR 3.3.1.1.11 SR 3.3.1.1.12 | ≤ 119.7% RTP |
| d. Inop | 1,2 | 3 ^(c) | G | SR 3.3.1.1.11 | NA |
| e. 2-Out-Of-4 Voter | 1,2 | 2 | G | SR 3.3.1.1.1 SR 3.3.1.1.11 SR 3.3.1.1.17 SR 3.3.1.1.18 | NA |
| f. OPRM Upscale | ≥ 23% RTP | 3 ^(c) | I | SR 3.3.1.1.1 SR 3.3.1.1.8 SR 3.3.1.1.11 SR 3.3.1.1.12 SR 3.3.1.1.19 | (d) NA |

(continued)

- (a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.
- (b) 0.55 (W - ΔW) + 61.5% RTP when reset for single loop operation per LCO 3.4.1, "Recirculation Loops Operating."
- (c) Each APRM channel provides inputs to both trip systems.
- (d) ~~See COLR for OPRM period based detection algorithm (PBDA) setpoint limits.~~
- (e) If the as-found channel setpoint is outside its predefined as-found tolerance, then the channel shall be evaluated to verify that it is functioning as required before returning the channel to service.
- (f) The instrument channel set point shall be reset to a value that is within the Leave Alone Zone (LAZ) around the Nominal Trip Setpoint (NTSP) at the completion of the surveillance; otherwise, the channel shall be declared inoperable. Setpoints more conservative than the NTSP are acceptable provided the as-found tolerance and LAZ apply to the actual setpoint implemented in the Surveillance procedures to confirm channel performance. The NTSP methodologies used to determine the as-found tolerance and the LAZ are specified in the Bases associated with the specified function.

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Table 3.3.1.1-1 (page 1 of 3)
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| 1. Wide Range Neutron Monitors | | | | | |
| a. Period-Short | 2 | 3 | G | SR 3.3.1.1.1 SR 3.3.1.1.5 SR 3.3.1.1.12 SR 3.3.1.1.17 SR 3.3.1.1.18 | ≥ 13 seconds |
| | 5(a) | 3 | H | SR 3.3.1.1.1 SR 3.3.1.1.6 SR 3.3.1.1.12 SR 3.3.1.1.17 SR 3.3.1.1.18 | ≥ 13 seconds |
| b. Inop | 2 | 3 | G | SR 3.3.1.1.5 SR 3.3.1.1.17 | NA |
| | 5(a) | 3 | H | SR 3.3.1.1.6 SR 3.3.1.1.17 | NA |
| 2. Average Power Range Monitors | | | | | |
| a. Neutron Flux-High (Setdown) | 2 | 3(c) | G | SR 3.3.1.1.1 SR 3.3.1.1.8 SR 3.3.1.1.11 SR 3.3.1.1.12 | ≤ 15.0% RTP |
| b. Simulated Thermal Power-High | 1 | 3(c) | F | SR 3.3.1.1.1 SR 3.3.1.1.2 SR 3.3.1.1.8 SR 3.3.1.1.11 SR 3.3.1.1.12 (e),(f) | ≤ 0.55 W + 63.3% RTP(b) and ≤ 118.0% RTP |
| c. Neutron Flux-High | 1 | 3(c) | F | SR 3.3.1.1.1 SR 3.3.1.1.2 SR 3.3.1.1.8 SR 3.3.1.1.11 SR 3.3.1.1.12 | ≤ 119.7% RTP |
| d. Inop | 1,2 | 3(c) | G | SR 3.3.1.1.11 | NA |
| e. 2-Out-Of-4 Voter | 1,2 | 2 | G | SR 3.3.1.1.1 SR 3.3.1.1.11 SR 3.3.1.1.17 SR 3.3.1.1.18 | NA |
| f. OPRM Upscale | ≥23% RTP | 3(c) | I | SR 3.3.1.1.1 SR 3.3.1.1.8 SR 3.3.1.1.11 SR 3.3.1.1.12 SR 3.3.1.1.19 | NA |

(continued)

- (a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.
- (b) 0.55 (W - ΔW) + 61.5% RTP when reset for single loop operation per LCO 3.4.1, "Recirculation Loops Operating."
- (c) Each APRM channel provides inputs to both trip systems.
- (d) ~~See COLR for OPRM period based detection algorithm (PBDA) setpoint limits.~~
- (e) If the as-found channel setpoint is outside its predefined as-found tolerance, then the channel shall be evaluated to verify that it is functioning as required before returning the channel to service.
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