From: Tobin, Jennifer
To: "Helker, David P:(GenCo-Nuc)"
Cc: "Gropp Jr, Richard W:(GenCo-Nuc)"; "Loomis, Thomas R:(GenCo-Nuc)"
Subject: Peach Bottom Units 2 and 3 - Request for Additional Information FINAL - Relief Request I5R-04 (EPID L-2018-LLR-0057)
Date: Monday, August 27, 2018 10:00:00 AM

Dear Mr. Helker,

By letter dated April 19, 2018 (Accession No. ML18109A116), Exelon Generation Company, LLC requested relief from the requirements of the American Society of the Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code for Peach Bottom Atomic Power Station, Units 2 and 3. The licensee proposed alternative, I5R-04, allows for examination of nozzle-to-vessel welds and inner radii in accordance with the requirements of ASME BPV Code Case N-702 in lieu of Table IWB-2500-1 during the fifth inservice inspection (ISI) interval at Peach Bottom, Units 2 and 3.

The Nuclear Regulatory Commission's (NRC) staff is reviewing your submittal and has determined that additional information is needed to complete its review. The specific request for additional information (RAI) questions are provided below. These questions are being sent to ensure that the questions are understandable, the regulatory basis for the questions is clear, and to determine if the information was previously docketed. A clarification phone call to discuss the draft RAI was held August 20, 2018 and it remains unchanged. The licensee committed to supplying a response by September 19, 2018.

If you have any questions, please contact me at (301) 415-2328. A copy of this e-mail will be made publicly available in ADAMS.

Thanks,
Jenny

Jenny Tobin
Project Manager
NRR/DORL/LPL-1
Office O9-C12 Phone 301-415-2328

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REQUEST FOR ADDITIONAL INFORMATION (FINAL)

BY THE OFFICE OF NUCLEAR REACTOR REGULATION

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PROPOSED ALTERNATIVE NO. I5R-04

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FIFTH 10-YEAR INTERVAL INSERVICE INSPECTIONS

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EXELON GENERATION COMPANY, LLC

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PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3

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DOCKET NOS. 50-277 AND 50-278

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EPID: L-2018-LLR-0057

By letter dated April 19, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18109A116), Exelon Generation Company, LLC (the licensee) requested relief from the requirements of the American Society of the Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code for Peach Bottom Atomic Power Station, Units 2 and 3. The licensee proposed alternative, I5R-04, allows for examination of nozzle-to-vessel welds and inner radii in accordance with the requirements of ASME BPV Code Case N-702 in lieu of Table IWB-2500-1 during the fifth inservice inspection (ISI) interval at Peach Bottom, Units 2 and 3. Pursuant to Title 10 of the Code of Federal Regulations (10 CFR) Part 50.55a(z)(1), the licensee requested to use the proposed alternative on the basis that the alternative provides an acceptable level of quality and safety.

The NRC staff has determined that additional information is necessary to complete its review of the licensee proposed alternative. The NRC staff's request for additional information (RAI) is provided below.

RAI-1

Code Case N-702 was conditionally approved in Regulatory Guide (RG) 1.147, Revision 18, "lnservice Inspection Code Case Acceptability, Section XI, Division 1," dated March 2017, requiring the applicants to address the evaluation criteria in the safety evaluation (SE) for BWRVIP-108, "Technical Basis for the Reduction of Inspection Requirements for the Boiling Water Reactor Nozzle-to-Vessel Shell Welds and Nozzle Inner Radii" (ADAMS Accession No. ML073600374) or BWRVIP-241, "Probabilistic Fracture Mechanics [PFM] Evaluation for the Boiling Water Reactor Nozzle-to-Vessel Shell Welds and Nozzle Blend Radii" (ADAMS Accession No. ML 13071A240). Both reports are for 40 years of operation. On April 26, 2017, the SE for BWRVIP-241-A, Appendix A (ADAMS Accession No. ML17114A096) for the period of extended operation was issued, which extends the application of BWRVIP-108 and BWRVIP-241, and, therefore, ASME Code Case N-702, from 40 years to 60 years.

Proposed Alternative I5R-04 used the evaluation criteria from the 2013 SE for BWRVIP-241, but did not explain why the evaluation criteria for 40 years can be used beyond 40 years during the period of extended operation. NRC staff requests the licensee provide justification for using Code Case N-702 during the period of extended operation. The licensee may perform a plant-specific PFM analysis, with results considering low temperature overpressurization (LTOP) and normal operation. Alternatively, the licensee may reference BWRVIP-241-A, Appendix A, and address the required demonstrations under A.3 and A.4 of Appendix A.