



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

August 10, 2015

MEMORANDUM TO: Douglas A. Broaddus, Chief  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

FROM: Richard B. Ennis, Senior Project Manager */RA/*  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3,  
DRAFT REQUEST FOR ADDITIONAL INFORMATION (TAC NOS.  
MF6551 AND MF6552)

The attached draft request for additional information (RAI) was transmitted on August 6, 2015, to Ms. Stephanie Hanson of Exelon Generation Company, LLC (Exelon, the licensee). This information was transmitted in order to clarify the licensee's relief request for Peach Bottom Atomic Power Station, Units 2 and 3, dated July 29, 2015. Specifically, the licensee requested that the NRC authorize relief from Code Case N-513-3, "Evaluation Criteria for Temporary Acceptance of Flaws in Moderate Energy Class 2 or 3 Piping Section XI, Division 1" of the American Society of Mechanical Engineers (ASME) *Boiler and Pressure Vessel Code* (Code) and the condition placed on Code Case N-513-3 as listed in Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1," Revision 17, dated August 2014. Relief Request I4R-56 proposes an alternative that allows repair of leaking moderate energy Class 3 emergency service water piping during the Unit 2 refueling outage (scheduled to begin in September 2016) in lieu of the Unit 3 outage (scheduled to begin in October 2015).

This memorandum and the attachment do not convey or represent an NRC staff position regarding the licensee's request. The specific request for additional information (RAI) questions were discussed in a conference call between the NRC staff and Exelon on August 4, 2015.

Docket Nos. 50-277 and 50-278

Attachment: Draft RAI

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Docket Nos. 50-277 and 50-278

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OFFICE	LPL1-2/PM
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DATE	08/10/15

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DRAFT REQUEST FOR ADDITIONAL INFORMATION  
REGARDING PROPOSED RELIEF REQUEST I4R-56  
EMERGENCY SERVICE WATER LEAK REPAIR DEFERRAL  
EXELON GENERATION COMPANY, LLC  
PEACH BOTTOM ATOMIC POWER STATION - UNITS 2 AND 3  
DOCKET NOS. 50-277 AND 50-278

By letter dated July 29, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15210A750), Exelon Generation Company, LLC (Exelon, the licensee) submitted a relief request to the U.S. Nuclear Regulatory Commission (NRC) for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3. Specifically, the licensee requested that the NRC authorize relief from Code Case N-513-3, "Evaluation Criteria for Temporary Acceptance of Flaws in Moderate Energy Class 2 or 3 Piping Section XI, Division 1" of the American Society of Mechanical Engineers (ASME) *Boiler and Pressure Vessel Code* (Code) and the condition placed on Code Case N-513-3 as listed in Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1," Revision 17, dated August 2014 (ADAMS Accession No. ML13339A689). Relief Request I4R-56 proposes an alternative that allows repair of leaking moderate energy Class 3 emergency service water (ESW) piping during the Unit 2 refueling outage (scheduled to begin in September 2016) in lieu of the Unit 3 outage (scheduled to begin in October 2015).

The 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, which were discussed in a conference call between the NRC staff and Exelon on August 4, 2015, are as follows:

1. Section 5 of the relief request states that "Based on the corrosion rate, the through-wall flaw is expected to increase by 34 mils before the start of the Unit 2 outage, for a final hole diameter of 0.0404 inches." Provide the expected leakage rate, under operating conditions, for a hole diameter of 0.0404 inches.
2. Section 3 of the relief request provides the applicable requirements that the licensee seeks relief from. Other than the requirements listed in Section 3 of the relief request, for which the licensee seeks relief from, will the licensee meet all other requirements in Code Case N-513-3?
3. Section 5 of the relief requests states that "The assurance of quality and safety in the extended period of time between September 2015 and October 2016 is based on:  
...5) Code Case N-513-3 required daily leak check and UT flaw examination every 30 days...." Provide the UT examination reports for examinations that have been performed subsequent to the UT examination detailed on pages 13 and 14 in Enclosure 2 of the relief request.

Attachment

4. Section 5 of the relief request states that "Corrosion analysis was also performed on surrounding and similar piping. Of the five areas inspected as extent of condition as required by ASME Code Case N-513-3, none have an expected life below nine years based on a low reading of 0.134."
  - a) Discuss the areas that were inspected and why these areas were appropriate and adequate to determine the extent of condition.
  - b) Given the close proximity of the leak to the ceiling/floor penetration, discuss how the structural integrity of the piping section that passes through the penetration was determined.
  - c) Discuss whether a leak in the pipe section that passes through the penetration would be detectable during required daily leak checks.
5. Section 6 of the relief request limits system leakage to 5 gallons per minute (gpm).
  - a) Discuss any administrative controls, including corrective actions, which would be implemented prior to the leak rate increasing to 5 gpm.
  - b) Provide a flooding analysis based on the maximum allowable leak rate of 5 gpm. The flooding analysis should include discussions of whether any safety related components, such as electrical equipment, will be affected by leaking water.
6. As discussed in Section 4.6 of NRC Office of Nuclear Reactor Regulation (NRR) Office Instruction LIC-102, "Relief Request Reviews," Revision 2 (ADAMS Accession No. ML091380595), the NRC staff may grant verbal authorizations of proposed alternatives when, due to unforeseen circumstances, licensees need NRC authorization before the staff is able to issue its written safety evaluation (SE). The relief request indicates that the leak was identified on May 3, 2015. However, the relief request was not submitted until July 29, 2015, with a requested review completion date of September 21, 2015. Due to the compressed schedule for this review, and other work currently in-house, the staff may have difficulty completing a written SE by the requested review completion date. As such, verbal authorization will be considered. Please explain the unforeseen circumstances associated with the delay in submitting the relief request from the time the leak was first identified.