

Exelon BWR Fleet Relief Request Associated with RPV Instrument Nozzle Repairs

June 15, 2021



Exelon Generation®

Exelon Fleet BWR Relief Request for Nozzle Repair

- The purpose of this pre-emptive relief request is to provide a repair technique for the instrument nozzles in the Exelon BWR fleet for the duration of the operating cycle in which the indication is identified.
- This pre-emptive relief request would mimic the two previously approved half-nozzle repairs for a 2-inch instrument line nozzle at Limerick Generating Station, Unit 2 and Peach Bottom Atomic Power Station, Unit 2.
- Three previous NRC Safety Evaluation Reports (SERs) for a nozzle repair:
 - Quad Cities Nuclear Power Station, Unit 2 dated January 30, 2013 (ML13016A454)
 - Limerick Generating Station, Unit 2 dated March 5, 2019 (ML19009A002)
 - Peach Bottom Atomic Power Station, Unit 2 dated April 23, 2021 (ML21110A680)

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- The previous relief requests and the proposed relief request will address the following elements of the repair evolution:
 - Examination of the j-groove welds and the RPV low alloy steel interface.
 - Technical details of the repair with referenced ASME Code Cases.
 - One-cycle flaw analytical evaluation with referenced ASME Code Cases.
 - Planned steps of the repair.
 - Commitments for the final one-cycle flaw analytical evaluation, evaluation of repair, and corrosion evaluation.
- A similar pre-emptive repair relief request was obtained for Byron Station, Units 1 and 2, and Braidwood Station, Units 1 and 2 concerning alternative requirements for the repair of reactor Vessel Head Penetrations (VHPs) and J-groove Welds (ML16007A185, dated January 21, 2016).

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- This relief request does not support a bounding analysis / evaluations for the fleet.
- Plant specific analyses will be submitted for each plant as was done for the Limerick and Peach Bottom Relief Request.
- The flaw cannot be removed therefore a relief request would be needed and submitted in accordance with 50.55a(z)(2).
- This relief request does not change the bases used in approved relief requests from Quad Cities Unit 2, Limerick Unit 2, and Peach Bottom Unit 2.

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QUESTIONS?