

Nuclear

RS-11-053

March 31, 2011

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

LaSalle County Station, Units 1 and 2
Facility Operating License Nos. NPF-11 and NPF-18
NRC Docket Nos. 50-373 and 50-374

Limerick Generating Station, Units 1 and 2 Facility Operating License Nos. NPF-39 and NPF-85 NRC Docket Nos. 50-352 and 50-353

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

Subject:

Deviation from BWR Vessel and Internals Project (BWRVIP) Guideline – Inspection of the Core Plate Bolts

References:

- BWRVIP-25, "BWR Vessel and Internals Project BWR Core Plate Inspection and Flaw Evaluation Guidelines (BWRVIP-25)," EPRI TR-107284, dated December 1996
- 2) Letter from the Boiling Water Vessel and Internals Project (BWRVIP) to all BWRVIP Committee Members, "Transmittal of Deviation Dispositions Templates for Core Plate Bolt Inspections," dated October 29, 2010
- 3) BWRVIP-94, "BWRVIP-94, Revision 1: BWR Vessel and Internals Project Program Implementation Guide," 1011702, dated December 2005

Exelon Generation Company, LLC (Exelon) is a member of the BWR Vessel and Internals Project (BWRVIP) and has committed to implementing BWRVIP products and to providing timely notification to the NRC staff if an applicable BWRVIP product will not be implemented. BWRVIP-25 (Reference 1) requires that plants without core plate wedges perform Ultrasonic (UT) or Enhanced Visual (EVT-1) inspections of the core plate bolts. Currently, it is not possible to perform meaningful inspections by those methods and consequently, many plants are not in compliance with the BWRVIP guidelines. As discussed in Reference 2, the U.S. Nuclear Regulatory Commission became aware of this situation and has indicated that in accordance with BWRVIP program implementation guidance (i.e., BWRVIP-94, Revision 1(Reference 3)) it

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is necessary for plants that are not in full compliance with the inspection guidance contained in BWRVIP-25 to prepare Deviation Dispositions to address this situation.

BWRVIP-25 requires that core plate bolts be inspected by UT or EVT-1 methods for plants that do not have core plate wedges installed. Currently, UT has significant limitations due to bolt geometry and EVT-1 is not able to interrogate the susceptible threaded areas of the bolting. The BWRVIP is addressing this issue and intends to develop revised guidance.

At Limerick Generating Station, Units 1 and 2, and LaSalle County Station, Units 1 and 2, an analysis was conducted that found that the bolting has a relatively low susceptibility to cracking and a very high flaw tolerance, and that postulated flaws would not grow to a size that significantly reduces the bolt preload over the life of the plant. The BWRVIP is currently working on developing revised guidance for the core plate bolts and expects to complete that work, including gaining NRC approval of the revised guidance, by 2015. Given the low likelihood that the function of the core plate will be compromised by bolting failures, there is little risk in postponing inspections of the bolts until such time as the BWRVIP develops revised guidance.

At Peach Bottom Atomic Power Station, Units 2 and 3, the susceptibility analysis identified above is not applicable. Accordingly, VT-3 inspections of a sample of the core plate bolts will be performed from above the core plate to ensure that significant degradation is not occurring. Given the low likelihood that the function of the core plate will be compromised by bolting failures, the VT-3 exams constitute an acceptable interim inspection strategy until such time as the BWRVIP develops revised guidance.

This letter is being transmitted for information only and is not requesting any action from the NRC staff.

This letter does not contain any new regulatory commitments. If you should have any questions, please contact Mr. Tom Loomis at 610-765-5510.

Respectfully,

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Exelon Generation Company, LLC

Stephen E. Kucyynski

cc: Illinois Emergency Management Agency - Division of Nuclear Safety

S. T. Gray, State of Maryland