

CCN 25-097 10 CFR 21.21(d)(3)(i)

December 17, 2025

U.S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, DC 20555

Peach Bottom Atomic Power Station Unit 2 & 3

Subsequent Renewed Facility Operating License No. DPR-44 & DPR-56

Docket No. 50-277 & 50-278

Subject: 10 CFR 21 Notification for Emergency Diesel Generator Cylinder Chrome

Delamination

Reference: EN# _____

This is a non-emergency notification required by 10 CFR 21.21(d)(3)(i). A written report in accordance with 10 CFR 21.21(d)(3)(ii) will be provided within 30 days.

On December 16, 2025, Peach Bottom Engineering staff determined that a defect identified during a causal evaluation could constitute a substantial safety hazard. Failure analysis testing of a Fairbanks Morse Defense, Emergency Diesel Generator (EDG) engine cylinder liner documented gross delamination between layers of the cylinder liner chrome plating. The delamination and subsequent loss of chrome plating contributed to piston ring damage that enabled combustion gas leakage into the engine crankcase, tripping the EDG on high crankcase pressure. The Fairbanks Morse Defense part number: LINER, CYLINDER, KIT, F/DIESEL GEN, MOD-38TD8-1/8, is purchased as a safety related part. Peach Bottom's procurement specification requires one single layer of chrome plating which is inconsistent with the defect exhibited, "at least two passes of chrome plating" during failure analysis. The EDG piston ring failure and ensuing inoperability resulted in the loss of a sub-component function, which could constitute a substantial safety hazard. The defect extent of condition potentially includes 5 cylinder liners with serial numbers: H837-1, H837-2, H832-2, H838-1, and H9311-2.

On December 17, 2025, the Peach Bottom Site Vice President was notified of the requirement to report this event under 10 CFR 21.21.

There are no new regulatory commitments contained in this letter. The NRC Senior Resident Inspector at Peach Bottom has been notified. Should you have any questions regarding this submittal, please contact Tim Grimme, Regulatory Assurance, at 267-533-7218.

Sincerely,

Martin A. Bonifanti Site Vice President

cc: Director, Office of Nuclear Reactor Regulation NRC Region I Administrator NRC Resident Inspector NRC Project Manager