

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

January 17, 2024

David P. Rhoades
Senior Vice President
Constellation Energy Generation, LLC
President and Chief Nuclear Officer
Constellation Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 – STAFF

ASSESSMENT OF UPDATED SEISMIC HAZARDS FOLLOWING THE NRC PROCESS FOR THE ONGOING ASSESSMENT OF NATURAL HAZARDS

INFORMATION (EPID L-2019-PMP-0061)

Dear David Rhoades:

The purpose of this letter is to document the U.S. Nuclear Regulatory Commission (NRC) staff's assessment of seismic hazards at the Peach Bottom Atomic Power Station, Units 2 and 3 (Peach Bottom), following the process for the ongoing assessment of natural hazards information.

The enclosed seismic hazard report provides the NRC staff's updated seismic hazard curves and response spectra for Peach Bottom that are based on the implementation of (1) a new seismic ground motion model for the central and eastern North America and (2) recent advances in site response analysis. The NRC staff's updated hazard curves are included in the enclosed seismic hazard report. The NRC staff conducted a screening evaluation that compared the updated seismic hazard curves contained in the attached report with previous seismic hazard curves developed by Constellation Energy Generation, LLC¹ for Peach Bottom. Based on its comparison and evaluation of the updated seismic hazard curves in combination with an estimate of the Peach Bottom seismic capacity and available information on the consideration of seismic events in Peach Bottom's approved risk-informed programs, the NRC staff has determined that no further regulatory evaluation of, or action to modify, the Peach Bottom plant seismic risk licensing basis is warranted.

Although the NRC staff is taking no further action at this time, the control point seismic hazard curves developed by the NRC staff for these reports may be considered in the context of potential future evaluations of Peach Bottom by the NRC staff (e.g., future license amendment requests) consistent with agency policy procedures (e.g., NRC Management Directive 8.4, "Management of Backfitting, Forward Fitting, Issue Finality, and Information Requests").

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¹ On February 1, 2022, Exelon Generation Company, LLC was renamed Constellation Energy Generation, LLC.

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The NRC staff plans to make the enclosed staff assessment publicly available five working days from the date of this letter. If you have any questions, please contact me at (301) 415-0489 or via email at Audrey.Klett@nrc.gov.

Sincerely,

/RA/

Audrey L. Klett, Senior Project Manager Plant Licensing Branch I Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-277 and 50-278

Enclosure:

Seismic Hazard Report

cc: Listserv

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SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 – STAFF

ASSESSMENT OF UPDATED SEISMIC HAZARDS FOLLOWING THE NRC PROCESS FOR THE ONGOING ASSESSMENT OF NATURAL HAZARDS INFORMATION (EPID L-2019-PMP-0061) DATED JANUARY 17, 2024

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NRR-106

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