

July 03, 2024

Mr. Mohammed Shams
Director, Division of Advanced Reactors and Non-Power Production and Utilization Facilities (DANU)
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Request for NRC Endorsement of NEI White Paper, “Selection of a Seismic Scenario for an EPZ Boundary Determination”

Project Number: 689

Dear Mr. Shams:

On behalf of the nuclear energy industry, the Nuclear Energy Institute (NEI)¹ is submitting to the U.S. Nuclear Regulatory Commission (NRC) the attached NEI White Paper, “Selection of a Seismic Scenario for an EPZ Boundary Determination,” for endorsement. This document reflects the work of NEI’s Advanced Reactor Regulatory Task Force to develop a technology-inclusive methodology for the selection of a seismic scenario to use in an analysis for determining the boundary of a plume exposure pathway Emergency Planning Zone (EPZ). An EPZ sizing analysis is required by applicants choosing to comply with 10 CFR 50.160, “Emergency preparedness for small modular reactors, non-light-water reactors, and non-power production or utilization facilities,” and the white paper guidance supplements that found in Regulatory Guide 1.242, “Performance-Based Emergency Preparedness for Small Modular Reactors, Non-Light-Water Reactors, and Non-Power Production or Utilization Facilities.”

The NRC staff reviewed a draft of the document and provided comments to NEI in a public meeting on December 7, 2023 (refer to ML23340A061 and ML23335A104). Those comments have been addressed in the attached document. NEI and the nuclear industry view the NRC endorsement of the attached white paper as an important step towards the efficient and predictable licensing of advanced reactor facilities.

¹ The Nuclear Energy Institute (NEI) is responsible for establishing unified policy on behalf of its members relating to matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI’s members include entities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect and engineering firms, fuel cycle facilities, nuclear materials licensees, and other organizations involved in the nuclear energy industry.

If you have any questions or require additional information, please contact me, or David Young at dly@nei.org.

Sincerely,



Kati R. Austgen
Sr. Project Manager, New Nuclear

Attachment

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