



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 8, 2024

Mr. George Wilson
Vice President, Regulatory Affairs
TerraPower, LLC
15800 Northup Way
Bellevue, WA 98008

SUBJECT: TERRAPOWER, LLC – SUMMARY REPORT ON THE REGULATORY AUDIT OF TOPICAL REPORT, “PLUME EXPOSURE PATHWAY EMERGENCY PLANNING ZONE SIZING METHODOLOGY,” REVISION 0 (EPID NO. L-2023-TOP-0024)

Dear Mr. Wilson:

By letter dated March 20, 2023, TerraPower, LLC (TerraPower) submitted topical report (TR) NAT-3056, “Plume Exposure Pathway Emergency Planning Zone Sizing Methodology,” Revision 0 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML23080A045) to the U.S. Nuclear Regulatory Commission (NRC) staff. The TR describes TerraPower’s proposed methodology for determining the plume exposure pathway (PEP) emergency planning zone (EPZ) for the Sodium sodium-cooled fast reactor design. Enclosed is a summary report on the regulatory audit conducted by the NRC staff in connection with its ongoing review of the TR. The audit followed the plan dated August 11, 2023 (ML23199A317).

The audit summary report does not make any licensing conclusions or findings, but it is part of the administrative record of the NRC staff’s review of the TR and may provide information supporting the NRC staff’s safety evaluation. No requests for additional information were identified as part of the audit and there are no open items resulting from the audit. The report constitutes the final report on the audit.

G. Wilson

- 2 -

If you have any questions regarding this matter, please contact me at (301) 415-0829 or by via email at Roel.Brusselmans@nrc.gov.

Sincerely,

/RA/

Roel Brusselmans, Project Manager
Advanced Reactor Licensing Branch 1
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

Project No.: 99902100

Enclosure:
As stated

cc: TerraPower Sodium
via Gov Delivery

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ADAMS Accession No.:

Package: ML24008A057

Letter: ML24008A061

Enclosure: ML24008A062

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