



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

January 23, 2025

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, TP-LIC-RPT-0005, "RADIOLOGICAL RELEASE CONSEQUENCES METHODOLOGY TOPICAL REPORT," REVISION 0 (EPID NO. L-2023-TOP-0055)

Dear George Wilson:

By letter dated November 6, 2023, TerraPower, LLC (TerraPower) submitted topical report (TR) "Radiological Release Consequences Methodology Topical Report," Revision 0 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML23311A138) to the U.S. Nuclear Regulatory Commission (NRC) staff for review. The TR contains an overview and description of the model developed to evaluate radiological release consequences for the Sodium sodium fast reactor design. On December 18, 2023, the NRC staff performed a completeness determination and found that the material presented in the TR provides technical information in sufficient detail to enable the NRC staff to conduct a detailed technical review (ML23333A070).

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 April 24, 2024 (ML24103A224).

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. However, by letter dated July 26, 2024, TerraPower submitted a revision to the TR, renumbered as NAT-9391, "Radiological Release Consequence Methodology Topical Report," Revision 0 (ML24208A181) to address the results of 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) 415-5301 or via email at Stephanie.Devlin-Gill@nrc.gov.

Sincerely,

/RA/

Stephanie Devlin-Gill, Senior 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 Natrium
via GovDelivery

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