



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

February 26, 2025

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

SUBJECT: US SFR OWNER, LLC – KEMMERER POWER STATION UNIT 1
CONSTRUCTION PERMIT APPLICATION REVIEW STATUS (EPIDS: L-2024-
CPS-0000 AND L-2024-LNE-0002)

Dear Mr. Wilson:

The purpose of this letter is to inform US SFR Owner, LLC (USO), a wholly owned subsidiary of TerraPower, LLC (TerraPower), that the U.S. Nuclear Regulatory Commission (NRC) staff has completed its draft safety evaluation (SE) with open items for the Kemmerer Power Station Unit 1 (Kemmerer 1) construction permit (CP) application. Productive interactions between USO and the NRC staff facilitated completion of this milestone ahead of the scheduled March 2025 date. With continued focus by both parties, the NRC staff is targeting completion of the final SE by June 2026, ahead of the August 2026 date communicated in our June 12, 2024, schedule letter (Agencywide Documents Access and Management System (ADAMS) Accession No. ML24162A063). The environmental review is scheduled for completion in May 2026; and the overall resource estimate remains on track, as described in the staff's November 25, 2024, letter (ML24304A977).

The NRC staff have identified additional information needs to support completion of its safety review. These include materials qualification for environmental compatibility, appropriate special treatment for design and construction of safety-significant structures, systems and components; treatment of preventative functions and features within the probabilistic risk assessment (PRA); documentation supporting the PRA's use in the Licensing Modernization Project and other licensing programs; and the safety basis for non-safety-related with special treatment seismic/structural design approaches. The NRC staff is relying on USO's continued commitment to address these information needs to support the NRC staff's ability to make the necessary regulatory findings on the revised schedule. The schedule may be adjusted, if necessary, to accommodate any delays in the NRC staff's receipt of necessary information. The NRC staff intends to continue engagement with USO to resolve open items and address any emerging technical and regulatory issues.

G. Wilson

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If you have any questions regarding this matter, please contact me at (301) 415-0673 or via email at Mallecia.Sutton@nrc.gov.

Sincerely,

R/A

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

Docket No.: 50-0613

cc: TerraPower Natrium
via Gov Delivery

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