

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

July 1, 2025

Mr. George Wilson Senior 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 George Wilson

The purpose of this letter is to inform US SFR Owner, LLC (USO), a wholly owned subsidiary of TerraPower, LLC (TerraPower), of a schedule change for the U.S. Nuclear Regulatory Commission (NRC) staff's review of the construction permit (CP) application for the Kemmerer Power Station Unit 1 (Kemmerer 1). By letter dated February 26, 2025 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML25055A019), the NRC staff communicated that it planned to complete the review of the CP application by June 2026, which was ahead of the original August 2026 date. Additionally, the draft environmental impact statement (EIS) was recently issued in June 2025 (ML25154A651), one month ahead of schedule. As a result of frequent and productive engagements with USO and considering Executive Order 14300, the NRC staff plans to issue the final safety evaluation and the final EIS by December 31, 2025, ahead of the updated schedule communicated in the February 26, 2025, letter.

This schedule shift is being accommodated primarily through streamlined reviews by management and the Advisory Committee on Reactor Safeguards; however, there remain technical topics for the staff to make its regulatory findings. These include materials qualification, appropriate identification of special treatments for design and construction of safety-significant structures, systems and components; treatment of preventative controls under the licensing modernization project (LMP) approach; documentation supporting the probabilistic risk assessment used in the LMP and other licensing programs; design and safety classification of the pool immersion cell and associated systems; and the safety basis for non-safety-related with special treatment seismic/structural design approaches. For the environmental review, the unresolved items include completing the Section 106 consultation under the National Historic Preservation Act and resolving any substantive comments on the draft EIS. The NRC staff remains engaged with USO in regulatory audits and other activities supporting the NRC staff's review of the CP application and resolution of these topics. The accelerated timeline depends on a continued commitment from USO's staff to resolve these issues and provide necessary information in a timely manner. Likewise, the NRC staff remains committed to working with USO

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to expeditiously drive the remaining technical topics to resolution to achieve the new schedule timeline.

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

Sincerely,

/RA/

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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