



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

November 25, 2024

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 REVISED RESOURCE ESTIMATE
(EPIDS: L-2024-CPS-0000 AND L-2024-LNE-0002)

Dear George Wilson:

This letter provides a revised resource estimate for the detailed review of the Kemmerer Power Station Unit 1 (hereafter referred to as Kemmerer 1) construction permit (CP) application.

On June 12, 2024, the U.S. Nuclear Regulatory Commission (NRC) staff sent US SFR Owner, LLC (USO), a wholly owned subsidiary of TerraPower, LLC (TerraPower), a letter with a schedule and resource estimate for the detailed review of the Kemmerer 1 CP application (Agencywide Documents Access and Management System (ADAMS) Accession No. ML24162A063). In the letter, the NRC staff estimated that approximately 27,000 staff hours and \$4 million in contractor support would be needed to complete the safety and environmental reviews of the application. This estimate was based on pre-application activities and the NRC staff's acceptance review of the information provided in USO's Kemmerer 1 CP application (ML24135A109). The letter also stated that if emergent complexities or challenges in the NRC staff's review caused changes to the estimated resources, the reasons for the changes, along with the new estimates would be communicated via separate correspondence.

During the environmental review of the Kemmerer 1 CP application, the NRC staff determined that additional staff hours are necessary to conduct the NRC's section 106 process of the National Historic Preservation Act, because of the identification of adverse effects of the proposed construction. To conduct the review of the CP application and effectively implement the section 106 process, the NRC staff is developing a Memorandum of Agreement (MOA) to mitigate and address the anticipated adverse effects of the proposed construction and completing consultations with a large number of Tribes. The NRC staff estimates that 1,500 additional staff hours will be needed to complete these activities to support the completion of the environmental review, resulting in a total revised resource estimate of 28,500 staff hours. This estimate assumes timely response from TerraPower and the Tribes.

At this time, no schedule changes are necessary to complete these activities. However, if additional complexities or challenges are identified, the reasons for the change to schedule or resources, along with any new estimates will be communicated via separate correspondence.

G. Wilson

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If you have any questions regarding this matter, please contact me at (301) 415-0673 or by 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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 (EPIDS: L-2024-CPS-0000 AND L-2024-LNE-0002) DATED: NOVEMBER 25,
 2024

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ADAMS Accession No.: ML24304A977**NRR-106**

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NAME	DBarnhurst	MRome	JBorromeo
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DATE	11/25/2024		

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