

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

May 1, 2023

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

SUBJECT: TERRAPOWER, LLC – SAFETY EVALUATION OF QUALITY ASSURANCE TOPICAL REPORT TP-QA-PD-0001, "TERRAPOWER QA PROGRAM DESCRIPTION," REVISIONS 13 AND 14 (EPID L-2022-TOP-0054/CAC 000431)

Dear Mr. Wilson:

By letter dated September 23, 2022 (Agencywide Documents Access and Management System Accession No. ML22266A286), TerraPower, LLC (TerraPower) submitted for the U.S. Nuclear Regulatory Commission (NRC) staff review and approval Quality Assurance Topical Report (QATR) TP-QA-PD-0001, "TerraPower QA Program Description," Revision 14, according to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.4(b)(7)(ii). Revision 12 of QATR TP-QA-PD-0001 was previously approved by the NRC staff in a safety evaluation dated January 2022 (ML21263A236). The NRC staff reviewed the changes between Revision 12 and Revision 14, including Revision 13. The results of the NRC staff's review are summarized in the enclosed safety evaluation.

On March 20, 2023, the NRC staff provided TerraPower a draft of the safety evaluation for the purpose of identifying proprietary information (ML23079A266). On April 17, 2023, TerraPower confirmed that the safety evaluation did not include proprietary information.

In accordance with NRC staff published information on topical reports,¹ the NRC staff requests that TerraPower publish an accepted version of this topical report within 3 months of receipt of this letter. The accepted version should incorporate this letter and the enclosed safety evaluation. The accepted version should include a "-A" (designated accepted) following the topical report identification number.

See https://www.nrc.gov/about-nrc/regulatory/licensing/topical-reports.html

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

Sincerely,

Signed by Proffitt, Joseph on 05/01/23

Joseph A. Proffitt, Acting Branch Chief 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

DISTRIBUTION:

PUBLIC RidsOgcMailCenter Resource RidsNrrDanu Resource RidsNrrDanuUal1 Resource DGreene, NRR CSmith, NRR WJessup, NRR AProffitt, NRR MSutton, NRR YDiaz-Castillo, NRR GGalletti, NRR

ADAMS Accession Nos.:

Package: ML23116A179 Letter: ML23116A178

Enclosure: ML23116A183 NRR-043			
OFFICE	NRR/DANU/UAL1/PM	NRR/DANU/UAL1/PM	NRR/DANU/UAL1/LA
NAME	SDevlin-Gill	MSutton	DGreene
DATE	4/26/2023	5/1/2023	5/1/2023
OFFICE	OGC	NRR/DRO/IOLB/TL	NRR/DANU/UAL1/BC(A)
NAME	JWachutka	KKavanagh	AProffitt
DATE	03/16/2023	01/30/2023	5/1/2023

OFFICIAL RECORD COPY