



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

July 13, 2021

Mr. Ryan Sprengel
Director, Regulatory Affairs
TerraPower, LLC
15800 Northup Way
Bellevue, WA 98008

**SUBJECT: TERRAPOWER, LLC - U.S. NUCLEAR REGULATORY COMMISSION STAFF
FEEDBACK REGARDING WHITE PAPER, "ADVANCED SFR TYPE 1 FUEL
PIN QUALIFICATION PLAN", REVISION 0 (EPID NO.: L-2021-LRO-0008)**

Dear Mr. Sprengel:

By letter dated February 26, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21057A008), TerraPower, LLC (TerraPower) submitted to the U.S. Nuclear Regulatory Commission (NRC) the white paper, "Advanced SFR Type 1 Fuel Pin Qualification Plan, Revision 0." The objectives of this proprietary document are to provide the NRC staff with information regarding fuel-related issues associated with a potential license application and detail on planned activities to support independent NRC staff review of the adequacy of the plans to address technical risks and regulatory needs. The enclosure to this letter provides NRC staff feedback on the white paper. Proprietary and non-proprietary versions of the NRC staff's feedback are in Enclosures 1 and 2 of this letter, respectively.

Please contact Mallecia Sutton at 301-415-0673 or by e-mail at Mallecia.Sutton@nrc.gov with questions about this matter.

Sincerely,

Handwritten signature of William B. Kennedy in black ink.

Signed by Kennedy, William
on 07/13/21

William Kennedy, Acting Chief
Advanced Reactor Licensing Branch
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

Project No.: 99902087

Enclosures:
As stated

Enclosure 1 to this letter contains Proprietary information. When separated from the Enclosure 1, this document is DECONTROLLED.
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DATED: JULY 13, 2021

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NRR-106

OFFICE	NRR/DANU/UARL/PM	NRR/DANU/UARL/LA	NRR/DANU/UART/BC	NRR/DANU/UARL/BC (A)
NAME	MSutton	SLent	MHayes	WKennedy
DATE	06/02/2021	06/2/2021	06/04/2021	07/13/2021

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