



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

May 4, 2021

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

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION FEEDBACK REGARDING
TERRAPOWER, LLC'S ADVANCED SODIUM FAST REACTOR FUEL
ASSEMBLY QUALIFICATION PLAN (EPID NO.: L-2020-LRO-0080)

Dear Mr. Wilson:

By letter dated November 11, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20316A038), TerraPower, LLC (TerraPower) submitted the "Advanced SFR Fuel Assembly Qualification Plan." The proprietary document was submitted to provide regulatory guidance, describe methodologies, and identify regulatory and qualification criteria for Sodium Fast Reactors (SFR) metallic fuel. The NRC staff is providing feedback on the information provided by TerraPower in the document. The proprietary and non-proprietary versions of the document containing the NRC staff's feedback are in Enclosures 1 and 2 of this document, respectively.

If you have any questions about this matter, please contact Mallecia Sutton at 301-415-0673 or by e-mail at Mallecia.Sutton@nrc.gov.

Sincerely,

A handwritten signature in black ink that reads "Benjamin Beasley".

Signed by Beasley, Benjamin
on 05/04/21

Benjamin G. Beasley, 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.

OFFICIAL USE ONLY – PROPRIETARY INFORMATION

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ASSEMBLY QULIFICATON PLAN (EPID NO.: L-2020-LRO-0080)
DATED: May 4, 2021

DISTRIBUTION:

EMAIL

Public (Letter and Enclosure 2 only)

RidsNrrDanu Resource

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ADAMS Accession Nos.:

Package: ML21099A080

Cover Letter: ML21099A081

Enclosure 1: ML21099A082 (Non-Public)

Enclosure 2: ML21099A104 (Public Redacted)

NRR-106

OFFICE	NRR/DANU/UARL/PM	NRR/DANU/UARL/LA	NRR/DANU/UART/BC	NRR/DANU/UARL/BC
NAME	MSutton	SLent	MHayes	BBeasley
DATE	4/7/2021	4/9/2021	4/14/2021	5/4/2021

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