



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

March 8, 2022

Mr. Simon Irish
Chief Executive Officer
Terrestrial Energy USA, Inc.
537 Steamboat Road, Suite 200
Greenwich, CT 06830

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION STAFF FEEDBACK
REGARDING TERRESTRIAL ENERGY'S METHODOLOGY FOR SAFETY
CLASSIFICATION OF INTEGRAL MOLTEN SALT REACTOR STRUCTURES,
SYSTEMS AND COMPONENTS WHITE PAPER (EPID NO. L-2021-LRO-0044)

Dear Mr. Irish:

By letter dated November 8, 2021 (Agencywide Documents Access and Management System (ADAMS) Package Accession No. ML21323A017), Terrestrial Energy USA (TEUSA), submitted a white paper titled, "Methodology for Safety Classification of IMSR® Structures, Systems and Components," for the U.S. Nuclear Regulatory Commission (NRC) staff's review. The white paper describes the methodology used by Terrestrial Energy Inc. (TEI) for classifying structures, systems, and components (SSCs) of the IMSR® design.

TEUSA requested that the NRC staff review the white paper and provide written comments regarding areas where the white paper does not provide sufficient detail for the NRC staff to have a clear understanding of the methodology for safety classification of IMSR® SSCs. The NRC staff's comments are provided in Enclosure 1 (Proprietary) and Enclosure 2 (Non-Proprietary) of this document.

If you have any questions regarding this matter, please contact Adrian Muñoz at (301) 415-4093 or via e-mail at Adrian.Muniz@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "William B. Kennedy".

Signed by Kennedy, William
on 03/08/22

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.: 99902076

Enclosures: As stated

Enclosure 1 to this letter contains Proprietary information. When separated from Enclosure 1, this document is DECONTROLLED.

S. Irish

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DATED: MARCH 8, 2022

DISTRIBUTION:

Public (Letter and Enclosure 2 only)

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ADAMS Accession Nos.:

Package: ML22033A371

Cover Letter: ML22033A370 (Public)

Enclosure 1: ML22033A450 (Non-Public)

Enclosure 2: ML22033A458 (Redacted- Public)

NRR-106

OFFICE	NRR/DANU/UARL:PM	NRR/DANU/UARL:LA	NRR/DANU/UTB1:BC	NRR/DANU/UARL:BC(A)
NAME	AMuñiz	CSmith	MHayes	WKennedy
DATE	02/03/2022	02/09/2022	02/09/2022	03/08/2022

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