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

March 2, 2021

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

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION FEEDBACK REGARDING  
TERRESTRIAL ENERGY USA WHITE PAPER – PRINCIPAL DESIGN  
CRITERIA FOR IMSR® SYSTEMS, STRUCTURES, AND COMPONENTS (EPID  
NO. L-2020-LRO-0034)

Dear Mr. Irish:

By letter dated January 6, 2021 (Agencywide Documents Access and Management System Accession No. ML21025A031), Terrestrial Energy USA (TEUSA), submitted for U.S. Nuclear Regulatory Commission (NRC) staff review a revision to a white paper titled “Principal Design Criteria for IMSR® Systems, Structures, and Components.” The white paper contains modifications made in response to NRC feedback provided to TEUSA in a closed meeting held on August 20, 2020 (ADAMS Accession No. ML20304A569, non-public). The NRC staff has completed its assessment of the revised white paper. The proprietary and non-proprietary versions of the document containing NRC staff’s feedback are in Enclosures 1 and 2 of this document, respectively.

If you have any questions about this matter, please contact Adrian Muñoz at (301) 415-4093 or by e-mail at [Adrian.Muniz@nrc.gov](mailto:Adrian.Muniz@nrc.gov).

Sincerely,

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

Signed by Beasley, Benjamin  
on 03/02/21

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.: 99902076

Enclosures:  
As stated

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

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NO. L-2020-LRO-0034) DATED: MARCH 2, 2021

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ADAMS Accession Nos.: Package: ML21053A100

Cover Letter: ML21053A098

Enclosure 1: ML21053A099

Enclosure 2: ML21053A201(Public-Redacted)

NRR-106

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