

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001





May 27, 2022

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

SUBJECT: CANADIAN NUCLEAR SAFETY COMMISSION – U.S. NUCLEAR

REGULATORY COMMISSION STAFF'S FEEDBACK REGARDING THE TERRESTRIAL ENERGY USA, INC. WHITE PAPER TITLED, "POSTULATED INITIATING EVENTS FOR THE IMSR®" (EPID NO.: L-2021-LRO-0074)

Dear Mr. Irish:

In a letter dated October 22, 2020 (Agencywide Documents Access and Management System (ADAMS) Package Accession No. ML20318A178), Terrestrial Energy USA, Inc. (an affiliate of Terrestrial Energy, Inc.), submitted a white paper titled, "Postulated Initiating Events for the IMSR®." This white paper was submitted to support a review collaboration activity under the Memorandum of Cooperation on Advanced Reactor and Small Modular Reactor Technologies, signed between the Canadian Nuclear Safety Commission (CNSC) and the U.S. Nuclear Regulatory Commission (NRC) staff. Following this initial submittal, revisions to the white paper addressing joint CNSC/NRC staff questions were submitted in letters dated July 8, 2021, and December 16, 2021 (ADAMS Package Accession Nos. ML21211A518 and ML21357A015, respectively). The CNSC and NRC staff reviewed the white paper and documented its feedback in a joint assessment report provided as an enclosure to this letter.

If you have any questions regarding this matter, please contact Adrian Muñiz at Adrian.Muniz@nrc.gov or Daniel Duchesne at Daniel.Duchesne@cnsc-ccsn.gc.ca.

Sincerely,



Approved by



Approved by

Dr. Mohammed K. Shams, Director Division of Advanced Reactors and Non-Power Production and Utilization Facilities United States Nuclear Regulatory Commission

Dr. Caroline Ducros, Director General Directorate of Advanced Reactor Technologies Canadian Nuclear Safety Commission

Michael Rinker, Director General Directorate of Assessment and Analysis Canadian Nuclear Safety Commission

Project No.: 99902076

Enclosure: As stated

CANADIAN NUCLEAR SAFETY COMMISSION - U.S. NUCLEAR SUBJECT:

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DATED: MAY 27, 2022

DISTRIBUTION:

PUBLIC Terrestrial IMSR Listserv UAL1 R/F RidsNrrDanu Resource RidsNrrDanuUal1 Resource RidsNrrLACSmith Resource MHayes, NRR SPhilpott, NRR AMuñiz, NRR CVanWert, NRR HPhan, NRR WKennedy, NRR caroline.ducros@cnsc-ccsn.gc.ca michael.rinker@cnsc-ccsn.gc.ca

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ADAMS Accession Nos.: Package: ML22140A276 Letter: ML22140A382 Enclosure: ML22139A124

OFFICE	NRR/DANU/UAL1: PM	NRR/DANU/UAL1: LA*	NRR/DANU/UAL1: BC(A)*	NRR/DANU: D*
NAME	AMuñiz	CSmith	WKennedy	MShams
DATE	05/23/2022	05/23/2022	05/24/2022	05/24/2022

*via email

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