

TERRESTRIAL ENERGY USA

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November 23, 2020

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

TEUSA Letter: L201123

Subject: Fee Relief Request for IMSR® Postulated Initiating Events White Paper Supporting CNSC/NRC Joint Review

Terrestrial Energy USA (TEUSA) requests fee relief under 10 CFR 170.11 (a) (12) and (b) for review of the subject white paper and supporting material. In December 2019, the Nuclear Regulatory Commission (NRC) and the Canadian Nuclear Safety Commission (CNSC) approached Terrestrial Energy about a willingness to volunteer to participate in a first-of-a-kind joint technical review of an advanced, non-light water nuclear reactor technology. Terrestrial Energy volunteered to participate in this initiative and is excited to participate in this joint technical review as a pilot application. During the exploratory meetings, Terrestrial Energy expressed its views that participation in such a collaborative activity would meet the standards for regulatory fee relief and that it intended to pursue such relief.

Since the December meetings, TEUSA has been actively involved in establishing the administrative protocols necessary to undertake and share information about IMSR® technology while undergoing review by two regulators. Participation in this regulatory initiative will require TEUSA to significantly advance its timeline for information development (approximately one year) and to subsequently incur licensing fees on an unanticipated accelerated timeline compared to that which was previously outlined in its most recent Regulatory Engagement Plan.

TEUSA has submitted the subject white paper in direct support of the established collaborative initiative between CNSC and the NRC under the recently signed Memorandum of Cooperation. TEUSA provided the subject white paper by a separate letter that requested review and endorsement for use in subsequent licensing applications. The white paper presents an overview of the methodology used to develop the list of postulated initiating events, their grouping and their categorization into categories of anticipated operational occurrences (AOOs), design basis accidents (DBAs), and beyond design basis events (BDBEs).

There are numerous precedents where the NRC granted fee relief for pilot applications that are in the public interest. For this particular request, there is substantial public interest for the following reasons:

- 1) The NRC and CNSC will reap substantial benefits from the development of the joint regulatory review framework and see regulatory efficiencies and improvements in regulatory guidance as a result of working collaboratively on the Terrestrial Energy materials.
- 2) The NRC and CNSC will learn lessons which will help future advanced reactor applicants make more complete submittals and thus require less agency resources to perform the regulatory reviews.

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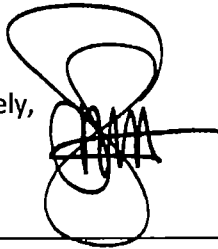
NRR

3) The industry as a whole will benefit as the regulatory efficiencies realized will be applied to the improvement of the advanced reactor regulatory guidance and review processes.

4) Finally, the joint review directly supports the recently signed Memorandum of Cooperation between the NRC and CNSC that will benefit both regulators through increased cooperation.

TEUSA is prepared to actively engage further with the NRC on the provided materials once the administrative protocols for the joint reviews are finalized and NRC makes its decision with respect to TEUSA's request for regulatory fee relief.

Sincerely,

A handwritten signature in black ink, appearing to read 'SIMON IRISH', written over a horizontal line.

Simon Irish
CEO, Terrestrial Energy USA

Cc:

Cherish Johnson, CFO - United States Nuclear Regulatory Commission (USNRC)

Ben Ficks, Deputy CFO - USNRC

Jawanza Gibbs, Lead - Office of the Chief Financial Officer (OCFO)

Margaret Doane, Executive Director for Operations (EDO)

Ho Nieh, Director - Office of Nuclear Reactor Regulation (NRR)

Robert Taylor, Deputy Director for New Reactors - NRR

Mohammed Shams, Director - Division of Advanced Reactors and Non-Power Utilization Facilities (DANU)- NRR

Benjamin Beasley, Branch Chief - Advanced Reactors Licensing Branch - DANU-NRR

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