NRC Issues Safety Evaluation Report Approving Terrestrial Energy's IMSR Postulated Initiating Events Topical Report

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Topical Report's safety evaluation establishes another fundamental safety framework for future IMSR Plant licensed operation

Second recent approval of a Topical Report foundational to IMSR plant safe and compliant operation

CHARLOTTE, N.C.--(BUSINESS WIRE)--May 12, 2026--

Terrestrial Energy Inc. (NASDAQ: IMSR) ("Terrestrial Energy" or "the company"), a developer of small modular nuclear power plants using its Generation IV Integral Molten Salt Reactor (IMSR) today announced that the U.S. Nuclear Regulatory Commission (NRC) has issued its Safety Evaluation Report (SER) approving the company's Postulated Initiating Events (PIE) Topical Report. This follows the NRC's acceptance of the company's final Topical Report submission announced in April 2026.

The NRC's SER issuance is an approval of Terrestrial Energy's PIE methodology, which identifies and evaluates events that may challenge the safe operation of IMSR nuclear plant. This analysis is foundational to nuclear safety analysis and represents another important regulatory milestone as Terrestrial Energy systematically executes on its nuclear regulatory program.

"We are pleased to report the timely issuance by the NRC of the SER on our PIE Topical Report, this follows its acceptance of final submissions just last month," said Simon Irish, CEO of Terrestrial Energy. "The scope of this Topical Report is foundational to nuclear safety analysis and future IMSR Plant licensed operation."

Approved Topical Reports with their associated safety analyses can be referenced in future operating licensing applications for nuclear plant operation, removing the burden of repetitive re-evaluations and enabling standardized regulatory outcomes. They support faster review timelines, reduce uncertainty, and improve efficiency of the regulatory process.

This milestone demonstrates further process with Terrestrial Energy's multi-year engagement the NRC. It builds on prior successful regulatory actions, including the NRC's approval of IMSR's Principal Design Criteria announced in September 2025. Principal Design Criteria are the foundational safety and design requirements of key reactor systems. These agreed criteria represent regulatory acceptance of important mechanisms of IMSR safety, particularly those relating to IMSR inherent safety and reactor power control that deliver powerful load-following capability.

Together, these extensive safety analyses of IMSR performance with approvals establish the critical elements of the IMSR's licensing basis and reinforce the company's continued progress toward commercial deployments of multiple IMSR plants.

About Terrestrial Energy Inc.

Terrestrial Energy is a developer of Generation IV nuclear plants that use its proprietary Integral Molten Salt Reactor (IMSR). The IMSR captures the transformative operating benefits of molten salt reactor technology in a plant design that represents true innovation in capital efficiency, cost reduction, versatility, and functionality of nuclear energy supply. IMSR Plants are designed to be small and modular for distributed supply of low-cost, reliable, dispatchable, clean, high-temperature industrial heat and electricity, and to be customized for a dual-use energy role relevant to many industrial applications, such as petrochemical and chemical synthesis, and data center operation. In so doing, IMSR Plants extend the application of nuclear energy far beyond electric power markets. Their deployment will support the rapid growth of clean firm heat and power, delivering energy self-reliance, grid reliability, and economic growth. Terrestrial Energy uses an innovative plant design together with proven and demonstrated molten salt reactor technology and readily-available and inexpensive standard-assay low-enriched uranium in its fuel for a nuclear plant with a unique set of operating characteristics and compelling, transformative commercial potential. Terrestrial Energy is engaged with regulators, suppliers, industrial partners, and energy end-users to build, license and commission the first IMSR Plants in the early 2030s.

For more information, visit www.terrestrialenergy.com.

Forward Looking Statements

The statements contained in this press release that are not purely historical are forward-looking statements. These forward-looking statements include, but are not limited to, statements regarding our expectations, milestones, hopes, beliefs, intentions or strategies regarding the future. In addition, any statements that refer to projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. The words "anticipate," "believe," "continue," "could," "estimate," "expect," "intends," "may," "might," "plan," "possible," "potential," "predict," "project," "milestone,"

“should,” “will,” “would” and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking.

The forward-looking statements contained in this press release are based on our current expectations and beliefs concerning future developments and their potential effects on the Company. There can be no assurance that future developments affecting the Company will be those that we have anticipated. These forward-looking statements speak only as of the date of this press release and involve a number of risks, uncertainties (some of which are beyond our control) or other assumptions that may cause actual results or performance to differ materially from those expressed or implied by these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, but are not limited to: (1) risks related to the development, manufacturing and construction of IMSR Plants and key components, including potential delays, cost overruns and contractor performance issues; (2) the Company’s ability to obtain applicable regulatory approvals and licenses on a timely basis or at all; (3) the ability of management to manage growth; (4) the possibility that the Company may be adversely affected by other economic, business, and/or competitive factors, including from alternative energy technologies, energy price volatility, and competition from other advanced reactor developers; (5) potential supply chain constraints and cost inflation for specialized nuclear-grade materials and components; (6) any failure to comply with the laws and regulations governing the use, transportation, and disposal of toxic, hazardous and/or radioactive materials; (7) changes in domestic and foreign business, market, financial and political conditions, and in applicable laws and regulations, including tariffs; (8) the ability to raise additional funding in the future; (9) the outcome of any legal proceedings that may be instituted against the Company; and (10) other risk factors described herein as well as the risk factors and uncertainties described in the documents filed by the Company from time to time with the U.S. Securities and Exchange Commission (the “SEC”).

The foregoing list of risk factors is not exhaustive. You should carefully consider the foregoing risk factors and the other risks and uncertainties described in the documents filed by the Company from time to time with the SEC. In addition, there may be additional risks that the Company presently knows, or that it currently believes are immaterial, that could also cause actual results to differ from those contained in the forward-looking statements. Nothing in this communication should be regarded as a representation or warranty, either express or implied, by any person that the forward-looking statements set forth herein will be achieved or that any of the contemplated results of such forward-looking statements will be achieved. You should not place undue reliance on forward-looking statements, which speak only as of the date they are made.

In addition, the information contained in this press release is provided as of the date hereof and may change, and the Company and its representatives and affiliates specifically disclaim any obligation to, and do not intend to, update or revise any forward-looking statements, whether as a result of new information, inaccuracies, future events or otherwise, except as may be required under applicable securities laws. Information contained on our website is not a part of or incorporated into this press release.

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