

TERRESTRIAL ENERGY

Terrestrial Energy Achieves Key Safety Milestone with Nuclear Regulatory Commission

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Company submits foundational safety analysis to the NRC, advancing the IMSR toward licensed commercial operation

CHARLOTTE, N.C., April 23, 2026 (GLOBE NEWSWIRE) -- Terrestrial Energy Inc. (NASDAQ: IMSR), a developer of Generation IV small modular nuclear power plants, has submitted a foundational safety analysis to the U.S. Nuclear Regulatory Commission (NRC), marking another milestone in the company's systematic progress toward licensed commercial operation of its Integral Molten Salt Reactor (IMSR) plant in U.S. markets.

The submission, a topical report defining the safety events the IMSR is designed to withstand, is a required step toward NRC issuance of a Safety Evaluation Report and future licensing applications for IMSR plant operations.

"This is an important milestone for the company. It reflects the depth and rigor of our safety case and the continued progress of our engagement with the Nuclear Regulatory Commission," said Simon Irish, CEO of Terrestrial Energy. "Establishing the basis for NRC acceptance of this safety analysis is a critical step toward licensing and operating IMSR plants in the U.S. market."

A topical report allows for NRC review of a safety-related topic and leads to a Safety Evaluation Report, a ruling that can be referenced in a future licensing application. This regulatory ruling avoids the need for revisiting of important topics of reactor safety, which increases efficiency of the licensing process, allowing a single review to apply to multiple nuclear power facilities, supporting fleet-scale deployment and reducing regulatory risk through standardization of key safety determinations.

This final submission reflects the culmination of multiple rounds of technical review with the NRC and represents the final stage of the topical report review process prior to issuance of a Safety Evaluation Report. The submission is indicative of the maturity of the IMSR design and demonstrates Terrestrial Energy's disciplined and systematic approach to regulatory engagement. It supports further regulatory analysis and the company's program to prepare license applications to operate IMSR plants in the United States.

This submission builds on prior regulatory milestones, including the NRC's issuance of a Safety Evaluation for the IMSR's Principal Design Criteria in September 2025. Together, these foundational elements establish critical components of the IMSR licensing basis and support continued advancement toward deployment including validation of key design attributes such as inherent reactivity control that delivers a reactor with inherently stable power dynamics.

About Terrestrial Energy

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.

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," "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 press release 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.

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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