

TERRESTRIAL ENERGY

Terrestrial Energy Submits Topical Report to NRC to Confirm IMSR Plant's Thermal and Electric Facility Can Be Built and Operated Ahead of Nuclear Licensing

October 8, 2026

Approval enables site-specific heat and power systems, expands IMSR Plant access to industrial markets, and supports early commercial operation using natural gas as a bridge to nuclear power

Approval shortens critical path to plant commercial operation and revenue

CHARLOTTE, N.C.--(BUSINESS WIRE)--Oct. 8, 2026--

Terrestrial Energy Inc. (Nasdaq: IMSR) ("Terrestrial Energy" or the "Company"), a leader in Generation IV molten salt nuclear plants supplying electricity and high-temperature industrial heat, today announced that it has submitted its Thermal and Electric Facility (TEF) Topical Report to the U.S. Nuclear Regulatory Commission (NRC). If approved, the TEF, which houses the generators, turbines, and steam supply systems of the Integral Molten Salt Reactor (IMSR) Plant, could be customized for each site and built and operated ahead of the plant's nuclear construction permit and operating license.

"This submission can change how an IMSR Plant is regulated, built and financed," said Simon Irish, CEO of Terrestrial Energy. "With its NRC approval, only the nuclear portion of the plant would follow the nuclear licensing timeline. The rest of the plant would become a conventional industrial project, giving customers earlier power and heat and giving financing partners a bankable construction phase. As this pathway applies to every IMSR Plant, it is a fleet-wide advantage, not a one-off exemption."

The IMSR Plant is designed in two discrete parts: the Nuclear Facility (NF), containing standardized and modular nuclear systems, and the TEF, containing non-nuclear heat transfer, steam supply and electric systems for commercial power generation and thermal energy supply.

With NRC approval, the TEF could enter commercial service ahead of the NF, using an auxiliary heat source such as natural gas as a bridge to nuclear power.

The report asks the NRC to confirm that building the TEF is not nuclear construction under 10 CFR 50.10(a)(1). The submission incorporates elements of the Company's NRC-approved Postulated Initiating Events (PIE) methodology and shows that the IMSR Plant's nuclear systems do not rely on the TEF for safe operation and that any failure originating in the TEF is isolated from the nuclear systems.

The TEF Topical Report is the Company's third Topical Report submission of 2026, delivering on its guidance of submitting at least three reports in calendar 2026. The NRC approved the Company's PIE and Principal Design Criteria Topical Reports in 2026 and 2025, respectively. In September, the Company submitted a Topical Report seeking NRC approval of the Company's methodology to complete regulatory qualification of graphite for the IMSR Plant.

Approved Topical Reports establish foundational elements of the IMSR licensing basis that may be referenced in future applications without re-evaluation, reducing the scope of subsequent technical review.

About Terrestrial Energy

Terrestrial Energy is a developer of Generation IV nuclear plants powered by its Integral Molten Salt Reactor (IMSR) technology, delivering innovation in efficiency, cost, versatility and functionality. The IMSR Plant is small, modular and designed to supply low-cost, reliable, high-temperature heat and electricity for industrial applications, including data centers, and chemical and petrochemical supply. By extending nuclear energy beyond power markets, IMSR Plant supports clean firm heat and power, self-reliance, grid reliability and economic growth. Using proven U.S. molten salt technology and inexpensive readily available standard-assay low-enriched uranium fuel, Terrestrial Energy is working with regulators, suppliers, customers and industrial partners to commission a fleet of IMSR plants across the U.S. in the 2030s. Learn more: 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," "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 possibility that our estimates regarding lifetime revenue and gross margin of IMSR Plants and our serviceable addressable market or the underlying assumptions may prove to be incorrect; (4) the ability of management to manage growth; (5) 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; (6) potential supply chain constraints and cost inflation for specialized nuclear-grade materials and components; (7) any failure to comply with the laws and regulations governing the use, transportation, and disposal of toxic, hazardous and/or radioactive materials; (8) changes in domestic and foreign business, market, financial and political conditions, and in applicable laws and regulations, including tariffs; (9) the ability to raise additional funding in the future; (10) the outcome of any legal proceedings that may be instituted against the Company; and (11) 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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