

TERRESTRIAL ENERGY

Terrestrial Energy Executes DOE Agreement for Project TEFLA Under Fuel Line Pilot Program

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Company's second OTA agreement with the US Department of Energy (DOE) provides an expedited pathway to authorize operation of TEFLA, a pilot plant for IMSR Fuel Salt production

Project TEFLA accelerates Terrestrial Energy's plans to demonstrate IMSR Fuel Salt production, a key element of the Company's business strategy

CHARLOTTE, N.C., Jan. 22, 2026 (GLOBE NEWSWIRE) -- 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) technology, today announced that it has executed an Other Transaction Authority (OTA) agreement with the U.S. Department of Energy (DOE) for Project TEFLA, a pilot production facility that will demonstrate IMSR Fuel Salt production. This announcement marks an important milestone in Terrestrial Energy's engagement with the Fuel Line Pilot Program, established under Executive Order 14301, which seeks to address the nation's shortage of domestic nuclear fuel resources by developing or building fuel production lines to increase production capacity.

Project TEFLA will support Terrestrial Energy's commercial IMSR plant development and future deployments by demonstrating the Company's proprietary IMSR Fuel Salt production technology. TEFLA will produce IMSR fuel at pilot plant scale, synthesizing the fuel to precise reactor requirements using readily available standard-assay low-enriched uranium (SALEU) enriched to less than 5% U235 as feedstock. Fuel produced under Project TEFLA will support the Company's Project TETRA test reactor project, being developed under DOE's Advanced Reactor Pilot Program through a [recently signed](#) separate OTA agreement. Project TEFLA will leverage Terrestrial Energy's existing supplier relationships to obtain key components, fuel feedstock, and transportation services.

Approval for the operation of the TEFLA IMSR Fuel Salt pilot plant will be expedited by the DOE's authorization process, facilitating the accelerated development of the TETRA test reactor and Terrestrial Energy's IMSR fuel supply business. Through a streamlined collaboration with the Company, DOE will review the TEFLA pilot plant design for safe and secure handling of nuclear and authorize its operation. The OTA mechanism enables Terrestrial Energy to operate outside traditional federal contracting constraints, providing an agile and flexible framework for rapid fuel production innovation.

"Projects TEFLA and TETRA deliver critical elements on IMSR plant design and operation via an accelerated DOE authorization pathway enabled by Executive Order 14301," said Simon Irish, CEO of Terrestrial Energy. "These programs encompass key technologies for IMSR plant commercialization, from fuel to reactor supply, and demonstrate our commitment to delivering practical, deployable nuclear solutions that strengthen America's energy security. We are grateful to the Department of Energy for their collaboration, oversight, and support of Terrestrial Energy."

Terrestrial Energy's commercial IMSR plant is designed to produce 822 MWth (390 MWe) of flexible, low-cost clean firm energy for industrial heat applications and electricity generation. Its high-temperature thermal energy supply will be available for industrial process use and electric power generation at superior efficiency. Terrestrial Energy's CAPEX-light business model, avoidance of HALEU fuel use and its supply chain challenges, modular IMSR design with high inherent safety in operation, position the Company as a leading advanced reactor innovator and nuclear plant supplier.

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 global decarbonization of the primary energy system across a broad spectrum and increase its sustainability. 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, 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," "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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