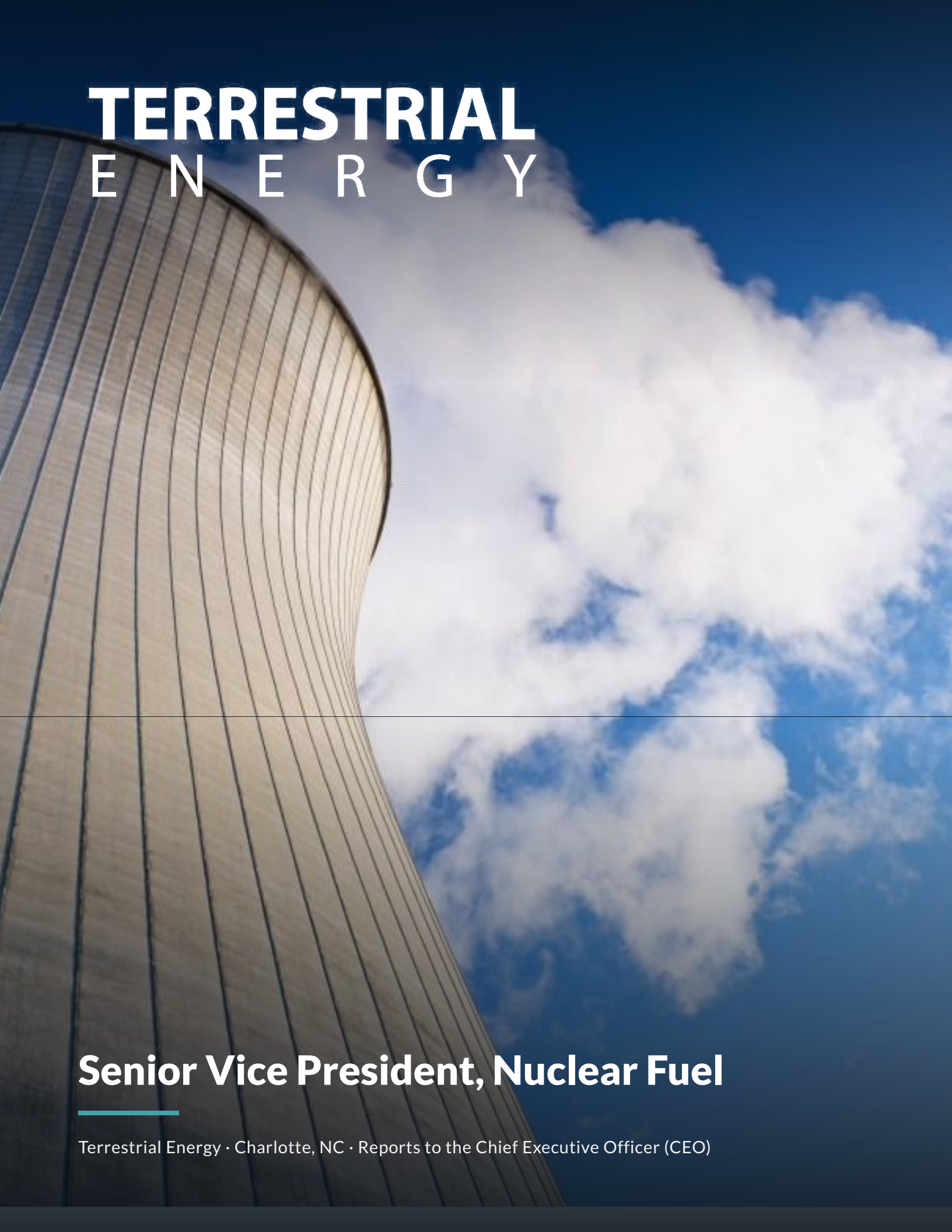


TERRESTRIAL
ENERGY

Senior Vice President, Nuclear Fuel

Terrestrial Energy · Charlotte, NC · Reports to the Chief Executive Officer (CEO)

About Terrestrial Energy

Terrestrial Energy is a US developer of advanced, Generation IV nuclear reactors, building the Integral Molten Salt Reactor (IMSR), a small modular nuclear plant designed to be affordable and capital efficient to deliver cost-competitive, clean firm heat and power to industry. In 2025 the Company completed a merger creating a publicly listed operating company (NASDAQ: IMSR), securing the capital resources for its next phase of growth. With the current alignment of US federal and state government policy and growing industry and investor interest in small modular and advanced reactor technologies such as IMSR, Terrestrial Energy sits at a genuinely unique and compelling moment in the advanced nuclear sector.

Having spent its first decade advancing the science, engineering, regulatory and supply chain foundations of its IMSR technology, the Company is now transitioning from a development-stage enterprise into a commercialization and project execution organization. Over the past 24 months, Terrestrial Energy has built one of the most active and credible commercial pipelines in the advanced nuclear sector, a portfolio of strategic relationships, site commitments, government program selections, and supply chain contracts that together define the early commercial architecture of the IMSR fleet. Terrestrial Energy is building a team of high-performing business, engineering, and operations leaders at its Charlotte, North Carolina headquarters and future project sites, and is looking for individuals who bring sound judgment, innovative problem-solving, and the flexibility to thrive amid rapid growth and organizational change.



Project TEFLA: Pilot Fuel Facility

In early 2026, Terrestrial Energy executed an Other Transaction Authority (OTA) agreement with the U.S. Department of Energy (DOE) for Project TEFLA, a pilot fuel production facility. 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.

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 material and authorize its operation. The OTA mechanism enables Terrestrial Energy to operate the fuel pilot plant under regulatory supervision of the DOE rather than the NRC, providing an agile and flexible framework for rapid fuel production innovation.



Position Overview

Terrestrial Energy has recently entered a new and exciting chapter. Having spent its first decade advancing the science, engineering, and regulatory foundations of its IMSR technology, the Company is now transitioning from a development-stage enterprise into a commercialization and project execution organization. An essential component of Terrestrial's forecasted revenue and commercial success will depend on building a best-in-class fuel supply chain and business line. It is within this context that the Company seeks its first SVP, Nuclear Fuel.

Reporting directly to the CEO, the SVP, Nuclear Fuel (SVP) is responsible for the development, commercialization, and execution of Terrestrial Energy's integrated nuclear fuel business line supporting IMSR fleet deployment. The SVP will define and execute the Company's strategy to deliver a secure, scalable, and commercially viable fuel supply chain. The position operates as a business line leader with accountability for strategy, partnerships, capital deployment, and revenue generation, working in close coordination with IMSR Plant development, licensing, and commercial project teams.

The SVP will join Terrestrial Energy as the first dedicated hire in its fuel division, and therefore will have the chance to shape the strategy, team, and execution of the Company's fuel strategy from inception to production. When up and running, the Fuel Supply business line will represent a key part of the Company's commercial model, as refueling IMSR Plants will become, along with operating and maintenance services, one of the recurring revenue streams for the Company. The first concrete deliverable is Project TEFLA, the DOE fuel-line program to build a pilot-scale IMSR fuel-salt production facility, with the mandate to scale that to commercial-quantity fuel production.

Terrestrial Energy has one of the most active and credible commercial pipelines in the advanced nuclear sector, cementing the need for a dedicated fuel executive. Over the past 24 months, the Company has built a portfolio of strategic relationships, site commitments, government program selections, and supply chain contracts that collectively define the early commercial architecture of the IMSR fleet. The SVP's mandate is to ensure the Company's fuel supply is not only ready and available to power the IMSR reactor fleet when needed, but able to scale in lockstep with increasing customer demand over time.

This is a rare opportunity to build, and ultimately help lead, a major new business line inside a newly public, fast-growing Generation IV nuclear company. Terrestrial Energy's CEO has indicated that the Fuel Supply business line represents roughly a quarter of the Company's overall enterprise value (alongside approximately 60% from major component sales and 15% from engineering services during construction), and that as the business matures it could become a standalone division within the group, with this leader well positioned to lead it. The SVP will work in close, trust-based collaboration with the CEO and executive team from day-one, and will be a natural partner to the incoming EVP of Engineering.

Why This Role

- First dedicated fuel executive at Terrestrial Energy: full latitude to define the strategy, team, and operating model for the Company's nuclear fuel business line from inception.
- Direct line to the CEO and a highly visible mandate: the fuel business represents an estimated ~25% of Terrestrial Energy's overall enterprise value.
- A tangible first deliverable already underway, Project TEFLA, with a clear mandate to scale from pilot-scale fuel production to commercial quantities over roughly a 5-8 year horizon.
- The chance to shape site selection, partnerships across the nuclear fuel cycle (enrichment, conversion, and fabrication), and the commercial architecture of a business supporting fleet-wide IMSR deployment.
- A collaborative, trust-based executive culture: this is a cross-functional, relationship-driven role rather than a command-and-control one, pulling together resources from engineering, licensing, procurement, and commercial teams to build a function that does not yet exist.

Key Responsibilities

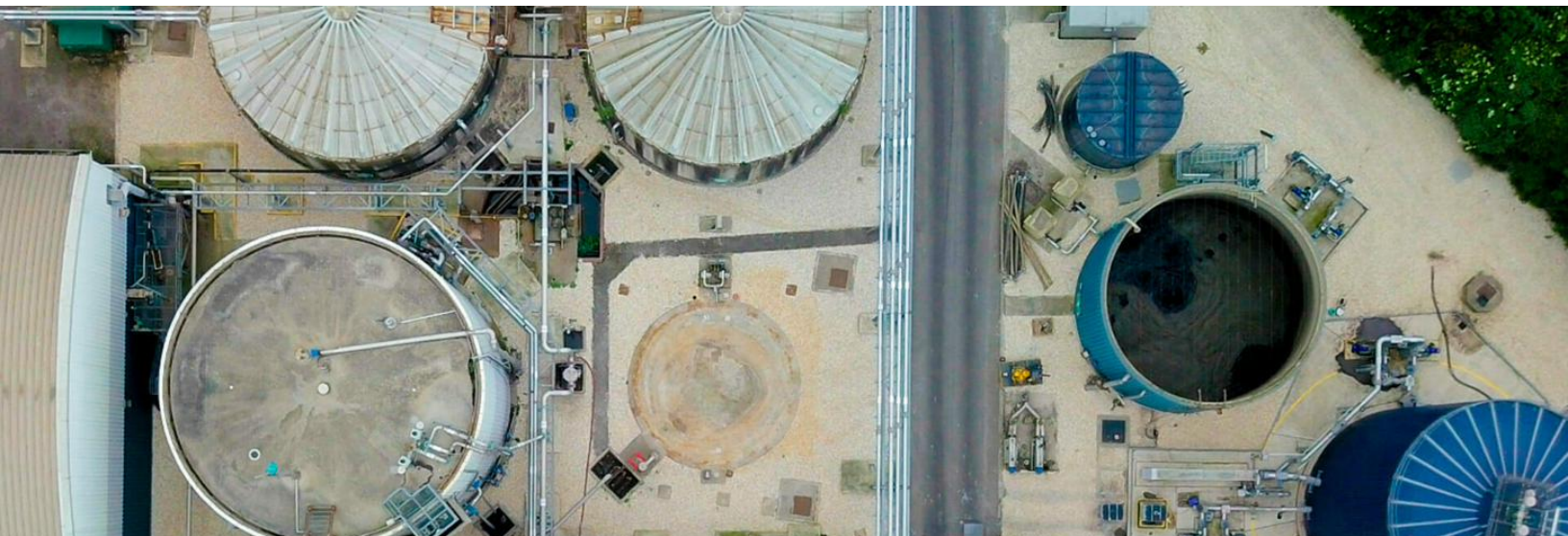
- Define and execute the long-term strategy for the IMSR Fuel Salt supply business as a core enterprise value driver.
- Establish the operating model and organizational structure for the Nuclear Fuel business line.
- Oversee site selection of the IMSR Fuel Salt production facility, project development, and execution strategies for fuel-related infrastructure.
- Align IMSR Fuel Salt supply capabilities with IMSR Plant deployment schedules, customer requirements, and geographic expansion.
- Lead development of commercial offerings including fuel supply agreements, lifecycle fuel services, and strategic partnerships.
- Structure and negotiate long-term contracts with utilities, industrial customers, and strategic partners.
- Develop pricing models and commercial frameworks that reflect Fuel Salt lifecycle value and risk allocation.
- Oversee development of facilities and capabilities for front-end nuclear material processing and conversion, carrier salt production, IMSR Fuel Salt manufacturing, and the safe handling, storage, and transportation of nuclear materials across the fuel lifecycle.
- Lead the design, construction, testing, and commissioning of IMSR Fuel Salt production facilities, with full accountability for operational readiness including alignment with applicable regulatory frameworks (e.g., NRC, DOE).
- Ensure scalability, cost competitiveness, and operational reliability across the business line.
- Establish secure and diversified sources of feedstock and critical materials.
- Develop partnerships across the nuclear fuel cycle, including enrichment providers and conversion services.
- Mitigate supply chain risks through strategic sourcing, inventory strategies, and long-term agreements.
- Define capital requirements and support financing strategies, including project finance, strategic investment, and government programs.
- Lead financial modeling for the Nuclear Fuel business line, including CAPEX, OPEX, and long-term revenue projections.
- Deliver against defined financial targets and value creation milestones.
- Support licensing strategies for Fuel Salt production, handling, transport, and storage.
- Engage with national laboratories and government agencies as required.
- Coordinate closely with IMSR Plant engineering, licensing, and commercial development teams to ensure full system integration.
- Support customer engagements where nuclear fuel supply is a critical component of project viability.
- Provide input into reactor design considerations that impact fuel manufacturability and lifecycle performance.

Core Competencies

- Executive communication and stakeholder engagement, including executive and Board presentation development.
- Critical thinking and problem solving, with sound decision-making under conditions of increased uncertainty.
- Strong written and verbal communication.
- Organizational leadership and team development to effect project execution.
- Cross-functional collaboration across engineering, licensing, procurement, and commercial teams.

Ideal Candidate Requirements / Attributes

- Highly intelligent, entrepreneurial, strategic builder comfortable with zero-to-one environments marked by rapid growth, changing conditions, and navigating ambiguity.
- Demonstrated experience working and leading in nuclear fuel cycle, chemical processing, advanced materials, or closely related industrial sectors; ideally, 15+ years of leadership experience in these areas.
- Demonstrated experience with a nuclear fuel manufacturing or similar non-reactor nuclear facility engaged in uranium conversion, deconversion, and/or chemical processing operations.
- Experience managing complex, multi-stakeholder projects involving regulatory, technical, and commercial dimensions.
- Direct experience with nuclear fuel cycle processes (i.e., conversion, enrichment, and/or fuel fabrication) or in the handling and deployment of nuclear fuel.
- Distinct value placed on supply-side experience: enrichment, conversion/deconversion, or fuel fabrication.
- Proven ability to lead cross-functional teams in a fast-moving, development-stage environment.
- Comfort operating in a cross-functional, dotted-line capacity rather than a command-and-control structure, and building trust quickly with the CEO and executive team.
- Experience engaging with the U.S. Department of Energy and/or Nuclear Regulatory Commission regulatory frameworks.
- Background working with national laboratories or major nuclear industry participants.
- Familiarity with molten salt reactor technology and Generation IV reactor systems a valuable plus.
- Strong commercial acumen with experience managing a budget, contract negotiation, partnership development, and revenue generation.
- Excellent project management skills that could support capital project development and transitioning nuclear facilities through commissioning and into stable commercial operations.
- International fuel fabrication exposure (e.g., UK enrichment, conversion, or fabrication) is a plus, though not required.
- Fuel risk management experience.
- Bachelor's degree in engineering or science, with additional consideration given for an advanced degree in a relevant field.



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