First Quarter 2026 Earnings Call

MAY 14, 2026

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2026

1Q Highlights

Three-Pillar Execution Framework: 1Q 2026 Progress

Engineering & Regulatory

- NRC Topical Report approves IMSR Postulated Initiating Events methodology (PIE)
- Project TETRA & Project TEFLA advancing under DOE Other Transaction Authority (OTA) agreements

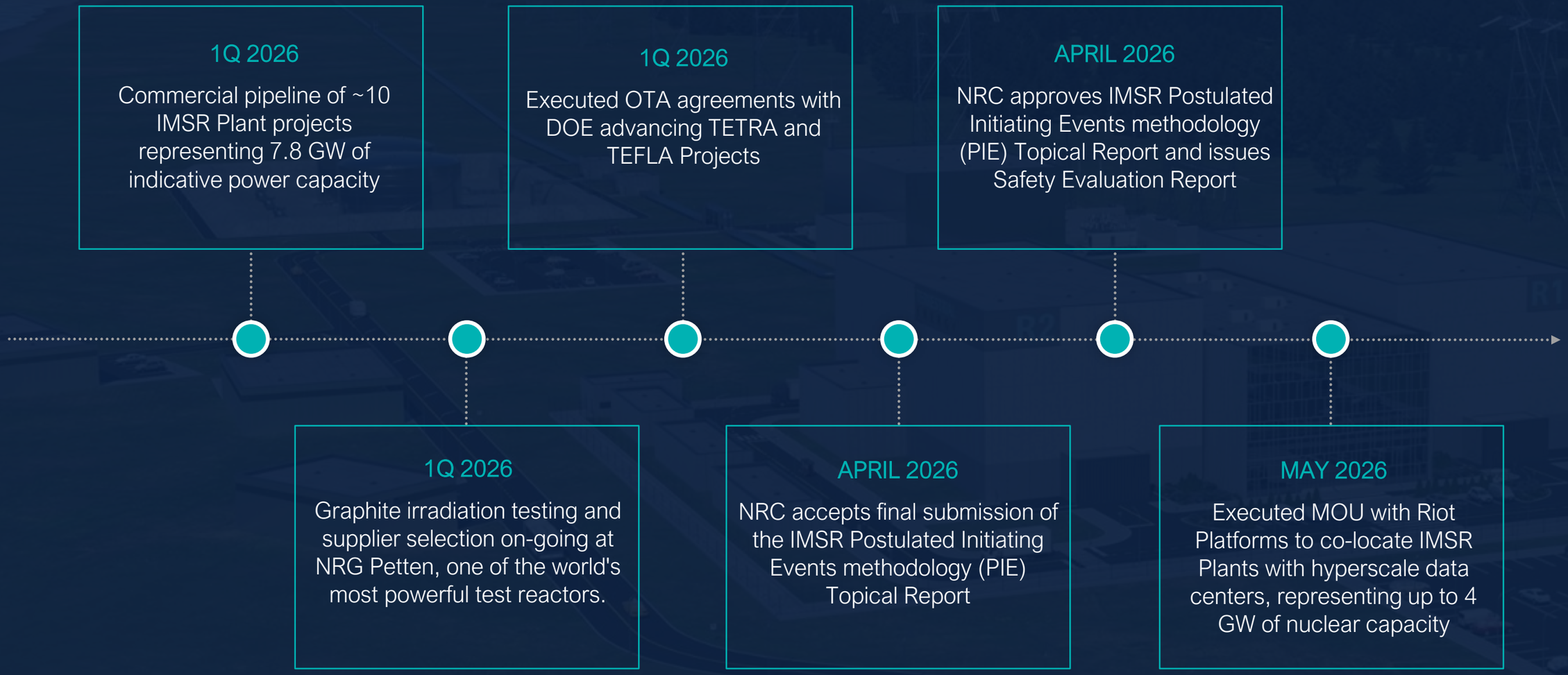
Supply Chain

- Developed supplier group for the execution of Projects TETRA and TEFLA
- Fuel supply partners engaged for TEFLA pilot project

Commercial Pipeline for IMSR Plant

- MOU with Riot Platforms to co-locate IMSR Plants with hyperscale data center
- Pipeline represents 7.8 GW in indicative power capacity

1Q 2026 Milestone Recap



2026

1Q Financial Highlights

1Q 2026 Financial Results

1

$10.5M Net Loss for 1Q2025, $4.3M Increase vs. 4Q 2025

The increase is attributable to:

- $3.2M increase in R&D
- $4.0M increase in G&A
- $2.8M increase in Other Income (Expense)

2

$7.9M Cash Burn for 1Q2025, $1.8M Increase vs. 4Q 2025

The increase is attributable to:

- Payment of $0.6M discretionary bonus payments in 1Q 2026
- $1.0M paydown of accounts payable on extended terms
- $0.2M payments of increasing R&D costs

3

$289.9M Total Cash & Investments

As of March 31, 2026:

- Comprised of cash & cash equivalents, short-term investments, and long-term investments
- Compares to $297.8M at year-end 2025
- Substantial runway generating meaningful engineering, regulatory, supplier and commercial milestones

4

105.9M Issued and Outstanding Shares

As of March 31, 2026:

- 82.2M Common shares and 23.7M Exchangeable shares
- Modest 1Q 2026 cap table activity due to stock option exercises
- Exchangeable shares are exchangeable into Common shares on a one-for-one basis at any time at the election of holders.

March 31, 2026 Capitalization Summary (shares in millions)

* Long term incentive program is reported net of 6.1M call options

2026

The Market

The Macro Case for Nuclear Energy and Nuclear Plant Innovation

Electricity Demand

- Electricity demand accelerating at unprecedented pace
- Step-changes driven by AI infrastructure, industrial innovation, data centers, electrification, and manufacturing reshoring
- Generational shift in energy consumption patterns

Policy Reset

- Energy security now dominant policy priority globally
- Grid reliability and affordability paramount concerns
- Geopolitical volatility (Ukraine, Gulf oil) elevating urgency

Nuclear Energy: The Only Path

- Powerful secular fundamentals driving continued demand expansion for nuclear energy
- Extraordinary opportunity for innovation to deliver transformative supply solutions
- Only innovative nuclear plants have capacity to meet demand deficiencies and policy requirements at required scale

Terrestrial Energy at-a-Glance

Developer of the small and modular Integral Molten Salt Reactor plant ("IMSR Plant"), which uses Gen IV nuclear technology. Listed on Nasdaq under "IMSR."

As a result of specific fission technology and intentional plant design choices, the IMSR Plant offers high-temperature, carbon-free heat and/or electricity supply with compelling economics and time-to-market

$1.4 T
Current SAM[1]

Directly addresses a $1.4 trillion SAM for industrial process heat and electricity in OECD markets and is expected to grow 35% to $1.9 T by 2050[1]

65 years
National laboratory proven and demonstrated technology

The Molten Salt Reactor research program started at Oak Ridge National Laboratory (ORNL) in the 1950s

>12 years
Corporate history

Corporate history built with an experienced management team with many decades of experience

1. Company internal projection.

Terrestrial Energy's IMSR Plant Addresses the Weaknesses and Limitations of Legacy Nuclear Technology While Delivering the Benefits of Nuclear Energy

- Avoids HALEU (15-20)[1] fuel supply chain risk. HALEU (15-20) supply unlikely to be commercially available to support 2030s fleet deployment, severely challenging the commercial timeframes for the other Gen IV technologies that rely on it.
- Development of HALEU (15-20) fuel supply chain will require significant government support due to an uncertain market demand signal
- By contrast SALEU is readily available today and producers are currently expanding production to meet growing demand[2]

Terrestrial Energy IMSR

Gen IV Advanced Modular Reactor

High capital efficiency due to:

- High-temperature thermal energy supply for high efficiency turbine operation
- Low-pressure operation easing design requirements, lowering manufacturing costs
- High inherent safety
- Modular design for fast construction
- Long and cost-effective fuel cycle

Wide range of essential industrial uses requiring high-temperature heat & electric power

- On-grid electricity generation
- Co-located industrial cogeneration

Capital efficient, smaller footprint for siting flexibility, modular design for fast construction, and financeable. High commercial value delivered quickly.

Legacy Nuclear Technology

LWR Gen II, III and III+ (including SMRs)

Low capital efficiency due to:

- Low-temperature thermal energy supply for low efficiency turbine operation
- High pressure operation
- High active and/or passive safety
- Conventional construction methods

Limited use case, focused primarily on electricity generation

- Very large unit plant configuration
- Centralized grid generation

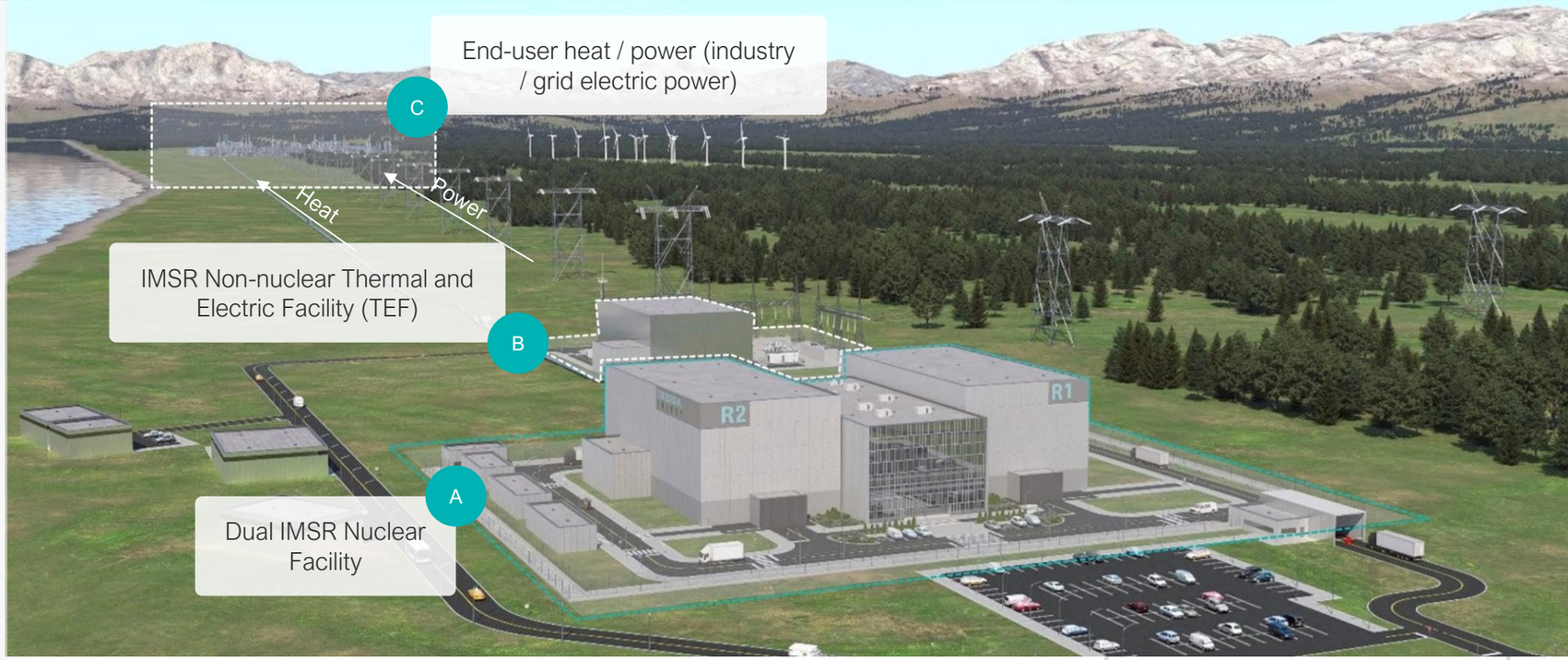
Uneconomic, capital-intensive, challenging to site, and difficult to finance without government support.

1. HALEU is 10-20% enriched Uranium-235, but the product relevant for comparison (i.e., Gen IV fuel) is 15-20% enrichment, i.e., HALEU (15-20)
2. "Urenco doubles expansion plans for uranium enrichment in the Netherlands. *World Nuclear News*, 20 Oct. 2025, https://www.world-nuclear-news.org/articles/urenco-doubles-expansion-plans-for-uranium-enrichment-in-the-Netherlands.

IMSR Plant is Designed to Deliver **Co-located, Customized** Energy Solutions to Industry

Separation of nuclear from thermal and electrical systems allows:

- Standardized reactor design with end-user flexibility and customized co-generation of thermal and electric supply
- Easier pathway for coal plant conversion
- Ability to be hybridized with other energy systems, such as natural gas and renewables

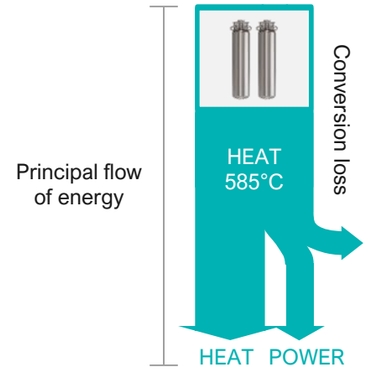


A **Standardized twin IMSR Nuclear Facility**
- Subject to nuclear regulation
- Standardized, simplified design reduces costs
- 822 MW (net) thermal energy production for 585°C supply

B **Customized non-nuclear Thermal and Electric Facility (TEF)**
- Converts thermal energy from two operating IMSRs to 585°C 822 MW (net) thermal or 390 MW (net) electric power for commercial supply – or any heat/electric power mix in between
- Steam turbines operate at ~50% greater efficiency than in a plant employing legacy nuclear technology
- Separate Nuclear Facility & non-nuclear Thermal and Electric Facility (TEF) enables the potential to integrate natural gas as a bridge to rapid commercial operation and use as back-up during nuclear systems' operation

C **Near and co-located generation**
- Chemical and petrochemical plant
- Artificial intelligence infrastructure & datacenters
- Coal plant conversion

Prospective off-takers
- Hyperscalers
- Industrlals
- Electric grid, including municipalities



Note: Example is for a dual reactor IMSR Plant. Scaling up is possible.
Source: Company internal view

TERRESTRIAL
ENERGY

Making transformative nuclear energy a commercial reality