DEEP FISSION

DeepFission.com

NASDAQ: FISN

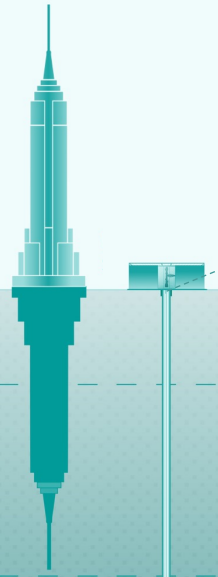
Corporate Overview

Powering Humanity from a
Mile Underground

GRAVITY
NUCLEAR REACTOR

August 2026

DEEP FISSION



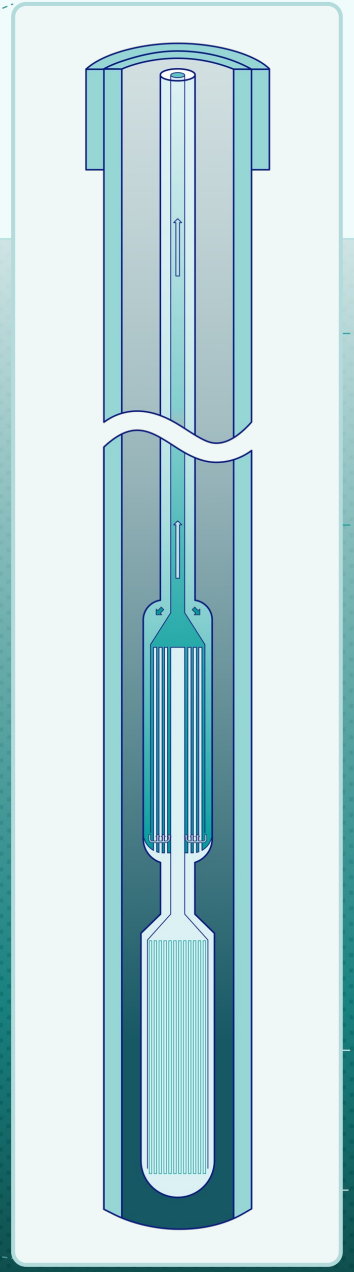
Empire State
Building for scale
(1,454 ft tall)

500 ft

1500 ft

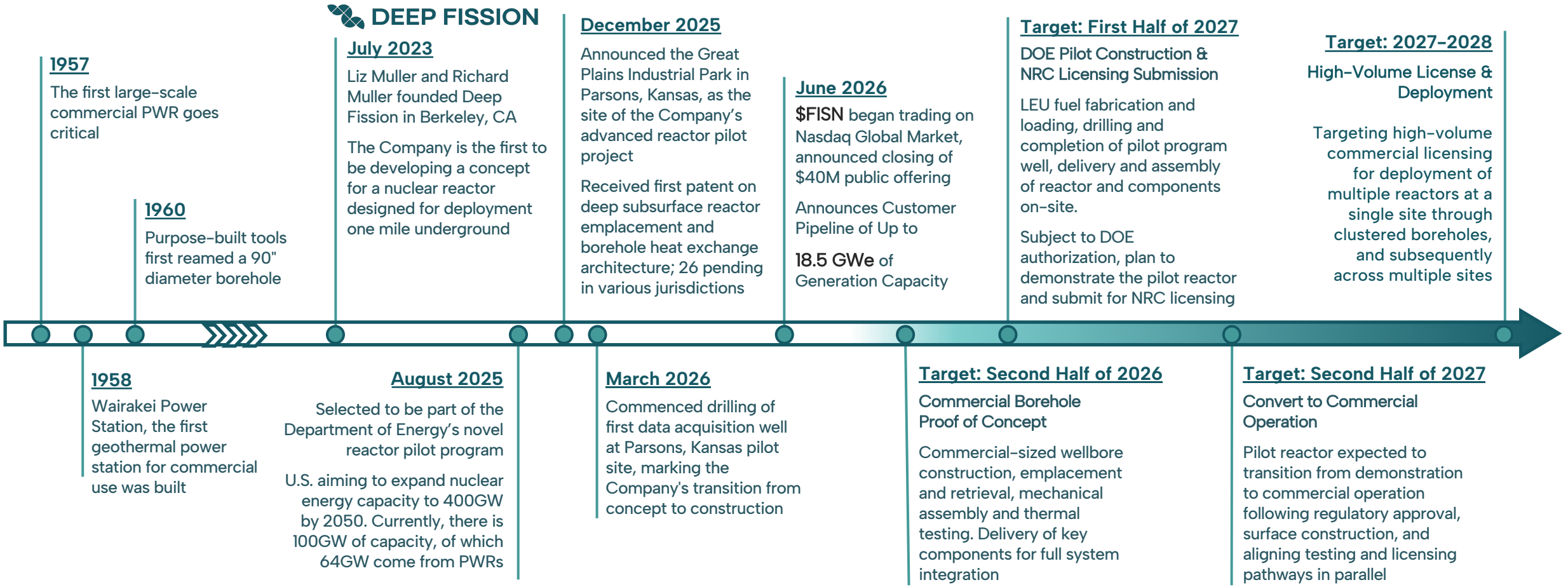
4500 ft

1 Mile



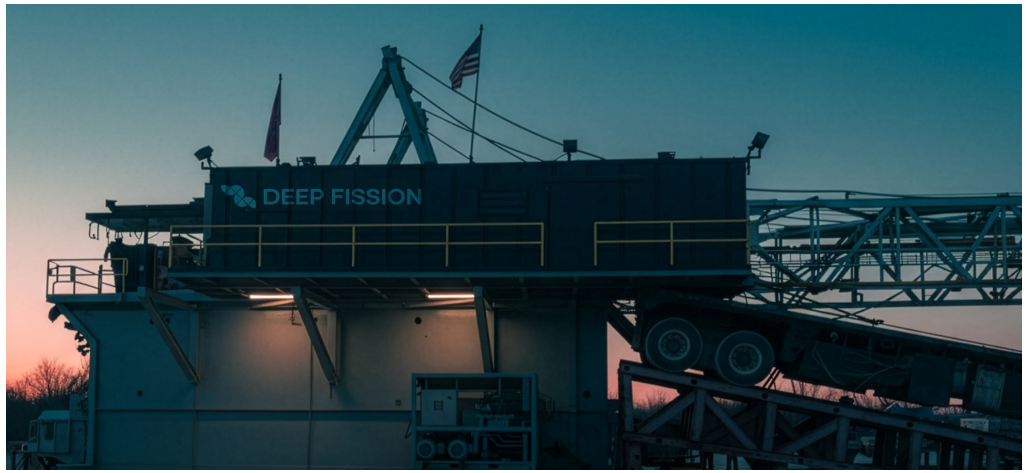
Key Milestones and Company History

Foundational Tech | Technology Validation | Commercial Deployment

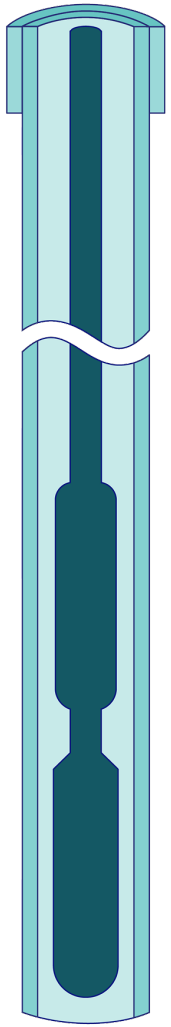


Gravity™ Nuclear Reactor: Building Something Real

Designed to Convert to Commercial Operation in Parsons, Kansas

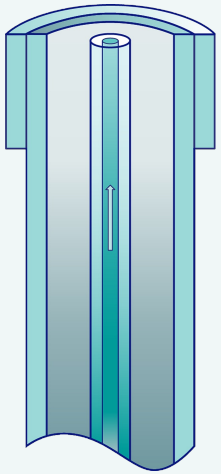


Integrating Three Mature Technologies



Deep Fission prioritizes deployment over invention. Our Gravity Nuclear Reactor™ design uses established reactor technology, leveraging existing capabilities in the oil, gas, and geothermal industries with the goal of reducing reliance on surface infrastructure, supporting faster deployment timelines, improving security, enhancing safety and lowering costs.

Deep Borehole Drilling



Optimized borehole design is intended to be drillable using proven oil & gas infrastructure for containment a mile underground.

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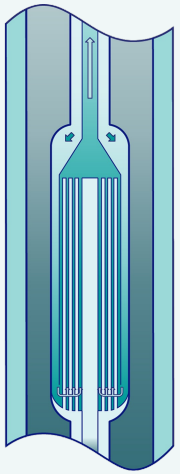
Geothermal Technology



Novel deployment approach will apply established geothermal components and processes for energy transfer to the turbine generator at the surface.

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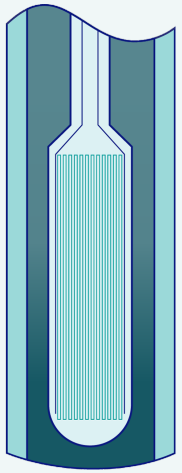
Pressurized Water Reactor (PWR)

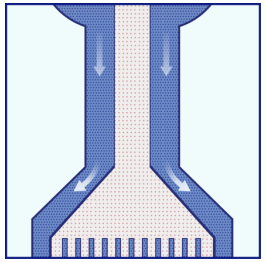


Hydrostatic pressure from one-mile-deep column of water expected to provide 160 atm of reliable pressure, safely and naturally. PWR design uses readily available low-enriched uranium (LEU) fuel.

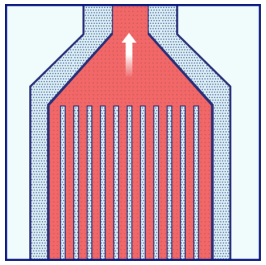
Simplifying Standard PWR

Removing complexity typically required of surface PWRs, keeping just the core.

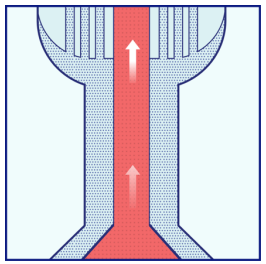
Primary System



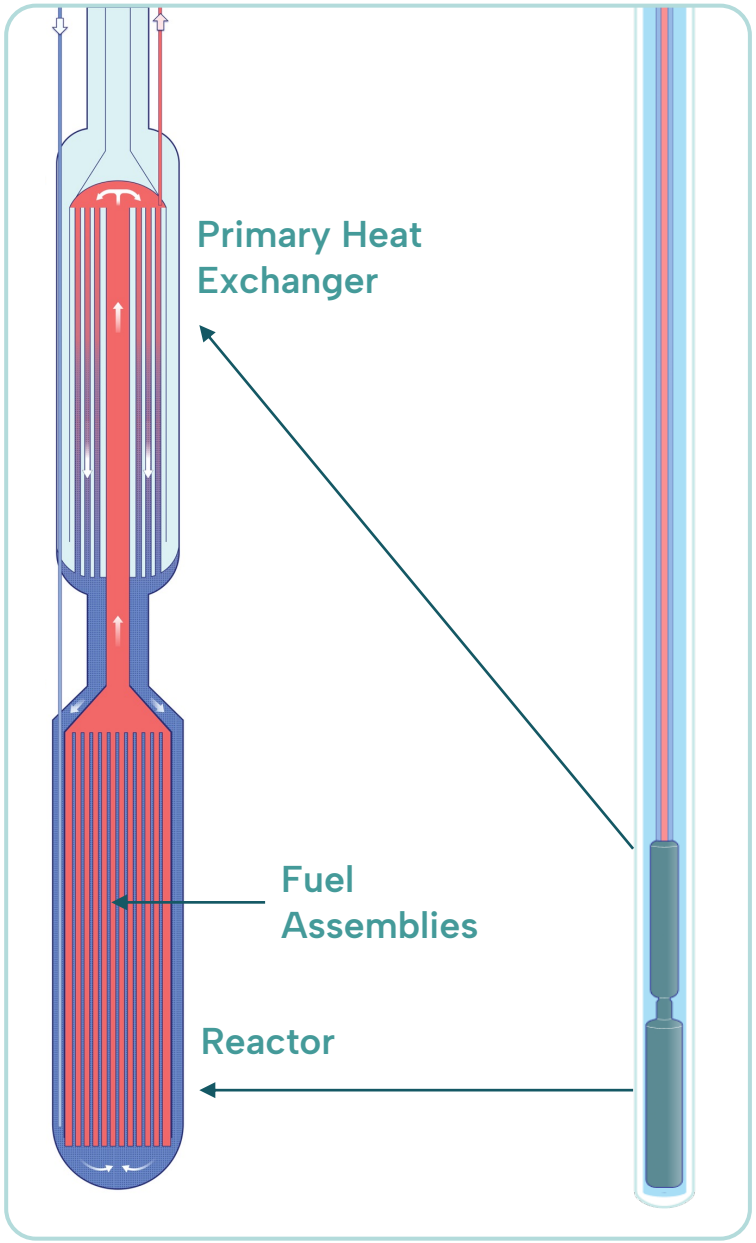
1. Primary Coolant is a Closed System (160 Atm)



2. Natural Circulation (Hot Water Rises)



3. Transfers Heat to Secondary System in Primary Heat Exchanger



Highlights

- **Primary Coolant Pressurized by Gravity (160 Atm)**
- **Heat Transferred to the Secondary System is Pumped to the Surface**
- **DOE Authorizes Operation, NRC Regulates Safety of the Reactor**

Established Technology:

Large-scale commercial PWR first went critical on December 2, 1957.[1] There are currently 64 operating PWRs producing 64GW in the U.S.[2,3]

[1]Library of Congress (loc.gov)
[2]Nuclear Regulatory Commission (nrc.gov)
[3]Energy Information Administration (eia.gov)

DEEP FISSION

Substantial Market & Regulatory Tailwinds

Key Tailwinds

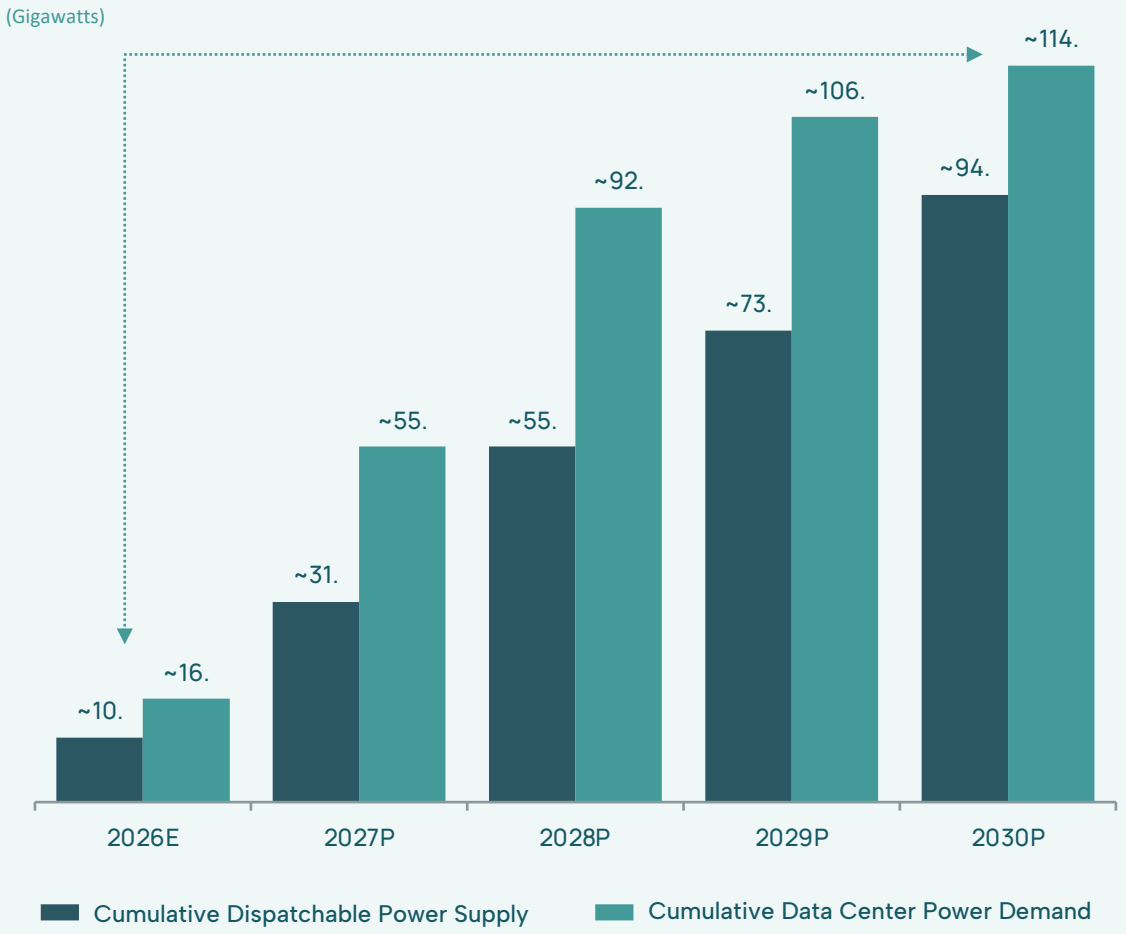
Near-Term Capacity Constraints are creating Massive Production Shortfalls
AI, data centers, big tech, and military spend are supercharging energy demand

Lagging Infrastructure Lead Times are Creating Decade-Long Delays
Industry wide permitting and manufacturing delay affecting new reactor development

Big Tech Decarbonization by 2030 Deadlines
Numerous leading hyperscalers, energy majors and climate focused funds have made commitments to achieve net zero, or better, by 2030

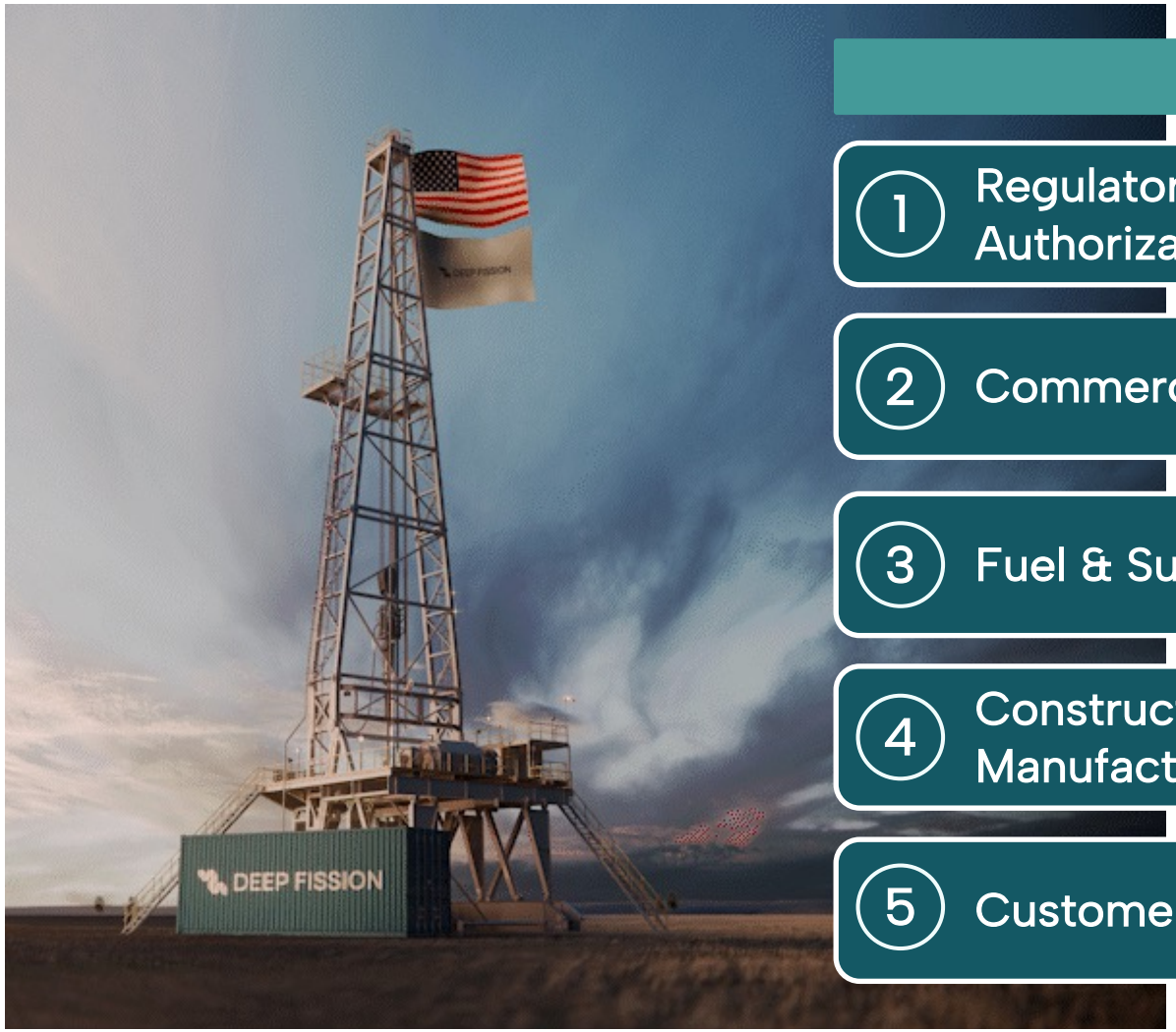
Customers have been Searching for a Solution
Hyperscalers, governments, and militaries have been searching for near-term solutions to match near-and-long term demands

U.S. Data Center Power Demand Expected to Outstrip Supply



Sources: EIA, and SEIA, Company Websites, Los Angeles Times, McCoy Power Reports. Chart is cumulative from 2025 Baseline.

Commercial Readiness, Not a One-Time Criticality Test



Key Capabilities for Commercial Power	
1 Regulatory & Authorization	Our NSDA covers the same reactor designed to convert to commercial power
2 Commercial Siting	First commercial site at Great Plains Industrial Park in Parsons, Kansas
3 Fuel & Supply Chain	Standard LEU fuel with existing supply chain, not awaiting HALEU allocation challenged by domestic production constraints
4 Construction & Manufacturing	Relies on drilling supply chain that's drilled wells for decades; factory prototype canister already manufactured and delivered to site
5 Customers & Offtake	Co-location capability and 18.5 GW of non-binding LOIs including data centers, industrial parks, and strategic partners

Designed for Rapid Speed of Deployment

Nuclear Energy Solutions	Pace to Completion
Deep Fission is Designed to be Measured in Weeks of Drilling Time Deep Fission is designed for rapid deployment, leveraging established technology, and engineered for economic transformation.	**6 Months** target for reactor deployment at scale (NOAK basis)
Above-Ground SMRs Measured in Years of Construction Time Above ground small modular reactors are hindered by their ability to produce cost-effective electricity in the near term.	**3–4 Years** from breaking ground to completion
Traditional/Surface Level Reactors Could Take Decades Credible, safe solutions that take decades to build, result in “not-in-my-backyard” pushback and often amplify costs to the point of cancellation.	**6–10 Years** from breaking ground to completion

Low Build Cost

The Gravity Nuclear Reactor Expected to Improve on Major Variables of PWR Complexity and Cost

Criteria	**New Pressurized Water Reactors** are still not cost-effective	**Deep Fission** engineered to achieve compelling economics across the board
Reactor Pressure Vessel	Large forged pressure vessels within engineered nuclear island	Reactor system to be integrated within borehole environment
Emergency Core Cooling Systems	Engineered active safety systems with pumps, power, and redundancy	System to incorporate water column that generates pressure and serves as primary coolant
Reactor Containment Building	Above-ground reinforced concrete and steel containment structures	Containment functions integrated with geology and depth
Nuclear Construction and Quality Assurance	Large-scale, site-built nuclear construction with extensive on-site QA	Drilling-based installation with emphasis on repeatable, modularized + packaged system integration
Supply Cost for Standard Fuel Assembly	Our deployment model encompasses safe interim storage pending identification of national, long-term storage solutions.	Use of existing LEU fuel supply chains aligned with commercial infrastructure
		Targeting significant cost reduction of the nuclear island versus most recent completed conventional PWR

Build-Own-Operate Business Model

Business plan includes revenue from development and construction, technology licensing and services, and long-term revenue from electricity sales. We expect to utilize third-party project financing to support reactor deployment

1 **Upfront Revenue Streams (One-Time)**

2 **Recurring Revenue Streams (Ongoing)**

3 **Revenue from Electricity Sales**

Reactor Delivery & Integration

Revenues associated with engineering, integration, and delivery of modular reactor units.

Intellectual Property Licensing

Recurring licensing fees associated with the use of our proprietary technology.

EPC Support

Revenues from providing site-specific engineering, installation, commissioning, and related services.

Operations & Maintenance Services

Revenues from long-term reactor services such as refueling, monitoring, and regulatory support.

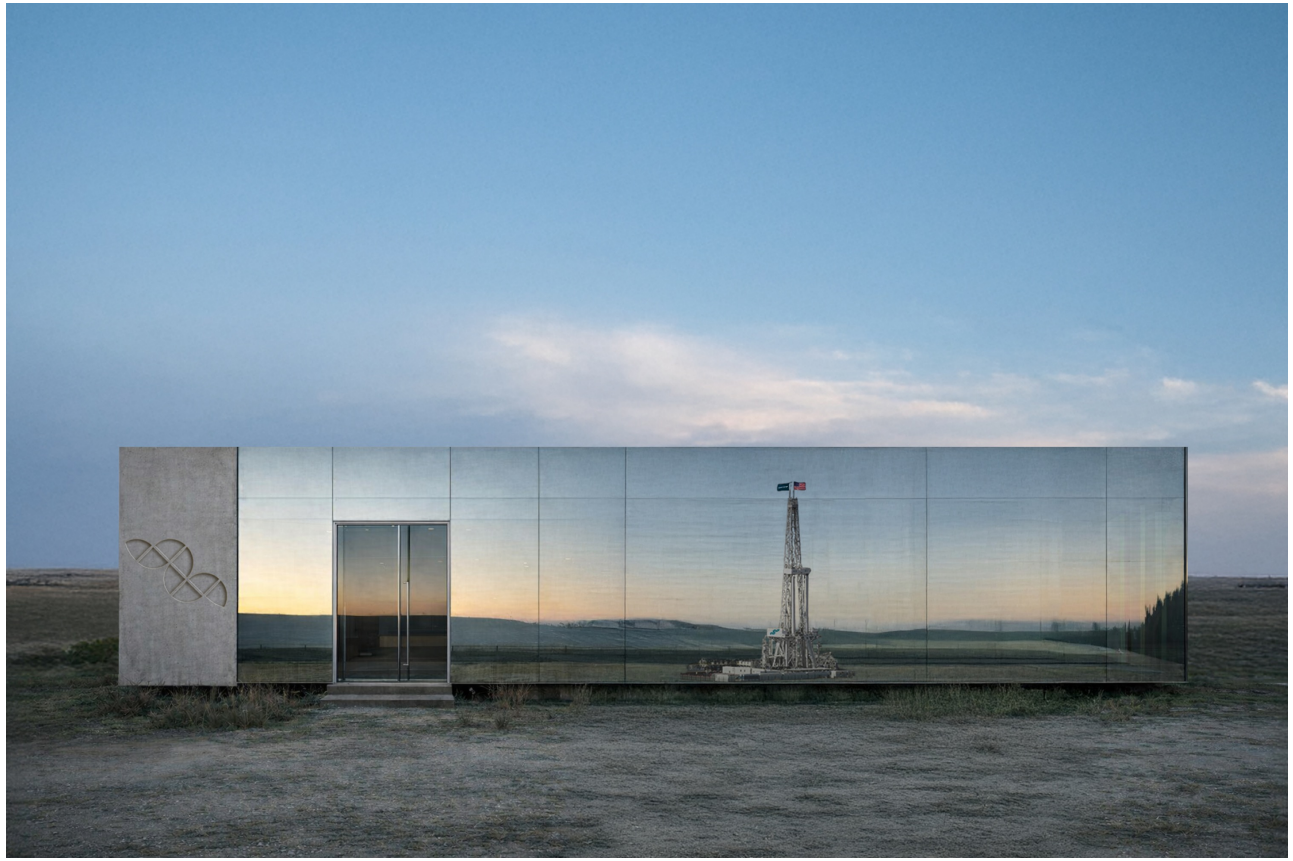
Project-Level Equity Participation

For certain projects, we plan to retain an ownership interest in the project company. This would allow us to benefit from project-level cash flows associated with electricity generation and sale over the operating life of the facility, in many cases through its retained equity in the project, which are expected to be driven by long-term power purchase agreements or similar offtake arrangements.

*Revenue mix may vary by project structure — some projects may involve third-party ownership, financing, or utility / grid intermediation.

Security Advantage: Defense-Enabling Energy Deployment

Aligned with Department of Defense efforts to strengthen installation energy resilience, reduce dependency on vulnerable grids and fuel logistics, and maintain operational continuity under disruption



Physical Resilience

Reduced targeting profile and resilient, distributed architecture potential

Mile-deep deployment supports Inherent physical protection and survivability of critical systems

Logistical Resilience

Independent, continuous baseload power supports sustained operations

Reduced logistics burden and long-duration refueling cycles enables energy resilience

Executive Leadership

Elizabeth Muller
CEO and Co-Founder

Prior Experience:
Co-Founder, Board Chair & Former CEO of Deep Isolation (nuclear waste disposal), and Co-Founder, Berkeley Earth policy advisor at the OECD

Mark Schmitz
CFO

Prior Experience:
40+ years of experience in global finance leadership in energy technology, manufacturing, automotive, life safety, and capital-intensive industries

Mark Pérès
Chief Nuclear Officer

Prior Experience:
40+ years of experience in Nuclear Engineering, former Engineering Lead at NuScale Power and Kairos Power, former Reactor Operator at Hanford

Michael Brasel
COO

Prior Experience:
30+ years of experience across Nuclear and Fossil, former Senior Director at NuScale Power, Board Chair of Great River Energy, and former Plant Manager at La Crosse Boiling Water Reactor

Richard Muller
CTO and Co-Founder

Prior Experience:
Co-Founder of Deep Isolation, MacArthur "Genius" Recipient, holding 80+ nuclear patents, and is a Professor Emeritus at UC Berkeley

Stacy Tarver Patterson
CMO

Prior Experience:
19 years of experience across global marketing strategy, digital product growth, and brand transformation for technology and consumer platforms

Jon Gordon
General Counsel

Prior Experience:
20+ years of experience in legal services, advising companies on legal, compliance, securities, and other matters

Depth of Technical & Operations Teams

Executive Team	**Bryan Black** *VP, Business Development* 14+ years in nuclear energy and power		**Rani Franovich** *VP, Regulatory Strategy* 30+ years in nuclear regulation		**David Nelson** *VP, Drilling and Completion* 25+ years in well engineering		
Technical Team	**Aleem Boatright** *Director, Nuclear Analysis* 25+ years in Nuclear Engineering, PE, former NRC Reactor Engineer	**Jason Pottorf** *Director, Thermohydraulics* 25+ years in Nuclear Engineering, PE, I&C and safety analysis expert	**Chris Weindorf** *Director, Reactor Mechanical* 20+ years in Nuclear Mechanical and Structural Engineering	**John McClure** *Director, Electromechanical* 15+ years in engineering, PE, and MBA experience	**Brett Siebert** *Senior Thermal Hydraulics Engineering* 20+ years in Nuclear Engineering	**Brian Treadway** *Senior Project Director* 30+ years in power generation, and MBA experience	**Mark Chitty** *Licensing Director* 45+ years in the nuclear industry
	Maurice LaFountain *Director, Surface Design* 25+ years in Nuclear, Engineering, PE, and PMP	**Laura Holewa** *Senior Nuclear Engineer* 15+ years in nuclear engineering	**John Fehler** *Electromechanical Engineer* 25+ years in mechanical and manufacturing engineering	**Pradeep Pandurangan** *FEA Mechanical Engineer* 20+ years in mechanical engineering	**Justin Pottorf** *Surface Systems Lead* 20+ years in digital systems and automation engineering, PE, and FPGA	**Zach Comstock** *Quality Assurance Manager* 15+ years in nuclear QA, NQA-1 Lead Auditor	**Jim Read** *Senior Director Supply Chain and Procurement* 25+ years in energy industry, and US Navy experience
Nuclear Operations Team	**Adam Rose** *Director, Nuclear Operations* 25+ years in nuclear and engineering	**Tim Gnadt** *Senior Nuclear Operations Engineer* 18+ years in nuclear operations, and MBA, experience	**Stephen Sparks** *Senior Nuclear Operations Engineer* 35+ years in nuclear industry	**David Green** *Senior Reactor Operator* 15+ years in nuclear technical engineering	**Dustin Cluck** *Reactor Operator* 10+ years in nuclear and manufacturing engineering		

Prior Work Experience

Ardmore Energy · Nuclear Regulatory Commission · Holtec · GE Vernova · Fluor

U.S. Navy – Nuclear Propulsion Div. · Paragon Energy Solutions · NuScale Power · Westinghouse · TVA

Board Of Directors & Advisors

Board of Directors

Elizabeth Muller
CEO and Co-Founder
Board Chair

Leslie Goldman Tepper
Managing Partner of LGT Seven
Enterprises Nominating & Governance
Committee Chair

Jonathan Angell
CEO of Angell Investments

Thomas Glanville
Managing Partner of Eschelon Advisors, LP
Audit Committee Chair

Blake Janover
Board Member and CCO of DeFi
Development Corporation
Compensation Committee Chair

Expert Advisors

Stacy Polley
Independent Board
Member, Blue Owl

Steve Koonin
Special Government
Employee, DOE

Kristin Sverchek
Former President,
General Counsel at Lyft

Mark Peters
CEO Mitre Corp. Former Head
of Idaho National Labs

Patrick Huston
Brig. Gen. (Ret.)

Jo Riley
Co-Founder and
CEO of Censia

Allison Salisbury
Entrepreneur

Steve Chu
Nobel Laureate
Former Secretary
of Energy

John Mather
Nobel Laureate
in Physics

Accelerated Innovation — Deep Fission is a New Class of Infrastructure

Intellectual Property (IP) Process is Intended to Create Long-Term IP Moat and Technology Licensing Potential

Core Concept Stack

Borehole Reactor Architecture

- Deep Subsurface Reactor Emplacement and Borehole Design
- Reactor Module Configuration, Thermal-Hydraulic Systems, and Passive Safety Features

Deep-Borehole Nuclear Reactor

- Drilling, Casing, and Emplacement Techniques for Nuclear Applications
- Instrumentation, Control, and Monitoring Systems for Deep-Borehole Reactors

Borehole Nuclear Power Plant System

- Heat Extraction and Surface Power-Conversion Interface Systems

38

Pending Applications;
2 U.S. Patents Issued

40+

Unique Innovations and Novel Concepts to Date

Commercial Deployment Plan: 2027-2028 Commercial Operation Date Goal

Phase 1: Analysis

Second Half 2025:
Site Selection & Groundbreaking

Development activities commenced in Parsons, KS, including geological evaluation, borehole planning and early drilling.

Phase 2: De-Risk

Targeting Second Half 2026:
Commercial Borehole
Proof of Concept

Commercial-sized wellbore construction, emplacement and retrieval, mechanical assembly and thermal testing. Delivery of key components for full system integration.

Targeting First Half 2027: DOE Pilot Construction & NRC Licensing Submission

LEU fuel fabrication and loading, drilling and completion of pilot program well, delivery and assembly of reactor and components on-site. Subject to DOE authorization, plan to demonstrate the pilot reactor and submit for NRC licensing.

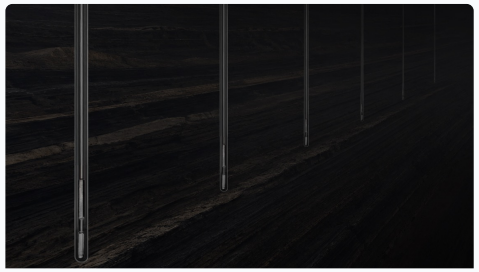
Secured non-binding LOIs for 18.5 GWe pipeline including site-host and off-take LOIs in KS, TX, UT

First Half 2026: Drilling, Engineering & Emplacement Analysis

Drilled first data acquisition well to ~6,000ft. to gather real-world subsurface data. Advancing engineering validation, including rigorous preparation and permitting for commercial-scale borehole drilling.

Targeting Second Half 2027:
Convert to Commercial Operation

Pilot reactor expected to transition from demonstration to commercial operation following regulatory approval, surface construction, and aligning testing and licensing pathways in parallel.



Targeting 2027-2028: High-Volume License & Deployment

Targeting high-volume commercial licensing for deployment of multiple reactors at a single site through clustered boreholes, and subsequently across multiple sites.

Phase 3: Commercial

Commercial Deployment Plan: Strategic Relationships

Diversified Geographies and LOI Counterparties

Great Plains Development Authority

Non-binding letter of intent and executed lease agreement establish framework to develop up to 2 GWe at Great Plains Industrial Park.

This partnership positions Deep Fission with a commercial pathway into hyperscaler and industrial customers, with potential for:

- Purpose-built data center campus with scalable power, high-speed fiber, and large contiguous land enabling hyperscale deployment.
- Accelerated time-to-market through powered shell sites and a pro-growth regulatory environment.

Blue Owl

Non-binding strategic relationship with Blue Owl Capital's Real Assets platform for the potential deployment of Deep Fission SMR projects across its digital infrastructure portfolio, alongside a $20 million equity investment from a Blue Owl-managed fund.

This partnership establishes a direct commercial and financing pathway for Deep Fission reactors in the rapidly expanding data center sector, combining potential project development collaboration, power offtake alignment, and structured capital support, in an effort to accelerate scalable, zero-carbon baseload deployment.

Endeavour

Non-binding strategic relationship term sheet with Endeavour, a sustainable data center infrastructure company, for potential co-development of 2 GWe of nuclear energy across cloud provider projects.

This partnership creates a direct commercial pathway for Deep Fission reactors in one of the fastest-growing electricity demand sectors.

Commercial Deployment Plan: Supply Chain

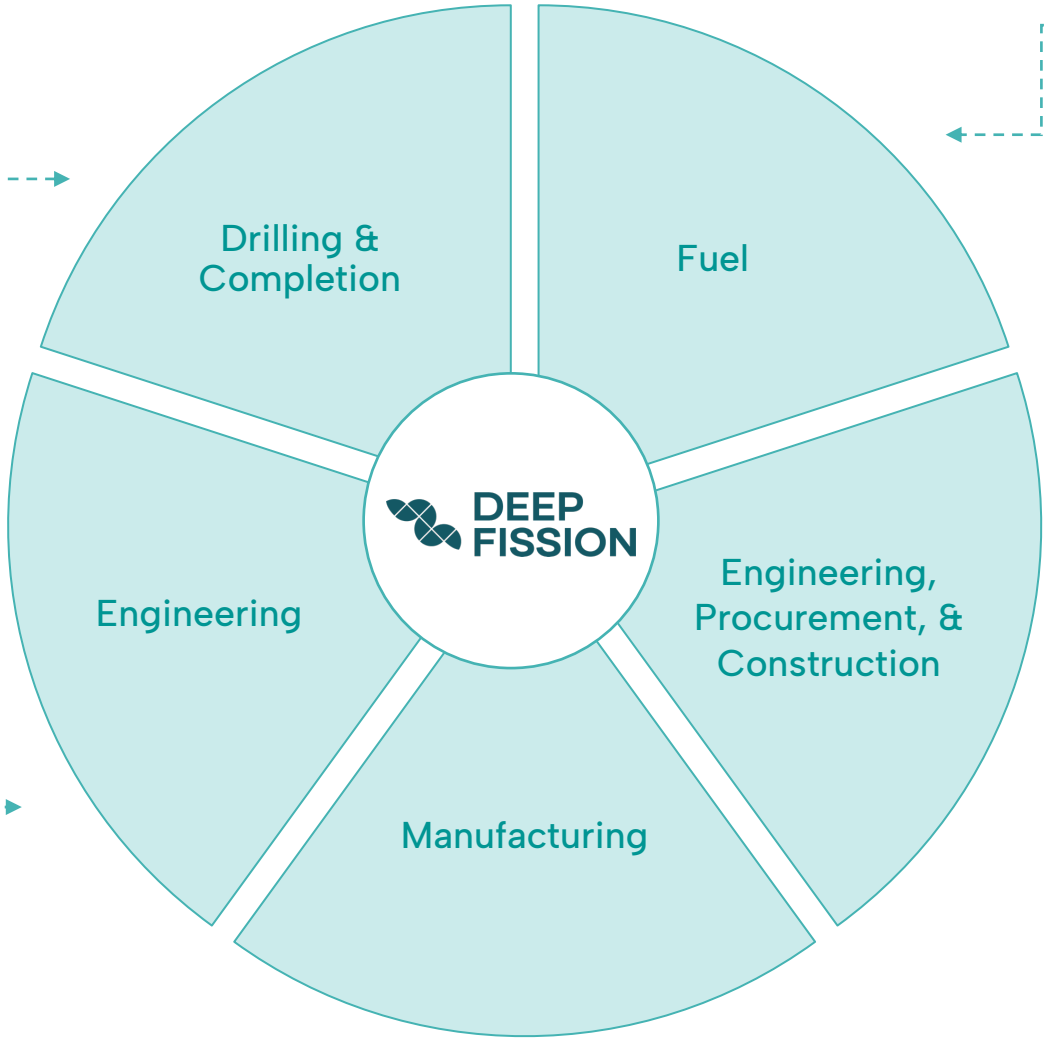
Flexibility and Resilience from Optionality at Each Dimension

HALLIBURTON

MOU signed

SPARX ENGINEERING

Designing Deep Fission's instrument hub and electronics for monitoring the reactor including pressures, temperature and neutron detectors



urenco The Energy to Succeed

Enriched uranium product (EUP) procured, with delivery this summer

Day&Zimmermann

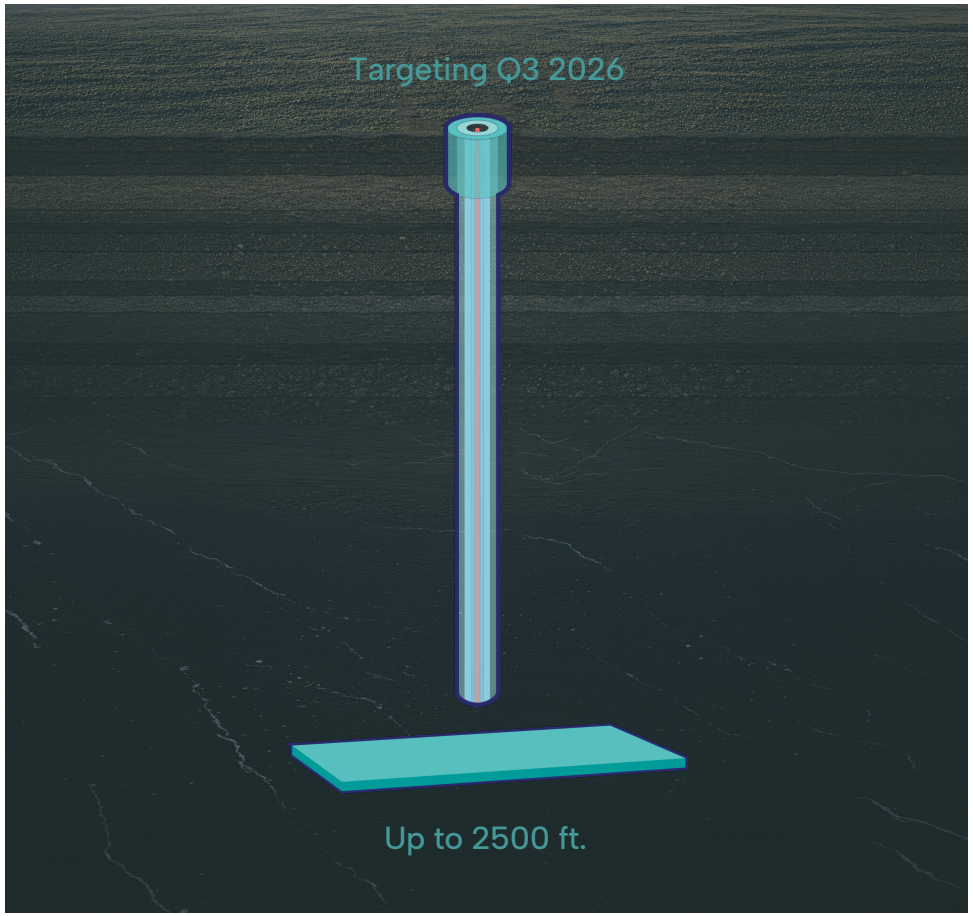
Construction manager for the demonstration reactor with personnel on site, acting as an EPC

R-V INDUSTRIES INC.

Fabricating Deep Fission prototype reactor

Proof of Concept: Commercial Drilling Program

Pursuing Multiple Checkpoints in Parallel



Next Checkpoints

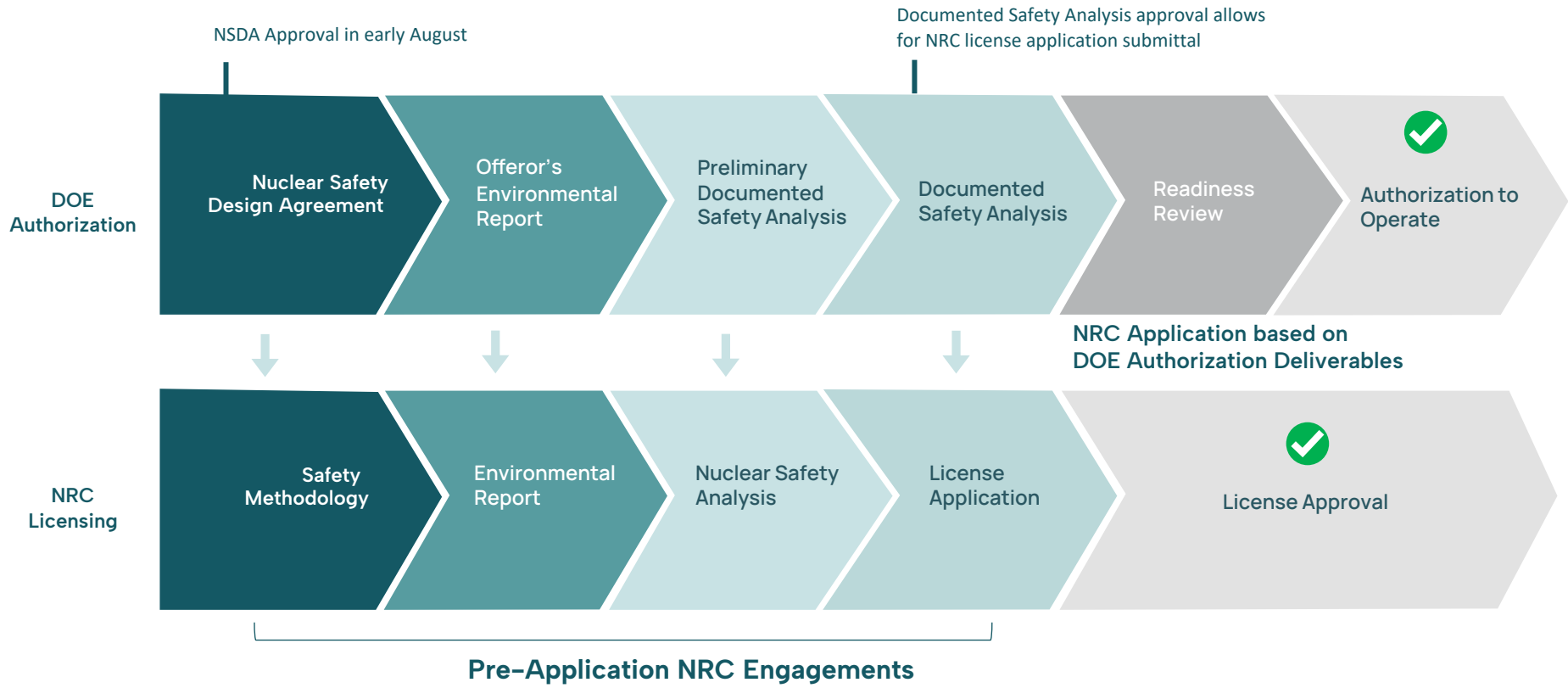
1. Prototype installation
2. Casing integrity
3. Larger borehole execution
4. Thermal performance
5. Progressive depth drilling system
6. Instrumentation hardware integration
7. Operational tool and process development

Seeking to de-risk all aspects of our deployment model through a series of discrete non-nuclear tests.

Deep Fission Operates in a Market with Rigorous Nuclear Requirements

Proactive engagement with Regulators allows for parallel path - technology development and commercial approval

DOE Authorization & NRC Application Process



Technical & administrative meetings

Commissioner and Exec meetings (if needed)

Document submittals: white papers, topical reports, etc.

Review of Safety Analysis Report outlines or other drafted submittals

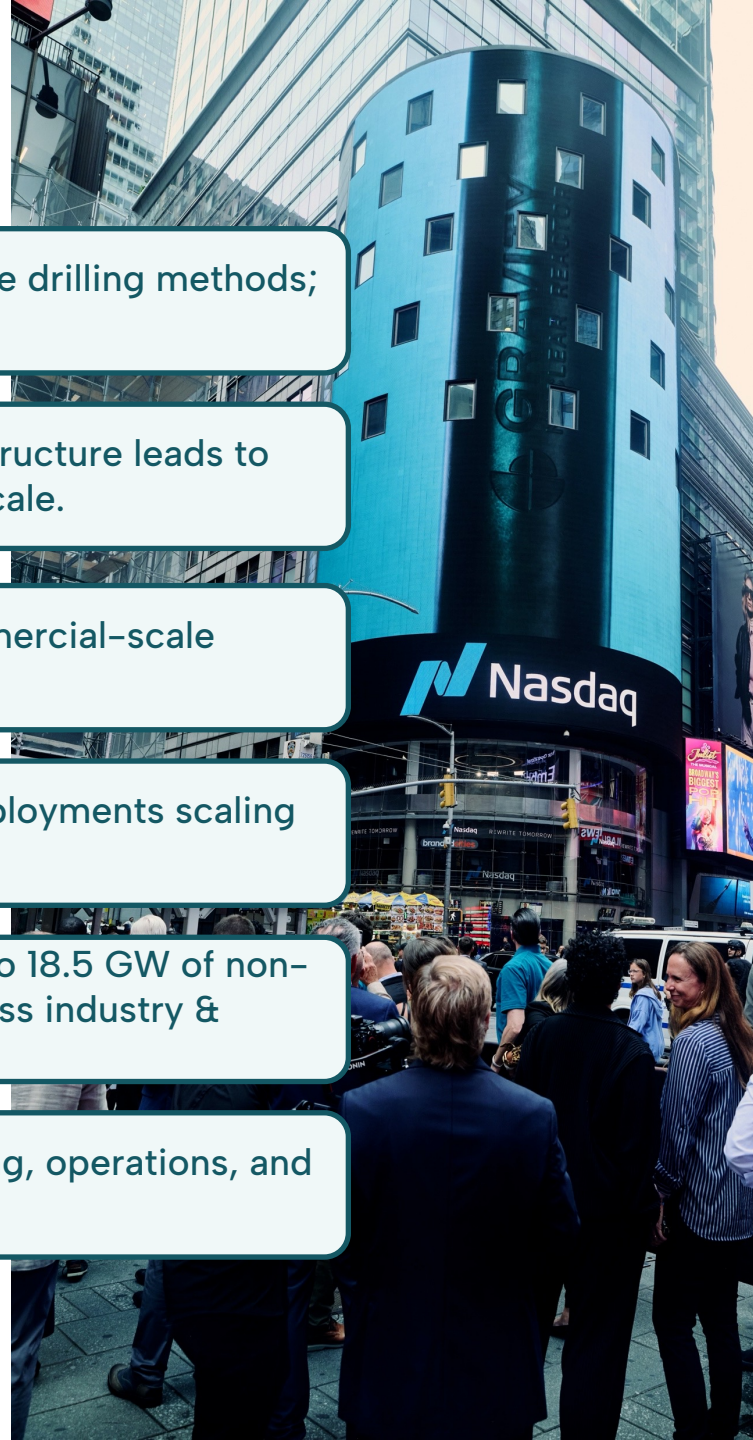
Observation of DOE RPP authorization

Commercialization Pathway

- Commercial operation of FOAK Reactor at Parsons, KS
- License Amendment application for larger reactor up to 15 MWe for large scale commercialization
- Establish corporate and project infrastructure to deliver the 15 GWe of non-binding LOI agreements
- Continue development of customer pipeline

Key Highlights

1 Proven Technology & Proprietary Architecture	Established PWR technology, standard LEU and mature drilling methods; 2 issued patents and 38 pending applications.
2 Designed for Speed & Capital Efficiency	Drilling-based installation with reduced surface infrastructure leads to faster deployment and improving unit economics at scale.
3 Field Execution Underway	First data acquisition well drilled to ~6,000 feet; commercial-scale drilling and prototype emplacement are next.
4 Modular, Scalable Output	Targets up to ~15 MWe per reactor, with clustered deployments scaling incrementally to demand.
5 Commercial Pathway Taking Shape	DOE program, NRC engagement, Kansas site and up to 18.5 GW of non-binding LOI deployment opportunities diversified across industry & geography.
6 Deep Nuclear & Drilling Expertise	Experienced team across reactor engineering, licensing, operations, and drilling execution.



Forward-Looking Statements

This document includes forward-looking statements within the meaning of federal securities laws, including the Private Securities Litigation Reform Act of 1995. Forward-looking statements describe future expectations, plans, results or strategies and can often be identified by the use of terminology such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "potential," "project," "seek," "should," "target," "will," "would," and similar expressions, although not all forward-looking statements contain these identifying words. These statements include statements regarding Deep Fission's technology development, regulatory activities, commercialization plans, anticipated reactor deployments, strategic partnerships, market opportunities, future operating performance, financing plans and growth strategy.

Forward-looking statements are based on current expectations and assumptions and involve risks and uncertainties that could cause actual results to differ materially from those expressed or implied. Important factors include Deep Fission's ability to obtain financing, secure regulatory approvals, develop and deploy its technology, achieve anticipated technical and economic performance, secure customers and commercial agreements, obtain fuel and critical supplies, manage costs and timelines, and other risks described in Deep Fission's filings with the Securities and Exchange Commission. Deep Fission's forward-looking statements are based on information available as of the date of publication. Except as required by law, Deep Fission does not undertake any obligation to update these statements.

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