DEEP FISSION

DeepFission.com

# NASDAQ: FISN

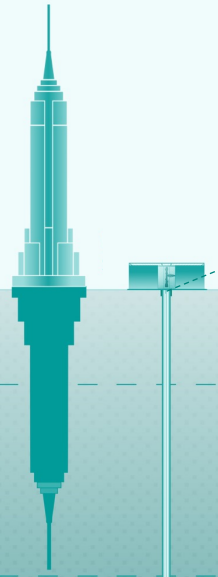
## Corporate Overview

Powering Humanity from a
Mile Underground

June 2026

GRAVITY™ NUCLEAR REACTOR

# DEEP FISSION



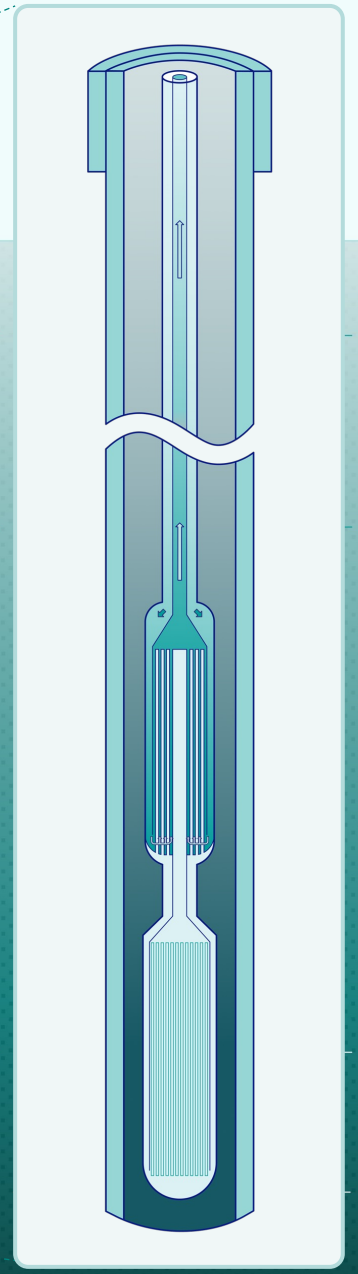
Empire State
Building for scale
(1,454 ft tall)

500 ft

1500 ft

4500 ft

1 Mile



# Energy Resilience for the AI era

Deep Fission is focused on delivering reliable, low-carbon baseload power to meet growing electricity demand from utilities, industrial customers, and data centers.

The Gravity Nuclear Reactor™ approach combines established pressurized water reactor technology with a novel underground deployment model designed to simplify construction, enhance safety, and support scalable commercial deployment.

2026 Company Update from CEO Liz Muller – Advancing Development of First Reactor Project

VIEW VIDEO

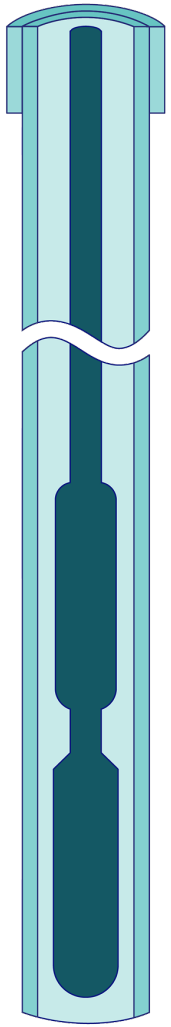
Advanced Nuclear Company Deep Fission Announces Closing of Public Offering of Common Stock

VIEW PRESS RELEASE

# Deep Fission Breaks Ground

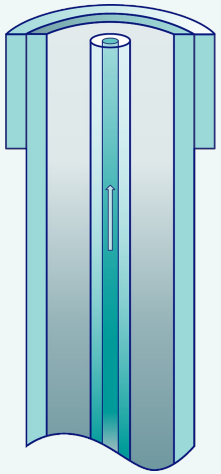
## Site 1 – Parsons, Kansas

# 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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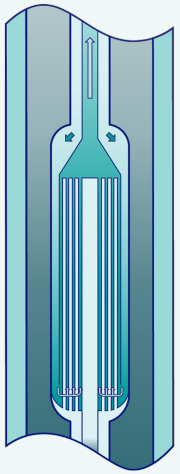
## Geothermal Technology



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

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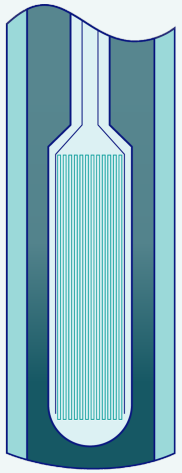
## Pressurized Water Reactor

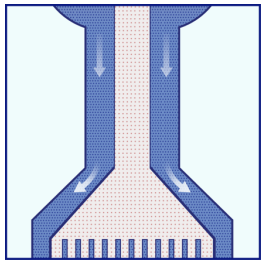


Hydrostatic pressure from one-mile-deep column of water expected to provide 160 atm of reliable pressure, safely and naturally. PWR design uses readily available low-enriched uranium (LEU) fuel.

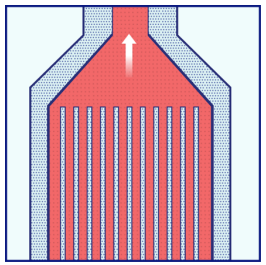
# Pressurized Water Reactor

(PWR)

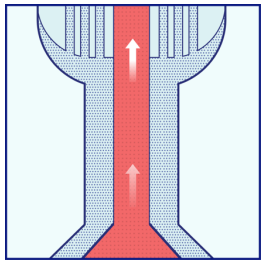
## Primary System



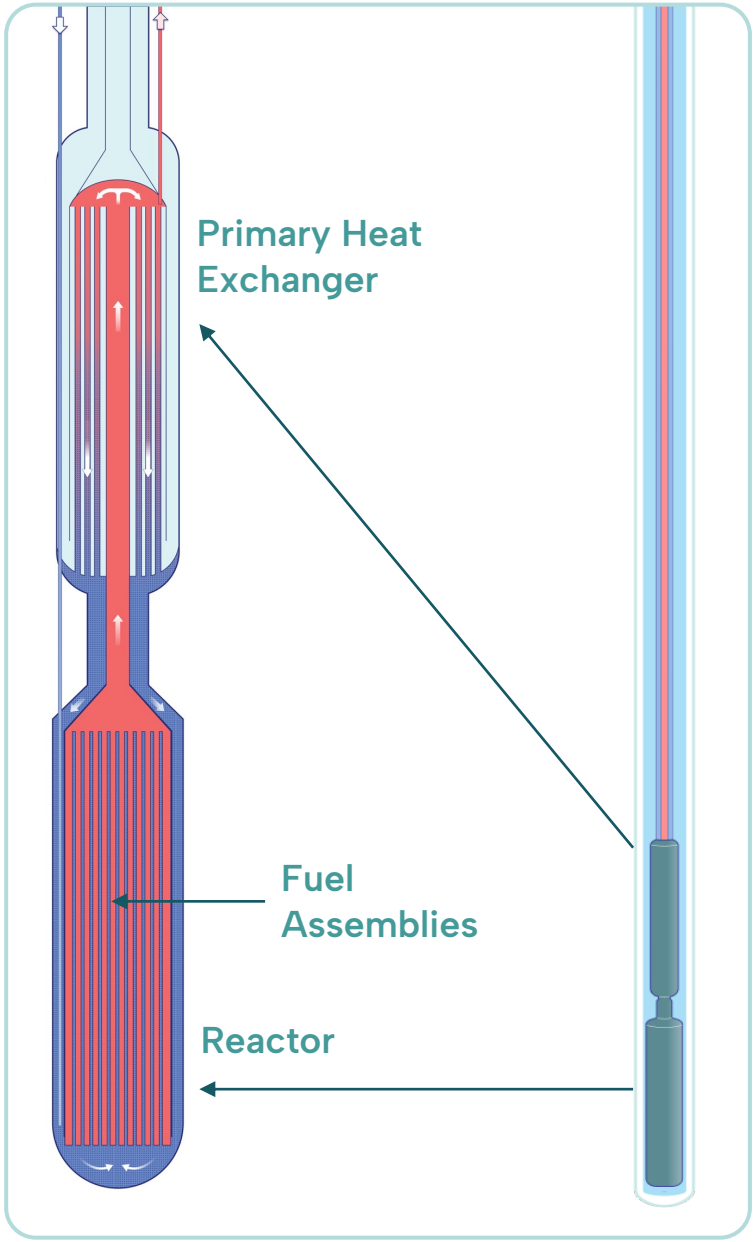
1. Primary Coolant is a Closed System (160 Atm)



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**

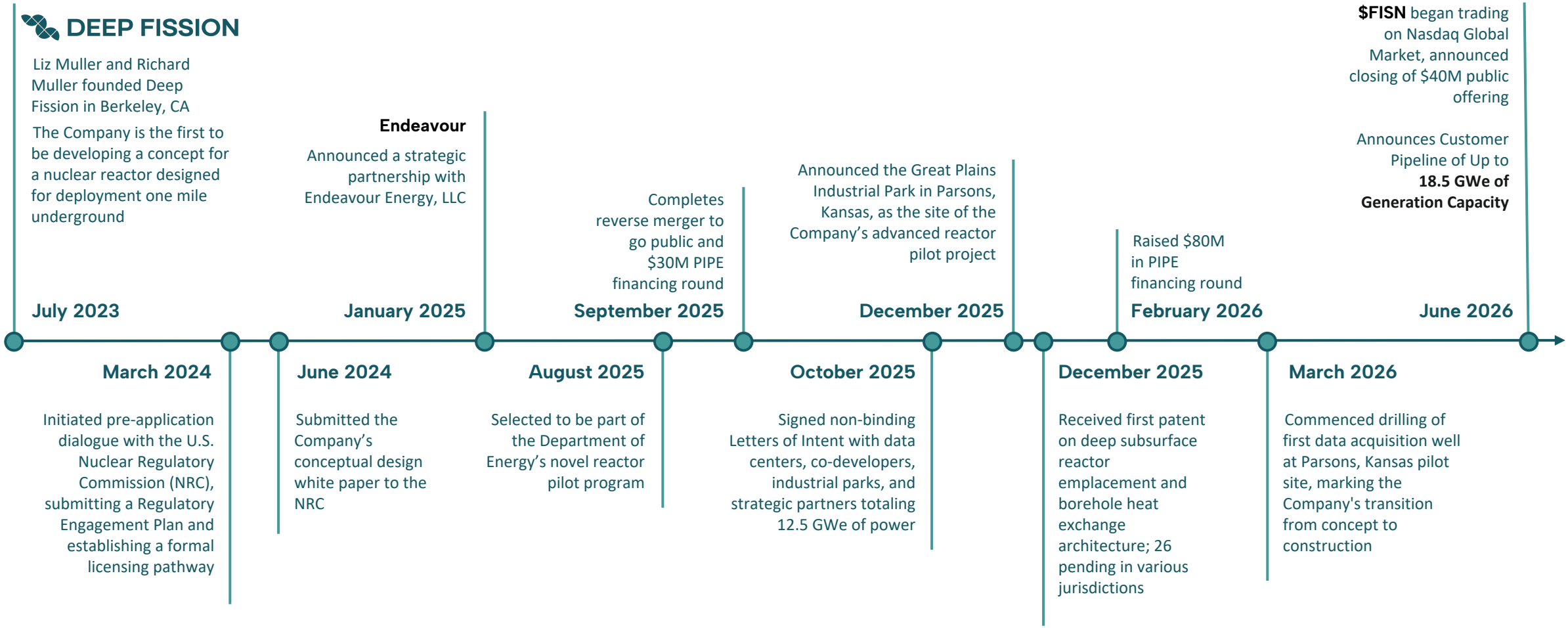
**DOE Authorizes Operation, NRC Regulates Safety of the Reactor**

### Established Technology:

Large-scale commercial PWR first went critical on December 2, 1957.[1] There are currently 64 licensed to operate PWRs in the U.S.[2]

[1]Library of Congress (loc.gov)
[2]Nuclear Regulatory Commission (nrc.gov)

# Company History and Key Milestones



# Key Highlights

1. **Substantial Market & Regulatory Tailwinds:**
   18.5 GWe Pipeline of Non-Binding LOIs

2. **Established Technology Pathway:**
   Light Water Reactor up to 15 MWe
   Using Standard LEU Fuel

3. **Rapid Speed of Deployment and Low Build Cost:**
   Build / Own / Operate (BOO) Business Model

4. **Enhanced Security Advantage:**
   Defense-Enabling Energy Deployment

5. **Depth of Team & Strong IP Stack:**
   38 Patents Pending, 2 U.S. Patents Issued

6. **Commercial Deployment Plan:**
   Milestone Execution, Strategic Relationships, and Defined Regulatory Pathway
   2027-2028 COD Goal

# 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

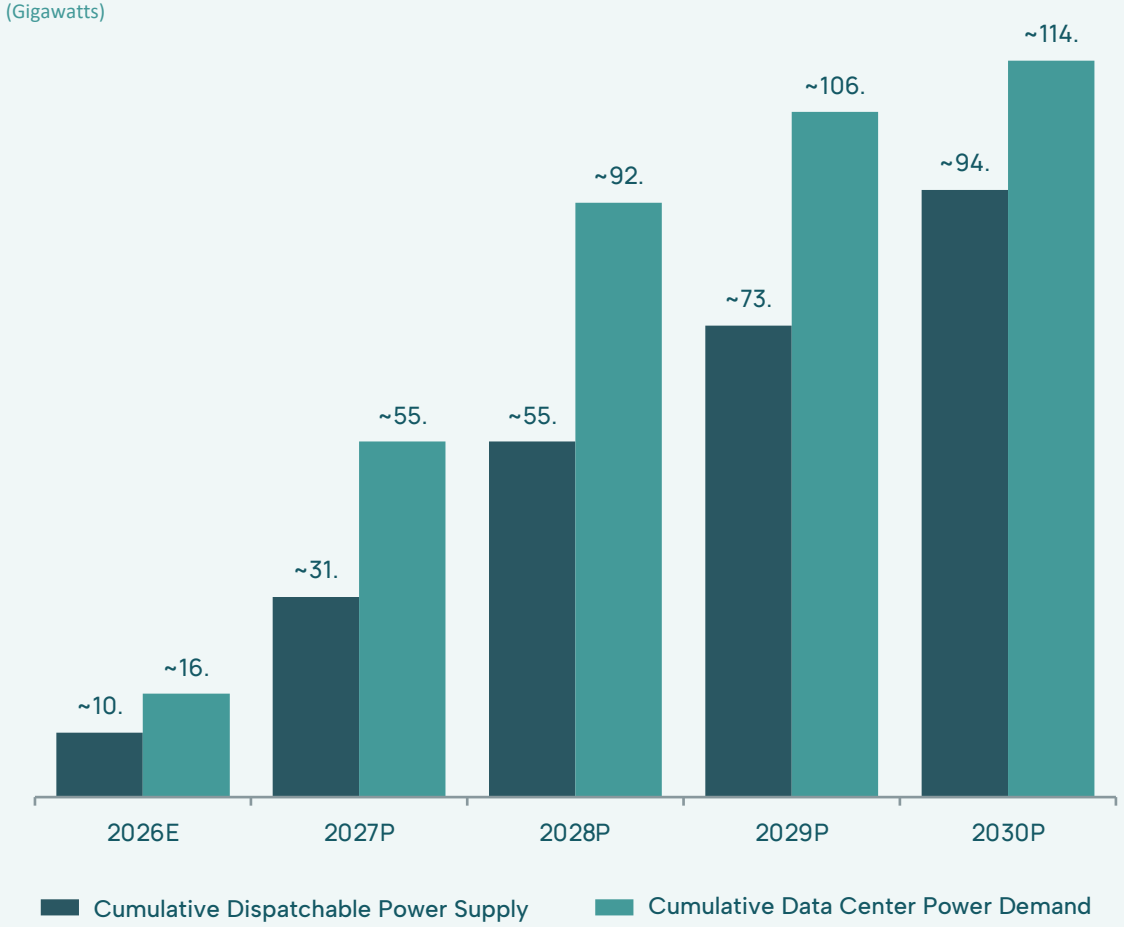
### Big Tech Decarbonization by 2030 Deadlines

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.

# Major Governmental Initiatives Propelling Nuclear Demand

## America-first policies have accelerated demand for nuclear energy production

### Policy Tailwinds

| | DEEP FISSION | |
|---|---|---|
| **Speed up Reactor Licensing** | ✓ | Deep Fission's regulatory strategy aligns with DOE's streamlined authorization framework for reactor demonstration and supports commercial licensing by NRC, building on licensing frameworks already in place for PWRs. |
| **Add 300 GWe by 2050** | ✓ | The Gravity Nuclear Reactor is intended to allow quick scaling. |
| **Faster Reactor Testing** | ✓ | On August 12, 2025, Deep Fission was selected as one of only 10 companies to participate in DOE Reactor Pilot Program. |
| **Deploy for AI & Military** | ✓ | Gravity Nuclear Reactor architecture is inherently modular and scalable, enabling energy-hardened underground deployment that may offer advantages for government and defense installations. |
| **Ramp Up Fuel Production** | ✓ | The novel approach of our reactor at-depth uses conventional LEU (not HALEU), which is more readily available than exotic alternative fuels (e.g., TRISO fuel). |
| **Spent Fuel Management** | ✓ | Our deployment model encompasses safe interim storage pending identification of national, long-term storage solutions. |



Note: LEU = Low Enriched Uranium, HALEU = High-Assay Low-Enriched Uranium

# Established Technology Pathway

### Scalable Power

Targeting up to 15 MWe per reactor, scalable with additional boreholes.

### Inherent Safety

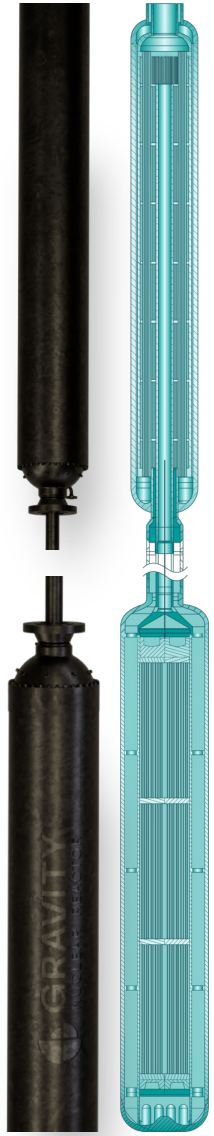
Utilize borehole water to provide essential pressure control and safety.

### Standard LEU Fuel

Utilize standard LEU fuel for pressurized water reactor (PWR). Expect initial 2x2 configuration and intend to move toward 3x3 PWR fuel assembly configurations.

### Spent Fuel Management

Encompasses safe interim storage pending identification of national, long-term storage solutions.



### Primary Heat Exchanger

Heat Transfer

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

### Reactor Canister

Standard Fuel Assemblies

Hydrostatic pressure from one-mile-deep column of water will provide 160 atm of reliable pressure, safely and naturally.

# Designed for Rapid Speed of Deployment

New reactor designs, advanced fuel cycles, and safety innovations are important, but not sufficient on their own for deployment at pace with compute infrastructure. Deep Fission believes it has a path to achieve near-term scale as determined by licensing efficiency, construction timelines, replicability/standardization, and supply chain readiness.

## Other Nuclear Energy Solutions

### Traditional/Surface Level Reactors

Credible, safe solutions that take decades to build, result in “not-in-my-backyard” pushback and often amplify costs to the point of cancellation.

### Above-Ground SMRs

Above ground small modular reactors are hindered by their ability to produce cost-effective electricity in the near term.

### Novel Reactor Startups

New solutions pose high risk with unproven upside—iterative, untested reactor technology as concepts advance through early engineering and validation stages.

## Deep Fission

Deep Fission is designed for rapid deployment, leveraging established technology, and engineered for economic transformation.


### ...With Deep Fission Offering a Quicker Solution

| | | |
|---|---|---|
| **Traditional Reactor** Pace | | **6–10 Years** from breaking ground to completion |
| **Above-Ground SMR** Pace | | **3–4 Years** from breaking ground to completion |
| **Gravity Nuclear Reactor** Pace | | Targeting as quick as **6 Months** for a single reactor deployment *NOAK basis* |

# 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** |

# Deep Fission 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.

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*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

Minimal, modularized and packaged surface infrastructure = Reduced targeting profile and resilient, distributed architecture potential

- Limited above-ground infrastructure is difficult to detect and reduces exposure to kinetic attack
- Enables multiple smaller assets that can be reset quickly vs. single-point of failure infrastructure

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

- Naturally shielded from drones, missiles, and surface-level sabotage
- Fuel and core systems are sealed and inaccessible during operation
- Significantly reduces risk of tampering, diversion, or forced access

## Logistical Resilience

Independent, continuous baseload power = Sustained operational support for :

- Military installations
- Forward operating environments
- Critical infrastructure and emergency response

Reduced logistics burden and long-duration operation = Energy resilience

- Not dependent on weather conditions (solar, wind)
- Not dependent on fuel logistics (diesel, LNG)
- A single reactor is designed to have longer refueling cycles, enabling persistent power in remote or contested locations

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

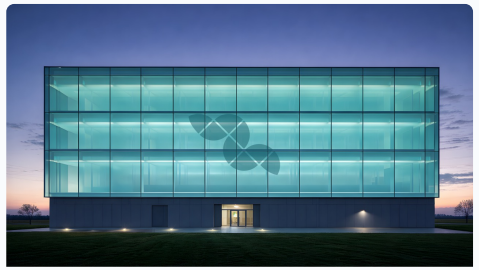
**Targeting First Half 2027: DOE Pilot Construction & NRC Licensing Submission**

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 15 GWe pipeline including site-host and off-take LOIs in KS, TX, UT

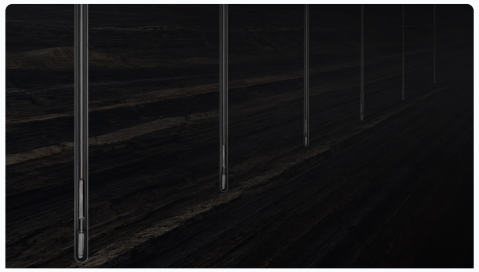
**First Half 2026: Drilling, Engineering & Emplacement Analysis**

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 (Cont'd)

## Strategic Relationships for Accelerated Commercial Pathways

### 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 (Cont'd)

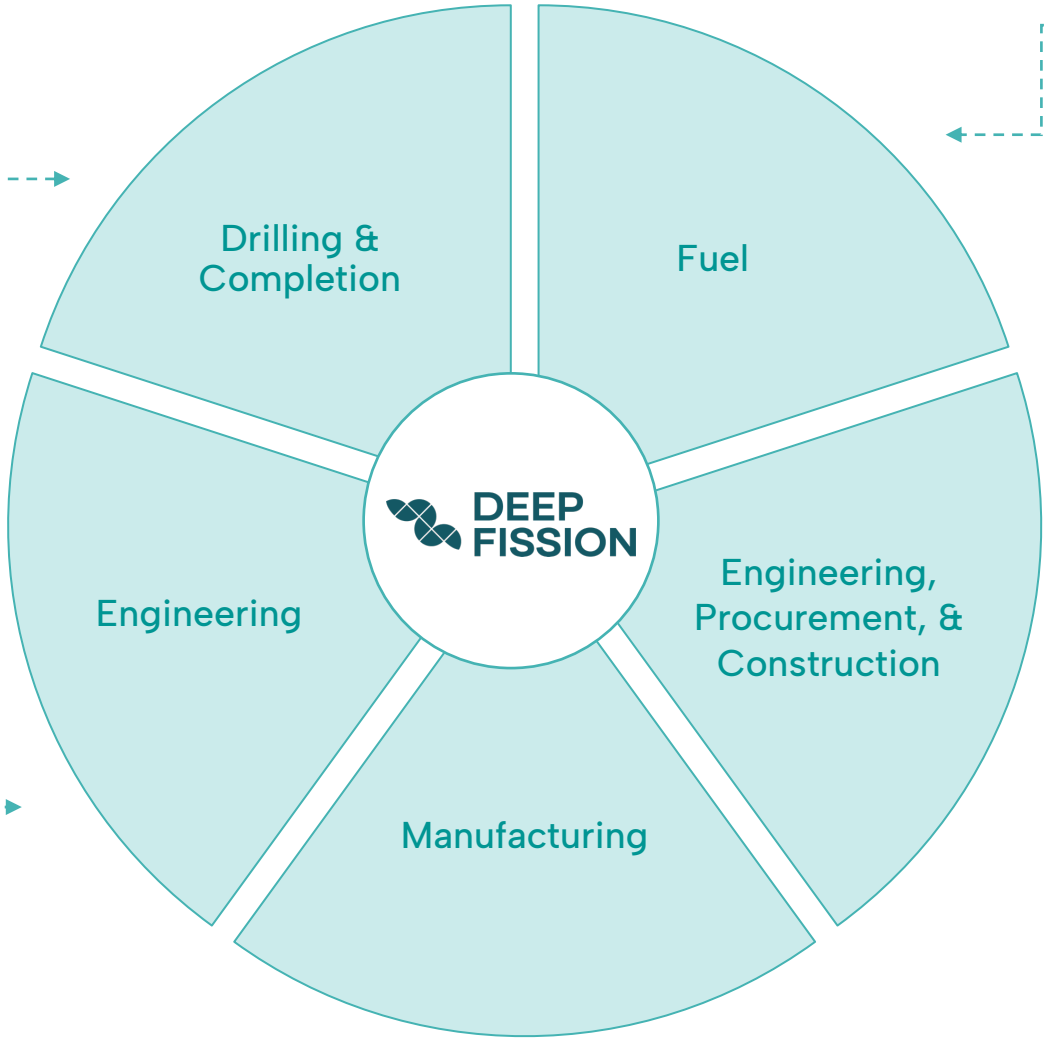
## Supply Chain: Strategic Relationships

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

# Commercial Deployment Plan (Cont'd)

## Phased Milestones

1 TARGETING 2026 – 2027

### Borehole Drilling, Installation and Emplacement

Data Acquisition + Analyses + Full Proof of Concept

2 TARGETING 2027

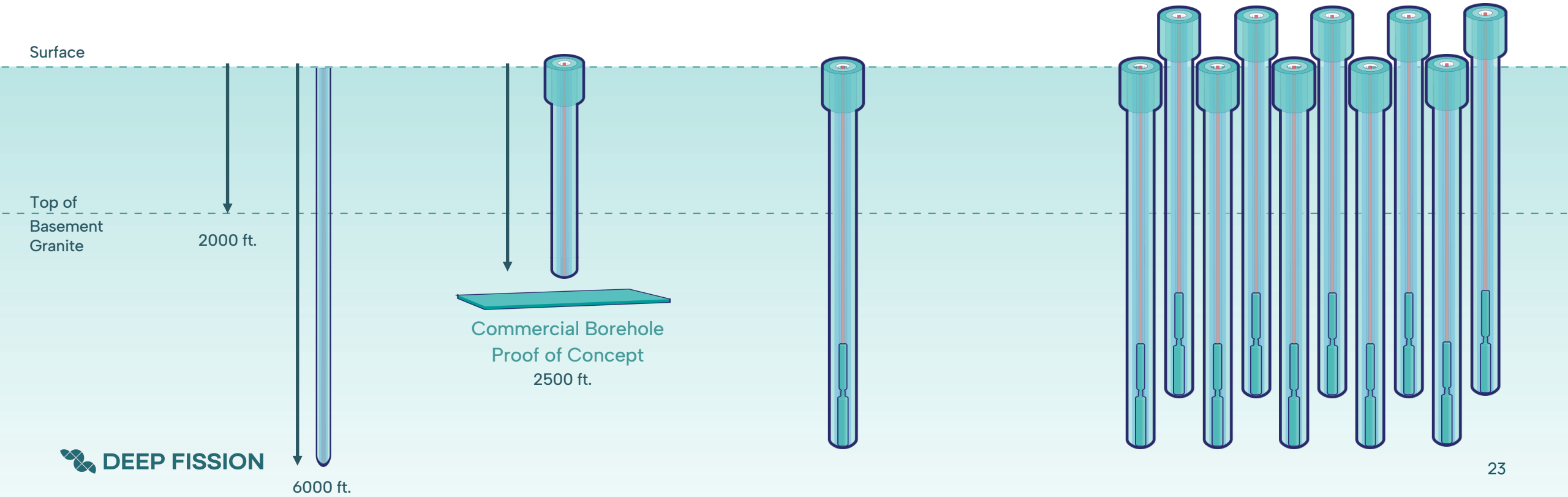
### DOE Pilot Authorization Milestones and Demonstration

NRC Commercial License at Kansas Site

3 TARGETING 2027 – 2028

### Potential Future Commercial Deployment Objective

Multiple Boreholes at Single Site

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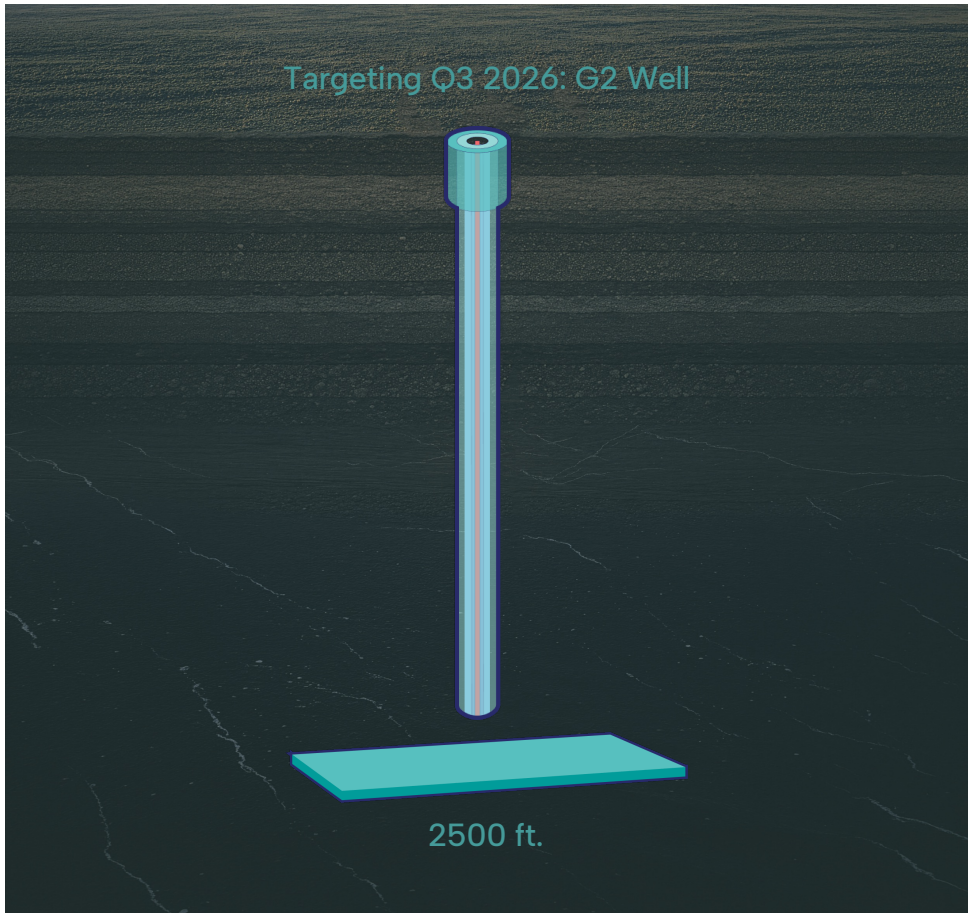
# Next Milestone: Commercial Borehole Proof of Concept

"G2 Well"




## What G2 Intends to De-Risk:

1. Ability to drill a large-diameter well in the target geology and handle subsurface complexity
2. Ability to manage lost circulation and preserve seal integrity through enlargements
3. Ability to test the emplacement and retrieval process in a field setting
4. Ability to test the mechanical assembly and thermal hydraulics in a field setting

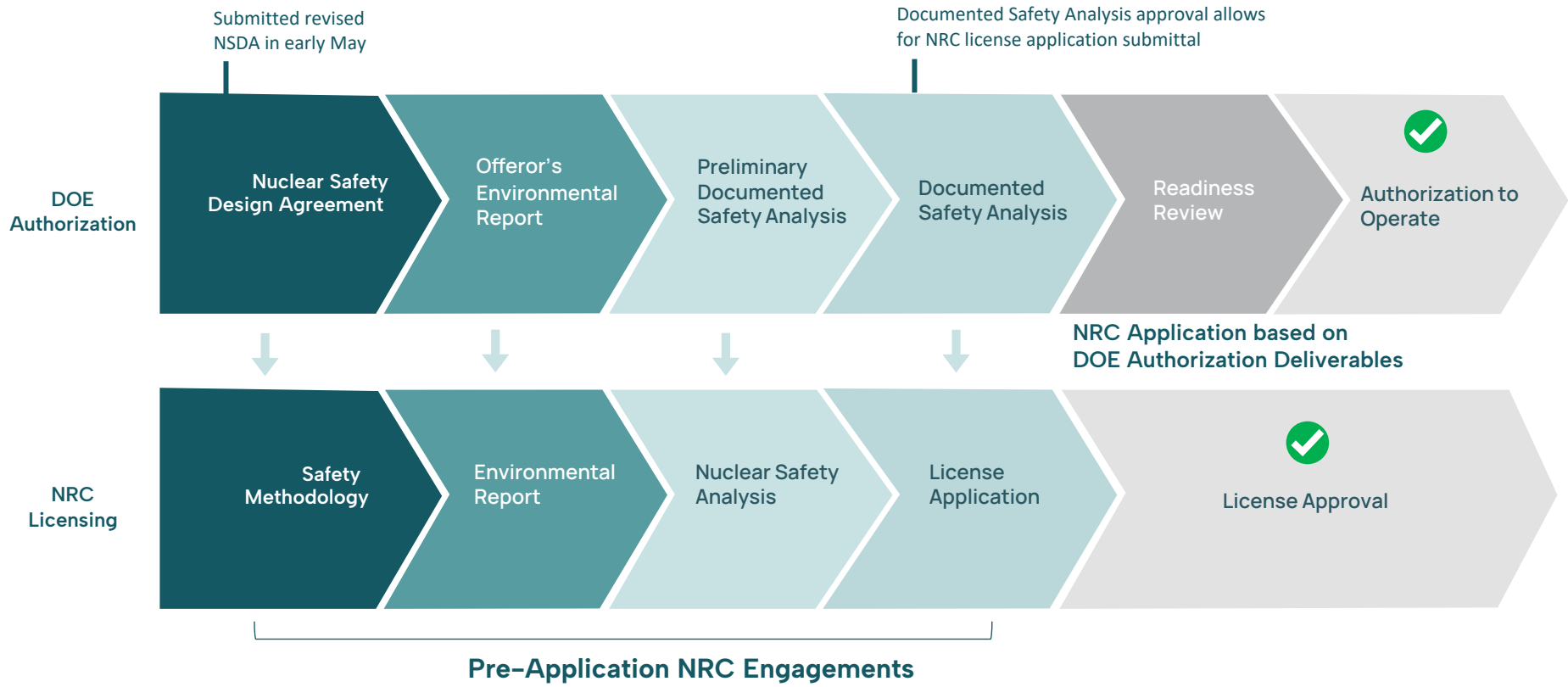
## G2 milestone is a focused proof-point program.

Use of funds concentrated on the most important next milestones: Larger borehole execution and advancing the regulatory path.

# 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

# Forward-Looking Statements

This document includes forward-looking statements within the meaning of federal securities laws. Forward-looking statements include statements regarding Deep Fission's technology, business strategy, regulatory activities, commercialization plans, anticipated deployments, market opportunities and future performance.

These 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 financing, regulatory, technical, operational, market, supply chain, construction and commercialization risks, as well as the 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.

DEEP FISSION

# Powering Humanity from a Mile Underground

GRAVITY™ NUCLEAR REACTOR