



# Powering Humanity from a Mile Underground

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VP Regulatory Affairs



**Learn more at**  
[deepfission.com](https://deepfission.com)

# Recent News and Media

Deep Fission Announces Initial Planned Sites  
in Texas, Utah, and Kansas for Co-  
Development of Nuclear Projects

[Press Release](#)

Deep Fission Nuclear Completes \$30M  
Financing in a Go-Public Transaction

[Press Release](#)

Burying Nuclear Reactors Might Make Them  
Cleaner and Cheaper

[The Economist](#)

# Why Aren't We Doing More Nuclear?

## Public Answer

# Waste

Deep Isolation is the first company commercializing nuclear waste disposal in deep boreholes, leveraging **proven drilling practices** to safely isolate waste in deep underground repositories.

## Industry Answer

# Cost

Deep Fission is revolutionizing the energy landscape with innovative technology that places small modular PWR in a borehole one mile underground, addressing the containment, pressure systems, & emergency core cooling that account for **~75-90% of nuclear's cost.**

Customer Question —  
Key Insight

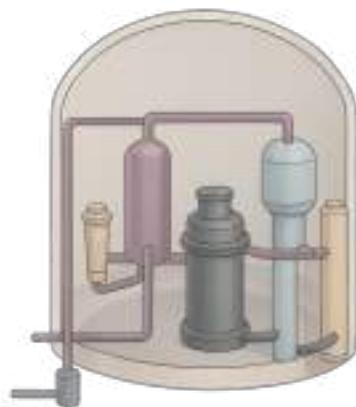
“

If we accidentally put fresh fuel down a disposal borehole, does it risk going critical?

”

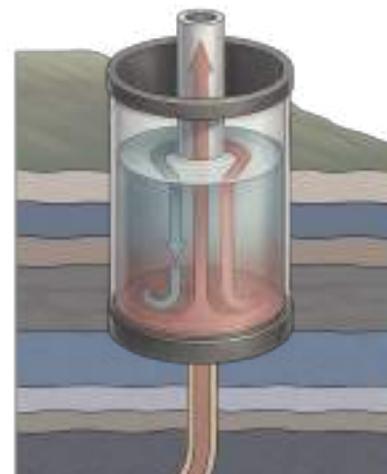
Integrating the most proven advancements from three industries to engineer a breakthrough, affordable solution.

### Pressurized Water Reactor



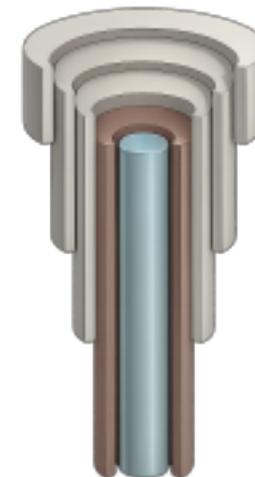
Hydrostatic pressure from one-mile-deep column of water provides **160 atm of invulnerable pressure safety**, naturally. PWR uses readily available **LEU fuel**.

### Geothermal Methodology



Novel deployment approach applies **proven geothermal methodology for energy transfer** from the natural heat sink properties of the surrounding geology.

### Deep Borehole Drilling



Evolved borehole design is 100% drillable using **standard oil & gas infrastructure for containment** a mile underground.

# Deep Fission may be the biggest scientific breakthrough in nuclear power technology in last 50+ years.

**Inherent Safety and Containment**

**Natural Emergency Core Cooling**

**No Need for Expensive Mega-Structures**

**Deep Geothermal**  
Steam Generator leveraging conventional geothermal technology

**Deep PWR**  
2x2 Standard Fuel Assemblies with readily available LEU fuel

**Deep Geo Vault**  
Standard Borehole drilled utilizing readily available technology

# Not just viable— Profitable from day one.

First-of-a-kind target LCOE of 5-7¢ enables nuclear project economics to be cost competitive with other traditional and renewable forms of energy.

Deep Fission Expected  
Contracted Sales Price (¢/kWh)

**8-13¢**

Including energy, capacity,  
and environmental attributes

\*excludes Owner costs, EPC fee and contingencies

	Levelized Cost of Electricity (¢/kWh)	Overnight Installed Cost (\$/kW)
Solar PV + Storage (Utility)	6 – 21¢	\$850 – 1,400
Wind + Storage (Onshore)	4.5 – 13.3¢	\$1,300 – 1,900
Coal	6.9 – 16.8¢	\$3,310 – 7,005
Gas Combined Cycle	4.5 – 10.8¢	\$850 – 1,300
US Nuclear (Vogtle)	18.6¢	\$15,000
Advanced /Small Modular Nuclear	N/A	~\$8,000 – 9,000
<b>Deep Fission</b>	<b>5 – 7¢</b>	<b>~\$4,000* (first 15MWe reactor)</b>

# Up to 80% cost reduction compared to competitor priced projects.

<u>Feature/Metric (1GW)</u>	 <b>Traditional Nuclear</b>	 <b>Advanced Reactors</b>	 <b>DEEP FISSION</b>
<b>Build Time</b>	6-10 years	3-4 years	~6 months
<b>Construction Costs</b>	\$15B+	\$8-9B	\$2.5-3B
<b>Fuel Type</b>	LEU (readily available)	HALEU (hard to source)	LEU
<b>Levelized Cost of Energy (LCOE)</b>	18¢+/kWh	N/A yet, likely > 10¢	5-7¢ per kWh

# Regulatory Advantage: Deep Fission selected as one of 10 companies for the U.S. Department of Energy Nuclear Reactor Pilot Program —

A fast-track initiative to design, build, and operate advanced test reactors, with the ambitious goal of reaching criticality by **July 4, 2026.**



# Go-To-Market Rollout— Rapid Scale from First Reactor to First Focus: **Data Centers**

Secured site-host and off-take LOIs at three locations:

- Kansas (definitive agreement in progress)
- Texas, Utah (continued site diligence)

**1**  
reactor

**15MWe Build/Operate First Unit**

DOE Nuclear Reactor Pilot Authorization by July 2026

**10**  
reactors

**150MWe Build  
9 Additional Units**

Pilot Commercial Project  
at Test Site

**100**  
reactors

**1.5GWe Up to 100  
Boreholes on Three Acres**

Partnership with Endeavour  
Edged Data Centers

# Time is the Currency in the Industry Right Now

—*Arman Shehabi*

Lawrence Berkeley National Laboratory, Energy Department



# Thank You— Get in Touch!

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**Elizabeth Muller**

**CEO and Co-Founder**  
Co-Founder, Board Chair & Former CEO, Deep Isolation (nuclear waste disposal)  
Co-Founder, Berkeley Earth



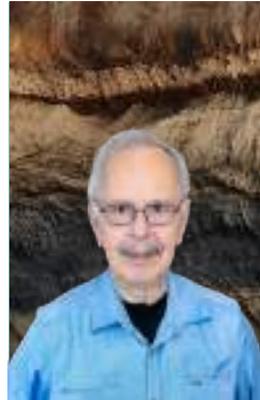
**Mark Pérès**

**VP Engineering**  
40+ years in Nuclear Engineering



**Rani Franovich**

**VP Regulatory Affairs**  
30 years at NRC



**Richard Muller PhD**

**CTO and Co-Founder**  
Co-Founder, Deep Isolation  
MacArthur “Genius”  
80+ nuclear patents  
Professor Emeritus, UC Berkeley



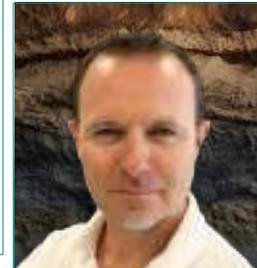
**Michael Brasel**

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30 years across nuclear, fossil, renewable energy



**Kwadwo Adutwum**

**Nuclear Reactor Core Design Engineer**  
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**DEEP FISSION**