

Shepherd Power


Operational Considerations for Commercial-Scale Micro-reactor Deployment

NRC Commission Briefing

Micro-reactors: Current Status and Moving Forward

April 10, 2025





**We power the
industry that
powers the world.**

34k
Employees¹

\$8.87B
FY 2024
Revenue

551
Locations

\$1.11B
FY 2024
Adjusted EBITDA

59
Countries

\$953MM
FY 2024
Free cash flow

Who We Are

NOV is a global leader in oil and gas solutions that drives industry innovation and sustainability with cutting-edge technology and a legacy of over 150 years of excellence and reliability.

NOV has created **Shepherd Power** to bring our expertise in manufacturing and our innovative approach to the nuclear industry.

¹ Full time equivalent workers.



Our Mission and Vision

Our mission is to **commercialize** advanced nuclear reactors by owning and operating reactors and offering long-term energy purchase agreements.

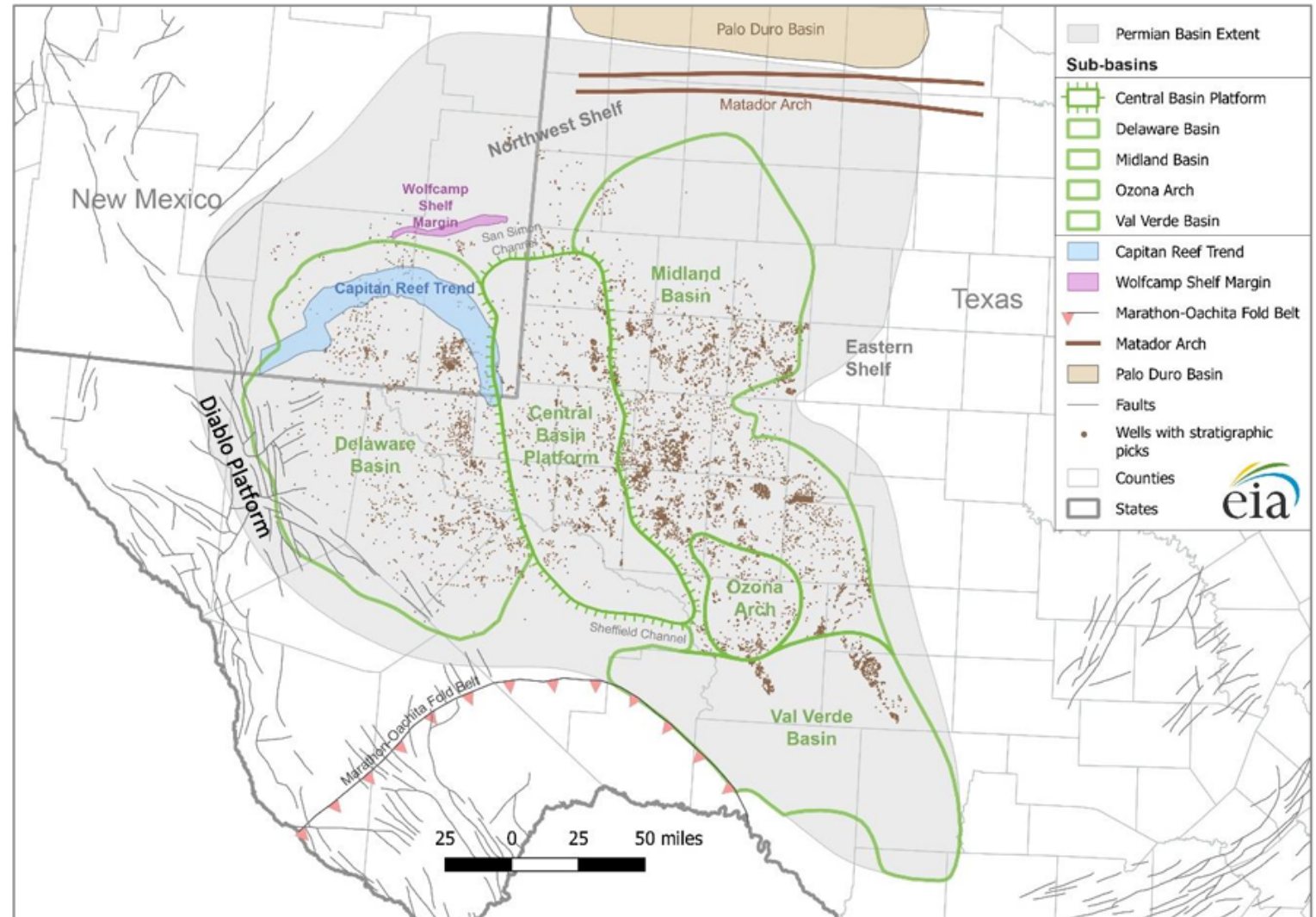
Our vision is a world where **energy availability** is taken for granted. Where lights shine on children's homework regardless of continent, where factories run and produce goods for local economies, and where hospitals save lives on cloudy days.

We believe in a world of **energy abundance**, and we believe baseload, deployable, carbon-free advanced nuclear is the key to getting us there.



Deployment Geographies, Applications, and Demand

- Significant remote load growth is expected in the Permian Basin over the next 10 to 20 years
 - Increasing electrification of oil and gas exploration and production activities
 - Competition for demand from other large loads (e.g., data centers)
 - Transmission and distribution challenges
- **Micro-reactors offer a useful solution to the oil and gas industry's growing remote power needs**
- Operating model must be aligned with distributed nature of the load and meet customer needs to enable deployment



Enabling the Operating Model



- Micro-reactor attributes, standardized designs, and manufacturability will enable a paradigm shift in nuclear power operating models
- Commercialization necessitates an optimized operations and maintenance profile

Regulatory Engagement

- Initial regulatory engagements with NRC focused on mitigating commercial risks and identifying a pathway from projects to products
- Shepherd Power is conducting pre-application engagement with the NRC and continuing to support key policy initiatives
- Future white paper and topical report submittals will be operationally focused, but likely aligned to specific reactor design(s)



Thank you.

SHEPHERD POWER

