NANO NUCLEAR ENERGY INC.

NASDAQ: NNE

KRONOS MMR™

October 2026

This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

About Us

MISSION STATEMENT
NANO's mission is to establish the vertically integrated domestic reactor, fuel enrichment, fabrication, and transportation infrastructure to sustain the next generation of clean nuclear energy.

Vision
To power the world by delivering clean, safe, and limitless advanced nuclear energy.

WELL-FINANCED GROWTH
$600M+ raised; $578M on balance sheet (Feb 2026); $900M shelf registration approved (Mar 2026).

MARKET VALIDATION
Added to the Global X Uranium ETF (URA), which holds over $4B in net assets.

NANO Nuclear Energy Inc.

WHOLLY-OWNED SUBSIDIARIES

STS Secured Transportation Services

HALEU Energy Fuel Inc.

2021
NANO Nuclear Founded in NYC by Jay Jiang Yu

2024
Initial Public Offering (NASDAQ: NNE)

2025
Acquired key assets from Ultra Safe Nuclear Company (KRONOS & LOKI MMR)

2026
First MMR to submit a Construction Permit Application to the U.S. Nuclear Regulatory Commission (NRC)

2026
Acquired STS, adding revenue and 20+ years of nuclear logistics

This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

U.S. Energy Capacity vs. Demand

1985-2005 Steady Growth

- Demand and capacity rise with economic expansion.
- Coal dominates; nuclear holds steady; renewables negligible.

2005-2015 Gas & Renewable Surge

- Fracking boom slashes gas prices → gas-fired generation soars.
- Wind and solar scale rapidly with falling costs and tax incentives. Coal retirements accelerate.

2015-2020 Transition Era

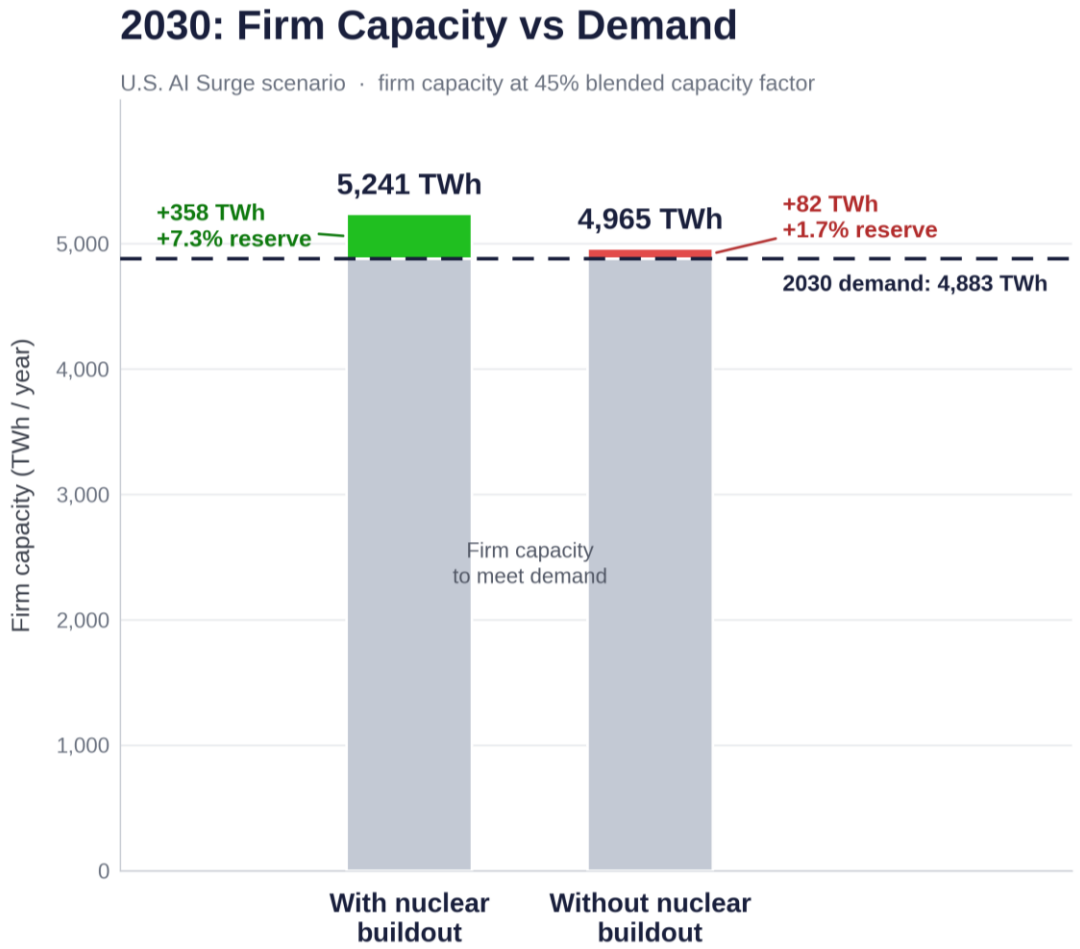
- Renewables outpace fossil fuel additions.
- Demand plateaus; nuclear flat; coal continues to decline.

2020-2024 Recovery & Nuclear Restart

- COVID slows demand and project timelines.
- Vogtle Unit 3 comes online (2023) — first new nuclear in decades.

2024-2035 Nuclear Renaissance

- **With:** SMRs, advanced reactors, and life extensions expand firm capacity. Supply stays ahead of accelerating AI-driven demand.
- **Without:** AI/data centers add ~100 TWh/year. Capacity growth lags → **potential supply gap by 2030.**



Historical data was sourced from the U.S. Energy Information Administration (EIA, 1990–2023). Projections from 2024–2030 were modeled using scenario-based assumptions: demand grows by +100 TWh/year, driven by AI/data centers (aligned with DOE and industry forecasts), and capacity grows by +20 GW/year with nuclear or +10 GW/year without. Installed capacity was converted to TWh/year using 8.76 TWh/GW. For projected years only, firm capacity was estimated using a 45% blended capacity factor.

This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

Clean Energy Alternatives Comparison

Category	Advanced Nuclear	Solar	Wind	Fuel Cells
Capacity Factor	>92%	20 — 30%	30 — 45% Onshore	85%, limited by price and availability of fuel
Land Footprint (600 MWe)	40 Acres	3,000 – 5,000 Acres	18,000 – 36,000 Acres	20 – 60 Acres
Geographic Flexibility	Flexible and Adaptable	Must be in a solar friendly region	Must be in high-wind region	Must be near fuel supply for frequent refueling
High Temperature Process Heat Option	Available	Not Available	Not Available	Not Available

Significant Drawbacks

Advanced Nuclear

Deployment timeline: First commercial KRONOS units come in 2030. For near term deployments, KRONOS cannot supply power before 2030.

Solar

Capacity Factor: At 20-30% CF, Firm large scale solar developments require costly overbuild, massive storage, or grid support. Intermittency of sunlight also massively constrains solar energy.

Wind

Variability & Siting: Wind offers low-cost clean power, but intermittency and location limits create reliability, storage, and transmission challenges.

Fuel Cells

Fuel dependency: Economics are bound by fuel cost and supply chain. Natural-gas-fed fuel cells have a carbon problem; green-hydrogen-fed fuel cells depend on hydrogen infrastructure that's still being built and is expensive today.

This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

Comparison of Reactors

Microreactors

MMR

POWER OUTPUT

0.1 – 20 MWe

Scalable past 1 GW

FORM FACTOR

Modular, Scalable, Mobile

CAPEX

Low

GRID

Independent

SUPPLY CHAIN

Flexible supply chain

EMERGENCY PLANNING ZONE

Contained within site boundary

Small Reactors

SMR



POWER OUTPUT

20 – 300 MWe

FORM FACTOR

Fixed Site, Scalable

CAPEX

Moderate

GRID

Dependent (conditional)

SUPPLY CHAIN

Mostly specialized providers

EMERGENCY PLANNING ZONE

Contained within site boundary (varies)

Large Reactors

LWR



POWER OUTPUT

300 – 1,000+ MWe

FORM FACTOR

Fixed-site, large infrastructure

CAPEX

High

GRID

Dependent

SUPPLY CHAIN

Highly specialized providers

EMERGENCY PLANNING ZONE

10+ Miles

This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

KRONOS MMR Specifications

15 MWe
ELECTRICAL POWER
Per unit · Scales to GW+

45 MWth
THERMAL POWER
660°C process heat

0 mi
EMERGENCY PLANNING ZONE
Contained within site fence

3-7 yrs
FUEL CYCLE
Streamlined refueling process



- **TRISO fuel**
- **Helium coolant**
- **Supports commercially available 9.75% LEU+ & future 19.75% HALEU**
- **Rankine Cycle (35-36%)**
- **Inherent Passive Safety**

This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

LOKI MMR™ Overview

100 kWe – 1 MWe

ELECTRICAL OUTPUT

Per unit · scales in parallel

3 MWth

THERMAL OUTPUT

Provides Process Heat Option

40%+

THERMAL EFFICIENCY

Supercritical CO_2 cycle



TRISO

FUEL FORM

Stable at high temperatures

19.75% – 9.9%

ENRICHMENT

LEU+

up to 10 yr

Fuel Lifetime

Sealed Core

LOKI MMR Highlights

- **sCO_2 power cycle**
- **Helium / sCO_2 coolant**
- **Modular & interconnected**
- **Multi-modal transport**
- **Purposely built for space applications**
- **DOE NRIC FEEED selected**

This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

KRONOS Cluster

Optimized 14-unit deployment for utility-scale loads

14 Reactors × 15 MWe

210 MW

per cluster



1×	2×	3×	N×
210 MW	**420 MW**	**630 MW**	**1+ GW**
Single Cluster	Double Cluster	Triple Cluster	Fleet

N+1 Redundancy: Refueling takes just one reactor (15 MW) offline at a time, while the remaining reactors continue delivering full power. The cluster maintains 100% of capacity through refueling events with no full-plant outages.

This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

KRONOS Competitive Advantage

Vertically Integrated Ecosystem

NANO facilitates reactor design, transportation, and the full nuclear fuel supply chain through its subsidiaries.

Walk Away Safety

Passive safety architecture shuts the reactor down and enables continued cooling without operator action or external power.

LEU+ & HALEU Compatible

Designed to run on both current commercially available enriched fuel sources and future optimized sources.

Dual Use Output

KRONOS delivers both electricity and high-temperature process heat.

Load Following Capability

Output can ramp to match shifting process demand instead of running at a fixed setpoint.

Subgrade Reactor Core

Underground reactor vault increases passive safety features and decreases visible site footprint.

Optimized For Colocation

Small reactor footprint and EPZ ending at the site boundary allows colocation with data centers, communities, industrial facilities, etc.

De-Risked Deployment Pathway

Experienced NRC/DOE officials lead licensing, DOE and DoD co-investment partnerships are in place, and UIUC R&D follows a phased TRL pathway.



This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

KRONOS Use Cases

KRONOS Reactor Solution

Reliable Supply
3-7 year fuel cycle; multi-unit redundancy keeps power flowing during refueling.

Scalable to Gigawatt
Modular units stack to support site growth from MW to GW scale.

Built-In Storage
Integrated thermal storage allows for load following to meet demand peaks.

Off-Grid Capable
No grid interconnection required — direct power to site loads.

Simplified Fuel Logistics
STS Nuclear, a NANO Nuclear subsidiary provides comprehensive fuel transport services

Infrastructure

- Data centers
- Remote communities
- Resorts & Hospitals
- Maritime applications
- Airports
- EV Charging

Industrial Processes

- Process heat
- Desalination
- Chemical manufacturing
- Petrochemical refineries
- Concrete production
- Remote and Critical Minerals Mining

Defense

- Military bases
- Black-start capability
- Forward operating bases
- Critical mission resilience
- Energy independence
- Resilient power supply

This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

KRONOS Achievements

FIRST DEPLOYMENT

University of Illinois Urbana-Champaign

Central Campus Citing

KRONOS is sited on campus at U of I. The zero-mile EPZ allows for the reactor to safely operate across the street from student housing.

Commercial Scale Demonstration

At a 15 MW electrical output, the U of I reactor is the same design and power generation capacity as future commercial units.

Campus and Municipal Electricity

Including campus electricity and EV charging for Urbana-Champaign buses.



REGULATORY ROADMAP

Oct 2025	May 2026	2027	2030
Groundbreaking	CPA accepted for review by NRC	Operating license to be submitted	Operational

First in CNSC Review

KRONOS is the first advanced reactor to enter vendor design review with the Canadian Nuclear Safety Commission.

US Air Force Contract

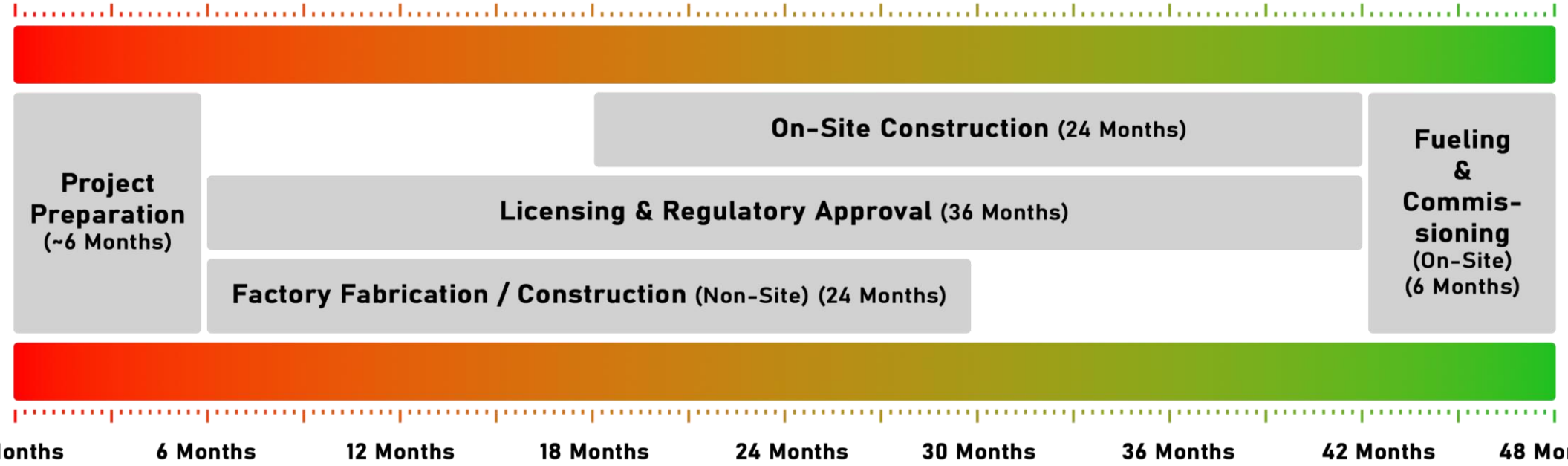
Direct-to-Phase-2 feasibility study at Joint Base Anacostia-Bolling (JBAB), Washington DC.

CRADA with INL

10 year cooperative Research and Development Agreement (CRADA) signed with Idaho National Laboratory.

This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

Deployment Timeline



1

Project Preparation

Site selection, stakeholder engagement, and regulatory strategy. Often overlaps with initial NRC pre-application interactions.

2

Licensing & Regulatory Approval

Formal application, review, and approval by the NRC. Led by a team with 40+ years of NRC licensing experience. Runs in parallel with off-site fabrication.

3

Factory Fabrication

Modular components built off-site to reduce on-site construction time. Duration depends on design maturity and supply chain readiness.

4

Site Construction

Civil works, reactor installation, and on-site facility setup. Duration driven by reactor scale, site complexity, and required local infrastructure.

5

Fueling & Commissioning

Final assembly, fueling, and integrated system testing. Includes operational readiness validation and final regulatory sign-off.

This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

Spent Fuel Management for Micro Modular Reactors

A safe, secure, and managed pathway from reactor to long-term disposal

1 Cooling in Reactor

After irradiation, fuel is cooled in the reactor for a few days.



2 On-Site Storage Cask

Cooled fuel is moved to a cooling and/or on-site storage cask. Fuel cools for a few years then is in interim on-site storage for years.



3 Interim Storage (CISF)

Spent fuel can be shipped to a Consolidated Interim Storage Facility (CISF) for longer-term storage.



Example: Holtec's proposed CISF in New Mexico (was not ultimately opened).

4 Final Disposal

Long-term, permanent disposal in a Deep Geological Repository (DGR).



Example: Yucca Mountain (U.S.) would have been a DGR. It was not opened

Space Requirements

Spent fuel storage uses a small footprint.

- ~45-50 m^2 per refueling cycle (3 years for LEU+, 7 years for HALEU)
- A single reactor may require, for a 40-year life anywhere between 1785 m^2 (single block per cask, LEU+) and ~250 m^2 (HALEU, multiple blocks per cask) for interim fuel storage.
- For fuel fresh out of the reactor, storage wells in the ground can be used in the existing site footprint. This takes up minimal space, and then the fuel is moved to a cask for storage.



Less than a very small parking lot for laydown area (for midterm storage).

Additional Options

Reprocessing

- Spent fuel can be shipped to France for reprocessing to recover usable materials and reduce waste volume.

Deep Geological Repositories

- Finland and Sweden have DGRs (deep geological repositories).

Policy & Regulatory Context

- DOE and the government are strongly supporting MMRs and SMRs, which means long-term storage solutions are essential.
- The US government (DOE) is leading permanent spent fuel management solutions, and it will require changes to existing legislation.

Key Takeaways

- **Proven pathway:** reactor → on-site storage → CISF → DGR (or reprocessing).
- **Small footprint:** storage takes up minimal space (less than a small parking lot for midterm storage).
- **Multiple options:** on-site storage, CISF, reprocessing, and DGRs.
- **Growing urgency:** MMR deployment requires long-term storage solutions and legislative updates.

MICROMODULAR REACTOR DEPLOYMENT CONSIDERATIONS

Successful deployment aligns the site, licensing pathway, infrastructure, supply chain, and operating model.

1 SITE & ENERGY NEED

- Load profile, reliability and growth
- Land, geotechnical and hazard studies
- Cooling, water and environmental constraints

2 LICENSING & REGULATORY

- Applicable NRC pathway and schedule: 10 CFR Parts 50, 52, 53, 57
- Site-specific reviews, permits and NEPA
- Safety, security and emergency planning

3 GRID & INFRASTRUCTURE

- Electrical interconnection and upgrades
- Heat / steam integration, if applicable
- Roads, utilities and construction access

4 FUEL & SUPPLY CHAIN

- Fuel availability, qualification and delivery
- Long-lead components and qualified vendors
- Transport, storage and spent-fuel strategy

5 DELIVERY & ECONOMICS

- EPC / contracting and cost allocation
- Schedule, contingencies and financing
- Multi-unit scope and shared infrastructure

6 OPERATIONS & LIFECYCLE

- Operator model, staffing and training
- Maintenance, refueling and outage planning
- Decommissioning funding and end-of-life plan

KEY DEPLOYMENT GATE

Confirm site requirements, licensing basis, fuel path, delivery model, and operating responsibilities before committing to firm cost and schedule.

This presentation contains proprietary information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

Policy Recommendations for Vermont

RECOMMENDATIONS

- **Consider replacing legislative approval requirement with a municipal opt-in pathway**
- **Explore nuclear eligibility under a broader clean-energy standard**
- **Designate a state lead to coordinate nuclear development and permitting – create a "one-stop-shop"**
- **Solicit interest from communities, utilities and potential customers; host local informational sessions**
- **Assess potential sites for advanced nuclear**
- **Consider cost-shared feasibility and site-readiness grants for willing communities**

HAPPENING IN OTHER STATES

CT

- Established a municipal opt-in pathway for advanced nuclear
- Created a site-readiness program of up to $5M (in development)

IL

- Lifted its nuclear moratorium in phases, beginning with small reactors
- Conducted a statewide inquiry into nuclear development opportunities – including asking communities if they were willing to host

TX

- Established a state nuclear office to assist with development and permitting
- $350M development fund includes early-stage grants up to $12.5M with a 50% match

NY/NJ

- NY: Solicited interest from potential host communities
- NJ: Lifted its nuclear moratorium; created a nuclear procurement program

This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

NANO's Services & Capabilities

Feasibility study

Site evaluation to assess reactor placement requirements based on

Licensing-as-a-service

End-to-end licensing guidance from a team built on deep regulatory expertise.

In-house NRC expertise

Community & state engagement

Local outreach and state-level agency support for projects, including licensing and permitting support and developing state policy for advanced nuclear

Fuel & transport

Fuel cycle support led by Secured Transportation Services (STS), including fuel acquisition and spent fuel storage.

Strategic consulting

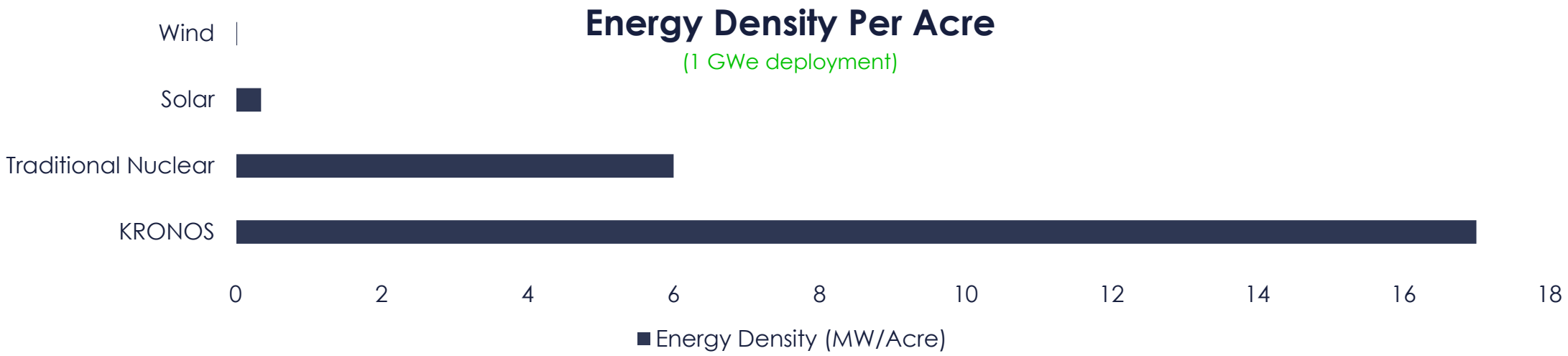
Guidance on funding opportunities, supply chain, and project development.

Operations training

Education and training programs to prepare operations teams, including support for internal audit structuring during the operational lifetime.

This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

Reactor Siting Comparison



Reactor Siting Considerations

Emergency Planning Zone (EPZ), the area around a reactor in which formal emergency response plans must be maintained, for all NANO microreactors is contained within the nuclear site footprint.

Economies of Scale: At higher numbers of units, modular design allows for greater land usage efficiency (e.g. 16 units does not require 16 times the footprint requirement of a single unit).

Number of Reactors	Nuclear Site Footprint	Power Generation Footprint (Non-Nuclear)	Total Footprint
1 Unit (15 Mwe)	1 Acre	1 Acre	2 Acres
4 Units (60 MWe)	3.5 Acres	3.5 Acres	7 Acres
16 Units (240 MWe)	10 Acres	10 Acres	20 Acres
67 Units (1 Gwe)	30 Acres	30 Acres	60 Acres

This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

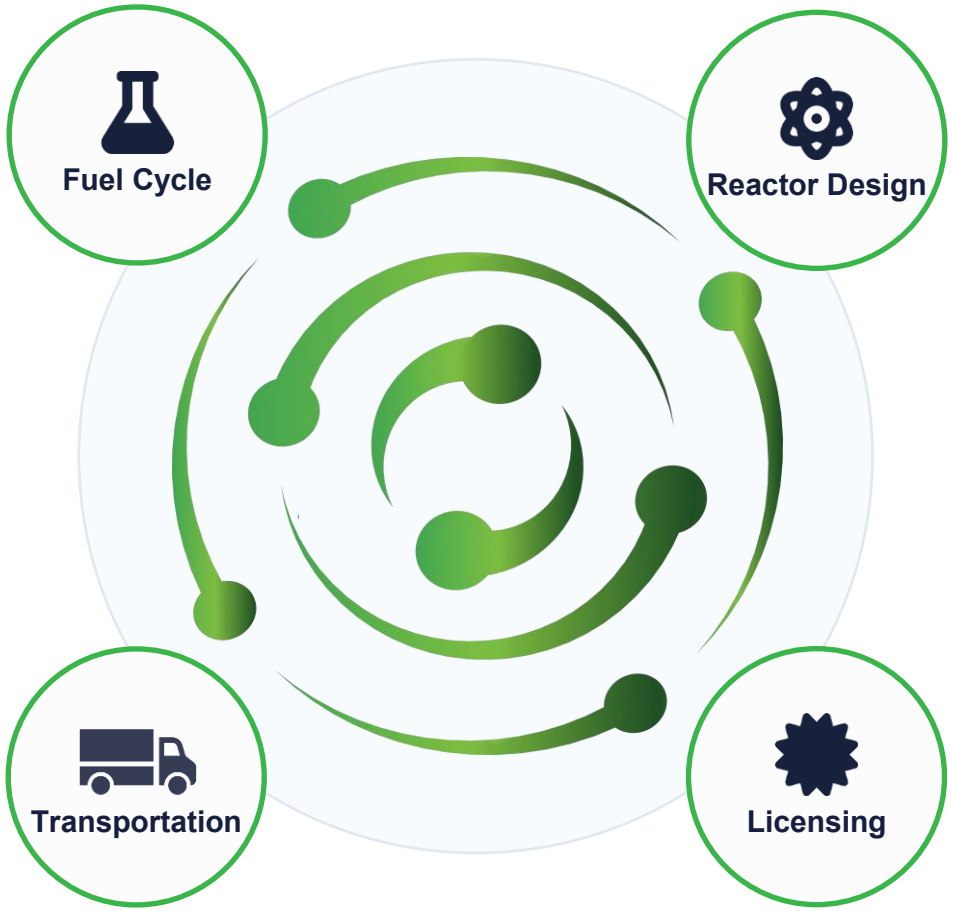
NANO’s Integrated Solution

Fuel Cycle

- Nuclear fuel processing
- Strategic investment in uranium enrichment (LIS Technologies)
- Founding member of the U.S. DOE HALEU Consortium

Transportation

- Patented high-capacity HALEU fuel transportation basket
- Secured Transportation Services acquisition
- International radioactive and hazardous material handling



Reactor Technology

- Multiple platforms: KRONOS, LOKI, ZEUS
- Patent portfolio across reactor & fuel IP
- Modular, factory-built standardized units

Licensing

- NRC Construction Permit Application docketed for acceptance review
- In-house regulatory experts
- Site engineering & commissioning support

This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.

Contact Us

NASDAQ: NNE

Smaller. Simpler. Safer.

NANO Nuclear Energy Inc.

info@nanonuclearenergy.com
nanonuclearenergy.com

Senior Project Manager:
Erin.Robinson@nanonuclearenergy.com







This presentation contains proprietary or confidential information intended solely for the parties identified herein. By accepting this document, the recipient agrees not to disclose, distribute, or produce any part of its contents without the express prior written consent of the other party, except as may be required by law or regulation. Unauthorized use or disclosure is strictly prohibited.