



Project NextGenNE – Department of Energy III+ Small Modular Reactor Tier 2 Selection

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NPPD Board of Directors Meeting
June 2026

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Grants Management & Compliance Administrator



Agenda

- **Project Objectives**
- **Project Team**
- **Application Timeline**
- **Technology Providers**
- **Project Site Options**
- **Next Steps**



Project NextGenNE

Project Objectives

- Conduct site characterization studies
- Achieve Nuclear Regulatory Commission (NRC) Early Site Permit (ESP) docketing by Fall of 2029 and secure an ESP by Summer of 2031
- Support workforce development initiatives for careers in advanced nuclear energy
- Continue community engagement and public education efforts
- Establish a framework for future SMR deployment in Nebraska
- Generate and share lessons learned to help accelerate advanced nuclear deployment

NPPD Project NextGenNE was awarded \$27.9 million in Department of Energy (DOE) funding to support site characterization, licensing, and NRC Early Site Permit activities.





Project NextGenNE

Project Team

- John Dent – Executive Sponsor
- Roman Estrada – Project Manager
- Jennifer Butler-Palu – DOE Contact & Grant Manager
- Khalil Dia – Technical Sponsor
- Stephen Nelson – Regulatory Affairs & Compliance Manager
- Mark Unruh – NRC & Licensing Lead
- Crystal Harper – Financial Lead
- Troy Barker – Quality Assurance
- Dan Buman – Technology Selection Lead
- Benjamin Beller – Environmental Lead
- Chris Elliott – Legal Affairs Lead





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Application Timeline

NPPD submitted the original application Jan. 2025 after responding to an opportunity posted under the Biden Administration.

The Trump Administration required a re-submission with additional project details in April of 2025.

No correspondence from the DOE has been received in the interim until the award selection was announced on May 14, 2026.



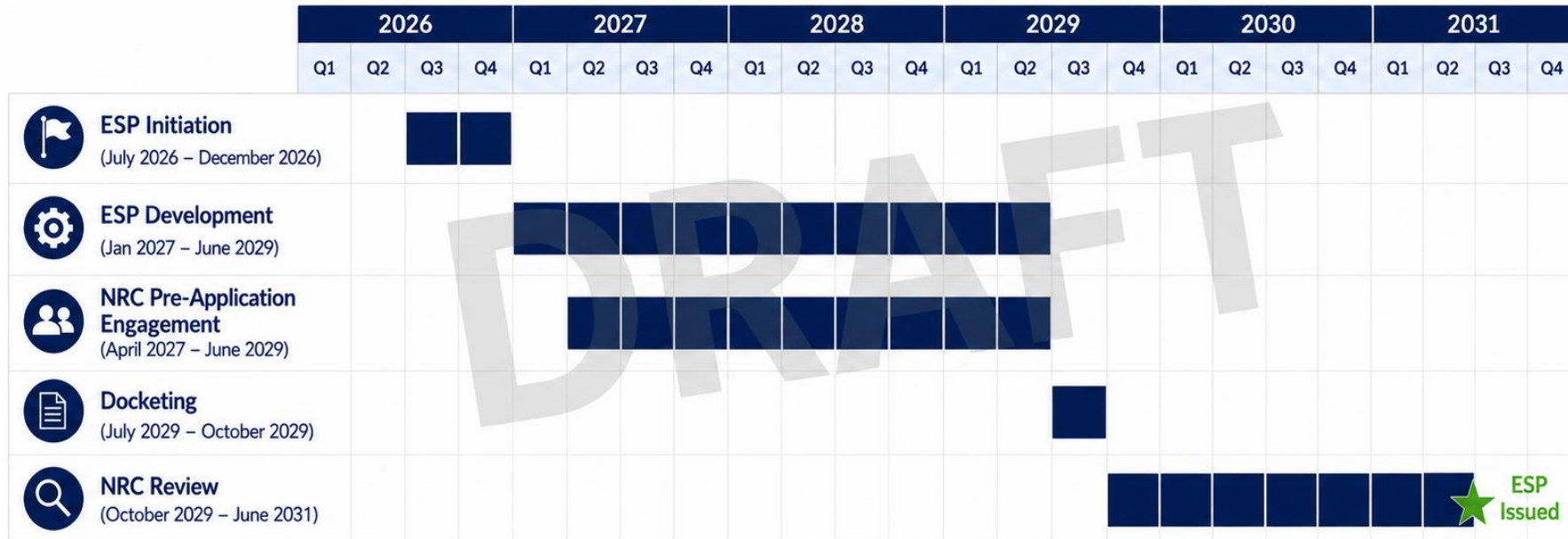


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POTENTIAL Project Schedule

Project NextGenNE is a multi-year initiative to achieve an Early Site Permit (ESP). The schedule below reflects the updated timeline, with project activities starting in Q3 2026 and concluding in Q2 2031.

OVERALL DURATION: Q3 2026-Q2 2031 (July 2026 - June 2031)



TARGETS

ESP Docketing:
Fall 2029

ESP Approval:
Summer 2031

**schedule dependent upon award negotiation durations*



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Technology Providers

NPPD is pursuing a technology-neutral licensing strategy while evaluating leading advanced nuclear technologies for future deployment. Note these are a sample list of providers and not all inclusive:

GE Hitachi (BWRX-300)	Proven BWR lineage with established supply chain
Westinghouse (AP300)	Based on the licensed AP1000 platform
NuScale (VOYGR)	First NRC-certified SMR design
TerraPower (Natrium)	Nuclear generation with integrated energy storage
X-energy (XE-100)	High-temperature reactor using TRISO fuel
Oklo (Aurora)	Compact advanced reactor for flexible deployment
Natura Resources	Molten salt reactor technology
Kairos Power (KP-FHR)	Salt-cooled reactor with passive safety systems

Evaluation Criteria

- *Licensing Maturity*
- *Technology Readiness*
- *Operational Familiarity*
- *Supply Chain Availability*
- *Economic Competitiveness*
- *Long-Term Deployment Potential*

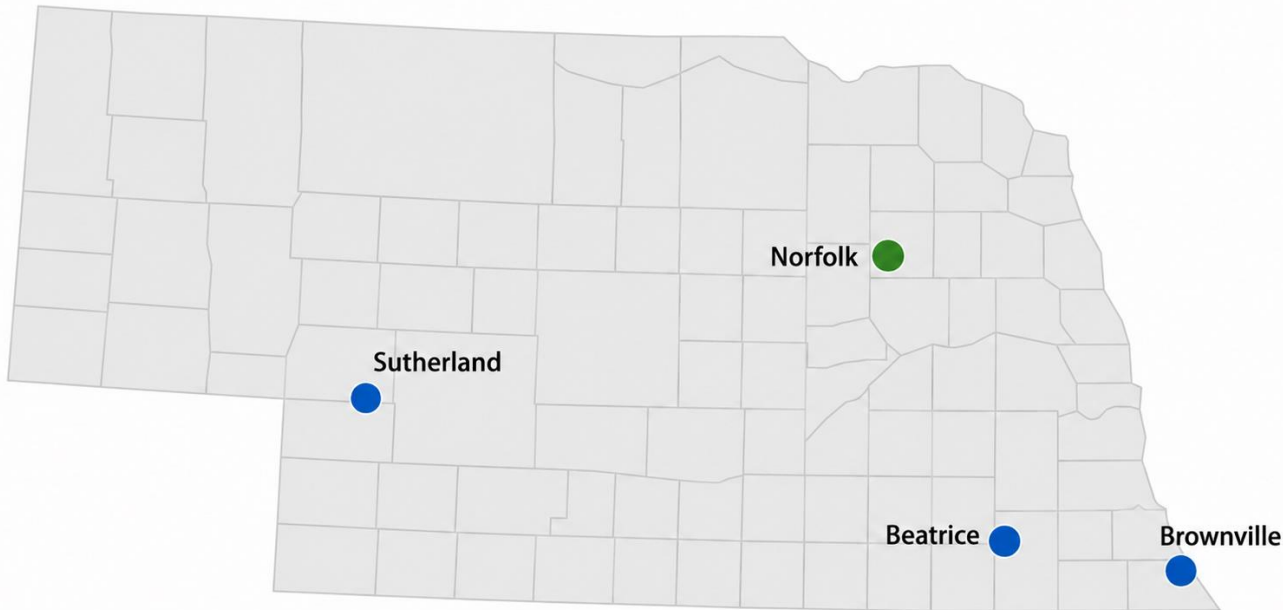
No technology has been selected. NPPD is maintaining flexibility while monitoring the advancement of multiple SMR platforms.





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Project Site Options



● NPPD Generation Sites

- Nebraska's statewide SMR siting study narrowed 32 candidate communities to a select group of high-potential locations through technical and stakeholder evaluations.
- All four sites were identified as strong candidates due to NRC siting criteria which include:
 - Existing generation assets
 - Transmission access
 - Available water resources
 - Favorable site characteristics
- The selected site will support NRC Early Site Permit activities and establish a pathway for future advanced nuclear deployment in Nebraska.





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Next Steps

- Finalize award negotiations
- Confirm the final project site
- Establish project team and select consultants for studies
- Initiate site characterization studies
- Expand stakeholder and community engagement efforts
- Continue workforce development and industry partnerships
- Evaluate future deployment pathways and technology options





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Questions

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