Exhibit to Agenda Item #1

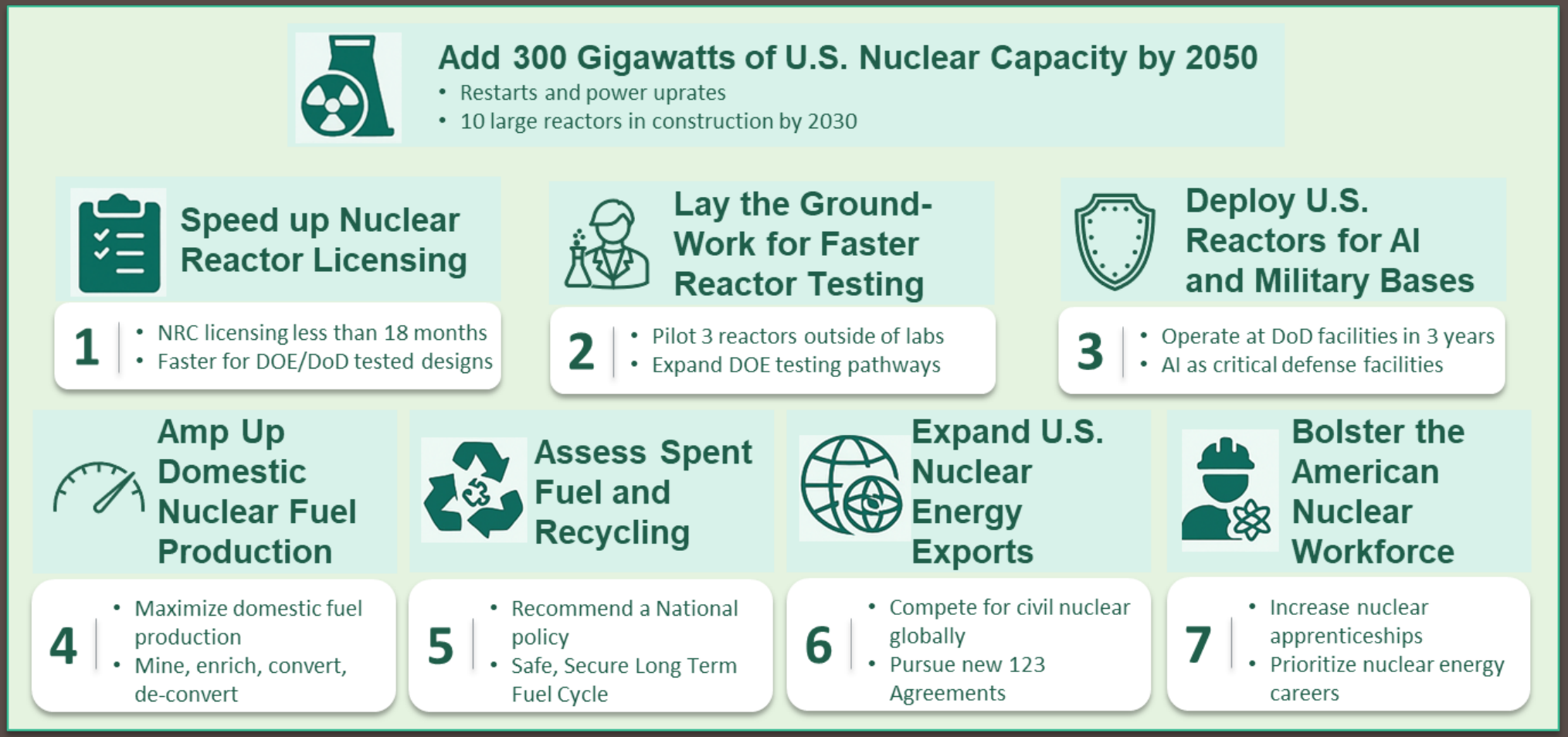
Provide the Board with informational external and internal presentations and discussion about the **Prospects of Nuclear Energy for Deep Decarbonization**.
[Kati Austgen, Nuclear Energy Institute]

Board Energy Resources & Customer Services Committee and Special SMUD Board of Directors Meeting

Wednesday, October 15, 2025, scheduled to begin at 6:00 p.m.

Auditorium, SMUD Headquarters Building

Key Enablers from Executive Orders on Nuclear Energy National Security (14299), NRC Reform (14300), DOE Testing (14301), and Industrial Base (14302)



Reference: https://www.energy.gov/ne/articles/9-key-takeaways-president-trumps-executive-orders-nuclear-energy

Accelerating NRC Reform

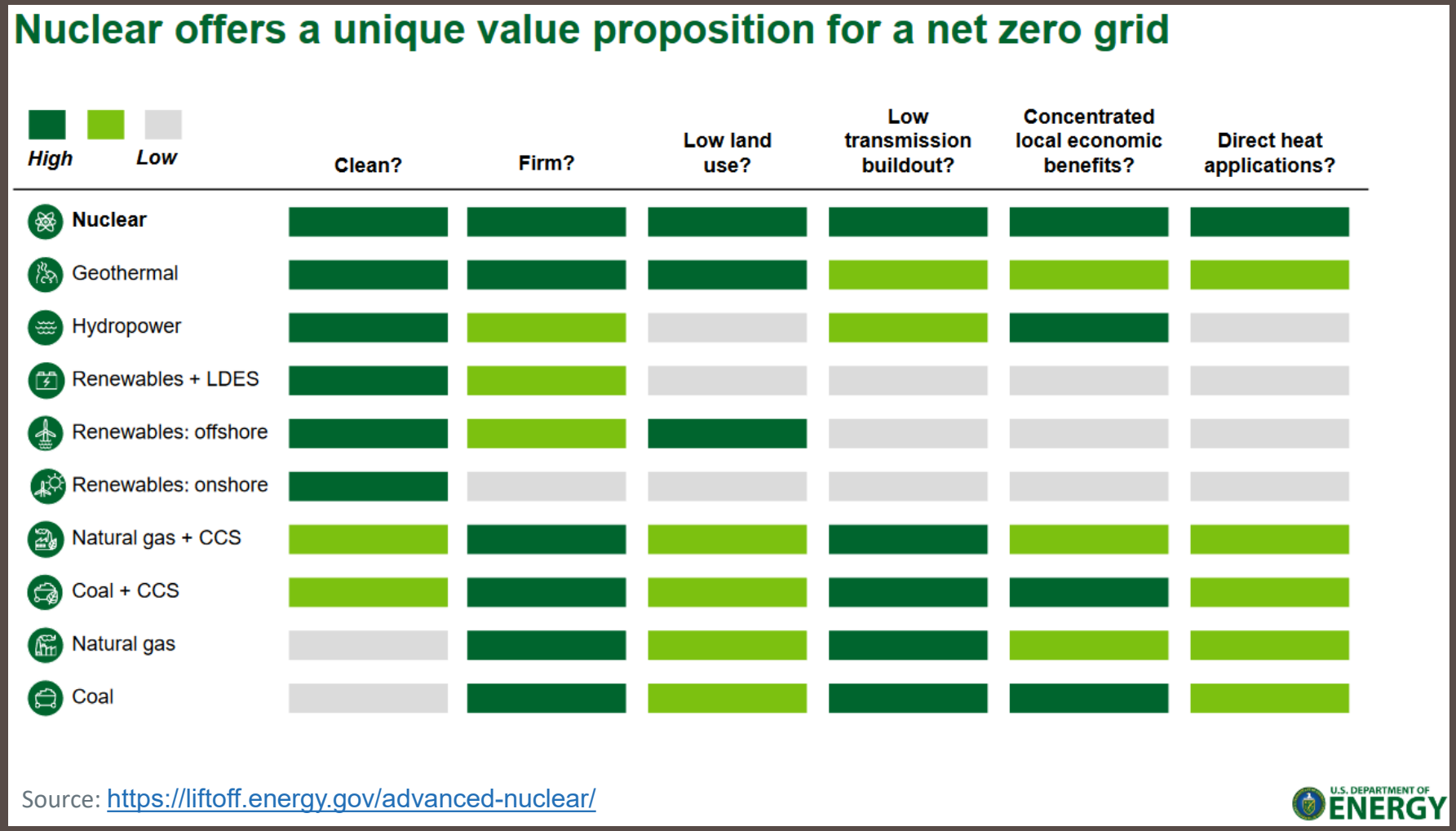
Industry Recommendations – July 2025

- **Streamline Licensing Actions** – Enhancing the efficiency of NRC reviews and meeting licensee schedules
- **Streamline Oversight and Inspection** – Eliminating unnecessary inspection to reflect licensee performance
- **Enhance Safety Focus** – Using risk insights and eliminating unnecessary regulatory requirements and processes
- **Accelerate Environmental Reviews** – Removing unnecessary delays impacting urgent grid and industrial needs
- **Reform Hearing Process** – Providing for stakeholder participation while maintaining project timelines
- **Modernize Security Framework** – Restoring requirements to a level appropriate for a commercial facility
- **Accelerate Deployment Pathways** – Right-sizing requirements and streamlining approval processes

https://www.nei.org/resources/reports-briefs/accelerating-nrc-reform-industry-recommendations

Intended as a Comprehensive Roadmap for Effective Reform

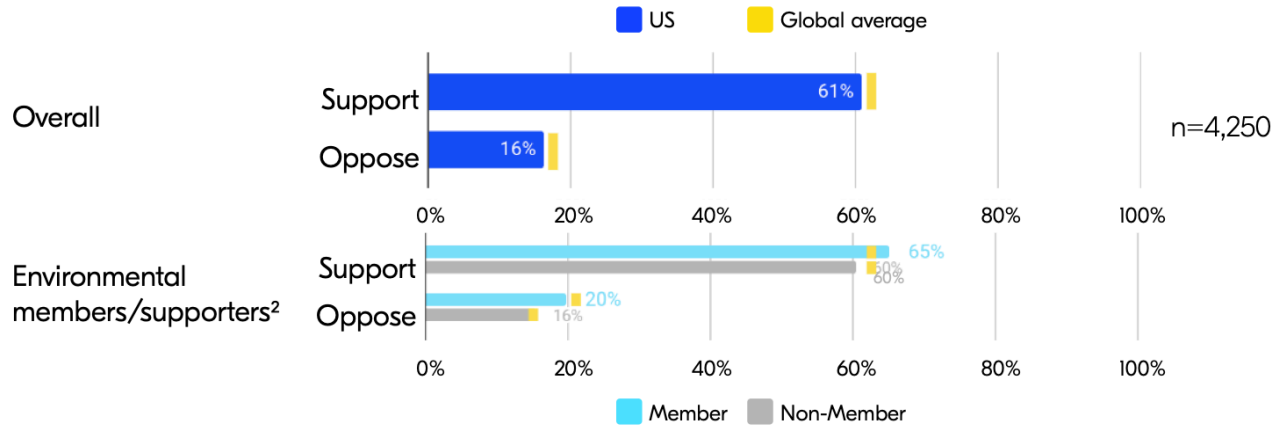
Nuclear Energy Checks All the Boxes



Strong Public Support for Nuclear Energy

US

Support vs. opposition[1]



Support by...

Gender

Men	73%
Women	50%

Age

18-34	58%
35-54	62%
55+	62%

Income

Low income (under 50k USD)	52%
Medium income (50k-100k USD)	60%
High income (100k+ USD)	70%

Political Affiliation

Democrat	61%
Independent	60%
Republican	66%

Top 5 nuclear sentiments[3]
(% agree)

We need a way to produce more and more energy for our economy to keep growing	76%
We need to be building capacity for more energy, not just trying to use less	63%
We need nuclear energy in the mix, along with renewables, if we are to meet our climate goals	60%
Leaving nuclear waste behind is just wrong, however safe it is	59%
We should use advanced nuclear energy to reduce our dependence on other countries	58%

Source: Potential Energy, 2023, https://potentialenergycoalition.org/wp-content/uploads/NewNuclear_Report_May2023.pdf

State Options to Support Advanced Reactors

- Reliability Portfolio Standards
- Value-based market/regulatory system
- Tax incentives (e.g., property)
- Advanced cost recovery
- Workforce and infrastructure

Source NARUC/NASEO: https://pubs.naruc.org/pub/8C96325F-CF7E-90BE-F8B3-B07570F3953B

NEI
Scan to view state policy options.

https://www.nei.org/resources/reports-briefs/policy-options-for-states-to-support-new-nuclear

States Taking Action to Support Nuclear

Exploring Nuclear Technology with Studies, Working Groups, Commissions and Task Forces	Connecticut, Florida, Indiana, Kentucky, Louisiana, Maryland, Michigan, Montana, Nebraska, New Hampshire, Ohio, Pennsylvania, Tennessee, and Texas
Recognizing Nuclear as a Clean Energy Resource	Colorado, Idaho, Michigan, Minnesota, North Carolina, Tennessee, Utah, and Virginia
Removing Barriers and Signaling Support	Repealing Nuclear Moratoriums: Connecticut, Illinois, Kentucky, Montana, West Virginia, and Wisconsin Signaling Regulatory Support: Indiana, Mississippi, North Carolina, and South Dakota
Incentivizing Nuclear Technology and Supply Chain	Kentucky, Michigan, Tennessee, Virginia, Washington, and Wyoming

Current State Policies: https://www.nei.org/resources/reports-briefs/state-legislation-and-regulations
State Policy Options: https://www.nei.org/resources/reports-briefs/policy-options-for-states-to-support-new-nuclear