

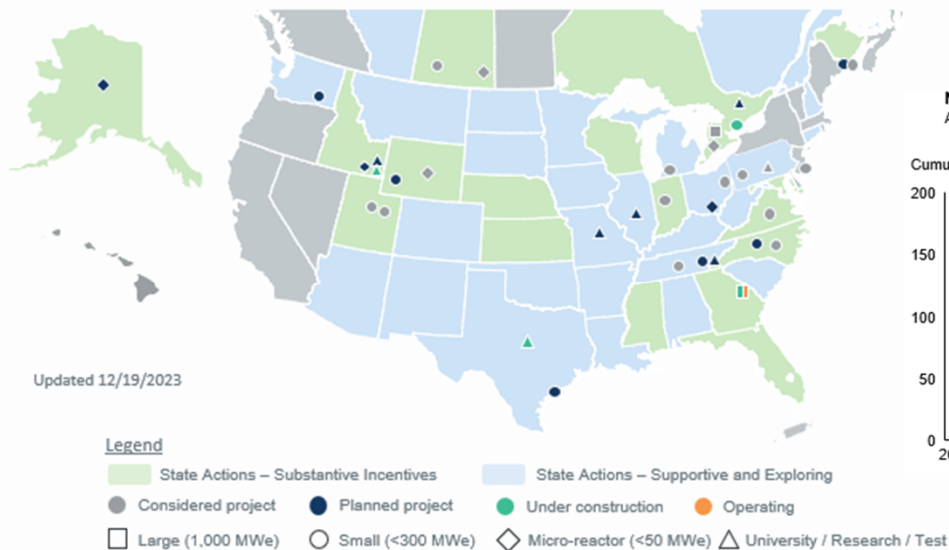
An Industry Perspective on Advanced Reactor Construction Oversight: 2024 NRC RIC

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New Nuclear Deployment Plans

State support and projects that may be in operation by early 2030s

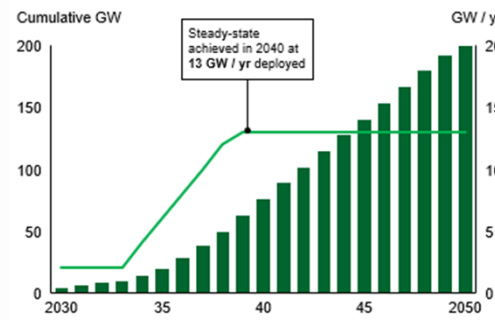


Pathways to Commercial Liftoff

Advanced Nuclear | March 2023

New nuclear deployment starting in 2030

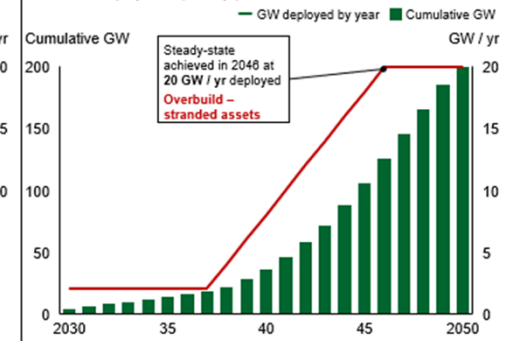
Annual deployment (GW / yr) built and Cumulative GW online



~43 300MWe
SMRs per Year

New nuclear deployment starting in 2035

Annual deployment (GW / yr) built and Cumulative GW online



~67 300MWe
SMRs per Year

A New Approach for Regulatory Oversight



- Advanced Reactor Construction Oversight Program (ARCOP)
 - A flexible, technology neutral, program to apply regulatory oversight commensurate with the risk posed
 - Provide reasonable assurance that advanced reactor facilities are built and will operate in accordance with their approved designs and licensing bases
 - NRC Principles of Good Regulation
- Implement Learnings from Past Experience
 - Part 50/52 Lessons Learned Rulemaking
 - 10 CFR 52 Construction Lessons Learned Report (ML23325A202)
 - Nuclear Experience (Existing Fleet, Research and Test Reactors)
 - External Benchmarking

Designed With Intent



SMALL

+

INHERENTLY
SAFE

= **SIMPLER**

READILY AVAILABLE EQUIPMENT

- Off-the-shelf Equipment
- Proven Performance

FACTORY- BUILT

- Increased Standardization
- 60-80% of Equipment
- U.S. Supply Chain Growth

FASTER CONSTRUCTION

- Smaller Structures
- Assembly vs. Construction
- Modern Construction Methods
 - Digital Twin
 - 4D Construction Model

IMPROVED PERFORMANCE

- Operational Excellence
- Best Practices
 - Design
 - Construction
 - Maintenance and Inspection

Thank You for Your Time and Attention