Nuclear Energy Institute Update on the Industry

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NUCLEAR ENERGY INSTITUTE

About NEI

- Washington, D.C., policy and membership organization
- A unified industry voice before federal, state and local governments, international organizations and venues
- Guidance and support on technical and business issues for the commercial industry
- A source of accurate and timely information to members, policymakers, the news media and the public
- 380+ members from more than a dozen countries

State of the Industry

Nuclear Power Contributions

447 million
Carbon emission avoided per year in metric tons

179,000
Short tons of NOx prevented

176,000
Short tons of SO_2 prevented

>90%
The average capacity factor since 1999

$6.9 billion
Contributions in federal taxes each year

$9.0 billion
Contributions in state and local taxes each year

250,000
Jobs supported

$64 billion
in contributions to the country's GDP

U.S. Clean Generation (2025)

41.2%
NUCLEAR

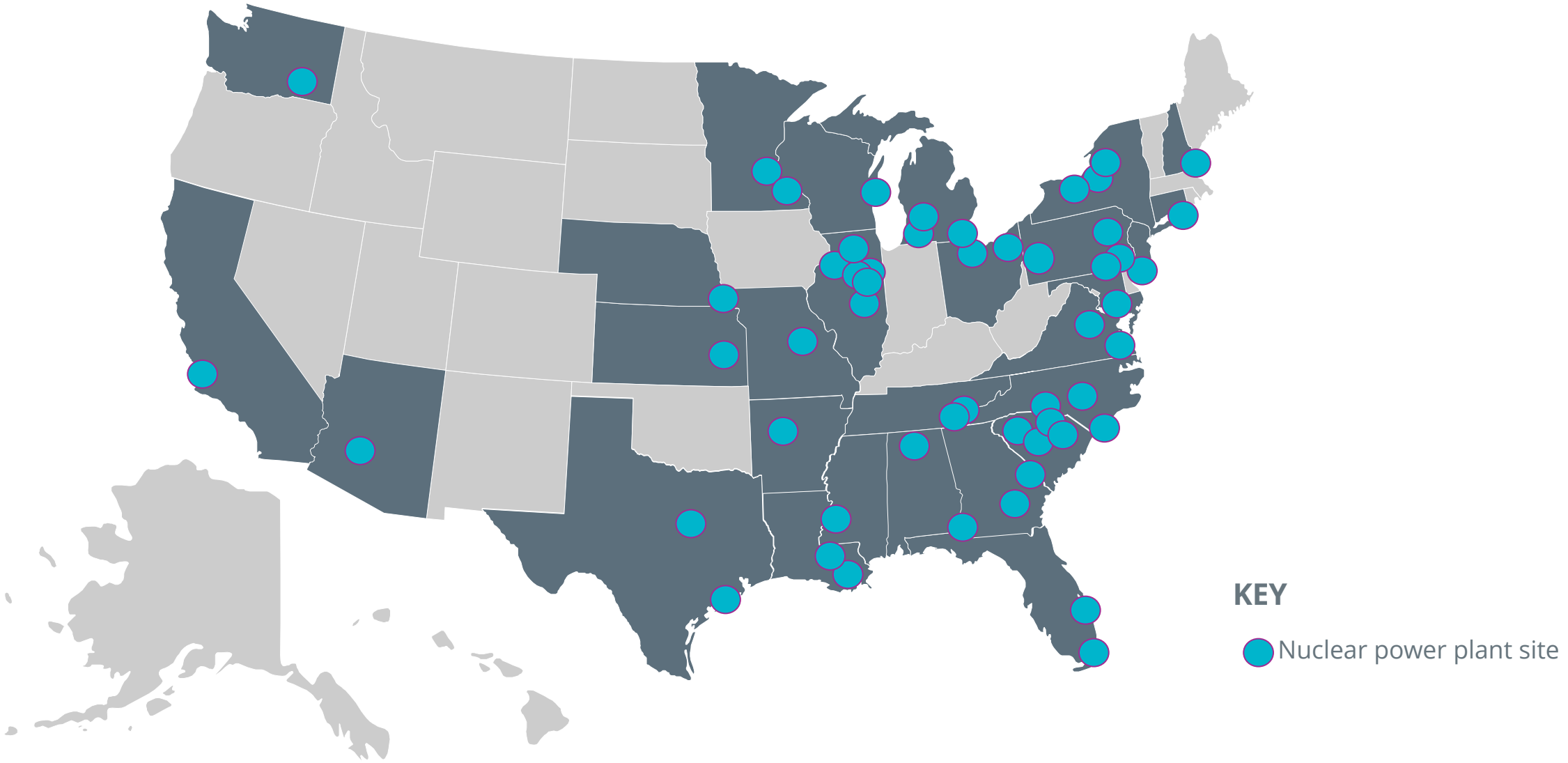
24.4%
WIND

20.4%
SOLAR

13.2%
HYDRO

0.8%
GEOTHERMAL

94 reactors at 54 plant sites across the country



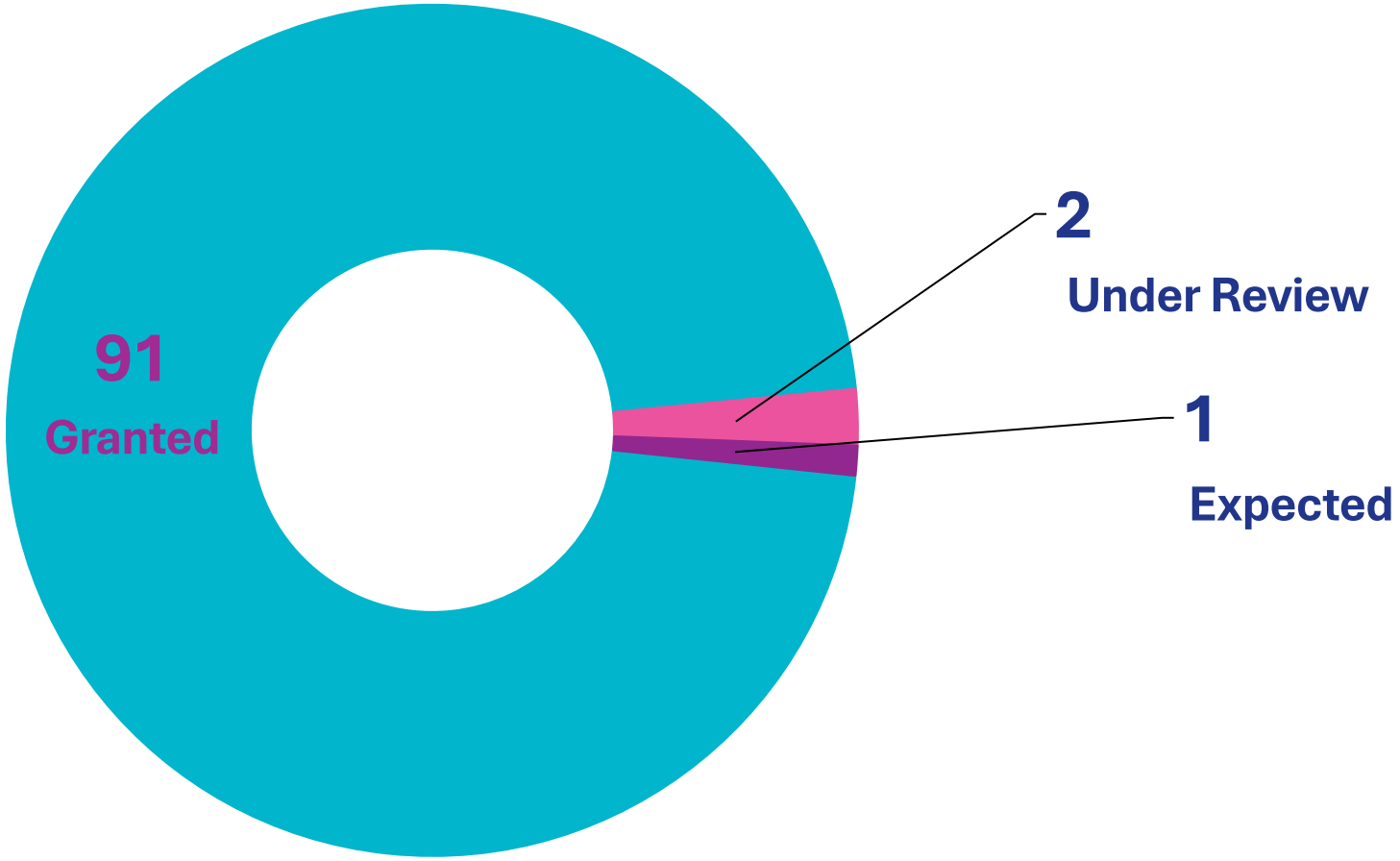
Updated: March 2026

State of Play

- 92.7% capacity factor in 2025
- 784.8 million MWh of electricity generated
- Three planned plant restarts: Palisades (MI), Crane (PA), Duane Arnold (IA)
- Potential for ~60-95 GW of new nuclear at existing nuclear sites

Source: U.S. Energy Information Administration, DOE Pathways Report (2024)
Updated: March 2026

Plants with initial license renewals



Note: Ten reactors, not included here, received an initial license renewal since ceased operations prematurely.
Source: U.S. Nuclear Regulatory Commission, U.S. Energy Information Administration
Updated: March 2026

Market Opportunity

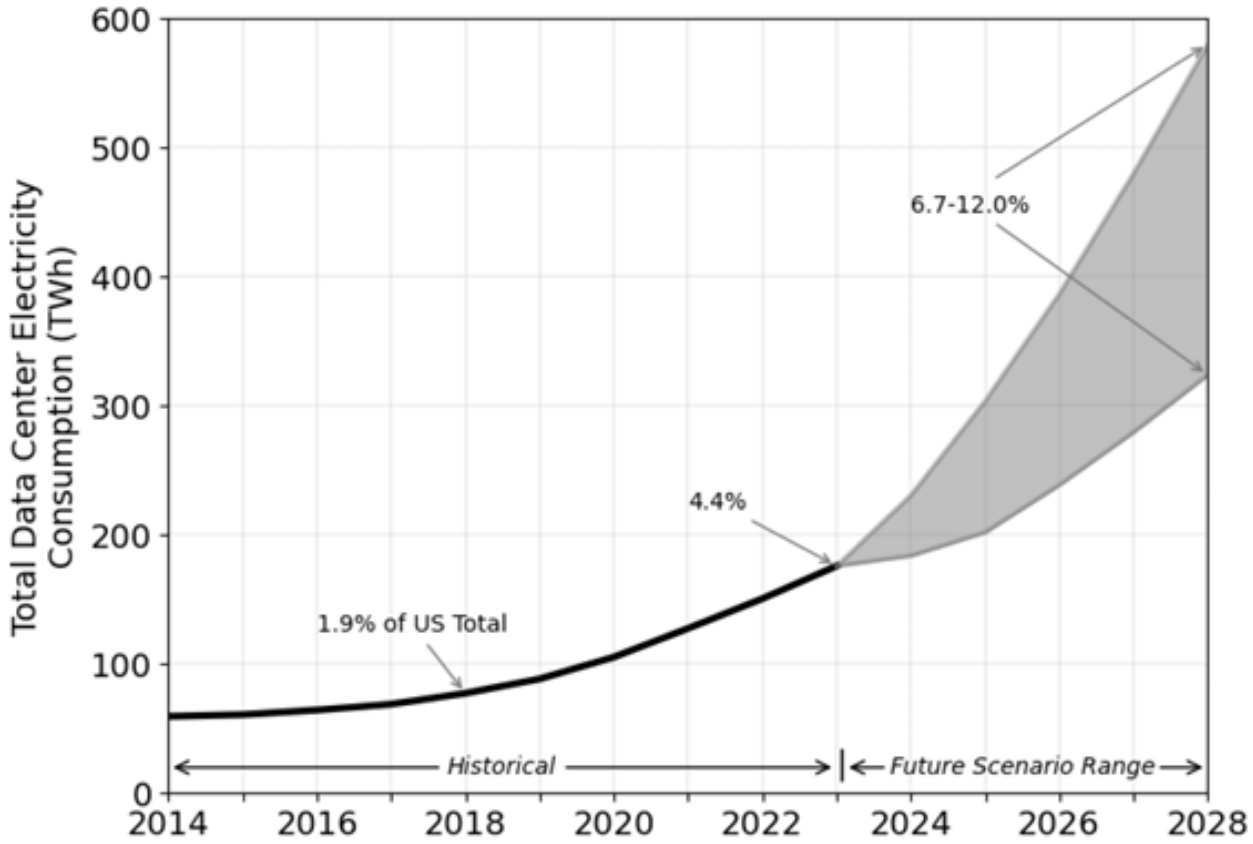
U.S. demand for electricity is increasing

Unprecedented surge in demand – after nearly two decades of low load growth, due to:

- Data centers supporting artificial intelligence, cloud computing
- Increasing advanced manufacturing efforts
- Electrification requirements from EVs, heat pumps, etc.

Data Center Electricity Consumption

Data centers are expected to consume approximately
6.7% - 12% of total U.S. electricity by 2028



Source: DOE 2024 Report on U.S. Data Center Energy Use

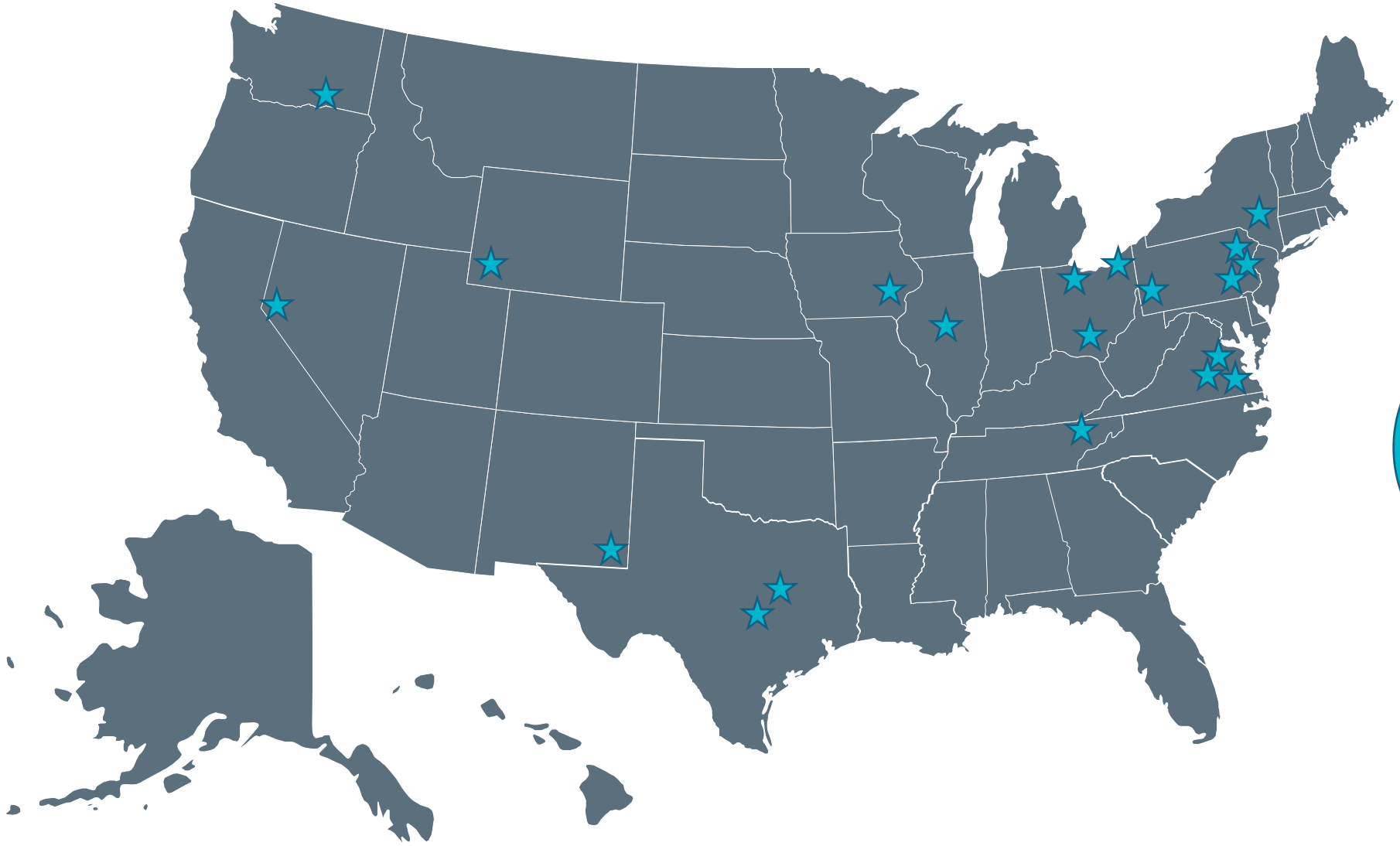
Growing Developer Landscape

- Silicon Valley-type ecosystem
- Wide range of advanced nuclear technologies
  - Varying in size…
    - Microreactors
    - Small modular reactors (SMRs)
    - Large (1000+ MW)
  - And design…
    - Molten salt reactors
    - High-temperature gas-cooled reactors (HGTRs)
    - Liquid-metal reactors (LMRs)
- Diversity of end users (e.g., data centers, heavy manufacturing, transportation)

Tech Showing Strong Interest in Nuclear

- Meta to unlock up to 6.6 GW of new and existing nuclear in partnerships with Vistra, Oklo and TerraPower
- Microsoft, OpenAI targeting nuclear for AI and supercomputing
- Microsoft 20-year PPA with Constellation for Crane Clean Energy Center Unit 1 power
- Amazon Web Services acquired Talen Energy data center campus in PA
- Google, Microsoft, Nucor partnership
- Green Energy Partners plans to build significant data center campus in VA
- Oracle designing data center powered by small modular nuclear reactors

Location of Tech <> Nuclear Partnerships



~49 GW

Early Mover Challenges

SCALING SUPPLY CHAINS

BUILDING A WORKFORCE

NAVIGATING A NEW REGULATORY ENVIRONMENT

FINANCING FIRST-OF-A-KIND PROJECTS

Early Mover Success

Industry De-Risking

- Construction Best Practices
- Risk Registers
- Fast Follower Approaches
- Fleet Deployment Models

Federal Policies

- Tax Incentives
- Loan Guarantees
- Demonstration Cost Shares
- Early Mover Support

State Policies

- Energy Policy
- Reliability
- Economic Policy
- Sustainability
- Permitting
- Infrastructure

Large Customers

- Data Centers & AI
- Manufacturing
- Anchor Customers
- Bring Your Own Nuclear

Executive Orders

National Security

Rapidly deploy advanced nuclear to support national security objectives, including powering artificial intelligence computing infrastructure and national security installations

Nuclear Industrial Base

Promote the production of nuclear energy by strengthening the domestic nuclear fuel cycle, expanding the nuclear workforce, and providing funding for restart, completion, uprate, or construction

Reform of the NRC

Reduce U.S. dependence on foreign technologies, decrease regulatory barriers through wholesale revisions, and expand domestic nuclear industry

Reform of Testing at DOE

Reform and streamline National Laboratory processes for reactor testing at DOE, including environmental reviews

Action at the executive level

- $2.7B DOE investment to rebuild and secure U.S. uranium enrichment over the next 10 years
- 11 initial selections named under DOE Reactor Pilot Program
- $800M awarded to TVA and Holtec to advance SMR deployment
- Four companies selected for DOE Advanced Nuclear Fuel Line Pilot Projects to strengthen domestic supply chain
- Strategic partnership with Cameco and Brookfield Asset Management to accelerate Westinghouse advanced reactor deployment in the U.S. and abroad
- $1B DOE loan closed to support Constellation's Crane Clean Energy Center restart

States Taking Policy Action for Nuclear

New in 2025 **Highlighted**

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

Key Congressional Policies

Bipartisan Infrastructure Law
November 15, 2021

Advanced Reactor Demonstration Program (ARDP) Funding
$2.5B for two commercial demos

Nuclear Hydrogen Hub
$8B total

Civil Nuclear Credit Program
$6B to support financially challenged plants

Inflation Reduction Act
August 16, 2022

Production Tax Credit (PTC) for Operating Plants
Up to $15 per MWh

Technology-Inclusive PTC for Clean Electricity
$30 per MWh

Technology-Inclusive Investment Tax Credit (ITC) for Clean Electricity
30% + 10% in energy communities + 10% using U.S. components

Clean Hydrogen Credit
$3 per kilogram

118th Congress

Nuclear Fuel Security Act
LEU/HALEU domestic production authorizing legislation in FY 2024 NDAA (December 22, 2023)

FY 2024 Appropriations Legislation
$2.72B for domestic fuel production (March 9, 2024)

Additional $800 Million for Small Modular Reactors (March 9, 2024)

40 Year Reauthorization of the Price-Anderson Indemnification Act (March 23, 2024)

ADVANCE Act
Increase regulatory efficiency & reduce regulatory costs (July 9, 2024)

119th Congress

One Big Beautiful Bill Act
Preserve and modify tax credits for nuclear energy

FY 2026 Energy and Water Appropriations
$1.785B for DOE's Office of Nuclear Energy

$3.1B for DOE advanced reactor programs + $150M in additional credit subsidy for nuclear projects

Accelerating Reliable Capacity (ARC) Act
Accelerate investment in commercial nuclear by minimizing cost overrun risk

Clean Electricity Production Credit - 45Y

	IRA	OB3
Value	~$30/MWh (inflation adjusted + bonuses)	No change in base value, but adds nuclear energy community bonus
Duration	Full credit if begin construction (BOC) before 2034 or 75% GHG reduction	Full credit only if BOC before 2034
Transferability	Yes	Yes, but not to SFEs
Elective Pay	Yes *(for public power and rural electric cooperatives)*	No change
PFEs	N/A	Bars PFEs from claiming credits or providing material assistance

Clean Electricity Investment Credit – 48E

	IRA	OB3
Value	30% of investment (+ bonuses)	No change
Duration	Full credit if begin construction (BOC) before 2034 or 75% GHG reduction	Full credit only if BOC before 2034
Transferability	Yes	Yes, but not to SFEs
Elective Pay	Yes *(for public power and rural electric cooperatives)*	No change
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Q&A