



NARUC

National Association of Regulatory Utility Commissioners

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Essential Guide to NARUC Nuclear Energy Resources



Overview

National Association of Regulatory Utility Commissioners (NARUC) members are increasingly seeking more information about nuclear infrastructure needs, impacts, and the role of public utility commissions (PUCs). This guide connects commissioners and commission staff to essential nuclear resources that NARUC has developed, many in partnership with the National Association of State Energy Officials (NASEO). All of these resources can be found on the [NARUC Nuclear Energy webpage](#).

The NARUC Center for Partnerships & Innovation (CPI) collaborates with the U.S. Department of Energy (DOE) Office of Nuclear Energy to maintain a Nuclear Energy Partnership to support states in better understanding the barriers and opportunities related to the U.S. nuclear fleet. This partnership

includes analysis on policy and regulatory issues related to existing and new nuclear generation, leading to educational briefs, workshops, and informational forums aimed at NARUC's state membership. For more information, contact Kiera Zitelman, kzitelman@naruc.org or Kathryn Kline, kkline@naruc.org.

Foundational NARUC Resources on Nuclear and the Role of PUCs

The resources below provide a starting point for further exploration of nuclear energy technologies.

- [NARUC-NASEO Advanced Nuclear State Action Tracker](#)
This tracker provides an overview of state activities that may impact advanced nuclear efforts.
- [Developing State Advanced Nuclear Energy Strategic Frameworks: Guidance for State Energy Offices and Public Utility Commissions](#), June 2025
This resource is designed to assist PUCs and State Energy Offices preparing to lead and/or contribute to the development of a strategic framework for new nuclear energy generation projects in their states.
- [Nuclear Energy as a Keystone Clean Energy Resource](#), August 2022
This report explores nuclear energy's role in providing carbon-free electricity and highlights key considerations for regulators as decarbonization efforts continue across many states and utilities.
 - [Webinar: Nuclear as a Keystone Clean Energy Resource](#)
- [Webinar: Introduction to Advanced Nuclear](#), June 2021
This webinar provided an overview of advanced nuclear technologies, their benefits and challenges, and the role of the federal government in nuclear research, development, and demonstration.

About the NARUC Center for Partnerships & Innovation

NARUC CPI identifies emerging challenges and connects state commissions with expertise and strategies to navigate their complex decision-making. CPI accomplishes this goal by building relationships, developing resources, and delivering training that provides answers to state commissions' questions.

NARUC CPI conducts work in five key energy topics: generation; transmission; distribution; customers; and critical infrastructure, cybersecurity, and resilience. Find all resources and upcoming events at: www.naruc.org/cpi.

Advanced Nuclear State Collaborative

NARUC and NASEO formed the [Advanced Nuclear State Collaborative \(ANSC\)](#) with support from DOE in 2023. The ANSC convenes state utility regulators and State Energy Officials to enhance collective understanding of the unique regulatory and policy questions surrounding the consideration and deployment of new nuclear generation and support peer learning across states. Additionally, the ANSC distributes a bimonthly newsletter to keep members informed on news from the states, federal government, and private sector entities; and relevant virtual and in-person events. Membership in the ANSC is open; reach out to Kathryn Kline at kkline@naruc.org for information about joining the collaborative.

Publications and Activities on Key Nuclear Topics

The following resources can be found on the [NARUC Nuclear Energy webpage](#). Hyperlinks lead to PDFs of the publications or webinar presentations. To view recordings of past webinars, visit the Nuclear Energy webpage or [NARUC's YouTube channel](#).

Nuclear Finance and Support

- [Webinar: Updated Pathways to Advanced Nuclear Commercial Liftoff](#), October 2024
This webinar provided updates to the 2023 DOE report Updated Pathways to Advanced Nuclear Commercial Liftoff by one of the report's authors, Julie Kozeracki, the director of strategy at DOE's Loan Programs Office. It also outlined a vision for the commercialization of the advanced nuclear industry.
- [Webinar: Assessing and Mitigating Financial Risks of New Nuclear](#), June 2022
During this webinar, experts in the nuclear industry shared how risks to ratepayers can be mitigated in the construction of new nuclear plants with a focus on federal-state coordination, risk mitigation through reactor design, and market development considerations.
- [Webinar: Compensating Nuclear Power](#), October 2021
This webinar explored if zero-emission credit (ZEC) programs that are aimed at compensating the zero-carbon electricity provided by nuclear units have effectively supported in-state nuclear capacity, how PUCs balance the benefits of zero-carbon generation with costs to ratepayers, and if existing or advanced nuclear is a part of the portfolio for large electricity customers considering how to obtain 24/7 clean power.

Nuclear Perception and Engagement

- [Webinar: Facilitating Equitable Community Engagement to Support the Deployment of Advanced Nuclear](#), August 2023
This webinar explored strategies for PUCs and State Energy Offices to increase state/local community engagement in planning processes to support advanced nuclear deployment.
- [Webinar: Nuclear Energy - What Does the Public Think?](#), December 2022
This webinar shared polling data that identifies the public's current perception of and attitude toward nuclear energy. It also explored relevant programs related to this topic and highlighted the implications of these findings to public utility commissions.

Nuclear Fuel, Spent Fuel, and Storage

- [Webinar: Evaluating Nuclear Waste Considerations for Advanced Nuclear Deployment](#), September 2023
This webinar discussed the characteristics of spent fuel produced by advanced reactors and prospects for reprocessing, provided an update on DOE's consent-based siting process, and NRC's new emergency planning rule, and explored relevant emergency planning procedures and responsibilities for local government / first responders.
- [Webinar: Understanding and Solving HALEU Fuel Supply Chain Challenges](#), January 2022
During this webinar, nuclear experts explored the opportunities and challenges of High-Assay Low-Enriched Uranium (HALEU) in the evolving nuclear fuel cycle.

Coal to Nuclear

[Coal to Nuclear Repowering: Considerations for State Energy Offices and Public Utility Commissions](#), April 2024

This report highlights some of the benefits and challenges associated with the coal to nuclear repowering process, with a particular focus on the policy, programmatic, and regulatory considerations of relevance to State Energy Offices and PUCs.

- [Webinar: Investigating Benefits and Challenges of Converting Coal Power Plants to Nuclear Power Plants](#), October 2022
This webinar discussed key findings from the September 2022 DOE report on converting retiring coal plant sites to nuclear plants.

Federal Nuclear Regulation and Policy

- [Workshop: Nuclear Regulatory Modernization](#), February 2025
This workshop engaged state PUCs and Nuclear Regulatory Commission (NRC) leadership and staff to learn about the NRC's regulatory modernization initiatives, share information about NRC licensing timelines for activities, identify strategies to enhance the economic and safety regulation of advanced reactors, and discuss opportunities for collaboration between the NRC and states.
- [Webinar: Nuclear Energy Provisions in the Inflation Reduction Act](#), September 2022
During this webinar, experts from the nuclear field discussed new support for nuclear provided by the Inflation Reduction Act, how this funding will impact the nuclear industry in the U.S., and how state regulators can coordinate effectively with stakeholders as these programs are designed and implemented.
- [Workshop: NRC-NARUC Federal State Information Session on Nuclear Regulation](#), February 2022
NARUC hosted an information exchange with the NRC providing members with an overview of the NRC, and discussions on topics such as NRC approaches to optimizing the licensing process, the role of the NRC in safely regulating advanced reactors, and opportunities for engagement between NARUC, state PUCs and the NRC.

Advanced Nuclear Opportunities

[Energy and Industrial Use Cases for Advanced Nuclear Reactors](#), October 2024

This report offers a comprehensive overview of potential alternative use cases for advanced nuclear energy, highlighting key considerations and critical questions for state utility regulators and State Energy Offices.

[Nuclear Generation in Long-Term Utility Resource Planning](#), November 2023

This report analyzes 17 utility integrated resource plan (IRP) filings to identify important trends regarding nuclear energy for consideration by state utility regulators.

- [Webinar: Paving New Trails for Advanced Fission with Oklo](#), March 2022
During this webinar, Oklo representatives and North Carolina Commissioner Kim Duffley discussed Oklo's microreactor technology and business model, partnerships with the National Labs and DOE, and the role of state and federal regulators in ensuring the safe and efficient deployment of advanced fission technologies to meet decarbonization goals.
- [Webinar: Prospects for Nuclear in Puerto Rico and the Pacific Northwest](#), August 2021
This webinar discussed how nuclear energy can help achieve carbon reduction targets and maintain reliability and resilience.

Non-NARUC Nuclear Resources

- [DOE Office of Nuclear Energy Advanced Reactor Basics](#)
DOE's Office of Nuclear Energy provides an interactive webpage that explores key information about advanced nuclear reactors including safety, different reactor concepts, and fuel options.
- [Gateway for Accelerated Innovation in Nuclear \(GAIN\)](#)
GAIN's website offers a variety of resources on nuclear energy topics including databases, directories, nuclear reactor technologies, nuclear security and safeguards, and more.
- [National Association of State Energy Officials Nuclear Resources](#)
NASEO's nuclear energy webpage convenes resources on nuclear that are particularly relevant to state officials.
- [State Legislation and Regulations Supporting Nuclear Energy](#), January 2025
This Nuclear Energy Institute report provides a state-by-state overview of legislation, executive orders, and regulations that have supported nuclear energy since the early 2000s.
- [Advanced Reactor Deployment Map](#)
This interactive map, published in collaboration with Third Way, Nuclear Innovation Alliance, Pillsbury, ClearPath, and Clean Air Task Force, highlights significant progress in the deployment of advanced nuclear reactor projects. It tracks nearly 80 global demonstration projects, showcasing advancements in reactor siting, construction, licensing, and commercial agreements in the United States and across the globe.
- [State Energy Legislation Database](#)
The National Conference of State Legislatures maintains a database that includes energy-related state legislation covering utility regulation and grid development; coal, oil and gas; renewable energy and electric vehicles; and more. The database includes all introduced legislation from 2023 through the present and is updated weekly.