

Nuclear Feasibility Studies

State	Status	Year Enacted	Target Completion/Date Completed	Entity Completing Work	Description	Policy, Technical, Economic?	Results
Colorado	Completed	2023	1/31/2024	Pueblo Innovative Energy Solutions Advisory Committee	Xcel Energy-Colorado has assembled a diverse group of Pueblo community leaders to evaluate and recommend future clean energy generation strategies that will be needed to replace the existing coal units at Comanche Generation Station. The Pueblo Innovative Energy Solutions Advisory Committee (PIESAC) will consider broad economic impacts to ensure the City of Pueblo and Pueblo County will continue to prosper with tax revenue, high-paying and highly skilled jobs, and a workforce pathway benefiting local citizens. This initiative will ensure an increased focus on the priorities of Pueblo, community engagement, and accountability in Xcel Energy's utility system as the company transitions to delivering 100% carbon-free energy by 2050 to its Colorado customers and communities.	Economic	Pueblo Innovative Energy Solutions Advisory Committee Report
Connecticut	Completed	2022	1/15/2023	Connecticut Green Bank	Enabling Legislation: HB 5200 Requires a study to be conducted on hydrogen power and include an examination of sources of clean hydrogen production including (but not limited to) nuclear.	Technical	Connecticut Hydrogen Task Force Study
Connecticut	Completed	2023	3/15/2024	Connecticut Department of Energy & Environmental Protection	Enabling Legislation: SB 7 To (1) evaluate the feasibility of deploying small modular reactors, advanced nuclear reactors, fusion energy facilities and other zero carbon resources that can improve affordability, fuel security, renewable integration, and winter reliability within the New England regional electric grid; (2) review the process for power purchase agreements procured pursuant to a state solicitation or pursuant to the state's renewable energy programs and identify best practices to ensure reliability in associated energy markets, reasonably reduce costs to ratepayers and promote conservation; and (3) review the state's gas supply system and evaluate whether current supply and capacity is adequate to meet the energy needs of residences and power plants in the state.	Technical, Policy	Public Act 23-102 - Section 35 Study
Florida	Completed	2024	4/1/2025	Florida Public Service Commission	Enabling Legislation: HB 1645 Study and evaluate the technical and economic feasibility of using advanced nuclear power technologies, including small modular reactors, to meet the electrical power needs of the state, and research means to encourage and foster the installation and use of such technologies at military installations in the state in partnership with public utilities.	Technical, Economic	Advanced Nuclear Power Feasibility Study
Indiana	Completed	2023	10/31/2024	Purdue University	The Indiana Office of Energy issued a RFP for a qualified partner to research SMR and analyze their applications and impacts. This includes both costs and benefits of SMR technology. The study shall provide specific and detailed information on the following broad topic areas: current status of SMR technology, state and local economic impact, workforce development and deployment, safety, community engagement needs and best practices, and key findings. \$300,000 was allocated to complete this study.	Economic, Technical	Study on Small Modular Reactor Technology and Its Impact for Indiana
Kentucky	Completed	2023	12/1/2023	Nuclear Energy Development Working Group within the Energy and Environment Cabinet	Enabling Legislation: SJR 79 The Nuclear Energy Deployment Working Group is tasked with identifying the barriers to the deployment of nuclear power generation and related technologies and to consult with stakeholders to develop recommendations for the role of a permanent nuclear energy commission to be established in state government.	Policy	Report to the Kentucky Legislative Research Commission Pursuant to 2023RS SJR 79
Kentucky	Completed	2024	12/1/2024	Kentucky Nuclear Energy Development Authority	Enabling Legislation: SB198 The KNEDA shall conduct a study to identify the workforce and educational needs to develop and support the nuclear ecosystem in Kentucky.	Economic, Policy	Draft report was produced by GAIN/INL but is not public yet.
Louisiana	Completed	2023	10/18/2024	Louisiana PSC Staff	Enabling: Committee Directive Study and track the development of advanced nuclear power technology.	Technical	LANCE Initiative

Nuclear Feasibility Studies

Maryland	Completed	2022	12/1/2022	X-energy, MPR Associates, and Frostburg State University	Enabling Document: MEA Grant 2022—2-544S1 X-energy was awarded a grant by the Maryland Energy Association on June 14, 2022. The study team evaluated the economic viability and social-economic advantages of replacing with a non-specified coal plant in Maryland with X-energy's Xe-100.	Technical	Feasibility Assessment and Economic Evaluation: Repurposing a Coal Power Plant Site to Deploy and Advanced Small Modular Reactor Power Plant
Michigan	Completed	2022	2/1/2024	ENERCON	Enabling Legislation: HB 6019 Provides for a feasibility study on building nuclear energy in state. The final report will consider current Michigan resources and expertise, cost assessment, nuclear technologies evaluation, benefit assessment, schedule assessment, integrated energy systems, policy assessment, and summary of supporting studies. \$250,000 was allocated to complete this study.	Policy, Technical, Economical	Michigan Nuclear Feasibility Study Report
Montana	Completed	2021	7/1/2022	Montana Legislative Services Division	Enabling Legislation: SJ3 Directs the Energy and Telecommunications Interim Committee to conduct extensive research on the potential to develop advanced nuclear reactor for the purpose of generating electricity in the state, including current state regulations, the economic feasibility of replacing coal boilers with advanced reactors, and the safety and waste stream of nuclear construction and operation.	Economic, Technical, Policy	Advanced Reactors: SJ3 Study of Nuclear Power Generation
Nebraska	Completed	2023	August 2024	NPPD with support from Burns & McDonnell	Enabling Legislation: LB 1014 Requires NPPD, with outside consulting firm assistance, to conduct a feasibility study to assess (a) siting options for new advanced nuclear reactors throughout Nebraska and (b) existing electric generation facilities based on key compatibility assets for such advanced nuclear reactors. When finished, this analysis will assist NPPD in their pursuit of potentially deploying new nuclear in the state of Nebraska. The first phase of the siting study involved a statewide assessment to determine the 15 best locations for siting SMRs; the second phase (currently underway) will perform a more in-depth evaluation and reduce the number of sites down to four. Estimated to take approximately a year to complete, the second phase will include detailed field environmental and constructability evaluations based on NRC criteria. \$1 million was allocated to complete this study.	Technical	Phase 1 results: SMR Siting Technical Screening Study: Phase 1
New Hampshire	Completed	2022	12/1/2023	Commission to Investigate the Implementation of Next Generation Nuclear Reactor Technology in New Hampshire	Enabling Legislation: HB 543 Establishes a commission to investigate the implementation of nuclear reactor technology in the state including the most promising Gen IV designs, large-scale, small-scale, microreactor, modular and breeder reactor designs, passive safety systems, and potential nonelectric applications, potential siting options, partnerships with industry, partnerships with federal agencies, federal incentives for nuclear power generation, and potential obstacles with federal nuclear regulations.	Policy	Commission to Investigate the Implementation of Next-Generation Nuclear Reactor Technology in New Hampshire
New York	Completed	2024	12/31/2024	New York State Energy Research and Development Authority (NYSERDA) and the Brattle Group	Enabling Legislation: Governor's Request To advance issues and considerations for the potential deployment of advanced nuclear power generation and potentially leverage federal funding programs, including but not limited to, nuclear planning grants.	Policy	Blueprint for Consideration of Advanced Nuclear Energy Technologies
Pennsylvania	Completed	2022	11/15/2023	Joint State Government Commission	Enabling Legislation: HR238 Directs the Joint State Government Commission policy staff to conduct a study on the benefits of nuclear energy and small modular reactors and provide recommendations on how to maximize the benefits of nuclear energy and small modular reactors.	Policy	Benefits of Nuclear Energy and Development of Small Modular Reactors
Tennessee	Completed	2023	11/1/2024	Tennessee Nuclear Energy Advisory Council	Enabling Legislation: Executive Order 101 Creates Tennessee Nuclear Energy Advisory Council to recommend legislative, policy, and budgetary changes to address existing barriers to new nuclear deployment, funding opportunities for both public and private entities, storage and waste practices, and federal actions Tennessee should pursue. \$50 million was allocated to the council.	Policy	Tennessee Nuclear Energy Advisory Council Final Report

Nuclear Feasibility Studies

Texas	Completed	2023	11/18/2024	Texas Advanced Nuclear Working Group	Enabling Legislation: Letter from Governor Abbott to the Public Utilities Commission's Chair Directs a PUC commissioner to establish a working group focused on understanding the state's role in deploying AR; including available financial incentives, potential changes to the market, regulatory impediments, and opportunities for streamlining.	Policy	Deploying a World Renowned Advanced Nuclear Industry in Texas
Virginia	Completed	2023	4/28/2023	Dominion Engineering	Enabling Document: GO Virginia Grant GO Virginia selected LENOWISCO Planning District for a grant to evaluate the deployment of an advanced reactor. Directs an evaluation of the feasibility of siting SMRs in the LENOWISCO Planning District of southwestern Virginia as a first step in the energy transformation of the region. \$100,000 was allocated to complete this study.	Technical	SMR Site Feasibility Study for LENOWISCO
Virginia	Completed	2023	3/15/2024	Dominion Engineering	Enabling Document: GO Virginia Grant GO Virginia selected LENOWISCO Planning District for a grant to evaluate the potential of the advanced nuclear supply chain. Directs an evaluation of which ways southeastern Virginia could participate in the supply chain of the advanced nuclear industry, regardless of whether a reactor will be built. \$50,000 was allocated to complete this study.	Technical, Economic	SMR Supply Chain Study for LENOWISCO
Arizona	Pending	2023	N/A	Arizona Corporation Commission Staff	Enabling Document: Docket Number ACC-00000A-23-0183 This docket is intended to act as a repository for research, informational filings and proceedings related to advanced nuclear technology. Advanced Nuclear technology meaning the building of Micro, Mini and Small nuclear reactors including Small Modular Reactors (SMRs). The purpose is to research and discuss the viability, feasibility, and sustainability of growing Advanced Nuclear Power generation in Arizona's power generation mix.	Technical	Link to Docket
Colorado	Pending	2023	7/1/2025	Colorado Energy Office	Enabling Legislation: HB 23-1247 Requires the Colorado Energy Office to conduct a study for northwest Colorado and southeast Colorado in terms of advanced energy systems, including advanced nuclear energy.	Technical	
New York	Pending	2025	12/31/2026	New York State Energy Research and Development Authority (NYSERDA) and the Brattle Group	As a follow-up to New York's "Blueprint for Consideration of Advanced Nuclear Energy Technologies" released in Fall 2024, the "Master Plan for Responsible Advanced Nuclear Development in New York" will provide a framework for in-depth examination into the key issues raised by the Blueprint to develop recommendations for implementation of advanced nuclear technologies in New York State.	Policy, Economic	
North Carolina	Pending	2023	Spring 2025	North Carolina State University and outside, contracted firm	Enabling Legislation: HB 259 Allocated funds and directs an evaluation of the feasibility for the establishing an advanced nuclear research reactor on the campus of North Carolina State University. \$3 million was allocated to complete this study.	Technical	
Wyoming	Pending	2023	TBD	BWXT Advanced Technologies LLC and Wyoming Energy Authority	BWXT was chosen by the Wyoming Energy Authority (WEA) and Governor Mark Gordon to be one of the two candidates to receive funds from the Energy Matching Fund to assess the viability of deploying advanced nuclear in the state by working with Wyoming industries to define the requirements basis for nuclear opportunities of base heat and power needs of the trona mining operations in the state. BWXT, with support from the state, will also identify locations where Wyoming's existing supply chain could demonstrate capabilities for reactor component manufacturing to support the development and deployment of BWXT's BANR. \$10 million from the State Energy Matching Fund was provided and matched by BWXT. As a follow-up to WEA announcement, BWXT signed an agreement with Tata Chemicals to study the use of the BANR microreactor to power its trona mining and processing facility in Green River, Wyoming with up to 100MW capacity. The work under this agreement will support the WEA-BWXT existing cost-share agreement. All of this work will also build upon BWXT's BANR development work at INL as part of ARDP.	Technical	