

DEEP Stakeholder Process to Explore New Nuclear Capacity in Connecticut

Section 34 of PUBLIC ACT NO. 25-173

Notice of Proceeding

The Connecticut Department of Energy and Environmental Protection (DEEP) is issuing this Notice of Proceeding to initiate a stakeholder process to Explore New Nuclear Capacity in Connecticut. This stakeholder process is intended to first (a) engage with stakeholders and national experts through a **series of informational workshops**, to increase awareness and understanding of the current issues and opportunities for new nuclear development, and subsequently (b) to build on the information and dialogue fostered in the informational workshops to develop and implement a **competitive advanced nuclear reactor site readiness funding program** pursuant to the requirements of Section 34 of Public Act No. 25-173.

I. Background

In May of 2025 the Independent System Operator for New England (ISO-NE) issued its annual [Forecast Report of Capacity, Energy, Loads, and Transmission](#) (CELT Report) which projects that the region's annual electricity consumption will increase by over 11% over the next decade as a result of economic growth and electrification increases within the building and transportation sectors. In its pending [Integrated Resources Plan](#) process, DEEP is exploring energy supply options that can help meet increasing electric demand. Meeting these needs affordably and reliably while achieving a 100% zero-carbon electricity supply by 2040, as required by Section 22a-200a of the Connecticut General Statutes, is a key state objective.

Advanced nuclear reactors, including Small Modular Reactors (SMRs), fusion machines, and other advanced designs, are gaining considerable national interest as a potential source of **firm, dispatchable, carbon-free generation** that can complement non-dispatchable renewable energy technologies like solar and wind power. A 2024 DEEP report on [Select Connecticut Energy Supply Issues](#), prepared at the request of the General Assembly, examined the potential for these advanced nuclear technologies to improve affordability, enhance fuel security, integrate renewables, and address winter reliability challenges within the New England regional electric grid.

As noted in the *Select Connecticut Energy Supply Issues* report, while the investment community recognizes the need for new nuclear, significant upfront costs and uncertainties associated with “first of a kind” (FOAK) deployments present high barriers, especially in deregulated electricity

markets like New England. Public-private partnerships and state policy tools are often needed to incentivize investment and distribute risk. The federal ADVANCE Act of 2024 further aims to streamline the Nuclear Regulatory Commission’s (NRC) processes for approving new reactors and fuels, emphasizing efficiency while maintaining safety and security standards.

For several decades, Connecticut has been the host to the Millstone Nuclear Power Station in Waterford, CT. The two pressurized water reactors at the Millstone site are the largest generation facility in New England, supporting over 3,000 local jobs and producing the equivalent of 47% of Connecticut’s energy supply. In 2022, the Connecticut General Assembly enacted Public Act 22-76, which exempted the Millstone facility from a longstanding state statutory moratorium on the construction of new nuclear facilities in the state. *See* Conn. Gen. Stat. 22a-136. In 2025, the General Assembly expanded that exemption in Section 33 of Public Act 25-173, by allowing for the moratorium on construction of an advanced nuclear facility in a municipality to be lifted if the municipality—and any other municipalities within the emergency planning zone for said facility—chooses to opt in through the affirmative vote of such municipality’s legislative body or a referendum held in such municipality.

This change to a consent-based siting approach empowers communities to determine for themselves whether hosting a nuclear facility aligns with their priorities and values. Municipalities that opt in can potentially capture the same kinds of benefits realized by Waterford, including high-quality local jobs, economic development opportunities, and increased property and tax revenues. A central component of this approach is robust community engagement and broad stakeholder outreach which ensures local voices are fully informed and shape decision-making from the very outset.

II. Informational Workshops

DEEP is committed to fostering public awareness and support through meaningful dialogue and careful attention to concerns surrounding safety, security, siting, and costs associated with deploying new nuclear technologies in our communities. As such, this stakeholder process reflects DEEP’s commitment to increasing public awareness and fostering public dialogue regarding current issues and opportunities for new nuclear development in the state. In the first phase of this process, DEEP will host a series of public meetings with nationally recognized experts on key issues involved in new nuclear development. These meetings will aim to foster candid dialogue and gather input from diverse perspectives on critical aspects of nuclear energy development. Specific schedule, format, and agendas for these meetings will be posted on DEEP’s Public Notices website at <https://portal.ct.gov/deep/about/public-notice>.

Public Meeting 1: Overview of Advanced Reactors and Siting Processes

- **Experts from academia, industry, non-profits, and/or regulatory agencies** will discuss topics such as:
 - The need and potential role for new nuclear in New England
 - The policy, regulatory, and business environment for new reactors

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- Licensing pathways and Early Site Permitting (ESP) process

Public Meeting 2: Safety, Security, Environmental Impact, and Waste Management

- **Experts from academia, industry, non-profits, and/or regulatory agencies** will discuss topics such as:
 - Safety, security, and waste performance of the currently operating nuclear fleet
 - Safety, security, and waste aspects for new reactors
 - Environmental monitoring around nuclear facilities for radiation buildup and other effects
 - Storage of spent nuclear fuel and management of other radioactive waste

Public Meeting 3: Community Engagement

- **Representatives from existing nuclear communities, non-profits, industry and/or academia** will discuss topics such as:
 - Host community experiences and benefits
 - Guidance for communities hosting or transitioning nuclear sites

Public Meeting 4: Workforce Development

- **Representatives from non-profits, industry and/or academia** will discuss topics such as:
 - Programs to train new workers to support advanced nuclear deployments
 - Education programs in nuclear technology and nuclear engineering

Public Meeting 5: Advanced Nuclear Developers and Vendors

- **Representatives from advanced nuclear project developers, reactor vendors, and industry** will discuss topics such as:
 - New reactor designs
 - Projects currently in development
 - Opportunities for future development

Public Meeting 6: Fusion Technology

- **Experts from academia, industry, non-profits, and/or regulatory agencies** will discuss topics such as:
 - How fusion differs from fission
 - Safety of fusion machines
 - Policy, regulatory, and business environment for fusion machines
 - Projects currently in development
 - Opportunities for future development

These public meetings are designed not only to increase awareness and understanding of advanced nuclear development but also to provide a meaningful forum for community engagement. The meetings will allow residents and local leaders to weigh both the potential risks and the benefits of hosting nuclear facilities. By fostering open dialogue, these meetings help communities make informed decisions about new nuclear projects while also shaping the design

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of DEEP's forthcoming advanced nuclear reactor site readiness grant program to better address local priorities and needs.

III. Early Site Readiness Funding Program

Section 34 of Public Act No. 25-173 directs the Commissioner of Energy and Environmental Protection to establish a funding program, backed by **up to five million dollars in state bonds**, to support site readiness activities for advanced nuclear reactors.

The program will advance Connecticut's clean energy and economic development goals by helping communities and institutions prepare for the deployment of advanced nuclear technologies. Through targeted grants or loans, it provides the early-stage support necessary to position Connecticut as a national leader in next-generation, zero-carbon nuclear energy—complementing renewable sources with reliable, always-available power that enhances grid stability, resilience, and energy security.

A key component of the program is supporting environmental and technical studies associated with the U.S. Nuclear Regulatory Commission's (NRC) Early Site Permit (ESP) process. The ESP evaluates a potential site's safety, environmental impacts, and emergency preparedness—independent of any specific reactor design. Applicants often use this process to identify and resolve siting challenges early, reduce regulatory and financial uncertainties, and effectively “bank” a site for up to 20 years for potential future use.

In addition to supporting ESP-related activities, the program can fund local and regional infrastructure assessments to ensure that transportation networks, utilities, and emergency services can accommodate potential development, and community engagement and planning initiatives to promote informed, inclusive participation. This integrated approach ensures that technical preparation and public readiness advance together, creating a strong foundation for future energy projects that align with Connecticut's environmental, economic, and workforce goals.

Eligible recipients will include municipalities, regional councils of governments, public authorities, and state or federally recognized tribes, as well as municipal electric utilities, cooperatives, and institutions of higher education. Private entities may participate in partnership with these eligible organizations. All recipients must adopt wage standards consistent with Section 31-53 of the Connecticut General Statutes, ensuring that Connecticut's transition to advanced nuclear energy supports good-paying jobs and shared economic growth across the state.

Following this stakeholder engagement process DEEP intends to issue a Request for Information to seek input from the public about the optimal framework and approach to utilize in a future Request for Proposals (RFP) as part of Connecticut's Advanced Nuclear Reactor Site Readiness Funding Program.

IV. Proposed Schedule

The following proposed schedule is tentative and subject to change with the release of the final RFP:

- **Informational Public Meetings:** 4th Quarter 2025-1st Quarter 2026
 - **Public Meeting 1: Overview of Advanced Reactors and Siting Processes**
 - **Public Meeting 2: Safety, Security, Environmental Impact, and Waste**
 - **Public Meeting 3: Community Engagement**
 - **Public Meeting 4: Workforce Development**
 - **Public Meeting 5: Advanced Nuclear Developers and Vendors**
 - **Public Meeting 6: Fusion Technology**
- **Release Draft RFP for Public Comment:** 1st Quarter 2026
- **Accept Public Comment on the Draft RFP:** 1st Quarter 2026
- **Release Final RFP to Bidders:** 1st Quarter 2026
- **Bidders Conference:** 1st Quarter 2026
- **Deadline for the Submission of Written Questions:** 2nd Quarter 2026
- **Deadline for DEEP to Post Q&A on DEEP's Website:** 2nd Quarter 2026
- **Due Date for Proposal Submissions:** 2nd Quarter 2026
- **Selection of Bidders:** 3rd Quarter 2026
- **DEEP Funding Awards:** 4th Quarter 2026

DEEP intends to release a draft RFP for written comments before issuing a final RFP and seeking bids.

V. Accessibility and Equal Opportunity Statement

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act. Please contact DEEP.EnergyBureau@ct.gov if you are seeking a communication aid or service, have limited proficiency in English, or require some other accommodation. If you wish to file an ADA or Title VI discrimination complaint, you may submit your complaint to DEEP Office of Diversity and Equity at (860) 418-5910 or via email at deep.accommodations@ct.gov. In order to facilitate efforts to provide an accommodation, please request all accommodations as soon as possible following notice of any agency hearing, meeting, program, or event.