# NASEO Advanced Nuclear First Movers Orderbook Strategy Request for Information (RFI)

### RFI Submissions are Due Friday, October 10, 2025

The National Association of State Energy Officials (NASEO) issues this Request for Information (RFI) at the direction of the states participating in the Advanced Nuclear First Mover Initiative to inform them on how best to create a coordinated orderbook for advanced nuclear projects — a mechanism that will speed project development and lower costs. The state-led Advanced Nuclear First Mover Initiative is facilitated by NASEO, Idaho National Laboratory (INL), Oak Ridge National Laboratory (ORNL), and the U.S. Department of Energy's Gateway for Accelerated Innovation in Nuclear (GAIN). The Initiative is led by state co-chairs New York, Indiana, Kentucky, Tennessee, and Wyoming, and participating states Louisiana, Maryland, Pennsylvania, Utah, Virginia, and West Virginia. The governors of these states are committed to delivering advanced nuclear power rapidly, safely, and cost effectively to ensure consumers and businesses have reliable and affordable electricity for years to come. **All responses to this RFI will be available to the public and will be posted on NASEO's website. RFI responses must not include any confidential, protected, or proprietary information. Responses to this RFI must include the completed, required RFI Response Coversheet included under Attachment A of this RFI.**

## Objectives

A committed orderbook[1] can be a critical first step for developers to undertake the significant financial investments needed to successfully deploy advanced nuclear technology (Gen III+ and Gen IV reactors) in the United States. An orderbook strategy focuses on moving from one-off demonstration projects to widespread market adoption by building a robust and credible demand signal for advanced nuclear. To facilitate a coordinated approach for a potential orderbook strategy or similar joint action through the Advanced Nuclear First Mover Initiative, NASEO is issuing this Request for Information (RFI) to understand what key points such a framework for developing an orderbook should consider. This RFI is designed to provide the First Mover states with information on a potential structure for an orderbook, status and use cases for different new nuclear technologies, and coordination approaches or models that have worked in other sectors. The First Mover states will use this information to determine an orderbook strategy, identify and advance market opportunities, and define next steps that support coordinated deployment of new nuclear generation. The RFI does not commit NASEO or the First Mover states to any particular action. Through this RFI, NASEO would like

---

[1] For the purposes of this RFI, an orderbook is defined as firm commitments for multiple, identical installations of a particular design (see EFI Foundation Working Paper on "A Cost Stabilization Facility for Kickstarting the Commercialization of Small Modular Reactors, October 2023, https://efifoundation.org/wpcontent/uploads/sites/3/2023/10/20231011-CSF-FINAL-1.pdf)

information on three categories of nuclear reactor types: 1) AP1000; 2) small modular reactors (SMRs) for power generation; and (3) SMRs for thermal/heat generation.

---

**Responding to the RFI**

Interested stakeholders including advanced nuclear technology developers, project developers, investors, utilities, energy end users (data center owners/operators, manufacturers, etc.), universities, and others, are invited to respond to this RFI. Respondents may address all or some of the questions depending on their areas of interest and expertise. **All responses to this RFI will be available to the public and will be posted on NASEO's website. RFI responses must not include any confidential, protected, or proprietary information. Responses to this RFI must include the completed, required RFI Response Coversheet included under Attachment A of this RFI.**

Please submit responses to the RFI to Kelsey Jones by e-mail at kjones@naseo.org. RFI responses are due no later than Friday, October 10, 2025. Any questions on the RFI should be directed to Kelsey Jones at kjones@naseo.org no later than Monday, October 6, 2025. Responses to this RFI are limited to 10 pages including the required cover sheet. Additional material will not be considered. NASEO does not expect respondents to this RFI to answer all questions, but to answer the questions that are most pertinent to the respondent and the perceived needs of the states.

Please include the following information in your response:
- Cover sheet (required) – see Attachment A to this RFI
- Full name, title, organization
- Email address and phone number

**Important Notice: all RFI responses will be publicly available and must not include any confidential, protected, or proprietary information. Responses to this RFI must include the completed, required RFI Response Coversheet included under Attachment A of this RFI.**

## Questions
*Coordinated Actions and Background*
1. What types of coordinated action or agreement among states could be used to support an orderbook strategy for advanced nuclear reactors?
   a. What are the benefits and challenges of structuring this as a formal agreement (e.g., a joint procurement action, compact, linked contracts) among states?
      i. If a formal agreement is more advantageous, what are some of the legal questions to consider?
      ii. What exit provisions would such an agreement need to have?

b. What are the benefits and challenges of structuring this as a Memorandum of Understanding among the states without a contract or other procurement action?

c. What are the benefits and challenges of structuring this effort more informally and what might that include?

    i. If an informal agreement is more advantageous, how could the states participating ensure accountability and coordination? (e.g., what would be the impact when there is a change in administration within a state or shifting policy priorities?)

d. What are the benefits and challenges of structuring this as a federal procurement concept? Specifically, a concept limited to state respondents that would require substantial state and industry cost share.

*Supply Chain, Workforce, and Policy Coordination*

1. Are there any policy actions that states can coordinate to support an orderbook (e.g., coordinated incentives)?
2. What state, regional, or federal policy initiatives might be supported by the states to ensure regulatory consistency?
3. How can state actions designed to ensure domestic availability of fuel and other supply chain needs support the formation of an orderbook?
4. How can state workforce initiatives and programs support the formation of an orderbook?
   a. Which jobs face the tightest supply, and what 2- to 4-year training programs could states support?

*Addressing Risk*

1. How could technology risk and benefits be addressed?
   a. How could this be divided among states or what other mechanisms to address technological risk could be useful?
2. How could financial risk and benefits be addressed?
   a. How could this be divided among states or what other mechanisms to address financial risk could be useful?
3. How could regulatory risks to current or planned developments be addressed?
   a. How could responsibilities be divided among states with current or future potential mechanisms to de-risk investments?
4. How could regulatory risk be pooled or hedged across states—e.g., joint legal defense funds, shared engagement with NRC, etc.?

*Orderbook Strategy*

1. Would development and administration of an orderbook require a formal governance structure?
   a. If so, please describe what that could look like. If not, please describe how the orderbook, or the states supporting it, would determine which projects should be included and other relevant considerations.

2. How would the deployment schedule for projects within an orderbook be established?
   a. What factors are critical for determining which states or locations would get the first project(s)?
3. Many states are considering the growth of the AI sector and interest from data centers as one of the key end-uses for advanced nuclear. How can those needs be met through an orderbook and what would coordination with data center companies and in particular hyperscalers look like?
4. Another of the key end uses considered is the support of national security needs (e.g., energy resilience and reliability at military bases). How can those needs be met through an orderbook and what would coordination with the U.S. Department of Defense and U.S. Department of Energy (e.g., Office of Cybersecurity, Energy Security, and Emergency Response) look like?
5. What role could the Federal Government play in an orderbook framework and what constraints should be considered (e.g., loan guarantees, procurement agreements, pilot program)?
6. What has coordinated procurement or an orderbook looked like in other sectors?
   a. Are there any models or lessons learned to consider?
7. What size would an orderbook need to be in order to be viable? How should we be defining viability within an orderbook structure (e.g., certain number of units or total financial investment)?
8. Are there infrastructure elements (e.g., fuel handling, manufacturing, training, emergency planning) that could be coordinated or shared regionally in support of an orderbook?

*For Developers*
1. Summarize your company's background (e.g., number of employees).
2. Is your company solely focused on reactor development? What is your company's mission and role?
3. Summarize the potential reactor's capacity, size, cost ($/kWh), use case, required fuel, and technology.
   a. Is your reactor dependent on HALEU?
      i. If so, what plan is in place to ensure availability and access?
4. What is the timeline for your reactor to be commercially viable?
   a. What stage of development are you in?
   b. Are there any go/no go decision points? If so, what is the basis and what would they look like?
   c. What milestones, including supply chain considerations, or information, is assumed in this timeline?
5. What does the regulatory environment look like for your reactor design?
   a. Has there been successful engagement with the NRC?
   b. Have you pursued any permits with the NRC?
   c. Have you determined potential sites or locations?

            i.  What site specific information would be helpful for your company to have?
6. What partnerships or project announcements do you have in place to support siting or new project build?
7. What is your company looking for from the states related to:
    a. Permitting/site preparation
    b. Workforce development
    c. Construction
    d. Other items
8. Does your project have identified infrastructure dependencies (e.g., transmission interconnection, rail access, workforce) that could delay deployment? What assistance partnership would address these gaps?
9. Are there specific permitting construction workforces or licensing elements that could be standardized across states to reduce cost timelines?
10. What end-of-life decommissioning strategy and spent-fuel disposition model do you assume?
11. How would an orderbook approach streamline the manufacturing process for new nuclear generation?
12. What interest do you have in working with some or all of the eleven First Mover states?
13. What interest do you have in supporting federal regulatory and process changes?

*For Utilities*
1. What are some of the biggest barriers to deploying new nuclear generation?
    a. How can states help reduce some of those barriers?
2. Are there certain financing mechanisms or approaches (e.g. cost share for early site permits) that would be beneficial for states to explore?
3. How would a nuclear orderbook approach affect ratepayers?
4. Are there any rules/regulations preventing you from supporting an orderbook?
5. Which rate-making frameworks (e.g. CWIP in rate base, performance-based regulation, multiyear rate plans, other) best support nuclear cost recovery?

*For Investors*
1. What do you see as the biggest challenge for new nuclear companies to secure financial investments at different stages of development (e.g., pre-development, permitting, siting, construction, supply chain, operations, financing, etc.)?
2. How are large hyperscaler technology deals changing or affecting capital decisions?
3. What are the different financing models currently being utilized/explored for new nuclear?
4. How can states best coordinate with private investors to bring projects to commercialization?
5. How do you see emerging innovations or partnerships (such as an orderbook strategy) playing a role in de-risking nuclear projects for investors?

6. What concrete measures can be taken to establish regulatory certainty, making nuclear investments more attractive to venture capital and institutional investors?
    a. How critical is regulatory certainty to orderbook development?
7. How might securitization or other hybrid financing models be effectively utilized in the nuclear space to address long-term capital requirements?
8. What stage of the reactor design certification process should be reached before a design is viable for orderbook engagement?
    a. Are there risks to forming an orderbook for a reactor design that is still in pre-engagement with the NRC?
    b. Should orderbooks be limited to certified designs?

*Technology Types*

Large Light Water Reactors (i.e., AP1000)
1. How can the existing supply chain be leveraged to support build-out of additional AP1000s?
2. What potential is there for siting an AP1000 at existing nuclear sites?
3. Are there any lessons learned from Vogtle that states interested in deploying an additional AP1000 should be aware of?
4. What are the benefits of a group of states facilitating an orderbook around AP1000s?
    a. Are there additional policy incentives or mechanisms that could help spur additional deployment across multiple states?

SMRs for Power Generation
1. What are the biggest barriers to deploying SMRs for power generation?
2. Can an orderbook approach support SMR development for power generation?
    a. If so, what are the deployment timelines based on technology?
3. State Energy Offices and state economic development offices are actively exploring opportunities to collocate SMRs with other infrastructure. How would an orderbook approach to SMRs for power generation help streamline the collocation process and ensure demand growth needs are met?

SMRs for Thermal/Heat Generation
1. Advanced nuclear is being explored to support different industrial use cases (e.g., manufacturing, chemical processes, hydrogen production). What could a partnership between states, nuclear developers, and industrial entities look like to support an orderbook approach?
2. Can an orderbook approach support SMR development for thermal/heat generation?
    a. If so, what are the deployment timelines based on technology?
3. What are the biggest barriers to deploying SMRs for thermal/heat generation?

*Additional Information*
1. Is there any additional information you would like to share?

2. Do you think an orderbook among states would enable advanced nuclear deployment?
3. What are other options that states could undertake to support advanced nuclear reactor deployment?

**Attachment A:  Required RFI Response Coversheet**

**Submitting Organization Name (Required):**

**_____**

**Submitting Organization Primary Point of Contact (Required)**

**Name:   _____**

**Email:   _____**

**Phone: _____**

**Acknowledgment (Required)**
**The [INSERT RFI RESPONDENT ORGANIZATION NAME] acknowledges that all information contained in this submission may be made public by the National Association of State Energy Officials and the entire RFI submission will be posted on the NASEO website for public viewing and use.**

**Name and Title:   _____**

**Date: _____**

**Signature: _____**