Invitational Call for Innovative Project Design Concepts: Informational Meeting

U.S. DOE Grid Innovation Program (GIP) Round 2 Funding Opportunity

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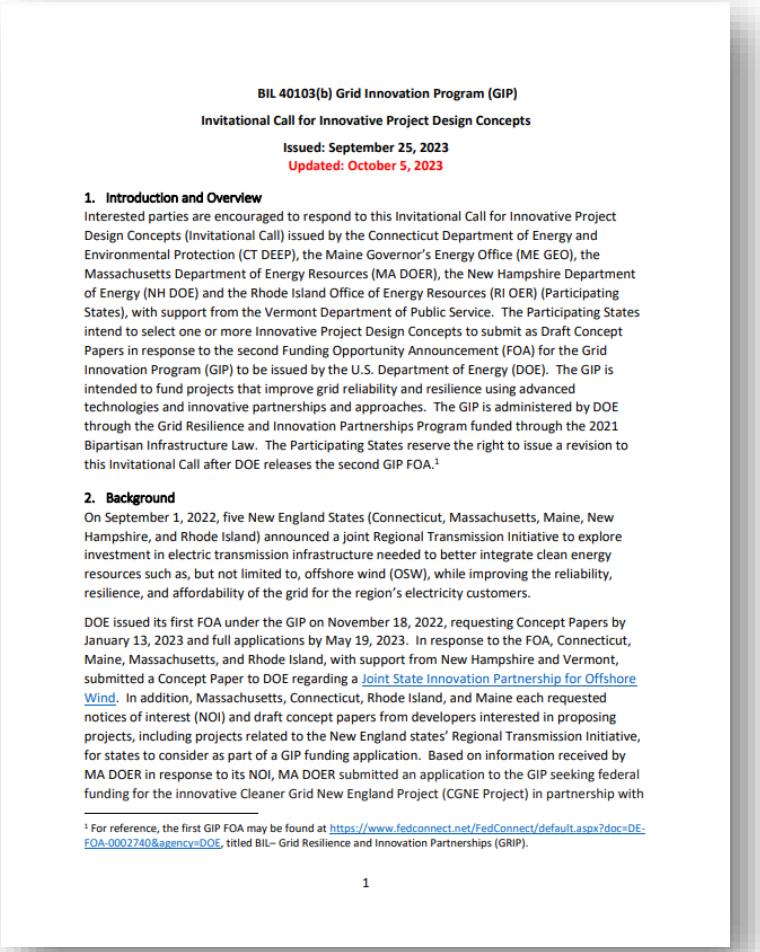
Issued by the Connecticut Department of Energy and Environmental Protection (CT DEEP), the Maine Governor's Energy Office (ME GEO), the Massachusetts Department of Energy Resources (MA DOER), the New Hampshire Department of Energy (NH DOE) and the Rhode Island Office of Energy Resources (RI OER) (Participating States), with support from the Vermont Department of Public Service (VT DPS)

October 31, 2023

Today's Informational Meeting

- The requirements, criteria, processes, and all other aspects of this invitation are governed by the document titled *Invitational Call for Innovative Project Design Concepts*, issued on September 25 and updated on October 5, 2023, available on the New England States Transmission Initiative website
- This Informational Meeting presentation is:
  - Provided for discussion purposes only and may not provide authoritative guidance regarding the invitation
  - Intended to highlight the major components of the invitation and answer questions from interested respondents



BIL 40103(b) Grid Innovation Program (GIP)

Invitational Call for Innovative Project Design Concepts

Issued: September 25, 2023
Updated: October 5, 2023

1. Introduction and Overview

Interested parties are encouraged to respond to this Invitational Call for Innovative Project Design Concepts (Invitational Call) issued by the Connecticut Department of Energy and Environmental Protection (CT DEEP), the Maine Governor's Energy Office (ME GEO), the Massachusetts Department of Energy Resources (MA DOER), the New Hampshire Department of Energy (NH DOE) and the Rhode Island Office of Energy Resources (RI OER) (Participating States), with support from the Vermont Department of Public Service. The Participating States intend to select one or more Innovative Project Design Concepts to submit as Draft Concept Papers in response to the second Funding Opportunity Announcement (FOA) for the Grid Innovation Program (GIP) to be issued by the U.S. Department of Energy (DOE). The GIP is intended to fund projects that improve grid reliability and resilience using advanced technologies and innovative partnerships and approaches. The GIP is administered by DOE through the Grid Resilience and Innovation Partnerships Program funded through the 2021 Bipartisan Infrastructure Law. The Participating States reserve the right to issue a revision to this Invitational Call after DOE releases the second GIP FOA.[1]

2. Background

On September 1, 2022, five New England States (Connecticut, Massachusetts, Maine, New Hampshire, and Rhode Island) announced a joint Regional Transmission Initiative to explore investment in electric transmission infrastructure needed to better integrate clean energy resources such as, but not limited to, offshore wind (OSW), while improving the reliability, resilience, and affordability of the grid for the region's electricity customers.

DOE issued its first FOA under the GIP on November 18, 2022, requesting Concept Papers by January 13, 2023 and full applications by May 19, 2023. In response to the FOA, Connecticut, Maine, Massachusetts, and Rhode Island, with support from New Hampshire and Vermont, submitted a Concept Paper to DOE regarding a Joint State Innovation Partnership for Offshore Wind. In addition, Massachusetts, Connecticut, Rhode Island, and Maine each requested notices of interest (NOI) and draft concept papers from developers interested in proposing projects, including projects related to the New England states' Regional Transmission Initiative, for states to consider as part of a GIP funding application. Based on information received by MA DOER in response to its NOI, MA DOER submitted an application to the GIP seeking federal funding for the innovative Cleaner Grid New England Project (CGNE Project) in partnership with

[1] For reference, the first GIP FOA may be found at https://www.fedconnect.net/FedConnect/default.aspx?doc=DE-FOA-0002740&agency=DOE, titled BIL– Grid Resilience and Innovation Partnerships (GRIP).

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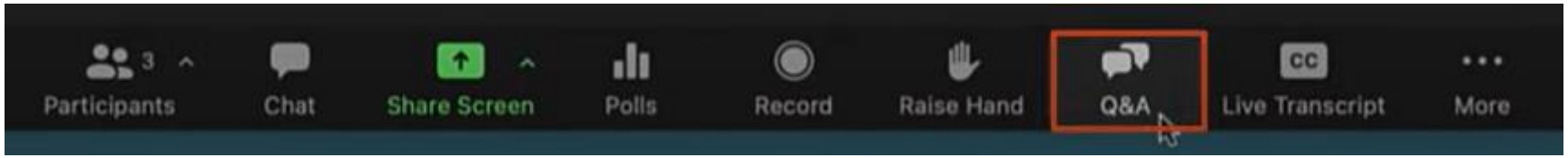
https://newenglandenergyvision.com/new-england-states-transmission-initiative/

Today's Informational Meeting, *continued*

- The following state representatives are participating in today's meeting –
  - **Connecticut**
    - Josh Walters, Staff Attorney, DEEP
  - **Maine**
    - Celina Cunningham, Deputy Director, GEO
  - **Massachusetts**
    - Joanna Troy, Deputy Commissioner, DOER
    - Weezie Nuara, Assistant Secretary, Federal and Regional Energy Affairs, EEA
  - **New Hampshire**
    - Tyler Sweeney, Utility Analyst, DOE
  - **Rhode Island**
    - Chris Kearns, Acting Commissioner, OER
    - Karen Bradbury, Administrator, Energy Legislation & Programs, OER

Logistics

- Answers to questions submitted by interested respondents were posted to the New England States Transmission Initiative website on October 27, 2023
- Questions may be submitted during today's Informational Meeting using the Q&A feature at the bottom of the Zoom webinar

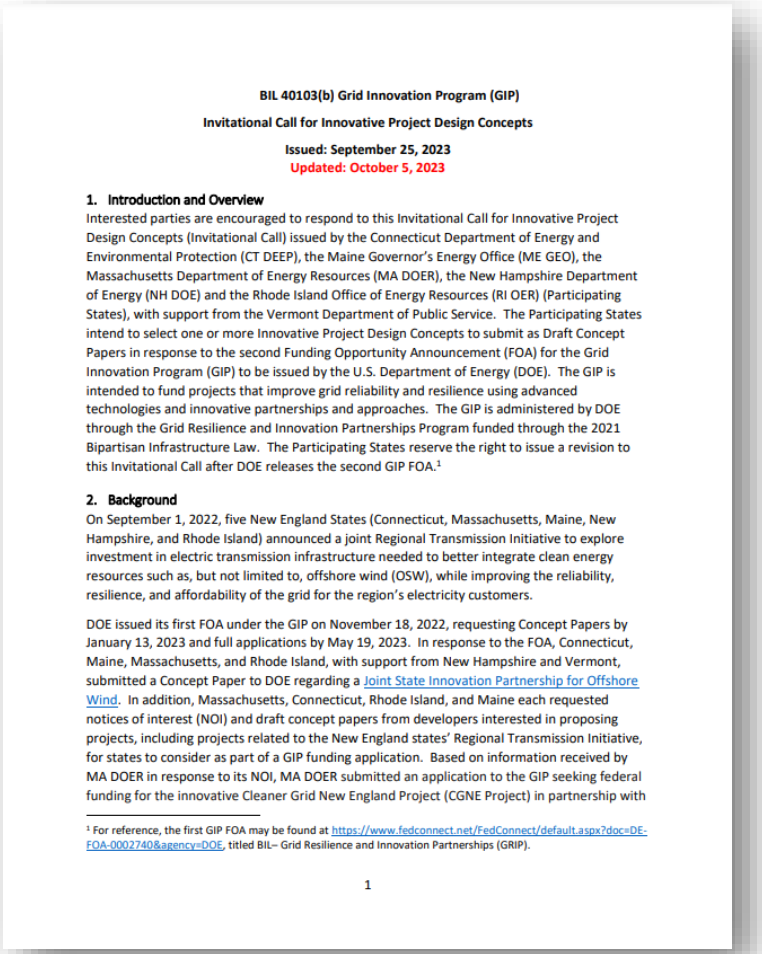


- The Participating States will endeavor to answer all questions submitted during the Informational Meeting
- Any questions not answered during or submitted after the Informational Meeting will be answered on a best-efforts basis

https://newenglandenergyvision.files.wordpress.com/2023/10/multi-state-invitation-for-innovative-project-design-concepts-responses-to-questions-from-interested-respondents-10272023.pdf

Introduction

- On September 25, 2023, CT, ME, MA, NH, and RI (Participating States), with support from VT, issued an ***Invitational Call for Innovative Project Design Concepts*** to solicit project proposals for an anticipated second round of the U.S. Department of Energy's (DOE) Grid Innovation Program (GIP)
  - As of the date of this Informational Meeting, DOE has not yet issued the Funding Opportunity Announcement (FOA) for the second round of the GIP
  - The Participating States reserve the right to issue a revision to the invitation after DOE releases the FOA for the second round of the GIP
- The Participating States have requested innovative project design concepts by Friday, **November 17, 2023**, at **5 PM** to consider for possible submission to DOE



BIL 40103(b) Grid Innovation Program (GIP)

Invitational Call for Innovative Project Design Concepts

Issued: September 25, 2023
Updated: October 5, 2023

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2. Background

On September 1, 2022, five New England States (Connecticut, Massachusetts, Maine, New Hampshire, and Rhode Island) announced a joint Regional Transmission Initiative to explore investment in electric transmission infrastructure needed to better integrate clean energy resources such as, but not limited to, offshore wind (OSW), while improving the reliability, resilience, and affordability of the grid for the region's electricity customers.

DOE issued its first FOA under the GIP on November 18, 2022, requesting Concept Papers by January 13, 2023 and full applications by May 19, 2023. In response to the FOA, Connecticut, Maine, Massachusetts, and Rhode Island, with support from New Hampshire and Vermont, submitted a Concept Paper to DOE regarding a Joint State Innovation Partnership for Offshore Wind. In addition, Massachusetts, Connecticut, Rhode Island, and Maine each requested notices of interest (NOI) and draft concept papers from developers interested in proposing projects, including projects related to the New England states' Regional Transmission Initiative, for states to consider as part of a GIP funding application. Based on information received by MA DOER in response to its NOI, MA DOER submitted an application to the GIP seeking federal funding for the innovative Cleaner Grid New England Project (CGNE Project) in partnership with

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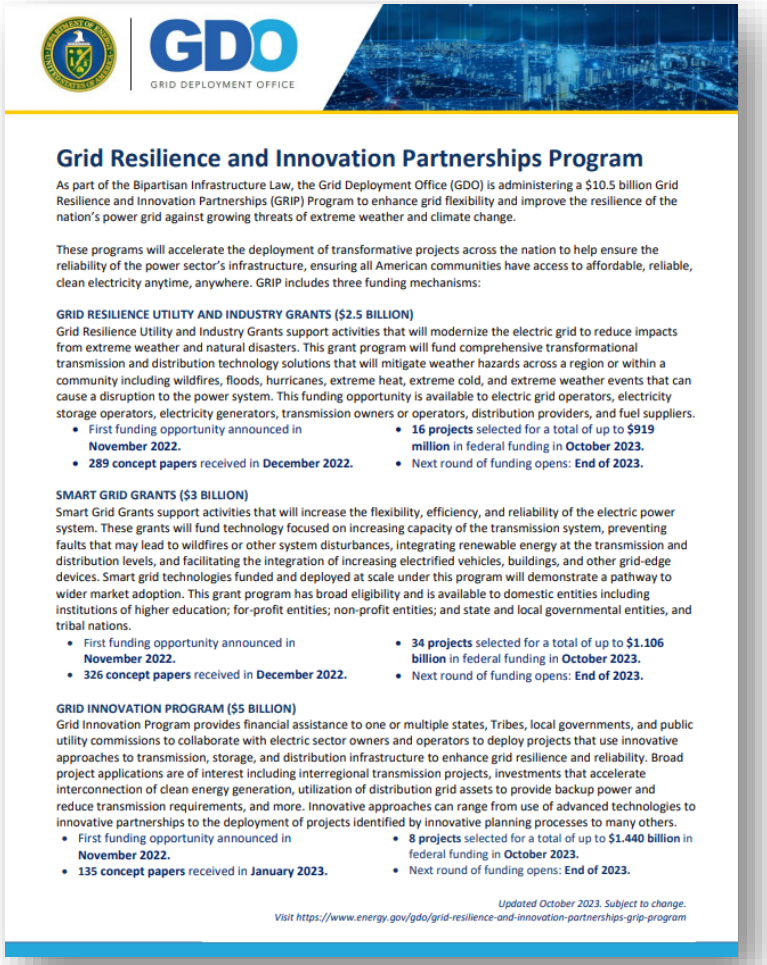
https://newenglandenergyvision.com/new-england-states-transmission-initiative/

Background on the GIP

- The $5 billion GIP, administered through DOE's $10.5 billion **Grid Resilience and Innovation Partnerships (GRIP) Program**, is intended to fund projects that use innovative approaches to transmission, storage, and distribution infrastructure to enhance grid resilience and reliability
  - DOE issued the first FOA on November 18, 2022, requesting Concept Papers for the GIP by January 13, 2023 and full applications by May 19, 2023
    - The maximum award per project was $250 million, or $1 billion for an interregional transmission project, with a cost sharing of at least 50% of the total project costs
    - CT and MA submitted full applications in May 2023
  - On October 18, 2023, DOE announced the selection of 8 projects for a total of up to $1.44 billion in federal funding through the first round of the GIP



GDO
GRID DEPLOYMENT OFFICE

Grid Resilience and Innovation Partnerships Program

As part of the Bipartisan Infrastructure Law, the Grid Deployment Office (GDO) is administering a $10.5 billion Grid Resilience and Innovation Partnerships (GRIP) Program to enhance grid flexibility and improve the resilience of the nation's power grid against growing threats of extreme weather and climate change.

These programs will accelerate the deployment of transformative projects across the nation to help ensure the reliability of the power sector's infrastructure, ensuring all American communities have access to affordable, reliable, clean electricity anytime, anywhere. GRIP includes three funding mechanisms:

GRID RESILIENCE UTILITY AND INDUSTRY GRANTS ($2.5 BILLION)

Grid Resilience Utility and Industry Grants support activities that will modernize the electric grid to reduce impacts from extreme weather and natural disasters. This grant program will fund comprehensive transformational transmission and distribution technology solutions that will mitigate weather hazards across a region or within a community including wildfires, floods, hurricanes, extreme heat, extreme cold, and extreme weather events that can cause a disruption to the power system. This funding opportunity is available to electric grid operators, electricity storage operators, electricity generators, transmission owners or operators, distribution providers, and fuel suppliers.

- First funding opportunity announced in **November 2022.**
- **289 concept papers** received in **December 2022.**
- **16 projects** selected for a total of up to **$919 million** in federal funding in **October 2023.**
- Next round of funding opens: **End of 2023.**

SMART GRID GRANTS ($3 BILLION)

Smart Grid Grants support activities that will increase the flexibility, efficiency, and reliability of the electric power system. These grants will fund technology focused on increasing capacity of the transmission system, preventing faults that may lead to wildfires or other system disturbances, integrating renewable energy at the transmission and distribution levels, and facilitating the integration of increasing electrified vehicles, buildings, and other grid-edge devices. Smart grid technologies funded and deployed at scale under this program will demonstrate a pathway to wider market adoption. This grant program has broad eligibility and is available to domestic entities including institutions of higher education; for-profit entities; non-profit entities; and state and local governmental entities, and tribal nations.

- First funding opportunity announced in **November 2022.**
- **326 concept papers** received in **December 2022.**
- **34 projects** selected for a total of up to **$1.106 billion** in federal funding in **October 2023.**
- Next round of funding opens: **End of 2023.**

GRID INNOVATION PROGRAM ($5 BILLION)

Grid Innovation Program provides financial assistance to one or multiple states, Tribes, local governments, and public utility commissions to collaborate with electric sector owners and operators to deploy projects that use innovative approaches to transmission, storage, and distribution infrastructure to enhance grid resilience and reliability. Broad project applications are of interest including interregional transmission projects, investments that accelerate interconnection of clean energy generation, utilization of distribution grid assets to provide backup power and reduce transmission requirements, and more. Innovative approaches can range from use of advanced technologies to innovative partnerships to the deployment of projects identified by innovative planning processes to many others.

- First funding opportunity announced in **November 2022.**
- **135 concept papers** received in **January 2023.**
- **8 projects** selected for a total of up to **$1.440 billion** in federal funding in **October 2023.**
- Next round of funding opens: **End of 2023.**

Updated October 2023. Subject to change.
Visit https://www.energy.gov/gdo/grid-resilience-and-innovation-partnerships-grip-program

https://www.energy.gov/gdo/grid-innovation-program
https://www.energy.gov/sites/default/files/2023-10/101823_GRIP-Overview-Fact-Sheet.pdf

Background on the GIP, *continued*

- Eligible entities for GIP funding include states (individual or combined), Tribes and Territories, local governments, and public utility commissions
- In the first FOA, DOE expressed an interest in both technical and non-technical innovative approaches that improve grid reliability and resilience on a local, regional, and interregional scale
- Innovative approaches could include advanced technologies, innovative partnerships, financial arrangements, deployment of projects identified by innovative planning and cost allocation approaches, and environmental siting and permitting strategies

https://www.fedconnect.net/FedConnect/default.aspx?doc=DE-FOA-0002740&agency=DOE

Background on the GIP, *continued*

- Applications could address the transmission system, the distribution system, or both, and could include elements such as:
  - distributed generation assets;
  - load point flexibility enhancements;
  - energy storage systems and other flexibility enhancements;
  - technologies to increase the capacity of the transmission and distribution system;
  - grid-edge technologies;
  - sensing, communications, and control technologies and approaches;
  - grid-forming power electronics;
  - integrated system designs;
  - projects with innovative financing and permitting solutions;
  - projects with uncommon or innovative regulatory structures;
  - projects that are a product of innovative planning, modeling, or cost allocation approaches; and
  - other similar projects

https://www.fedconnect.net/FedConnect/default.aspx?doc=DE-FOA-0002740&agency=DOE

Second Round GIP Invitation

- The Participating States invite innovative proposals that meet the DOE's **primary objectives** and the Participating States' **regional objectives**
- The Participating States will prioritize concepts that facilitate and complement the Regional Transmission Initiative and the states' joint efforts to develop transmission infrastructure needed to integrate offshore wind and other clean energy resources
  - **Note**: On September 1, 2022, five New England states announced a joint Regional Transmission Initiative to explore investment in electric transmission infrastructure needed to better integrate clean energy resources such as, but not limited to, offshore wind while improving the reliability, resilience, and affordability of the grid for the region's electricity customers
- With regard to offshore wind, the Participating States are interested in additional **onshore projects** that will ready our region for an offshore grid
- More specifically, the Participating States are not seeking offshore transmission solutions through this invitation in light of the substantial time needed to evaluate such solutions

DOE's Primary Objectives

- Through the first FOA for the GIP, DOE solicited projects that contribute significantly to one or more of the following **primary objectives**:
  - Ensuring reliable grid operations by reducing the frequency, scale, and/or duration of disruptions, reducing capacity interconnection time, increasing regional and interregional transfer capacity, or reducing costs associated with increased reliability
  - Improving overall grid resilience in terms of avoiding, withstanding, responding to, and recovering from disruptions, including deliberate attacks, accidents, the growing threats of extreme weather events and climate change, and other naturally occurring threats or incidents
  - Enhancing collaboration between and among eligible entities and private and public sector owners and operators on grid resilience, including in alignment with regional resilience strategies and plans
  - Contributing to the decarbonization of the electricity and broader energy system in a way that supports system resilience, reliability, and affordability by improving access to technologically and geographically diverse energy resources, including distributed energy resources and electrification opportunities
  - Providing enhanced system value, improving current and future system cost effectiveness, and delivering economic benefits to community members, underrepresented regions, or other stakeholders
- The Participating States expect very similar – if not the same – primary objectives to be outlined in the second FOA for the GIP and invite proposals that contribute significantly to such objectives

Participating States' Regional Objectives

- In addition, the Participating States invite proposed Innovative Project Design Concepts that will address one or more of the following **regional objectives**:
  - Provide an onshore transmission solution that prepares the region to effectively interconnect offshore wind transmission infrastructure, including a networked offshore wind grid
  - Enhance the resilience and reliability of the region's electric grid, including, but not limited to, concepts that feature emerging or underutilized solutions such as storage and demand response in innovative ways
  - Optimize the delivery profile and/or delivery point(s) for expanded offshore wind generation resources in the region
  - Contribute to advancements in transmission planning and address reliability criteria uncertainties
  - Address identified bulk transmission system constraints, including existing transfer capacity limitations, to accommodate cost-effective delivery of incremental renewable energy
  - Reduce the cost of interconnecting offshore wind and other renewable resources pursued through state policy goals
  - Facilitate energy delivery on shore from multiple offshore wind projects while minimizing community disruptions and/or habitat disturbance
  - Minimize interconnection and/or transmission development risk, including financing risk that may arise from unforeseen costs, and project-on-project risk that may arise if the success of one project is dependent on the timely completion of another project

Selection Criteria and Process

- At the Participating States' discretion, select proposed Innovative Project Design Concept submittals will be evaluated by the Participating States, with technical assistance from ISO New England, and scored in accordance with the criteria described in the invitation
- The evaluation criteria will be guided by the DOE's FOA criteria and associated weightings in order to identify the Innovative Project Design Concept(s) that have the highest probability of a GIP award, while also meeting the states' regional objectives. These criteria include:
  - Impact and Market Viability
  - Project Plan and Project Financial Feasibility
  - Management Team and Project Partners
  - Community Benefits Plan
    - Every Bipartisan Infrastructure Law (BIL)-funded project is expected to **(1)** support meaningful community and labor engagement; **(2)** support quality jobs and ensure workforce continuity; **(3)** advance diversity, equity, inclusion, and accessibility; and **(4)** contribute to the Justice40 Initiative's goal that 40% of the overall project benefits flow to disadvantaged communities

Selection Criteria and Process, *continued*

- Section 5 of the invitation requires that respondents provide additional **technical and financial information** to allow the Participating States to conduct a fulsome evaluation of the Innovative Project Design Concept in accordance with the selection criteria, including, but not limited to:
  - Respondent experience developing energy infrastructure projects
  - Technical description of the Innovative Project Design Concept
  - Anticipated project costs, mechanism for funding the 50% cost share, and why the project requires federal funding to be completed
  - Project development timeline that demonstrates the project can achieve commercial operation in the required 60 to 96-month performance period (as required by the first FOA)
- Proposed Innovative Project Design Concepts that are selected will be invited to prepare a Concept Paper for consideration by the Participating States for submission to DOE in response to the FOA
- By submitting a Concept Paper, the proposed project developer is committing to prepare a Full Application that meets the requirements of the FOA, at the developer's sole expense, for one or more Participating States to submit to DOE, if the Concept Paper is encouraged by DOE

Additional Guidance

- The Participating States will prioritize Innovative Project Design Concepts that demonstrate –
  - Enhanced collaboration among eligible entities (states, local governments, Tribes, and public utility commissions) and private and public sector owners and operators, including collaboration across state and other territorial boundaries such as grid operators or other balancing authorities
  - Readiness, viability, and clearly articulated timelines for deployment, including key milestones relating to financing, permitting, development, construction and commercial operation
  - Regional and/or interregional reliability and resilience benefits using quantifiable and measurable metrics relating to the intended improvements in grid outcomes
  - Widespread deployment of advanced technologies; innovative partnerships; new financial arrangements; increased non-Federal investment; deployment of projects identified by innovative planning, modeling, or cost allocation approaches; and/or innovative environmental siting, permitting strategies, or community engagement practices

Key Deliverables and Deadlines

- Please submit Innovative Project Design Concept responses to:
  - Joanna.K.Troy@mass.gov
  - deep.energybureau@ct.gov
  - ethan.tremblay@maine.gov
  - Daniel.T.Phelan@energy.nh.gov
  - karen.bradbury@energy.ri.gov
- Please include all state recipients on the e-mail submittal

Key Deliverables and Deadlines	
Issuance of Invitational Call for Innovative Project Design Concepts	September 25, 2023
Questions from Interested Respondents	September 29, 2023 at 5:00 PM
Informational Meeting for Interested Respondents	October 31, 2023 at 2:00 PM
Submittal of Innovative Project Design Concepts to Participating States	November 17, 2023 at 5:00 PM
Expected Notification of Selection by Participating States	TBD
Submittal of Concept Paper(s) to DOE	TBD
Submittal of Full Application(s) to DOE	TBD

Note: After DOE issues the second round FOA, the Participating States plan to update the invitation with the expected notification of selection date, the Concept Paper submittal deadline, and the Full Application submittal deadline.

- Respondent's submittal is limited to **15 pages**, excluding resumes and attachments
- Respondents must submit complete, unredacted versions of their Innovative Project Design Concepts, which are subject to the confidentiality provisions in Section 5.3

Questions?