# Huntsbrook Offshore Wind Hub

Project Scope & Community Benefits

CEEJAC Energy Subcommittee September 2024

## New England States Transmission Initiative

2022

2023

The Five New England States of CT, MA, RI, ME, and NH announced a new Regional Energy Transmission Infrastructure Initiative, aimed at pursuing investments into our transmission system to fully enable clean energy resources.

Early/Mid 2023: Individual states submitted Applications to the Federal Grid Resilience and Innovation Partnership (GRIP) Program, but no New England-based Projects were selected to receive funding.

Late 2023: the six New England States of CT, MA, RI, ME, NH, and VT, formed the New England Transmission Initiative, soliciting proposals for submission to the second round of DOE's Grid Resilience and Innovation Partnership Program (GRIP).

- One of the Projects selected for submission was the Huntsbrook Offshore Wind (OSW) Hub.
- On April 17, 2024, a coalition of New England states (along with the region's two largest utilities and two storage developers, including Eversource) jointly submitted an application to the U.S. Department of Energy (DOE) under the Grid Innovation Program for the Power Up New England portfolio, which includes Eversource's Huntsbrook Offshore Wind Hub.

On August 6th, 2024, DOE announced that the Power Up New England proposal, including the Huntsbrook OSW Hub, was selected to receive **a \$389M grant through the GRIP Program**.

## Power Up New England – What it is

A Public/Private Partnership between all six New England States, the region's two largest electric utilities, and an Emerging Battery Developer

### **Power Up Components**

### **New offshore wind POI in Connecticut** (Huntsbrook Offshore Wind Hub) – **Eversource**

- Enable 2,400 MW of offshore wind interconnection
- Eliminate 70% of fault risk for region's largest zero-carbon generator
- Increase regional switching capabilities and maximize capacity on existing right-of-way

### New and upgraded offshore wind POI in Massachusetts – National Grid

- Enable 2,400 MW of offshore wind transmission interconnection
- Deploy dynamic line rating (DLR) technology to maximize line capacity and improve reliability

### 85 MW multi-day storage system in Maine – Form Energy

- First-of-its-kind deployment in New England
- Reduce curtailment in a transmission constrained area
- Up to four days of backup power

Power Up New England is an integrated portfolio of replicable, gridbenefitting technologies to increase reliability and resilience and accelerate the clean energy transition

John Martin Standing and

### Huntsbrook Offshore Wind Hub Project Scope

- New 345-kV switching station in Montville, CT to serve as point of interconnection (POI), enabling the delivery of 2,400MW offshore wind energy
- Strategically prepares the onshore grid in advance of future offshore wind development, increase reliability, and bring clean energy into New England



## Huntsbrook OSW Hub – Project Key Attributes

- Increases the hosting capacity for incremental clean energy interconnection, which contributes to regional supply diversity and reduces power sector reliability risks associated with natural gas reliance.
- Will reliably deliver up to **2,400 MWs of offshore wind** without necessitating significant upgrades of the existing transmission system.
- Provides planners and operators an improved capability to **reduce risks associated with faults**, a reliability benefit that accrues to all customers in the region.
- Strategically prepares the onshore grid in advance of future offshore wind development to accelerate procurement activity related to the States' Regional Transmission Initiative and Modular Offshore Wind Integration Plan
  - State and National Achievement of Decarbonization Goals: Enables offshore wind interconnection in Connecticut, New England, and the Atlantic basin.
  - Improves Regional Electric Reliability: Switching station increases capability to reduce risks associated with outages on the regional network, as described further below.
  - Proactively Develop Solution to Developers' Greatest Risk: The Project reduces financial risk associated with identifying
    optimal points of interconnection, which is supported by several offshore wind developers, and addresses uncertainty
    associated with transmission upgrades for interconnection and delivery. The innovative coordination approach and federal
    financial support in turn increases the likelihood of securing additional public and/or private investment from the offshore
    wind development community

## Delivery of Offshore Wind into Huntsbrook

- The Huntsbrook OSW Hub is only the switching station to serve as the new POI for offshore wind
- For full deliverability of offshore wind, the following components will still be required, in coordination with Offshore Wind Developers:
  - Generator Lead Line from shore landing to converter station
  - Converter Station to convert DC to AC
    - Assumes HVDC will be utilized by OSW Developer
  - Onshore Sole-Use Facilities (AC Tie Line from Converter to Huntsbrook OSW Hub)
  - Network Upgrades as a result of ISO-NE Study Process
- Eversource stands ready to coordinate with companies developing offshore wind projects in the MA/RI lease area that may be interested in interconnection at Huntsbrook



## **DOE GRIP Funding:** What is Required?

- Applications to the Grid Innovation Program are comprised of three key documents:
  - Technical Volume
  - Community Benefits Plan
  - Budget Justification Workbooks
- **Community Benefits Plans** must support building a clean and equitable energy economy. Projects are expected to:
  - 1. Support meaningful labor and community engagement
  - 2. Invest in America's workforce
  - Advance diversity, equity, inclusion, and accessibility
  - 4. Contribute to the President's goal that 40% of the overall benefits flow to disadvantaged communities (Justice40 Initiative)
- Applications must include Community Benefit-focused S.M.A.R.T Goals (Specific, Measurable, Achievable, Relevant, and Time-Bound)



#### **Grid Innovation Program**

Funded through the Bipartisan Infrastructure Law (BIL), the Grid Innovation Program (40103(b)) support projects that use innovative approaches to transmission, storage, and distribution infrastructure to enhance grid resilience and reliability. Projects selected under this program will include interregional transmission projects, investments that accelerate interconnection of clean energy generation, and utilization of distribution grid assets to provide backup power and reduce transmission requirements. Innovative approaches can range from use of advanced technologies to innovative partnerships to the deployment of projects identified by innovative planning processes.

The Grid Innovation Program will invest up to \$5 billion (\$1 billion/year for Fiscal Years 2022-2026) in innovation and new approaches to transmission, distribution, storage, and regional resilience. The first funding cycle will include both FY22 and FY23, up to \$2 billion. Projects are subject to a 50% cost share minimum.

Eligible entities include

- A State
- A combination or 2 or more States
- An Indian Tribe
- A unit of local government
- A Public Utility Commission

Concept Papers are due January 13, 2023. DOE will provide a response to Concept Papers by March 2023. Full Applications are due May 19, 2023. Applicants are allowed to submit more than one Concept Paper, provided that each describes a unique project.

#### Grid Innovation Program Primary Objectives:

- Ensure reliable grid operations
- Improve overall grid resilience
- Enhance collaboration between and among eligible entities and private and public sector owners and operators on grid resilience
- Contribute to the decarbonization of the electricity and broader energy system
- Provide enhanced system value, improve current and future system cost-effectiveness and deliver economic benefits

#### Areas of Interest for Applications:

- Transmission capacity enhancements
- Advanced distribution grid assets and functionality
- Combined systems demonstrating innovative approaches

#### \*\*\*UPDATED AS OF DECEMBER 15, 2022. SUBJECT TO CHANGE\*\*\*



### DOE Community Benefits Plan Goals and Commitments

- Utilize organized labor as key element of project success, improve efficiencies, and ensure workforce safety.
  - Key Action(s): Formalize Project Labor Agreement with IBEW.



- Formalize Community Agreements to ensure robust stakeholder engagement throughout project development and construction.
- Key Action(s): Engage with Community Leaders & Formalize Community Agreements prior to construction.
- Develop a multi-disciplinary education initiative with UCONN to expand the clean energy workforce: Connecticut Institute for Clean Energy.
- Key Action(s): Develop Clean Energy Scholars Program, UCONN OSW Senior Design Program, and Offshore Wind Certificate Program, in coordination with UCONN.



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- Initiate a partnership with The Greater New England Minority Supplier Development Council (GNEMSDC) to engage diverse vendors & contractors .
- Key Action(s): Identify contract options for tier 1 & 2 suppliers, partner with GNEMSDC to solicit vendor & contractor support.



Form of Working Groups & Oversight Committee in coordination with the New England States and local communities to ensure Justice40 goals are met.

Key Action(s): Coordinate Oversight Committee with New England States and establish Working Groups with nearby Communities.

## Huntsbrook OSW Hub – Federally & State Designated Disadvantaged Communities



### State of CT Designated

- Distressed
  - Montville
  - New London
- Environmental Justice
  - New London
  - Waterford
  - East Lyme





### Federally Designated

- CT Tribes
  - Mohegan
  - Mashantucket Pequot
- Areas of New London and Groton

## **Community Engagement**

- The Huntsbrook Offshore Wind Hub will utilize Local Community Working Groups to serve as a dynamic platform for dialogue between Eversource, communities, and stakeholders at the local level.
- The Working Groups will support Eversource's commitment to solicit input from the various voices within the community, gather insights and feedback that inform the development of best practices.
- In addition to the Working Groups, Eversource will undertake extensive project engagement with community groups, private property owners, municipal staff, and other stakeholders where the Huntsbrook Offshore Wind Hub will be located and the localities through future offshore wind grid interconnections will occur.
- In-community events will be utilized to explain maturing project details, to educate about the need for the Project, and to inform about potential impacts and benefits for area residents.

### DOE Application Engagement & Support

- Town of Montville\*
- City of New London\*
- Town of Waterford
- Town of East Lyme\*
- Town of Preston
- Mohegan of Connecticut
- Mashantucket Pequot

#### UCONN\*

Greater NE Minority Supplier Development Council\*

Chamber of Commerce of Eastern CT\*

Greater Mystic Chamber of Commerce\*

CT Business & Industry Association(CBIA)\*

SeCTer\*

- Rep. Anthony Nolan\*
- Rep. Kevin Ryan\*
- Rep. Holly Cheeseman\*
- Rep. Kathleen McCarty\*
- Sen. Catherine Osten\*
- Sen. Martha Marx\*

CT Municipal Electric Energy Cooperative

Northeast Clean Energy Council

CT Industrial Energy Consumers

CT Attorney General

CT Office of Manufacturing & CT Office of the Clean Economy

CT Wind Collaborative Board

CT Office of Consumer Counsel

\*Provided Letter of Support for DOE Application

### Huntsbrook OSW Hub – Proposed Schedule\*



\*Schedule subject to change