

Offshore Wind Procurement

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Issue

This report describes the offshore wind procurement authorized under [PA 19-71](#).

Summary

PA 19-71 required the Department of Energy and Environmental Protection (DEEP) commissioner, in consultation with others, to solicit proposals from Class I offshore wind facilities with a total nameplate capacity of 2,000 megawatts (MW) in the aggregate. It also established a process and criteria for DEEP to select proposals and direct the electric distribution companies (EDCs) (i.e., Eversource and United Illuminating) to enter into long-term contracts under the selected proposals.

Among other things, the act requires (1) bidders to include an environmental and fisheries mitigation plan for building and operating their offshore wind facilities and (2) DEEP to establish a commission on environmental standards to inform these plans. DEEP established the commission in June and the commission released its final report in August 2019.

That month, DEEP also issued a request for proposals (RFP). DEEP received 46 bids from three developers: Constitution Wind (Bay State Wind), Mayflower Wind, and Vineyard Wind. In December 2019, DEEP selected Vineyard Wind's 804 MW Park City Wind Project.

For selected proposals, the act authorizes DEEP to direct the EDCs to enter into power purchase agreements (PPAs) for energy, capacity, associated transmission, and environmental attributes, or any combination of them, for up to 20-year terms, subject to approval by the Public Utilities Regulatory Authority (PURA). The companies must recover costs associated with the PPAs from electric ratepayers and credit any associated revenues to electric ratepayers. In August 2020, PURA

approved PPAs between Vineyard Wind and the state’s electric utilities for the Park City Wind Project and authorized the companies to recover costs and credit revenues through the non-bypassable federally mandated congestion charge (a component of ratepayer bills).

For subsequent solicitations issued after 2019, the act requires the DEEP commissioner to determine the timing, schedule, and quantities of energy for solicitations. Her decisions may be informed by the Integrated Resources Plan (IRP), a document prepared by DEEP and the EDCs. Table 1 shows a timeline of the offshore wind procurement process to date.

Table 1: Timeline of Offshore Wind Procurement Process

Date	Event
June 2019	On June 7, Governor Lamont signed PA 19-71 . DEEP issued a notice of scope of proceeding and a request for written comment (preliminary documents to begin soliciting proposals). On June 14, DEEP convened a Commission on Environmental Standards.
July 2019	On July 1, DEEP released its draft RFP. On July 18, the Commission on Environmental Standards issued its draft recommendations for comment.
August 2019	On August 7, the commission released its final recommendations . On August 16, DEEP issued an RFP for 2000 MW of energy derived from Class I offshore wind facilities.
December 2019	On December 5, DEEP announced their selection of the Park City Wind project (804 MW), developed by Vineyard Wind.
May 2020	On May 21, 2020, DEEP released its final determination for the RFP required under PA 19-71. Eversource and United Illuminating filed power purchase agreements for approval with PURA.
August 2020	PURA approved power purchase agreements between Vineyard Wind and the electric utilities (Eversource and United Illuminating) (Docket 19-12-18).
December 2020	DEEP plans to publish the IRP by the end of the month.

Request for Proposals

Generally, to conduct an energy procurement, DEEP solicits proposals from certain types of resources, evaluates submissions, makes selections, and then directs the EDCs to enter into long-term agreements (e.g., PPAs) to purchase a specified amount of energy or related products (e.g., renewable energy credits) in accordance with selected proposals. This allows selected resources to have a pre-determined price for their products over a long period of time rather than selling for fluctuating prices on the wholesale energy markets. The EDCs, which, in Connecticut, do not own generation, can resell the purchased energy and recover the costs from ratepayers through a

reconciling component of their bills (or, distribute the profits to ratepayers should the procured energy and related products sell for more than the purchase price).

The act authorizes the DEEP commissioner, in consultation with the Office of Consumer Counsel and the Attorney General, to solicit proposals for Class I offshore wind facilities, but required her to initiate a solicitation within 14 days of the act's effective date, for projects with a total nameplate capacity of 2,000 MW in the aggregate. The act allows the commissioner to issue solicitations on behalf of Connecticut alone or in ordination with other New England states or New York.

DEEP issued a draft RFP on July 1 and [a final RFP](#) on behalf of Connecticut on August 16, 2019.

Commission on Environmental Standards

The act requires the DEEP commissioner to establish a commission on environmental standards to provide input on best management practices to inform the environmental and fisheries mitigation plans that must be part of any submitted proposal.

The DEEP commissioner convened the Commission on Environmental Standards in June 2019. The commission included legislators, representatives from commercial fishing industries, and environmental groups, among others. After submitting comments for DEEP's draft RFP and releasing a draft report, the commission released [its final report](#) in August 2019.

The final report includes the following recommendations:

1. **Adoptive Operational Plan:** Ongoing studies on potential impacts to the environment and commercial fishing should serve as the basis for an adaptive operational plan in which the developer, DEEP, and other stakeholders periodically assess information gathered and make "course corrections" to mitigation efforts.
2. **Mitigation Fund:** The developer should (a) commit some amount of money "up front" to a mitigation fund, administered by an independent third party, and used to offset economic losses or burdens to the commercial fishing industry, the environment, and other stakeholders and (b) detail their intent to provide an ongoing, reliable funding source for the fund.
3. **Decommissioning Plan and Funding:** The developer should provide plans for decommissioning installations at the end of their service life, including for infrastructure in state waters (e.g., cables).
4. **Wildlife Risks:** Applications should contain (a) an assessment and monitoring plan with a site-specific inventory of all species at risk of impact, (b) an avoidance and mitigation plan to anticipate and avoid risks to each species for each stage of development and in all locations

where project activities occur, and (c) a data reference and sharing plan to reference existing data and coordinate regionally to share data.

5. Hazards to Navigation, Safety at Sea, and Interference with Fishing Operations: Bidders should present an assessment of potential hazards and measures taken to minimize them, addressing topics such as (a) turbine orientation, configuration, and spacing; (b) cable burial; (c) collision risk; (d) indemnification; (e) transit lanes; (f) interference with search and rescue operations; and (g) interference with mobile and fixed fishing gears.
6. Impacts to Federal Fisheries Assessment Surveys: Bidders should provide an inventory of any scientific surveys impacted by development and plans to collaborate with entities conducting those surveys to mitigate impacts.

Bid Requirements

The act includes various requirements for bids the commissioner may solicit and select. Under the act, selected bids must contain contract commitments requiring (a) payment of at least the prevailing wage to laborers, workmen, and mechanics performing construction activities for the project within the United States and (b) selected bidders to engage in good faith negotiations over a project labor agreement. The act additionally allows bidders to include plans for using skilled labor.

Under the act, bidders must include an environmental and fisheries mitigation plan for building and operating their offshore wind facilities. The plan must include an explicit description of the best management practices that the bidder will use to avoid, minimize, and mitigate impacts to wildlife, natural resources, ecosystems, and water-dependent uses (e.g., commercial fishing).

The act also required bidders responding to 2019 solicitations to include at least one proposal for eligible resources with a nameplate capacity of 400 MW.

[DEEP's August 2019 RFP](#) includes additional requirements. For example, bidders submitting to a similar procurement in Massachusetts must also submit a copy of their complete and unredacted proposal to DEEP. Project agreements must require the delivery of energy to begin by July 1, 2020, but no later than December 31, 2026. And eligible projects may not receive Connecticut ratepayer-funded incentives or subsidies.

Among other things, bidders under the RFP must also:

1. hold a lease from the federal Bureau of Ocean Energy Management;
2. qualify and participate in the Independent System Operator of New England (ISO-New England) Forward Capacity Market;

3. demonstrate that their projects are technically viable and can be fully dispatched without displacing other clean energy generation; and
4. demonstrate that they have sufficient technical, financial, and managerial capabilities, as well as relevant experience and expertise.

Submitted Bids

DEEP received proposals from three developers, all submitted in the fall of 2019:

1. Constitution Wind, submitted by Bay State Wind, LLC, and described as an Ørsted and Eversource Initiative;
2. Mayflower Wind, submitted by Mayflower Wind Energy, LLC; and
3. Vineyard Wind, submitted by Vineyard Wind LLC.

Each developer submitted multiple bids with various pricing options. DEEP received 46 bids in total, 23 of which were contingent upon Massachusetts also selecting the project in its procurement process.

Bid Evaluation

The act requires the DEEP commissioner, when selecting a proposal, to consider whether it:

1. is in the ratepayers' best interests, including the energy source's delivered price;
2. promotes electric distribution system reliability, including during winter peak demand;
3. has any positive impacts on the state's economic development (in consultation with the Department of Economic and Community Development commissioner);
4. is consistent with the state's (a) statutory requirements to reduce greenhouse gas emissions, (b) policy goals outlined in the Comprehensive Energy Strategy and Integrated Resources Plan, and (c) goals and policies set in the Coastal Management Act and Long Island Sound Blue Plan; and
5. uses practices to avoid, minimize, and mitigate impacts to wildlife, natural resources, ecosystems, and water-dependent uses.

For the 2019 solicitation, the bid evaluation team included representatives from DEEP, PURA, the Office of Consumer Counsel, the Office of Attorney General, United Illuminating, and Eversource. As allowed by the act, DEEP also retained Levitan and Associates, Inc., as consultants to assist with implementing solicitations and evaluating proposals. The team conducted a two-stage evaluation

and selection process, first evaluating whether proposals met basic eligibility criteria and then evaluating them qualitatively and quantitatively. The DEEP commissioner made the final selection.

Selected Project

In December 2019, DEEP selected the 804 MW Park City Wind Project developed by Vineyard Wind. According to DEEP, the project is expected to generate 3.7 million megawatt-hours per year or approximately 14% of the state's electric load. According to DEEP's final determination, the Park City Wind Project includes an estimated \$890 million in economic development in the state, including Bridgeport Harbor and the local supply chain. The decision notes that the project will provide significant environmental benefits and help the state meet its carbon emission targets.

The act authorizes DEEP to direct the EDCs to enter into power purchase agreements (PPAs) for energy, capacity, associated transmission, and environmental attributes, or any combination of them, for up to 20-year terms. After DEEP selected Park City Wind, the EDCs negotiated and executed power purchase agreements (PPAs), to become effective in May 2020.

PURA Review

Under the act, the PPAs are subject to PURA's review and approval. The act requires PURA to approve a PPA if it:

1. provides for delivering adequate and reliable products and services, for which there is a clear public need, at a just and reasonable price;
2. is prudent and cost effective; and
3. is between an EDC and a solicitation respondent that has the technical, financial and managerial capabilities to perform under the PPA.

In August 2020, PURA [approved](#) PPAs between Vineyard Wind and the state's EDCs for the Park City Wind Project (Docket [19-12-18](#)). PURA generally found that the PPAs "provide for adequate delivery of products and services and will contribute significantly toward meeting the state's carbon reduction goals." The decision did not include the prices for energy or other products, but PURA stated that it found the pricing in the PPAs just and reasonable, based on information presented by DEEP and PURA's review of recent offshore wind projects. According to PURA, the EDCs must generally receive PURA's approval to modify the PPAs in the future.

The act requires that the EDCs recover a PPA's net costs, including costs incurred under the PPA and reasonable costs incurred in connection with it, through a fully reconciling component of

electric rates for all EDC customers. Any net revenues from selling products purchased under the PPA must be credited to customers through the same electric rate component. PURA's approval requires the EDCs to recover costs through the non-bypassable federally mandated congestion charge (a component of ratepayer bills).

Plan for Subsequent Solicitations

PA 19-71 required the DEEP commissioner to issue a solicitation within 14 days after it became effective. But it also authorized her to issue additional solicitations until the 2,000 MW cap is reached, which must be done by the end of 2030. Under the act, the DEEP commissioner must determine the timing, schedule, and quantities of energy for solicitations issued after 2019, but her decisions may be informed by the Integrated Resources Plan (IRP). By law, DEEP, in consultation with Eversource and United Illuminating, must prepare an IRP every two years that contains, among other things, a comprehensive plan for procuring energy resources ([CGS § 16a-3a](#)).

The act requires DEEP, in the next IRP, to determine the timing and schedule for offshore wind solicitations issued after 2019 and the amount of energy the DEEP commissioner may seek through these solicitations (up to 2,000 MW including the 2019 procurement). According to DEEP staff, the next IRP will be published in December 2020.

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