



March 1, 2019

SUBMITTED ELECTRONICALLY TO eric.steltzer@mass.gov

Eric Steltzer, Deputy Director Renewables Division
Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

RE: Offshore Wind Additional Procurement Study

Dear Mr. Steltzer,

Please accept the following attached comments on behalf of Vineyard Wind LLC ("Vineyard Wind") in response to the Request for Stakeholder Comment: Offshore Wind Additional Procurement Study issued by the Department of Energy Resources ("DOER") on February 7, 2019.

Thank you for the opportunity to provide input. We stand ready to provide any further information or assistance that you may require.

Respectfully submitted,

Vineyard Wind LLC

A handwritten signature in dark ink, appearing to read "Erich Stephens", written over a horizontal line.

Erich Stephens
Chief Development Officer

ATTACHMENT

Respondent Information

1. Please provide the name of your organization and your contact information.

Vineyard Wind
700 Pleasant Street, Suite 510
New Bedford, MA 02740
508-717-8964

2. Please briefly describe your organization and your interest in the Commonwealth's OSW procurements.

Vineyard Wind is a New Bedford-based offshore wind development company developing the nation's first commercial-scale OSW project- an 800 MW located in federal waters south of Martha's Vineyard (the "Massachusetts Project"). The Massachusetts Project is set to begin construction later this year and was awarded Power Purchase Agreements (PPAs) in 2018 in connection with the first Section 83C OSW procurement.

Vineyard Wind is 50% owned by funds of Copenhagen Infrastructure Partners (CIP) and 50% by Avangrid Renewables (together the "parent companies"). Avangrid Renewables is one of the nation's largest developer / operators of wind energy projects. CIP manages over \$7 billion in clean energy investments worldwide.

Vineyard Wind holds two leases in the Massachusetts Wind Energy Area and is working to develop additional OSW projects in its lease areas. The company is interested in the Commonwealth's future OSW procurement(s) as an opportunity to secure long-term PPAs for its next project(s).

Necessity

3. Are additional OSW procurements for long-term Power Purchase Agreements that are above and beyond those authorized by Section 83C necessary to support the development of OSW?

Vineyard Wind believes additional OSW procurement(s) for long-term PPAs are necessary to support the continued development of OSW. As described in response to Question 4, current opportunities to participate and earn revenue in wholesale markets do not allow an OSW project to obtain financing. Long-term PPAs, however, do make it possible for OSW projects to obtain financing by fixing the price paid for the electricity and renewable energy credits (RECs) generated for a large part of a project's economic life. This removes one of the largest economic uncertainties in estimating the future income of OSW projects, thus lowering risk to investors and lenders, and ultimately lowering costs for energy consumers.

Financing and constructing OSW projects with long-term contracts for both energy and RECs to underpin the financing is, in the view of Vineyard Wind and its parent companies, currently not possible. This view has been confirmed by the banks and financial advisors that Vineyard Wind is consulting with as it moves forward with the Massachusetts Project.

State-led OSW procurements are presently the only way for OSW projects to secure the long-term PPAs required to obtain financing. Such procurements for OSW have also already demonstrated their ability to deliver substantial savings to electricity ratepayers. The PPAs that Vineyard Wind has entered into for the Massachusetts Project are expected to deliver \$3.7 billion in energy-related savings over 20 years.

Other long-term contracting approaches are being explored or developed (e.g., community aggregation and corporate PPAs), but Vineyard Wind does not expect these approaches will be able to sustain the growth and scale in the sector needed to drive down costs and meaningfully contribute to carbon emission reduction policies. Rather, community aggregation and corporate PPAs are best seen as a means to amplify or leverage large-scale state-led procurements-and is another reason why such procurements are so important to maximize the benefits of OSW for Massachusetts.

a. What are the advantages and disadvantages of longer and shorter term (i.e. 10 years, 25 years) periods for Power Purchase Agreements to developers, ratepayers, or others?

Longer term periods (e.g., 20 years or more) for PPAs are more advantageous for OSW developers and ratepayers than shorter term periods. A 25-year contract term is compatible with the expected operational life of an OSW project, and allows a developer to recover the costs to develop and build an OSW project over the course of project's operational life rather than a more condensed timeframe. This makes it easier to obtain low cost financing for a project and allows developers to offer more competitive pricing for electricity and RECs. Financing shorter term period PPAs (e.g., 10 or 15 years) can be difficult. Shorter term period PPAs also increase financing costs to developers by changing the risk profile of a project, which impacts a project's pricing requirements for electricity and RECs.

Longer term period PPAs enable lower prices for OSW, which mitigates the risk to ratepayers that the prices paid for OSW energy and RECs will be above market over the term of the PPA. As noted above, the Massachusetts Project is expected to deliver \$3.7 billion in energy-related savings over 20 years. These savings would not have been possible with a shorter term period PPA for the reasons mentioned above. What's more, concerns about potential risks to ratepayers regarding longer term period PPAs should be viewed in light of the range of energy-related and non-energy related economic and environmental benefits that OSW delivers as well as the fact that OSW is the only high capacity Class I renewable energy resource capable of offsetting large portions of the region's generation retirements while

delivering badly needed fuel diversity and contributing to the efforts to reduce emissions in the electricity sector.

b. Are there advantages or disadvantages in soliciting OSW in a stand-alone procurement – or could it compete in a broader renewable or clean energy procurement?

Stand-alone OSW procurements are preferable, particularly while OSW is in the initial development stage. Dedicated procurements account for the fact that it takes longer to plan and develop OSW projects than other types of renewable energy projects. What's more, stand-alone procurements, when coupled with a long-term OSW target, provide developers with insight into total market opportunities. This in turn allows for long-range planning that can drive down prices, heighten competition, and avoid "boom/bust" scenarios that undermine economic development and make in-state investment difficult.

The one potential drawback of stand-alone OSW procurements is ensuring sufficient competition. However, given the number of lease holders in the wind energy areas on the Outer Continental Shelf that could serve Massachusetts, this should not be an issue in additional OSW procurement(s). If needed, a simple "Expression of Interest" process could easily confirm the level of competition prior to launching any procurement process.

4. Are the opportunities to participate and earn revenue in the wholesale markets (e.g. Energy, Capacity, and Ancillary Services) and renewable energy certificate payments sufficient to support the development of new OSW projects? Why or why not? Are there recommended changes to the wholesale market structure or renewable energy portfolio standard that would impact your answer?

For the moment, the lack of certainty regarding participation in and/or subsequent revenue from wholesale markets, such as energy and capacity, means these markets are unable to support OSW projects in the absence of a long-term PPA. Ancillary services markets provide a very limited opportunity for OSW, and do not support the development of new OSW projects.

The current design of the ISO New England Forward Capacity Market (FCM) is particularly problematic for OSW, as well as other renewable energy resources, despite the fact that OSW is a high capacity, high yield renewable energy resource with a production profile similar to baseload power stations. The FCM Substitution Auction as an avenue for OSW to participate in the FCM is ultimately self-defeating as it is designed to mitigate the price suppressive effects of renewable energy generation without marginal costs. In doing so, the FCM Substitution Auction limits opportunities for renewable energy generation to enter the FCM by maintaining higher

prices and sufficient revenues for conventional (e.g., fossil fuel-based) generators, which otherwise would retire.

This dynamic is readily demonstrated by Vineyard Wind's recent experience in Forward Capacity Auction (FCA) #13. Ahead of FCA #13, Vineyard Wind sought to qualify the Massachusetts Project as a "renewable technology resource" ("RTR"), which would have provided an exemption from the FCM's Minimum Offer Price Rule. However, due to an unintentional drafting error in ISO-NE's tariff, which limits RTR status to resources located within the physical borders of a New England state, the Massachusetts Project failed to qualify. Vineyard Wind petitioned the Federal Energy Regulatory Commission (FERC) to waive this condition in FCA 13, but FERC declined to act on this request prior to the auction.

Had the Massachusetts Project been granted RTR status, it would have lowered the clearing price paid to all generation resources in FCA #13 to the benefit of New England ratepayers. According to a statement by the New England Power Generators Association, ratepayer savings would have amounted to \$270,000,000.¹ Instead, only 54 MW of the Massachusetts Project received a capacity commitment in the Substitution Auction- creating zero savings for ratepayers- and 300 MW of RTR exemptions went unused.

The utility of the Substitution Auction for OSW has been further undermined by steps ISO-NE has taken to provide additional payments to or special treatment for generation units that would otherwise retire and make their capacity obligations available in the Substitution Auction. Vineyard Wind therefore expects the Substitution Auction will prove even less effective for OSW in the coming years as more projects come line.

Vineyard Wind's recent experience illustrates a mismatch between New England states' ambition on renewable energy and greenhouse gas emission ("GHG") reductions and how the region's wholesale electricity markets work, with the latter failing to properly account for and accommodate the former. Aside from frustrating public policy goals, the current FCM construct leads to overpaying and even double paying for capacity. The New England states and ISO-NE should redouble their efforts to implement regulatory reform that avoids this and better support the integration of renewable energy resources and decarbonization of the electricity sector.

While such an effort will take some time, Massachusetts can implement policies to mitigate the current uncertainty and support further cost-effective deployment of OSW. One option is to explore the implementation of a "Market Offshore Renewable Energy Credit" ("Market OREC") as described in response to Question 5. Because the mechanism would not require any changes to wholesale market design or policies, Massachusetts could implement this policy relatively quickly and on its own.

¹ <https://www.utilitydive.com/news/iso-ne-capacity-prices-fall-amid-controversy-over-vineyard-wind-participati/548037/>

5. Are there other forms of financing mechanisms, such as Offshore Renewable Energy Certificates (ORECs), that could support OSW?

At present, long-term contracting mechanisms are the only viable financing mechanisms for OSW. With respect to ORECs, Vineyard Wind views Market ORECs as a mechanism that could support OSW. Market ORECs work by providing generators a hedge against wholesale market uncertainty, through long-term contracts, while ensuring ratepayers get the lowest prices.

In a Market OREC mechanism, an OSW project would have a contract with the electric distribution companies to sell its output to the distribution company at a fixed MWh price. The project (or a designated third party) would then sell all products associated with the generation (energy, RECs, capacity, etc.) in the appropriate wholesale market. The revenues from the sale of these products would then be used to offset the MWh price paid to the project, thereby reducing the price of the OSW contract for ratepayers, and possibly even providing a rebate.

Such a Market OREC mechanism would mitigate future REC market uncertainty for all parties, and could make RPS compliance less expensive in the long-term by increasing REC supply without increasing prices. From the state's perspective, another advantage of Market ORECs is that they can be designed to take into account all wholesale market and state policy revenues that a project receives, which can reduce costs to ratepayers and the risk of paying above market prices over a contract tenor.

Several states have already implemented Market OREC policies in support of OSW-Maryland, New Jersey, and New York. From Vineyard Wind's perspective, the Maryland and New Jersey Market OREC models are preferable to the New York model because they provide developers with greater certainty regarding a project's revenue stream.

Market OREC mechanisms need to be carefully considered and designed to maximize their effectiveness. Should Massachusetts decide to explore Market ORECs, some issues to keep in mind include: (1) How does a Market OREC model impact a distribution company's creditworthiness and ability to pay relative to PPAs?; (2) Which contract party will manage and direct decisions related to a project's capacity and participation in the FCM?; (3) How would the Market OREC model deal with negative wholesale energy pricing and curtailment?

6. What are the costs and benefits of an additional OSW procurement(s) on potential pricing and other impacts on wholesale markets (e.g. Energy, Capacity, and Ancillary Services)? Please be as specific as possible as to which markets you are referring too.

a. What, if any, would be the effect on the wholesale markets caused by an additional OSW procurement(s)?

For the Energy market, additional OSW procurement(s) have the potential to positively impact (i.e., lower) pricing and deliver additional savings to New England ratepayers. OSW's ability to lower prices in wholesale energy markets extends beyond its price suppression potential as a no-fuel renewable energy resource. OSW is also a high capacity, high yield renewable energy resource that enhances grid reliability, delivers much-needed fuel diversity, and generates large amounts of stable-priced power.

OSW's production profile aligns well with the region's peak demand profile and is estimated to generate significant power in the winter months when natural gas is in high demand and the region's energy infrastructure is most stressed. See the response to Question 9 for an example of how OSW projects can reduce electricity market prices during extreme winter weather events. OSW's production profile is also less variable than and complementary to solar and onshore wind resources. As such, higher penetration levels for OSW can translate into lower market volatility and reduce the need for stand-by/back-up supply and storage resources.

OSW is also invulnerable to the types of pipeline interruptions, availability constraints, and delivery failures that can interrupt power supply and drive up power prices. Such unplanned events can significantly increase electricity prices and create reliability issues in the grid. The unexpected outage of the Mystic gas-fired power plant in Everett on Labor Day in 2018, combined with higher-than-expected power demand, for example, drove spot market prices to \$2,600 per MWh and triggered ISO-NE emergency procedures.²

For these and other reasons, additional OSW procurement(s) are likely to yield a net financial benefit to New England ratepayers compared to a business-as-usual scenario. With respect to capacity, which we understand to reference the FCM specifically, please see the response to Question 4. With respect to Ancillary Services, the current opportunity for OSW is limited and is therefore not expected to have an appreciable impact on this market.

² See Bade, G. (2018). Unexpected outages, intense heat behind ISO-NE Labor Day price spike. UtilityDive. September 6, 2018. Available at: <https://www.utilitydive.com/news/unexpected-outages-intense-heat-behind-iso-ne-labor-day-price-spike/531751/>.

b. If there would be any negative effect, are there recommended solutions to mitigate the effect?

The potential for lower prices would benefit the region's ratepayers, as noted above. However, lower prices could negatively impact some merchant generators' ability to recover operating costs and lead to further generation retirements. Generally speaking, reform of the region's wholesale markets is needed to ensure that such retirements do not impact reliable operation of the grid and better align the markets with New England states' renewable energy and GHG emission reduction goals. That being said, in the short-term Massachusetts' energy storage targets can mitigate potential grid reliability issues created by generation retirements, including meeting peak demand, while supporting integration of additional renewable energy resources in the grid.³

7. Would additional OSW procurement(s) incremental to procurements under Section 83C have any specific wholesale market impacts on other low/no emission resources?

Vineyard Wind has no specific information or insight in response to this question.

8. What are the potential pricing and compliance impacts of additional OSW procurement(s) on Renewable Energy Certificate and Clean Energy Certificate markets?

The potential pricing impacts of additional OSW procurement(s) will depend on the extent to which such procurement(s) impact the supply of RECs and Clean Energy Certificates (CECs) relative to demand. It's possible that additional OSW procurement(s) could result in an over-supply of RECs and/or CECs relative to demand for a period, which would suppress prices. Lower prices could decrease compliance costs and the overall costs of these programs to ratepayers. While this is a positive effect, if prices fall too low, revenue streams for existing Class I renewable energy projects would be impacted and the incentive to develop new renewable energy projects could be undermined. Lowering costs to ratepayers while simultaneously supporting financing of new renewable energy projects is a principle advantage of the Market OREC approach described in response to Question 4.

9. Will additional OSW procurement(s) have specific seasonal market impacts?

As noted in response to Question 6a., additional OSW procurement(s) have the potential to yield positive seasonal market impacts, particularly in the winter months when demand for natural gas is at its highest. This is also the time of year when OSW generates at its highest production levels. During this period, OSW will improve grid reliability and lower costs by

³ See Department of Energy Resources (2017). State of Charge: A Comprehensive Study of Energy Storage in Massachusetts. Available at: <https://www.mass.gov/files/2017-07/state-of-charge-report.pdf>.

decreasing demand for natural gas, mitigating energy price spikes, and reducing the need to rely on expensive coal- and oil-fired generation units.

The potential for additional OSW procurement(s) to deliver these benefits by securing the development of additional projects is perhaps best illustrated by how the Massachusetts Project would have performed had it been operational during winter storm Grayson in early 2018, the so-called “bomb cyclone”. An analysis conducted by Daymark Energy Advisors shows that during the four-day storm event, this project would have displaced 61 million kilowatt hours of oil- and natural gas-fired generation, resulting in savings of over \$31 million for New England ratepayers and emission reductions totaling 67,485 metric tons of carbon dioxide, which is equivalent to removing 14,358 cars from the road for an entire year.⁴

10. Is an additional 1600MW of solicitation(s) the appropriate target? Why or why not?

A larger, longer-term target would better facilitate the development of OSW in the Commonwealth and drive down prices. New York’s recent announcement of a 9 GW by 2035 target is a good example of such a long-term, more efficient scale approach. Establishing such a target, in conjunction with a regular procurement schedule, provides long-term market visibility for developers, manufacturers, suppliers and service providers to invest in Massachusetts. Such a target, however, needs to be carefully considered in relation to transmission planning for the region to ensure the target can be achieved and at a reasonable cost to ratepayers.

Transmission

11. What are the advantages and disadvantages of requiring a coordinated OSW transmission network?

Vineyard Wind discourages Massachusetts from requiring a coordinated OSW transmission network at this time. Such a requirement would increase the complexity of and timelines for future OSW projects. Coordinated OSW transmission networks inevitably take longer to design and build and are not likely to result in lower overall costs. Vineyard Wind believes that the design and development of offshore transmission infrastructure is best left to each individual OSW developer and unforced competition among generation developers and transmission developers.

Because any one OSW generation project can easily use the full capacity of a transmission line, there is little advantage to a “coordinated” or “expandable” transmission system. A coordinated system will not reduce the amount of cable needed offshore for any given amount of generation, and so there are no environmental benefits to such an approach. Simply overbuilding transmission to accommodate future generation creates a huge commercial and financing risk

⁴ See Vineyard Wind (2018). Study: Massachusetts Offshore Wind Farm Would Have Substantially Curtailed Environmental and Grid Impacts Created by “Bomb Cyclone”. January 29, 2018. Available at: <https://www.vineyardwind.com/news-and-updates/2018/1/29/bombcyclone>.

and inefficient use of capital that will, one way or another, have to be paid for by either ratepayers or taxpayers.

It is imperative, however, for the New England states to focus their attention on onshore transmission infrastructure, which will require substantial investments in upgrades and expansions to facilitate the cost-effective deployment of future OSW projects. A coordinated, public needs-driven process to strategically and cost-effectively expand and upgrade the regional onshore transmission system should begin now, and it is in Massachusetts' best interest to take a leadership role in such a process. Upgrading the onshore transmission system can happen incrementally, and in way that shares costs that will have to be undertaken anyway for reliability and growth reasons.

More specifically, Vineyard Wind believes a bold and forward-looking build-out of the onshore transmission system in southeastern New England, particularly at the interface between the South Coast, where generation would ideally interconnect, and the large load Boston area, is essential to support future OSW projects in the Commonwealth and the region. Such a strategic approach to connect generation with load would supplant the piecemeal project-by-project grid upgrade approach and avoid interconnection at sub-optimal locations and project sizes from an electricity system perspective. It would also provide OSW developers with schedule and deliverability certainty with respect to future OSW projects, thus increasing competition and lowering costs. A demonstration of how such an approach can benefit ratepayers and also support the rapid development of a wind resource can be seen in Texas, which successfully used a market-oriented policy to build transmission necessary to connect its high wind areas with its major load centers.⁵

a. If there are advantages, what would be required to accomplish this?

Vineyard Wind does not see any advantages to a coordinated OSW transmission approach, and rather recommends that Massachusetts and other New England states focus their efforts on addressing bottlenecks in the onshore transmission system that could prevent the cost-effective interconnection of future OSW projects, as noted above.

b. Are there changes to the solicitation process that could accomplish this?

Vineyard Wind urges that all future solicitations be for OSW generation only. This will create maximum competition among OSW developers, without forcing OSW developers into transmission solutions that are not likely to be optimal.

c. Could state or regional support for a transmission system to support further offshore wind development be sufficient to finance further offshore wind development?

⁵ See Gimon, E., O'Boyle, M., and Aggarwal, S. (2015). A Tale of Two Regions: Why Wind is Booming in Texas and Stalling in the West. GTM. September 23, 2015. Available at: <https://www.greentechmedia.com/articles/read/a-tale-of-two-regions#gs.GnpbMNAj>.

Vineyard Wind does not see how support for an offshore transmission system could be sufficient to finance further offshore wind development.

Other Factors that Impact Cost and Price

12. What, if any, impact will the expiration of the federal Investment Tax Credit have on future pricing for additional OSW procurement(s)?

The expiration of the federal Investment Tax Credit (ITC) will have an impact on future pricing for additional OSW procurement(s), depending on the timing and size of the procurement(s). In the immediate term, ITC expiration means Massachusetts is unlikely to receive pricing offers for OSW projects below what was seen in the first Section 83C procurement. This risk can potentially be mitigated with longer term period PPAs, larger procurements (i.e., 800 MW or larger), eliminating expandable transmission network requirements, and flexibility on commercial operation dates.

Over the longer-term, the ITC's expiration is unlikely to have an impact on pricing for additional OSW procurement(s). A number of factors driving down the cost of OSW have the potential to more than offset the ITC's expiration. These include larger wind turbine sizes of 12 MW to 15 MW, more efficient installation techniques, and larger economies of scale that come along with larger (i.e., greater than 800 MW) projects.

13. What is the potential for advancement of technological improvements in offshore wind sector to affect pricing for any additional OSW procurement(s)?

Expected advancement of technological improvements in the OSW sector could contribute significantly to further cost declines in the industry. Larger, more efficient wind turbine models will reduce the number of foundations required thereby reducing the cost per megawatt for OSW projects while increasing yields and operations and maintenance (O&M) efficiency. Improved component reliability along with predictive maintenance capabilities, drones, and multi-turbine control strategies can reduce downtime and are expected to further lower O&M costs. Additionally, the availability of OSW purpose-built vessels and logistics innovations will also reduce the overall costs of OSW projects and positively impact pricing for any additional OSW procurement(s).

In order to realize these future cost reductions, however, industry must be able to rely on a steady pipeline of projects that will allow for re-investment in to technology development and otherwise attract R&D investment, and provide opportunity for improvements based on operational experience. This is particularly true for savings that might come about through investment in Massachusetts infrastructure, workforce, and business development.

14. What restrictions on price shall there be on any additional OSW procurements, if any? Should each successional procurement be required to reflect a price decrease?

A price decrease requirement can be a reasonable approach provided it accounts for significant market developments that can impact price, such as the expiration of the ITC. Vineyard Wind also encourages Massachusetts to ensure that the design of any future OSW procurement(s) provides developers with certainty and longer planning horizons, limits complexity, and fosters competition. Together, these three elements will support further cost declines in the sector and lower prices.

15. With pending retirements in New England should there be a particular focus on specific development areas and/or transmission interconnection points to relieve future reliability constraints?

As noted in response to Question 11, Vineyard Wind believes Massachusetts should focus its attention on upgrading the onshore transmission system in the Boston/South Coast (NEMA/SEMA) area, with a focus on transmitting generating connected on Cape Cod and the South Coast to the high load of the Boston area. Doing so will help offset generation retirements in that region while ensuring the Commonwealth can meet its OSW targets in a timely and cost-effective manner.

Economic Development and Supply Chain

16. Will requiring the Distribution Companies to undertake an additional OSW solicitation of up to 1600 MW impact the development of offshore wind supply chain services in the Commonwealth? If so, what potential economic benefits to the Commonwealth may result if OSW supply chain services are located in MA?

Additional OSW procurement(s) of at least 1,600 MW would cement and build on the progress that Massachusetts has already made in building an OSW supply chain and facilitate further cost declines; procurement amounts of less than 1,600 MW are unlikely to attract supply chain attention. The additional OSW procurement(s) would do so primarily by providing incentive for supply chain companies to invest or expand their operations in Massachusetts relative to other states by providing them with some certainty about potential future market opportunities in the Commonwealth. Potential economic benefits to the Commonwealth that could result include a permanent increase in port activity and marine services as well as long-term growth and maintenance of manufacturing capacity in some areas of the OSW value chain.

17. Are there certain services or products in the OSW supply chain that are more likely to locate in the Commonwealth than others?

The OSW supply chain services that are more likely to locate in the Commonwealth than others include pre-assembly and load-out facilities; marine services, including vessels, logistics,

surveys, bunkering, and commissioning services; legal and consulting services; and operations services, such as field technicians, survey work, and logistics. These are services that are best provided locally, i.e. within reasonable proximity to an OSW project and/or its onshore base of operations.

18. Are there actions, outside of additional OSW procurement(s), that the Commonwealth should consider to secure OSW supply chain services are located in MA? Please explain.

Further investment in the onshore grid, as described in response to Question 11, would better ensure a sustainable OSW industry that is necessary to attract supply chain businesses to Massachusetts. Investment in port infrastructure would also reduce costs in the long-term, attract supply chain in the mid- to long-term, and provide near-term economic activity.

Regional Coordination

19. Should Massachusetts coordinate with other states in any future solicitations of OSW?

Vineyard Wind encourages Massachusetts to coordinate procurement schedules with neighboring states, including New York, so that only one OSW procurement is active at a time. In undertaking such a schedule coordination, thought should be given to selection deadlines, so that developers can offer advanced project designs in subsequent solicitations if the design is not selected for a previous solicitation.

While sharing solicitation responses among states may have advantages, Vineyard Wind observes that joint solicitations, designed to meet the requirements of more than one state's policy, have proven difficult to implement and not shown signs of providing more competitive responses.

20. What are the advantages or disadvantages to coordinating?

Two important advantages of coordinating procurement schedules, as recommended above, are reducing complexity in the project development process and ensuring a more competitive solicitation process. At the moment, northeastern states are not coordinating with respect to the timing and design of OSW procurements, which has led to overlapping processes. This constrains the ability of OSW developers to develop and offer the most competitive projects for a procurement, especially in situations where potential project capacity is tied up in another state's open procurement process.

Procurement schedule coordination could also facilitate the development of an OSW project pipeline in the region, along with associated investments, to the extent states provide visibility on long-term procurement targets and timelines. Such visibility and ability to participate in every procurement unhindered by open obligations to a previous procurement could drive substantial investment and competition, creating a very robust OSW industry for the Commonwealth and the region. Coordination along these lines could be a highly effective way to maintain the

development of the region's OSW sector across states and yield even greater regional economic development and energy system benefits, as well as lower costs and other benefits for the particular state running a procurement.

Vineyard Wind notes that the type of schedule coordination we are recommending can be and would be most effectively implemented at the administrative level, so long as procurement statutes are not overly prescriptive.

Other

21. Please provide any other comments pertain to the necessity, benefits and cost of additional OSW procurement(s).

Vineyard Wind has no additional comments to offer at this time.