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VINEYARD WIND

Draft Construction and Operations Plan

Volume III Appendices

Vineyard Wind Project

October 22, 2018

Submitted by

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Submitted to

**Bureau of Ocean Energy Management
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In Association with:

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C2Wind
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Clarendon Hill Consulting
Ecology and Environment
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Public Archaeology Laboratory, Inc.
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Swanson Environmental Associates
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October 22, 2018

Appendix III-Q

Community and Environmental Benefits of the Vineyard Wind Project

APPENDIX III-Q COMMUNITY AND ENVIRONMENTAL BENEFITS OF THE VINEYARD WIND PROJECT

The Vineyard Wind Project presents a historic opportunity to ignite the Massachusetts supply chain and workforce. Assuming Vineyard Wind secures an approved Power Purchase Agreement (PPA), we are committing \$30 million to four initiatives that will build a skilled offshore wind workforce centered in southeastern Massachusetts, attract additional investment in infrastructure and supply chain development, advance technologies that will allow for greater expansion of offshore wind and environmental protection, and build the resiliency and affordability of the electric grid in southeastern Massachusetts.

Offshore Wind Industry Accelerator Fund: \$10 Million

Vineyard Wind is committing to invest up to \$10 million in projects and initiatives to accelerate the development of the offshore wind supply chain, businesses, and infrastructure in Massachusetts. The Fund will attract investments to upgrade or create new facilities or infrastructure needed to develop the offshore wind industry in the Commonwealth. Vineyard Wind is proposing that the Massachusetts Clean Energy Center manage the fund, working with a steering committee of regional economic stakeholders to guide investment decisions.

The Offshore Wind Industry Accelerator Fund aims to support the state's goals rebuild and update ports and harbors, encourage municipal investments in local infrastructure, and create jobs in critical coastal communities.

Investing In Massachusetts Infrastructure

Examples of possible investments by the Offshore Wind Industry Accelerator Fund include expansion and improvement of ports available to support offshore wind construction, supporting the establishment of offshore wind manufacturing facilities in Massachusetts, or supporting the development of technologies that will improve the capability to deploy offshore wind on the US East Coast.

Vineyard Wind will work with supply chain companies eager to participate in the US's first offshore wind project to identify opportunities for investment in local infrastructure or facilities. By working with supply chain companies in this way, Massachusetts will be able to leverage both the Industry Accelerator Fund, along with the purchasing power of the first offshore wind project in the US to attract significant investment in the state's new offshore wind industry and do so in a sustainable way such that ratepayers and future projects will benefit from this initiative for years to come.

Offshore Wind's Economic Potential

Development of offshore wind will bring billions of dollars of private investment into Massachusetts, helping to diversify and grow the region's economy through modernization of local ports, new services such as transport vessels, ongoing research offshore, and skilled workforce training needed to build and operate wind farm facilities. Through strategic investment of Vineyard Wind's Offshore Wind Accelerator Fund, Massachusetts is poised to maintain its leadership role in reaping the economic benefits of the expanding offshore wind industry.

Windward Workforce: \$2 Million

The Windward Workforce program will recruit, mentor, and train residents of Massachusetts, particularly southeast Massachusetts, for careers in the Commonwealth's new offshore wind industry. These programs will ensure that Massachusetts is able to provide the workforce needed for the first - as well as all future - offshore wind projects in the US. The experience gained from working on the first commercial offshore wind project in the US, Vineyard Wind, will be invaluable in launching careers in offshore wind for Massachusetts residents. The ultimate objective of the Windward Workforce program is for Massachusetts to have the best trained, most experienced offshore wind workforce in the US.

The Wind Workforce initiative is expected to fund training courses established for certification in any number of high-skills offshore wind jobs or support services. Vineyard Wind's proposal to construct an 800MW wind farm approximately 15 miles south of Martha's Vineyard includes plans for up to 3,600 new jobs, including 1,000 new hires before 2022. Vineyard Wind expects that a majority of new employment opportunities related to its project will be based in Southeastern Massachusetts, Cape Cod and the Islands.

The Windward Workforce program will be undertaken in partnership with vocational schools, community colleges, the Fishing Partnership Support Services, and others. The Windward Workforce program includes a number of initiatives and company policies, including:

Look Local First

Vineyard Wind and all major contractors will actively seek Massachusetts residents as candidates for every position. First tier supply companies will also actively seek proposals and bids from Massachusetts companies. Through this policy, Vineyard Wind will ensure that Massachusetts businesses and residents have full access to new business opportunities related to the Vineyard Wind project.

These opportunities will be promoted in the Massachusetts business community via a series of "Meet the Buyer/Employer" events, local Chambers of Commerce, social media, and through the Vineyard Wind website. To support this policy, Vineyard Wind will include very specific obligations for contractors both in the tendering and in the contract execution phase.

Martha's Vineyard Wind Working Waterfront

Vineyard Wind has set for itself the goal of 100% of its operations and maintenance staff being Martha's Vineyard residents within five years of the project being operational.

Career Development In Offshore Wind

Vineyard Wind will fund curriculum development and instructor education for courses in "Offshore Wind 101" and other applicable subjects at local vocational schools, high schools, and community colleges within host communities.

Specialized Training

Vineyard Wind will coordinate and fund curriculum development and specific training programs, such as globally recognized certifications for offshore wind technicians, and component OEM certifications. These training programs and courses will be done in partnership with community colleges, such as Bristol Community College and Cape Cod Community College, as well as OEMs, organizations such as the Fishing Partnership Support Services, and labor unions.

Vineyard Wind will implement a mentoring program, within its own organization and with its contractors, to ensure skills and know-how are brought to Massachusetts through the Vineyard Wind project, so that evermore Massachusetts residents are qualified and ready to build the next offshore wind projects around the US.

Whales And Wind Fund: \$3 Million

As part of the Offshore Wind Accelerator commitment, Vineyard Wind has allocated \$3 million to helping advance marine mammal protection as the offshore wind industry develops along the East Coast. The Whales and Wind Fund will fund development and demonstration of innovative methods and technologies to enhance protections for marine mammals as the US offshore wind industry continues to grow.

To allow the sustainable growth of the US offshore wind industry, it will be essential to develop and adapt new technologies and practices to ensure effective protection for marine mammals. The Vineyard Wind project will provide an opportunity to test or demonstrate new tools and methods, so they are more likely to be available for future projects. Such tools and methods could include, for example, quieter pile driving technologies or technologies to better detect whales.

The Whales and Wind Fund will be another opportunity for the Massachusetts economy to benefit from offshore wind, given the large existing base of ocean technology companies and ocean-oriented academic institutions.

Tapping The Experts

In order to facilitate a comprehensive discussion of the how the fund can be allocated to best achieve the goal of advancing marine mammal protections quickly, Vineyard Wind will bring together experts in the field for a Whales and Wind Steering Committee (Committee). Investments by the fund will be guided by the Committee which will include representatives of environmental advocacy groups with particular expertise in the field of marine mammal protection. The Committee will consist of representatives from the following groups:

- ◆ Offshore Wind Developers
- ◆ Scientists
- ◆ Academia
- ◆ Government Agencies: Federal and State
- ◆ Non-Governmental Organizations

By assembling experts from a variety of groups, we aim to ensure that a variety of ideas, approaches, and proposals are considered. The Committee will meet to brainstorm ideas, determine the preferred approach to allocating funding, and develop consensus on which initiatives to fund.

Utilizing the US's first commercial-scale project to advance the protection of sensitive resources will help ensure the Vineyard Wind Project and future projects develop offshore wind in Massachusetts in an environmentally responsible manner.

Resiliency and Affordability Fund: \$15 Million

Vineyard Wind will establish and contribute \$1 million annually for 15 years to the Resiliency and Affordability Fund, which will support low-income ratepayers, promote clean energy projects in communities on the Cape and Islands, and fund effective use of distributed battery energy storage to enhance the resiliency of local coastal communities in the face of climate change. The Fund will be managed by Citizens Energy, a long-time leader in effective energy solutions for low-income ratepayers, our community partner Vineyard Power, and representatives from host communities of the project.

The Resiliency and Affordability Fund will fund distributed battery energy storage and solar projects in local communities as well as provide credits directly to low-income ratepayers' electric utility bills. Projects supported by the Fund will be implemented in New Bedford, Martha's Vineyard, Nantucket, Barnstable and Yarmouth and across Bristol County. Projects will include solar and energy storage projects and will demonstrate how decentralized battery energy storage will enhance reliability as Massachusetts continues to expand renewable energy resources such as offshore wind.

Timeline

Vineyard Wind's first contribution to the Fund is planned for 2019, once construction of the offshore wind project begins. Through the Resiliency and Affordability Fund, Citizens Energy will immediately benefit host communities through an initial contribution of \$500,000, which will be deployed as a revolving loan fund for energy efficiency improvements to multi-family, low-income housing in the host communities. The Fund will deliver significant and ongoing benefits to local communities in the form of bill-credits for low-income residents' electricity bills, and backup power and cost savings for public buildings.

Direct Benefits

- ◆ Effective use of distributed battery energy storage: Enhance system reliability and resiliency through wide deployment of distributed battery energy storage
- ◆ Low-income benefits: Provide solar bill credits directly to low-income ratepayers to reduce utility bills
- ◆ Coastal community resiliency: Implement energy storage and solar projects that provide back-up power to key infrastructure, public shelters, and public safety buildings, and also result in energy cost savings