



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF
ENERGY AND ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENERGY RESOURCES
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August 1, 2018

Mark D. Marini, Secretary
Department of Public Utilities
One South Station, 5th Floor
Boston, MA 02110

RE: Petitions for Approval of Proposed Long-Term Contracts for Offshore Wind Energy Pursuant to Section 83C of Chapter 188 of the Acts of 2016, DPU 18-76, 18-77, 18-78.

Dear Secretary Marini:

On July 31, 2018, Fitchburg Gas and Electric Light Company, d/b/a Unitil (“Unitil”), Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid (“National Grid”), and NSTAR Electric Company and Western Massachusetts Electric Company each d/b/a Eversource Energy (“Eversource”) (collectively, the “Electric Distribution Companies” or “EDCs”), filed long-term contracts for the Vineyard Wind project for review and approval by the Department of Public Utilities (“Department”), pursuant to Section 83C of Chapter 169 of the Acts of 2008, as amended by Chapter 188 of the Acts of 2016 (“Section 83C”). In accordance with Section 83C, the EDCs issued a Request for Proposals (“RFP”) on June 29, 2017 seeking offshore wind energy generation. The outcome of this process was the selection of the Vineyard Wind LLC (“Vineyard Wind”) combined 800 megawatts (“MW”) of offshore wind generation project (the “800 MW Vineyard Wind Project”)¹ and the execution of

¹ The long-term contracts provide for the delivery of an aggregate of 800 MW of Offshore Wind Energy Generation and related RECs which will be delivered in two phases with expected commercial operation dates (“COD”) of

cost-effective long-term contracts for the reliable offshore wind generation output and renewable energy certificates (“RECs”) of the 800 MW Vineyard Wind Project.

The Vineyard Wind offshore wind generation long-term contracts filed by the EDCs represent over a year’s worth of collaboration and consultation among the EDCs, the Department of Energy Resources (“DOER”), and Independent Evaluator (“IE”), and are a significant milestone in the Commonwealth’s transition to a clean, diversified energy portfolio. As detailed below, at a total levelized price of 6.5 cents/kilowatt hour (“cents/kWh”)(2017 Dollars) for energy and RECs, the Vineyard Wind offshore wind generation long-term contracts provide a highly cost-effective source of clean energy generation for Massachusetts customers.² As shown in the EDCs’ filings, on average, these contracts are expected to reduce customer’s monthly bills, all else being equal, approximately 0.1% to 1.5%.³ The 800 MW Vineyard Wind Project achieves the requirements and objectives of Section 83C and the Department’s regulations, 220 C.M.R. §23.00,⁴ including assisting the Commonwealth with meeting its Global Warming Solutions Act goals and supplying the Commonwealth with critical diversity to our energy portfolio through utilizing a technology with relatively high production during winter months. The implementation of this 800 MW Vineyard Wind Project has the potential to support Massachusetts’ “first mover” advantage in offshore wind development, providing greater opportunities for development of local supply chain and offshore wind industry jobs in the Commonwealth. This 800 MW Vineyard Wind Project is the largest procurement of offshore wind generation in the US, and will help spur development of local industry and economic development, including the use of the New Bedford Marine Commerce Terminal.

I. Section 83C Solicitation and Selection of Vineyard Wind

On April 28, 2017, pursuant to Section 83C, the EDCs proposed a timetable and method for solicitation of long-term contracts for offshore wind energy to the Department for review and approval. Subsequently, the Department approved the RFP, and the EDCs and DOER, (together the “Evaluation Team”), as monitored by the IE, conducted a highly competitive and robust solicitation for offshore wind generation projects. The RFP targeted 400 MW of generation but allowed proposals from 200 to 800 MW with the ability to select 800 MW if the larger proposal was superior to other proposals and was shown to provide significantly more net benefits to ratepayers. A total of 27 different proposals from three different bidders were received. The proposals ranged in capacity from 200 to 800 MW, contained various configurations of

January 15, 2022 for the first 400 MW (Phase 1) and January 15, 2023 for the second 400 MW (Phase 2). The long-term contracts each have a term of 20 years from the date of commercial operation.

² All dollar figures in this document are the result of using an evaluation of a multi-year net present value analysis as set forth in the RFP and are expressed in 2017 real dollars.

³ Exhibit JU-8, EDC Initial Filing (DPU 18-76, 18-77, 18-78).

⁴ Pursuant to Section 83C, the Department was required to promulgate regulations. The regulations required the long-term contracts for Offshore Wind Energy Generation resources to: 1) provide enhanced electricity reliability; 2) contribute to reducing winter electricity price spikes; 3) be cost effective to Massachusetts electric ratepayers over the term of the contract, taking into consideration potential economic and environmental benefits to the ratepayers; 4) avoid line loss and mitigate transmission costs to the extent possible and ensure that transmission cost overruns, if any, are not borne by ratepayers; 5) adequately demonstrate project viability in a commercially reasonable timeframe; 6) allow offshore wind energy generation resources to be paired with energy storage systems; 7) mitigate any environmental impacts, where possible, and; 8) create and foster employment and economic development in Massachusetts, where feasible.

transmission, and included various pricing options. Per the RFP, the evaluation process was comprised of three evaluation stages, including both a quantitative and qualitative assessment of bids. At the conclusion of the evaluation process, the Evaluation Team ranked the proposals, and the 800 MW Vineyard Wind Project was determined to be the lowest cost and highest ranked proposal.

The EDCs agreed to select one of the projects proposed by Vineyard Wind; however, they disagreed as to which specific project,⁵ with National Grid and Unitil favoring Vineyard Wind's 800 MW proposal and Eversource favoring Vineyard Wind's 400 MW proposal. Given that the EDCs failed to agree on whether the 800 MW or 400 MW Vineyard Wind bid should be selected, DOER followed Section 83C to consult with the IE and select the winning bid. DOER selected the 800 MW Vineyard Wind Project after determining, consistent with the RFP, that the 800 MW Vineyard Wind project meets the threshold of being superior to other proposals and is likely to produce significantly more economic benefits to ratepayers compared to the 400 MW project.

DOER found that the 800 MW Vineyard Wind Project was superior in terms of having the lowest total proposal price and highest levelized benefit (at net present value) of all proposals evaluated. Compared to the 400 MW Vineyard Wind proposal, it had significantly higher NPV net benefit to ratepayers. Further, the selection of the 800 MW Vineyard Wind Project is expected to exert downward pressure on future prices for offshore wind. In addition, contracting with 800 MW of offshore wind provides a unique opportunity to maximize the value of the federal investment tax credit ("ITC") as the value of the credit is scheduled to be gradually reduced and will not be available for projects that start construction after December 31, 2019.

II. The 800 MW Vineyard Wind Project Provides Significant Value to Massachusetts Ratepayers

As previously stated, the DOER strongly supports the 800 MW Vineyard Wind Project, and recommends that the Department approve the resulting offshore wind energy generation long-term contracts. The 800 MW Vineyard Wind Project is highly cost-effective procured through a rigorous and highly competitive RFP process that will provide offshore wind energy generation and RECs to the Commonwealth and effectively meets the requirements and objectives of Section 83C. Specifically, the 800 MW Vineyard Wind Project significantly aligns with the Commonwealth's goals of creating a clean, affordable, and resilient energy future for the Commonwealth.

The 800 MW Vineyard Wind Project contributes to the Baker-Polito Administration's goal of creating an affordable energy future. As detailed in the EDCs' filing⁶, the 800 MW Vineyard Wind Project will provide the Commonwealth with energy and RECs at a total

⁵ Exhibit JU-6, EDC Initial Filing (DPU 18-76, 18-77, 18-78).

⁶ *Id.* at Exh. JU-5, *see also* Exh. JU-4.

levelized price of 6.5 cents/kWh 2017 dollars over the term of the long-term contracts.⁷ This total price is materially below the levelized projected costs of buying the same amount of wholesale energy and RECs in the market, which is projected to be a total levelized price of 7.9 cents/KWh in 2017 dollars over the 20-year term of contract.⁸ Over the life of the contract, the 800 MW Vineyard Wind Project is projected to provide an average 1.4 cents/KWh of direct savings to ratepayers.

In addition to the direct market benefits from these fixed cost contracts described above, the 800 MW Vineyard Wind Project also provides indirect benefits. These indirect benefits include energy market price reductions and lower Renewable Energy Portfolio Standard (“RPS”) compliance costs through increased REC supply. Additionally, ratepayers receive the benefit of price certainty through a fixed cost contract. Overall, the total direct and indirect benefits to Massachusetts ratepayers from the long-term contracts with Vineyard Wind are expected to be 3.5 cents/kWh, or \$35.29/ megawatt-hours (“MWh”) on average over the term of the contract, with total net benefits of approximately \$1.4 billion.⁹

Section 83C allowed for proposals to provide options to create and foster employment and economic development in the Commonwealth, where feasible. The 800 MW Vineyard Wind Project includes a \$15 million initiative for acceleration of the offshore wind market including: a \$10 million offshore wind industry accelerator fund, \$2 million for workforce development and \$3 million for innovations in protecting marine mammals. Additionally, Vineyard Wind will further establish a Resiliency and Affordability Fund by contributing \$1 million each year for 15 years. The Fund will support the construction of battery energy storage and solar projects for the purpose of enhancing resiliency and providing low-income ratepayer benefit in the communities hosting the Vineyard Wind Project.

⁷ The price for energy and RECs in the Phase 1 of the long-term contracts begins at \$74 per MWh (nominal \$), and the price for energy and RECs in the Phase 2 long-term contracts begins at \$65 per MWh (nominal \$). Each long-term contract has a 20-year term, starting at the COD of the relevant project, and the prices described above escalate by 2.5 percent each year of that term which starts in 2022 and runs until 2043. The 20-year average cost of the two long-term contracts’ is \$84.23 per MWh in levelized nominal dollar terms. This is equivalent to a levelized net present value price in 2017 dollars of \$64.97 per MWh.

⁸ Projections of future energy market and REC costs are described in detail in the quantitative evaluation results.

⁹ *Id.* at Exh. JU-5, *see also* Exh. JU-4.

III. CONCLUSION

The 800 MW Vineyard Wind Project and the corresponding contracts provide a cost-effective source of reliable offshore wind energy for Massachusetts customers, meet the requirements of Section 83C, and are in the public interest. Accordingly, the DOER respectfully requests that the Department approve the long-term contracts filed by the EDCs.

Respectfully submitted by,

THE MASSACHUSETTS DEPARTMENT
OF ENERGY RESOURCES

By its attorneys,

/s/ Robert H. Hoaglund II

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