

Charles D. Baker Governor

Karyn E. Polito Lt. Governor COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS **DEPARTMENT OF ENERGY RESOURCES** 100 CAMBRIDGE ST., SUITE 1020 BOSTON, MA 02114 Telephone: 617-626-7300 Facsimile: 617-727-0030

> Kathleen Theoharides Secretary

Patrick Woodcock Commissioner

February 11, 2020

Mark D. Marini, Secretary Department of Public Utilities One South Station, 5<sup>th</sup> 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, D.P.U. 20-16, 20-17, 20-18

Dear Secretary Marini:

On February 10, 2020, 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 executed long-term contracts with Mayflower Wind LLC ("Mayflower Wind") 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, in coordination with the Department of Energy Resources ("DOER"), issued a Request for Proposals ("RFP") on May 23, 2019, as revised August 7, 2019, seeking offshore wind energy generation. The outcome of this process was the selection of the Mayflower Wind combined 804 MW Low Cost Energy Fixed Price with Commitment Agreement project (the "804 MW

Mayflower Wind Project" or "Project")<sup>1</sup> and the execution of cost-effective long-term contracts for the reliable offshore wind generation output and renewable energy certificates ("RECs") of the 804 MW Mayflower Wind Project.

The Mayflower Wind offshore wind generation long-term contracts the EDCs filed represent over a year's worth of collaboration and consultation among the EDCs, DOER, and the Independent Evaluator ("IE"), and represents significant and important progress towards the Commonwealth's goal of a clean, diversified energy portfolio. As detailed below, at a total levelized price of 7.8 cents/kilowatt hour ("cents/kWh") in nominal dollars for energy and RECs,<sup>2</sup> the Mayflower Wind offshore wind generation long-term contracts show the declining cost for offshore wind energy generation for Massachusetts customers with a levelized price less than the previously procured Vineyard Wind 800 MW project, which was approved at 8.4 cents/kWh.<sup>3</sup> As shown in the EDCs' filings, on average, these contracts provide benefits to customer's monthly bills, as compared to a future in which the EDCs do not acquire offshore wind energy under the RFP, by reducing customer bills by approximately 0.1% to 1.8%.<sup>4</sup> The 804 MW Mayflower Wind Project achieves the requirements and objectives of Section 83C and the Department's regulations, 220 C.M.R. 23.00,<sup>5</sup> including assisting the Commonwealth with meeting its Global Warming Solutions Act ("GWSA") 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 804 MW Mayflower Wind Project provides significant opportunities for development of local supply chain and offshore wind industry jobs in the Commonwealth through a financial commitment of over \$77 million to support economic development, low-income ratepayer programs, and marine science research. This represents a greater financial commitment than the Vineyard Wind 800 MW project despite a lower price for Massachusetts ratepayers. The Project also demonstrates significant winter

<sup>&</sup>lt;sup>1</sup> The long-term contracts provide for the delivery of an aggregate of 804 MW of Offshore Wind Energy Generation and related RECs which will be delivered through long-term contracts, each with a term of 20 years from the date of commercial operation.

<sup>&</sup>lt;sup>2</sup> The Section 83C evaluation used a multi-year net present value analysis as set forth in the RFP. Values in this letter are expressed in nominal dollars unless otherwise noted and are levelized by the MWh anticipated over the life of the contract. The levelized price for the 804 MW Mayflower Wind Project in real 2019 dollars (which accounts for inflation and the time value of money) is \$58.47/MWh.

<sup>&</sup>lt;sup>3</sup> As provided in D.P.U. 18-76, 18-77, 18-78, the Vineyard Wind 800 MW project price was provided in real 2017 dollars at \$64.97/MWh, which is equivalent to \$67.59/MWh in real 2019 dollars and \$84.23/MWh in nominal dollars.

<sup>&</sup>lt;sup>4</sup> D.P.U. 20-16, 20-17, 20-18, Joint Direct Testimony of Waltman, Brennan and Glover, Exhibit JU-5. Bill impacts will vary between EDC service territories and the year of the contract, with benefits increasing in later years with higher projected costs for market energy and RECs.

<sup>&</sup>lt;sup>5</sup> 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.

pricing benefits, reducing the use of fuel oil during periods of extreme gas prices.<sup>6</sup> This result demonstrates that the project meets the 83C statutory requirement of contributing to reducing winter electricity price spikes.<sup>7</sup>

#### I. Section 83C Solicitation and Selection of Mayflower Wind

On March 27, 2019, pursuant to Section 83C, the EDCs and DOER, having consulted with the Massachusetts Office of the Attorney General, 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 both superior to other proposals and was shown to likely provide more net economic benefits to ratepayers. A total of 28 different proposals from three different bidders were received and the proposals ranged in capacity from approximately 400 MW to approximately 800 MW, which contained various economic development packages and 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 804 MW Mayflower Wind Project was determined to be the highest ranked proposal. After the completion of all steps in the evaluation, the EDCs unanimously decided to select the 804 MW Mayflower Wind Project proposal.<sup>8</sup>

## II. The 804 MW Mayflower Wind Project Provides Significant Value to Massachusetts Ratepayers

DOER supports the 804 MW Mayflower Wind Project and recommends approval of the resulting offshore wind energy generation long-term contracts now before the Department. The 804 MW Mayflower Wind Project is competitively priced, 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 804 MW Mayflower Wind Project aligns with the Commonwealth's goals of creating a clean, affordable, and resilient energy future for the Commonwealth.

The 804 MW Mayflower Wind Project contributes to the Baker-Polito Administration's goal of creating an affordable energy future. As detailed in the EDCs' filing, the 804 MW Mayflower Wind Project will provide the Commonwealth with energy and RECs at a total

<sup>&</sup>lt;sup>6</sup> D.P.U. 20-16, 20-17, 20-18, Joint Direct Testimony of Waltman, Brennan and Glover, at JU-4, TCR Report, page 3, FN 3.

<sup>&</sup>lt;sup>7</sup> Section 83C(d)(5)(ii).

<sup>&</sup>lt;sup>8</sup> RFP, Section 1.3 (the Selection Team, comprised of the Electric Distribution Companies, with DOER as an advisory participant, is responsible for bid selection).

levelized price of 5.8 cents/kWh in real 2019 dollars over the term of the long-term contracts.<sup>9</sup> This total price is materially below the projected benefits of the project, including avoiding the cost of the same amount of wholesale energy and RECs in the market, which is projected to cost 8.4 cents/kWh (in real 2019 dollars) over the 20-year term of contract.<sup>10</sup> Over the life of the contract, the 804 MW Mayflower Wind Project is projected to provide an average 2.4 cents/kWh (in real 2019 dollars) of direct savings to ratepayers. Additionally, the negotiated contacts require Mayflower to maximize the federal investment tax credit ("ITC") for which it qualifies and if they successfully qualify for an ITC in excess of 12 percent, the contracted price will be reduced, providing even greater benefits to Massachusetts ratepayers.<sup>11</sup>

In addition to the direct market benefits from these fixed cost contracts described above, the 804 MW Mayflower 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 price contract. Overall, the total direct and indirect benefits to Massachusetts ratepayers from the Mayflower Wind long-term contracts are expected to be 5.3 cents/kWh (in real 2019 dollars), or \$52.65/MWh, on average over the term of the contract, with total net benefits of approximately \$2.4 billion.<sup>12</sup>

Section 83C allowed for proposals to provide options to create and foster employment and economic development in the Commonwealth, where feasible. The 804 MW Mayflower Wind Project includes a \$77.5 million commitment to economic development, including: a \$55 million commitment to the Massachusetts Clean Energy Center ("MassCEC") for the creation of an Offshore Wind Development Fund; \$10 million for marine science and fisheries research; \$7.5 million for port upgrades; and \$5 million for low-income strategic electrification through a separate memorandum of understanding with the Cape Light Compact ("CLC"). Mayflower Wind's economic development commitments are memorialized in a memorandum of agreement dated January 10, 2020, between MassCEC and Mayflower Wind, which is included as Attachment A hereto.

<sup>&</sup>lt;sup>9</sup> D.P.U. 20-16, 20-17, 20-18, Joint Direct Testimony of Waltman, Brennan and Glover, at Exhibit JU-4, TCR Report. The price is \$73.87 per MWh of energy and \$3.89 for RECs (nominal \$). Each long-term contract has a 20-year term and the prices described are fixed for every year, starting in 2025 and running until 2045. The 20-year average cost of contracts' is \$77.76 per MWh in levelized nominal dollar terms. This is equivalent to a levelized net present value price in 2019 dollars of \$58.47 per MWh.

<sup>&</sup>lt;sup>10</sup> D.P.U. 20-16, 20-17, 20-18, Joint Direct Testimony of Waltman, Brennan and Glover, at Exhibit JU-4, TCR Report, Appendix A.1.

<sup>&</sup>lt;sup>11</sup> See 26 USC § 48(a)(5)(E)(iv), as amended by the Further Consolidated Appropriations Act of 2020 (the federal investment tax credit is available to offshore wind and other eligible energy projects, valued at 12% for projects that commenced construction in 2019. It was extended through 2020 and increased to 18%); see also D.P.U. 20-16, 20-17, 20-18, Joint Direct Testimony of Waltman, Brennan and Glover, PPAs, Exhibit JU-3, Tabs A-I.

<sup>&</sup>lt;sup>12</sup> D.P.U. 20-16, 20-17, 20-18, Joint Direct Testimony of Waltman, Brennan and Glover, at Exhibit JU-4.

### III. CONCLUSION

The 804 MW Mayflower Wind Project and the corresponding contracts provide a costeffective source of reliable offshore wind energy for Massachusetts customers, meet the requirements of Section 83C, and are in the public interest. Accordingly, 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,

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