

# COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS

### DEPARTMENT OF ENERGY RESOURCES

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May 26, 2022

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, D.P.U. 22-70, 22-71 and 22-72

Dear Secretary Marini:

On May 25, 2022, 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 d/b/a Eversource Energy ("Eversource") (collectively, the "Electric Distribution Companies" or "EDCs"), filed executed long-term contracts with Commonwealth Wind LLC ("Commonwealth Wind") and 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 Sections 69 and 72 of Chapter 24 of the Acts of 2021, including capacity authorized pursuant to section 21 of chapter 227 of the acts of 2018 ("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 7, 2021, seeking offshore wind energy generation. The outcome of this process was the selection of a portfolio consisting of two projects: 1,200 MW of a 1,232 MW project from Commonwealth Wind ("the Commonwealth Wind Project") and 405 MW of a 480 MW project from Mayflower Wind (the "Mayflower Wind Project") and the execution of costeffective long-term contracts for the reliable offshore wind generation output and renewable energy certificates ("RECs") of both projects.<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> The long-term contracts provide for the delivery of an aggregate of 1,600 MW of Offshore Wind Energy.

The Commonwealth Wind and 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 in nominal dollars for energy and RECs of 7.2 cents/kilowatt hour ("cents/kWh") for the Commonwealth Wind project and 7.7 cents/kWh for the Mayflower Wind project, the 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 Mayflower Wind 804 MW project, which was approved at 7.8 cents/kWh. 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 0.8%.

The 1,200 MW Commonwealth Wind Project and the 405 MW Mayflower Wind Project achieve 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) requirements and supplying the Commonwealth with critical diversity to our energy portfolio. The approximately 1,600 MW portfolio<sup>6</sup> of offshore wind will increase energy security for the Commonwealth and the region by bringing online a renewable resource with a relatively

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> D.P.U. 22-70, 22-71, and 22-72, Joint Direct Testimony of Waltman, Wilson, Brennan and Glover, Exhibit JU-1 at 36. 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 price is the total price for energy and RECs. Each long-term contract has a 20-year term and the prices described are fixed for every year, starting in 2027 and running until 2047 for Commonwealth Wind and starting in 2028 and running until 2048 for Mayflower Wind. The 20-year average cost of contracts is \$72.17 per MWh in levelized nominal dollar terms for Commonwealth Wind and \$76.73 for Mayflower Wind. These are equivalent to a levelized net present value price in real 2021 dollars (which accounts for inflation and the time value of money) of \$54.19/MWh for the 1,200 MW Commonwealth Wind Project and \$57.07/MWh for the 405 MW Mayflower Wind Project.

<sup>&</sup>lt;sup>3</sup> As provided in D.P.U. 20-16, 20-17, 20-18, the Mayflower Wind 804 MW project price was provided in levelized nominal dollars at \$77.76/MWh, which is equivalent to \$58.47/MWh in real 2019 dollars and \$60.83/MWh in real 2021 dollars.

<sup>&</sup>lt;sup>4</sup> See D.P.U. 22-70, 22-71, 22-72, Joint Direct Testimony of Waltman, Wilson, Brennan and Glover, Exhibit JU-5. Bill impacts will vary between EDC service territories and the year of the contract.

<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.

<sup>&</sup>lt;sup>6</sup> The RFP specifies a solicitation for up to approximately 1,600 MW. The nominal maximum size of a proposal is 1,600 MW; provided that a bidder's proposal may exceed 1,600 MW by an amount that is not more than one-half of the nameplate capacity of the expected wind turbine size proposed by the bidder.

high winter capacity factor, which can help reduce the region's reliance on expensive, highemitting, imported fossil fuels during cold periods. This result demonstrates that these projects meet one of the 83C statutory requirements of contributing to reducing winter electricity price spikes.<sup>7</sup> Offshore wind will become even more important as a clean energy resource as Massachusetts pursues policies to electrify the heating and transportation sectors, which are projected to change the region to a winter peaking system within the next ten years.<sup>8</sup>

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

On March 10, 2021, 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 solicited at least 400 MW and up to 1,600 MW of generation, allowing proposals from 200 to 1,600 MW with no preferred bid size. A total of six different proposals from two different bidders were received, representing half of the current pool of potential bidders holding federal offshore wind lease areas near Massachusetts.

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 quantitative and qualitative evaluation process in Stage 2, the Evaluation Team conducted the Stage 3 evaluation of portfolios of highly-ranked projects that could achieve the full procurement amount of 1,600 MW. Following the Stage 3 evaluation, a portfolio of Commonwealth Wind's 1,200 MW project and Mayflower Wind's 405 MW 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 portfolio of 1,200 MW Commonwealth Wind Project and the 405 MW Mayflower Wind Project.<sup>9</sup>

## II. The Commonwealth Wind and Mayflower Wind Projects Provide Significant Value to Massachusetts Ratepayers

DOER supports the selected portfolio of the 1,200 MW Commonwealth Wind Project and the 405 MW Mayflower Wind Project and recommends approval of both sets of resulting offshore wind energy generation long-term contracts now before the Department. Specifically, the projects align with the Commonwealth's goals of creating a clean, affordable, resilient, and equitable energy future for the Commonwealth. Both projects are competitively priced, procured through a rigorous and competitive RFP process, and will provide offshore wind energy generation and RECs to the Commonwealth to effectively meet the requirements and objectives of Section 83C.

<sup>8</sup> Massachusetts 2050 Decarbonization Roadmap at 50, available at <a href="https://www.mass.gov/doc/energy-pathways-for-deep-decarbonization-report/download">https://www.mass.gov/doc/energy-pathways-for-deep-decarbonization-report/download</a>; ISO New England Pathways Study, PAC presentation at slide 50, available at <a href="https://www.iso-ne.com/static-assets/documents/2022/04/ag-pathways-april-final.pdf">https://www.iso-ne.com/static-assets/documents/2022/04/ag-pathways-april-final.pdf</a>.

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

<sup>&</sup>lt;sup>9</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).

The portfolio of projects fills the entire authorized procurement amount of 1,600 MW and makes significant progress towards achieving the statutory target of 5,600 MW of offshore wind procured by 2027.

The selection of this 1,600 MW portfolio, in combination with the executed amendments to the 83C Round 2 Mayflower Wind 804 MW contracts filed simultaneously by the EDCs in D.P.U. 20-16, 20-17, 20-18, offers an efficient solution to interconnect offshore wind procured under Section 83C with full utilization of the interconnection capacity and minimizing the number of interconnection points. Mayflower Wind proposes to combine the 405 MW selected in this solicitation with its previously contracted 804 MW project to a single grid interconnection point at Brayton Point. DOER's 2020 offshore wind transmission investigation recommended projects reduce environmental and siting impacts from subsea cabling by efficiently utilizing the limited number of onshore interconnection points on the grid. 10 Although the proposed amendments to the existing Mayflower Wind 804 MW contracts delay the project's commercial operation date by approximately eighteen months, the amendments reduce permitting risk for the project. The contract amendments also include a provision to remove all conditions to the reduction of the contract price from \$77.76 to \$70.26/MWh, which was contingent in the original contracts on qualification for the federal Investment Tax Credit (ITC). 11 This provision ensures ratepayers will benefit from a cost-effective project with a 9.6 percent discount from the originally contracted price.

The Commonwealth Wind PPA allows for interconnection of their 1,200 MW project at West Barnstable but has an alternative interconnection point at Acushnet. If Commonwealth Wind is able to interconnect their full project capacity at West Barnstable, that will reduce the amount of subsea cable corridors required and thereby reduce the environmental and siting impacts, helping avoid potential project delays and complexity from a second interconnection point. The RFP requested that bidders describe the extent to which their proposed projects were designed to efficiently use available interconnection points and transmission cabling. Given the complexity of project interconnection, there is a benefit to the flexibility Commonwealth Wind has in its PPA. The selected 1,600 MW portfolio of projects satisfies several of the statutory criteria of Section 83C, including mitigating environmental impacts and transmission costs, and ensuring project viability.

The 1,200 MW Commonwealth Wind Project and the 405 MW Mayflower Wind Project also contribute to the Baker-Polito Administration's goal of creating an affordable clean energy future. As detailed in the EDCs' filings, the 1,200 MW Commonwealth Wind Project will provide the Commonwealth with energy and RECs at a total levelized price of 7.2 cents/kWh in nominal dollars and the 405 MW Mayflower Wind Project will provide energy and RECs at a total levelized price of 7.7 cents/kWh in nominal dollars over the term of the long-term contracts. <sup>12</sup> These total

<sup>&</sup>lt;sup>10</sup> DOER Letter to the Joint Committee on Telecommunications, Utilities, and Energy re: offshore wind transmission investigation, available at: <a href="https://www.mass.gov/doc/offshore-wind-transmission-letter-07-28-20/download">https://www.mass.gov/doc/offshore-wind-transmission-letter-07-28-20/download</a>

<sup>&</sup>lt;sup>11</sup> D.P.U. 20-16, 20-17, 20-18, Joint Direct Testimony of Waltman, Brennan, and Glover, Exhibit JU-AMEND-1 at 10.

<sup>&</sup>lt;sup>12</sup> D.P.U. 22-70, 22-71, and 22-72, Joint Direct Testimony of Waltman, Wilson, Brennan and Glover, Exhibit JU-1 at 36.

prices are materially below the projected benefits of the projects, including avoiding the cost of the same amount of wholesale energy and RECs in the market. <sup>13</sup> Over the life of the contract, the portfolio of projects is projected to provide an average 0.6 cents/kWh (in real 2021 dollars) of direct savings to ratepayers. <sup>14</sup>

In addition to the direct market benefits from these fixed cost contracts described above, the portfolio of projects 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 net direct and indirect benefits to Massachusetts ratepayers from the portfolio of projects are expected to be 3.9 cents/kWh (in real 2021 dollars) on average over the term of the contract, with total benefits of approximately \$1.28 billion. 15

Section 83C allowed for proposals to provide options to create and foster employment and economic development in the Commonwealth, where feasible. The selection of a portfolio with both the 1,200 MW Commonwealth Wind Project and the 405 MW Mayflower Wind Project allows the Commonwealth to secure significant economic development opportunities from both developers, with pricing of both projects below the statutory price cap set in the previous procurement. The 1,200 MW Commonwealth Wind Project includes a financial commitment of \$35 million to various partner organizations to support supplier and workforce diversity and training, offshore wind innovation, environmental conservation, and low-income ratepayers. The Commonwealth Wind Project also includes commitments to develop the offshore wind supply chain in Massachusetts, including partnering with Prysmian Group on a goal to develop a subsea cable manufacturing facility in Somerset and a commitment to work with Crowley Marine Services and the City of Salem to assess a major redevelopment of Salem Harbor to support wind turbine marshalling in Salem Harbor. 16 The Mayflower Wind 405 MW project includes a financial commitment of \$42.41 million to various partner organizations to support economic development, workforce training, and low-income ratepayers, in addition to wind industry development initiatives to benefit the South Coast. <sup>17</sup> These commitments, and the projects' competitive pricing, highlight the success of a growing offshore wind industry in the Commonwealth.

As part of their commitments to promote economic development in the Commonwealth, both developers also include Diversity, Equity, and Inclusion (DEI) Plans as part of their bids, which describe their strategies to direct employment and contracting benefits of the projects to underrepresented groups including minorities, women, veterans, LGBTQ and persons with disabilities. These plans are backed by substantial financial commitments from both developers to promote workforce and supply chain diversity. DOER will work with the developers to track and

<sup>&</sup>lt;sup>13</sup> D.P.U. 22-70, 22-71, and 22-72, Joint Direct Testimony of Waltman, Wilson, Brennan and Glover, Exhibit JU-4, Appendix A (subtotal: direct benefits of proposal energy and RECs).

<sup>&</sup>lt;sup>14</sup> *Id.* (total net direct benefit).

<sup>&</sup>lt;sup>15</sup> D.P.U. 22-70, 22-71, and 22-72, Joint Direct Testimony of Waltman, Wilson, Brennan and Glover, Exhibit JU-1, at 39.

<sup>&</sup>lt;sup>16</sup> *Id.* at 40-41.

<sup>&</sup>lt;sup>17</sup> *Id*.

report annually on progress towards the goals in their DEI Plans to ensure equitable access to the economic benefits of offshore wind in Massachusetts.

Each developer has memorialized their economic development commitments in Memoranda of Understanding (MOU) with each third-party partner organization and also with DOER, consistent with the RFP requirement that all economic development benefits with specific commitments be reflected in contractual commitments. The MOUs with DOER also describe an annual report that each developer will submit to DOER to track and report on their status towards achieving their economic development commitments, the goals in their DEI Plans, and their impacts to Environmental Justice (EJ) Populations, consistent with RFP provisions. The MOUs that DOER has executed with Commonwealth Wind and Mayflower Wind, respectively, will help ensure the proposed economic development benefits for the Commonwealth are tracked and obtained. DOER plans to file these MOUs with the Department as part of these proceedings at a later date.

#### III. CONCLUSION

The approximately 1,600 MW portfolio consisting of the 1,200 MW Commonwealth Wind Project and the 405 MW Mayflower 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, DOER respectfully requests that the Department approve the long-term contracts filed by the EDCs.

Respectfully submitted,

THE MASSACHUSETTS DEPARTMENT OF ENERGY RESOURCES

By its attorneys,

/s/ Ben Dobbs

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<sup>&</sup>lt;sup>18</sup> RFP Section 2.2.2.8.

<sup>&</sup>lt;sup>19</sup> RFP Appendix A, Sections 7.6 & 13.4.