COMMONWEALTH OF MASSACHUSETTS ENERGY FACILITIES SITING BOARD

Petition of Mayflower Wind Energy LLC Pursuant) to G.L. c. 164 § 69J for Approval to Construct and) Operate Transmission Facilities in Massachusetts) for the Delivery of Energy from an Offshore Wind) Energy Generation Resource Located in Federal) Waters to the Regional Transmission System in the) Town of Falmouth, Massachusetts.)

EFSB 21-03

PETITION OF MAYFLOWER WIND ENERGY LLC PURSUANT TO G.L. c. 164, § 69J

I. INTRODUCTION

Mayflower Wind Energy LLC ("Mayflower Wind" or "Mayflower") hereby petitions the Energy Facilities Siting Board (the "EFSB" or the "Siting Board") pursuant to G.L. c. 164, § 69J ("Section 69J") for approval to construct and operate a set of transmission connector facilities, as further described below, in Massachusetts for the purpose of interconnecting a proposed offshore wind energy generation resource located in federal waters (the "Clean Energy Resource"¹) and enabling the delivery of energy from up to 1,200 megawatts of the capacity of the Clean Energy Resource to the New England regional electric grid at a point of interconnection ("POI") in the Town of Falmouth ("Falmouth"), Massachusetts (the "Section 69J Petition").² The Mayflower

¹ Mayflower Wind intends to develop the Clean Energy Resource up to the full capacity of the lease area, currently anticipated to be approximately 2,400 MW.

² Concurrently with the filing of the instant Petition, Mayflower has filed: (i) a petition to the Department of Public Utilities ("Department") pursuant to G.L. c. 164, § 72 for authority to construct and operate the state-jurisdictional transmission facilities that make up the Project; (ii) a petition to the Department pursuant to G.L. c. 40A, § 3 for certain zoning exemptions; and (iii) motions to refer and consolidate these two petitions and their related dockets in this proceeding. At this time, Mayflower is not a co-petitioner with the interconnecting transmission owner in this proceeding. To interconnect at or in the vicinity of the Falmouth Tap Substation, construction of a new substation will be necessary at or near the Falmouth Tap Substation. Mayflower expects that such construction would be undertaken by the interconnecting transmission owner as part of the ISO New England Inc. ("ISO-NE") cluster interconnection process and Mayflower will support those efforts. Mayflower will not be constructing,

Wind offshore and onshore transmission connector facilities interconnecting in Falmouth and subject to the Siting Board's jurisdiction are referred to herein as the "Project." Included with this Section 69J Petition, and incorporated in it by reference, is an "Analysis to Support the Petition Before the Energy Facilities Siting Board," which is attached hereto as Attachment A (the "Analysis").³ The Analysis provides a detailed explanation of how this Section 69J Petition meets the Siting Board's standards for approval.

In further support of this Section 69J Petition, Mayflower Wind states as follows:

1. Mayflower Wind is a Delaware limited liability company registered in the Commonwealth of Massachusetts, with a principal place of business at 101 Federal Street, Boston, Massachusetts 02110.

2. Pursuant to Section 69J, an "applicant" seeking to construct a "facility," as defined by G.L. c. 164, § 69G, must obtain approval from the Siting Board.

3. Under G.L. c. 164, § 69G, jurisdictional facilities include, *inter alia*: a "new electric transmission line having a design rating of 69 kilovolts or more and which is one mile or more in length on a new transmission corridor"; a "new electric transmission line having a design rating of 115 kilovolts or more which is 10 miles or more in length on an existing transmission corridor"; and "an ancillary structure which is an integral part of the operation of any part of a transmission line which is a facility."

4. The Project is comprised of new electric transmission lines having a design rating in excess of 69 kilovolts ("kV") that are more than one mile in length in a new transmission

owning, operating, or maintaining any of the interconnecting transmission owner's interconnection enabling transmission facilities in Falmouth.

³ The Analysis is contained in two volumes. Volume 1 contains the narrative text and some figures. Volume 2 contains figures, photographs, and attachments relevant to the Project.

corridor, and a related substation and other structures integral to the operation of the transmission lines. The Project facilities, including the offshore export cables in state waters, the onshore export cables, the substation and related ancillary structures are jurisdictional facilities for Siting Board review and approval.

II. PROJECT DESCRIPTION AND BENEFITS

5. Mayflower Wind is the developer of both the Clean Energy Resource and the Project. Mayflower Wind is a joint venture of Shell New Energies US LLC and OW North America LLC ("Ocean Winds") (itself a joint venture of EDP Renewables and ENGIE). As such, Mayflower Wind is backed by the combined capability, experience, commitment to innovation, and financial strength of world-leading offshore wind energy developers with deep experience and capability in working alongside communities and managing the complexities of offshore and onshore energy development projects.

6. The purpose of the Project is to integrate the Clean Energy Resource with the New England electric transmission grid administered by ISO-NE to deliver clean renewable energy and thereby advance the Commonwealth's policies and legislative mandates regarding climate change, clean renewable energy and offshore wind energy generation development. The Clean Energy Resource is a large-scale (up to approximately 2,400 megawatts ("MW")) wind energy project being developed within federal waters on the Outer Continental Shelf offshore of Massachusetts, approximately 26 nautical miles (48 km) south of the island of Martha's Vineyard and 20 nautical miles (37 km) south of Nantucket. The development site for the Clean Energy Resource is a federal lease area (OCS-A 0521) ("Lease Area") that has been designated by the Bureau of Ocean Energy Management ("BOEM") as a Wind Energy Area ("WEA"). Mayflower holds rights to the 127,388-acre Lease Area as awarded through an auction conducted by BOEM.

The Project is needed to connect and enable the delivery of energy from up to 1,200 7. MW of the capacity from the Clean Energy Resource that can be used to meet the public policy requirements of Massachusetts and the growing demand in New England for cost-effective and clean renewable energy. The Project is both consistent with, and directly advances, the Commonwealth's clean energy and climate policies, including legislative requirements to reduce greenhouse gas emissions and procure offshore wind energy through long-term power purchase agreements. Notably, the Project satisfies the legislative directives of An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy (St. 2021, c. 8) ("2021 Climate Act") by providing for the delivery of up to 1,200 MW of offshore wind energy into the Commonwealth. The 2021 Climate Act further commits and moves Massachusetts forward to a clean energy future. It builds on the Commonwealth's 2008 Global Warming Solutions Act, St. 2008, c. 298 ("GWSA"), which calls for significant reductions in greenhouse gas emissions, and sets an ultimate emissions goal of "at least net zero statewide greenhouse gas emissions" by 2050. The 2021 Climate Act directs the Secretary of the Executive Office of Environmental Affairs ("EEA"), in consultation with the Massachusetts Department of Energy Resources ("DOER"), to set greenhouse gas emissions limits for 2025, 2030, 2035, 2040, 2045 and 2050. The 2021 Climate Act also increases the offshore wind procurement authorization under Green Communities Act, St. 2008, c. 169, § 83C, as amended by the Act to Promote Energy Diversity, St. 2016, c. 188 ("Section 83C") to 4,000 MW, to be procured no later than June 30, 2021.⁴

⁴ The Project is also consistent with directives of the recently-proposed *Act to Power Massachusetts's Clean Energy Economy*, H. 4204 (2021), which calls for the creation of a Clean Energy Investment Fund to help incentivize investment and further innovation in projects similar to the Mayflower Wind Project.

8. The Project will enable Mayflower Wind to meet contractual commitments to deliver energy from the Clean Energy Resource to Massachusetts customers. On May 23, 2019 the Massachusetts electric distribution companies (the "EDCs"), in coordination with the Massachusetts DOER, issued a solicitation for Long-term Contracts for Offshore Wind Energy Projects pursuant to Section 83C. The solicitation sought to procure at least 400 MW, and up to 800 MW, of offshore wind energy generation. Project developers, including Mayflower Wind, submitted bids in August 2019. Mayflower Wind proposed four potential projects - a 400 MW project and three proposals for 800 MW projects, including Mayflower Wind's 804 MW Low Cost Energy proposal. Following a bid evaluation process, including monitoring and assistance by an Independent Evaluator, the EDCs selected Mayflower Wind's 804 MW Low Cost Energy proposal as the winning bid on October 30, 2019. On January 10, 2020, the EDCs and Mayflower Wind executed the long-term Power Purchase Agreements ("PPAs"). On February 10, 2020, the PPAs were filed for approval with the Department of Public Utilities (the "Department") in Docket Nos. DPU 20-16, DPU 20-17, and DPU 20-18. By order dated November 5, 2020, the Department approved the PPAs.

9. In conjunction with the state-jurisdictional Project, the Clean Energy Resource is being built in federal waters and is therefore being approved and permitted at the federal level. As part of this federal review, Mayflower Wind filed a Construction and Operations Plan ("COP") with BOEM on February 15, 2021. On August 30, 2021, and October 22, 2021, Mayflower Wind filed revisions and updates to its COP, adding a second POI at Brayton Point,-and responding to BOEM environmental and engineering comments. On November 1, 2021, BOEM published a Notice of Intent ("NOI") to Prepare an Environmental Impact Statement ("EIS") for the review of the Mayflower Wind COP.⁵ The NOI commences the EIS scoping process for the Mayflower Wind COP. Mayflower has been actively engaged with BOEM and remains in close communication with the federal agencies with whom BOEM will coordinate and consult during the National Environmental Policy Act ("NEPA") process.

10. As described in detail in Section 4 of the Analysis, Mayflower Wind's Preferred Route onshore begins with landfall in Falmouth at the first block of Worcester Park between the two lanes of Worcester Avenue (the "Worcester Avenue Landfall") and travels underground to the proposed Lawrence Lynch substation site to the point of change of ownership with the transmission facilities of the interconnecting transmission owner, NSTAR Electric Company d/b/a Eversource Energy ("Eversource"). The Noticed Alternative onshore route begins with landfall in Falmouth at Central Park near Crescent Avenue (the "Central Park Landfall") and continues north following local roadways to the Cape Cod Aggregates substation site and ultimately to the Falmouth Tap POI with the regional transmission grid.

- 11. For state permitting purposes, the Project includes the following elements:
 - up to three (3) offshore export power cables rated at between 200 and 345
 kV (nominal voltage), and up to one (1) communications cable, installed
 beneath State waters, including in Nantucket Sound and Muskeget Channel
 off Cape Cod;
 - A landfall location in Falmouth with underground transition vaults (a.k.a. transition joint bays, "TJBs") where the offshore export cables will connect to the onshore export cables, access to which will be arrived at through the

⁵ BOEM published its NOI in the Federal Register on November 1, 2021. <u>See</u> 86 Fed. Reg. 60,270 (published November 1, 2021) <u>https://www.boem.gov/sites/default/files/documents/about-boem/regulations-guidance/86-FR-60270.pdf</u>.

use of horizontal directional drilling to minimize environmental impacts, at the Worcester Avenue Landfall for the Preferred Route, or at the Central Park Landfall for the Noticed Alternative;

- c. Up to three (3) underground onshore export power circuits (with three cables per circuit) rated at between 200 and 345 kV (nominal voltage) that will transmit the energy from the landfall location to a new Mayflower Wind-developed onshore substation (the "Mayflower Wind Substation"), plus associated communications and grounding cables;
- d. The new Mayflower Wind Substation, a 345 kV substation in Falmouth,
 located at the Lawrence Lynch site for the Preferred Route, or at the Cape
 Cod Aggregates site for the Noticed Alternative; and
- e. The Mayflower Wind 345 kV interconnection facilities that, as further described below, will interconnect the Mayflower Wind Substation with the transmission facilities of Eversource and the ISO-NE regional transmission system at: (i) the point of change of ownership between the Mayflower Wind transmission facilities and the Eversource transmission facilities in Falmouth for the Preferred Route, or (ii) the point of interconnection in Falmouth, at a new 345 kV substation to be permitted and built by the interconnecting transmission owner at or in the vicinity of the existing Eversource substation at Falmouth Tap as part of the ISO-NE cluster interconnection project, for the Noticed Alternative.

12. For the Preferred Route, Mayflower Wind expects that the interconnecting transmission owner will own, build and operate the interconnection facilities necessary to

interconnect the Project to the POI with the regional grid as part of the ISO-NE cluster interconnection project. The interconnecting transmission owner would also be responsible for permitting these interconnection facilities, including with the Siting Board if they are jurisdictional under Section 69J, or at a minimum, under G.L. c. 164, § 72 with the Department, thus providing opportunity for any interested persons to comment on those facilities and their siting. For the Noticed Alternative, Mayflower Wind has proposed a variant under which the interconnection transmission owner could own, build and operate the transmission facilities from the Mayflower Wind Substation at the Cape Cod Aggregates substation site to the POI at Falmouth Tap. Under this scenario, the interconnecting transmission owner would also be responsible for permitting these facilities, including with the Siting Board if they are jurisdictional under Section 69J, or at a minimum, under G.L. c. 164, § 72 with the Department, thus again providing opportunity for any interested persons to comment on those facilities.

13. Offshore wind projects such as Mayflower Wind's Project support important public policies of the Commonwealth, including those policies pertaining to climate change, energy, the environment, public health and the economy, and carry out legislative mandates, as further described in Sections 2 and 6 of the Analysis. Mayflower Wind's Project and the associated Clean Energy Resource will provide multiple benefits to the Commonwealth and New England as further described in Section 1 of the Analysis.

14. This Section 69J Petition and the Analysis, which is incorporated herein, provide the factual basis for Mayflower Wind's conclusion that the Project is necessary, superior to alternatives, appropriately balances issues of cost and environmental impacts, is consistent with Commonwealth policies, and meets the standard of review applicable to proposals under Section 69J.

III. STANDARD OF REVIEW

15. In accordance with Section 69J, before approving a petition to construct a proposed

facility, the Siting Board requires an applicant to show that its proposal meets five requirements:

(1) that additional energy resources are needed \ldots ; (2) that, on balance, the proposed project is superior to alternative approaches in terms of reliability, cost, and environmental impact, and in its ability to address the identified need \ldots ; (3) that the applicant has considered a reasonable range of practical facility siting alternatives and that the proposed facilities are sited in locations that minimize costs and environmental impacts \ldots ; (4) that environmental impacts of the project are minimized and the project achieves an appropriate balance among conflicting environmental concerns as well as among environmental impacts, cost, and reliability. \ldots ; and (5) that plans for construction of the proposed facilities are consistent with the current health, environmental protection and resource use and development policies of the Commonwealth....

<u>Vineyard Wind LLC</u>, EFSB 17-05/D.P.U. 18-18/18-19, at 10-11 (2019) ("<u>Vineyard Wind 1</u>"); <u>NSTAR Electric Co.</u>, EFSB 14-2/D.P.U. 14-73/14-74, at 6-7 (2017) ("<u>NSTAR Electric Co.</u>"). The Siting Board looks to whether an applicant has used a "reasonable set of criteria for identifying and evaluating alternative routes in a manner that ensures that it has not overlooked or eliminated any routes that, on balance, are clearly superior" and whether the proposed route is superior to a noticed alternative with respect to balancing environmental impact, cost, and reliability, in assessing requirements (3) and (4). <u>Vineyard Wind 1</u> at 19; <u>NSTAR Electric Co</u>. at 32, 38-39.

16. As demonstrated in the Analysis, the Project meets the Siting Board's standards, satisfies the applicable requirements and is consistent with Siting Board precedent. The Analysis directly addresses the Siting Board's five requirements: Section 2 of the Analysis explains the need for the Project; Section 3 of the Analysis considers Project alternatives; Section 4 of the Analysis explains route selection and the comparison of the Preferred Route to alternatives, including the Noticed Alternative; Section 5 of the Analysis compares the Preferred Route and Noticed Alternative and discusses environmental impacts, costs, and reliability matters, and shows how the Project will minimize environmental impacts and costs; and Section 6 of the Analysis

addresses the Project's consistency with current health, environmental protection, and resource use and development policies of the Commonwealth, and shows how approval of the Petition would be consistent with those policies.

A. The Project is Needed.

17. In <u>Cape Wind Associates, LLC</u>, EFSB 02-2, at 17 (2005) ("<u>Cape Wind</u>"), the Siting Board articulated its standard for determining whether a proposed transmission facility is needed to interconnect a new or expanded generation facility:

[T]he Siting Board will require an applicant seeking to construct a transmission line to interconnect a new or expanded generating facility to show: (1) that the existing transmission system is inadequate to interconnect the new or expanded generator; and (2) that the new or expanded generator is likely to be available to contribute to the regional energy supply.

The Siting Board affirmed this standard in its decision in Vineyard Wind 1. <u>Vineyard Wind 1</u> at 11. If the subject generator "is planned, and not subject to the Siting Board's jurisdiction, the showing may be made on a case-by-case basis based on indicators of project progress." <u>Cape Wind at 17; Vineyard Wind 1</u> at 12.

18. The primary purpose of the Project is to deliver energy from the offshore wind Clean Energy Resource to Massachusetts and New England, consistent with the policies and legislative mandates of the Commonwealth of Massachusetts, including Section 83C.

19. As described more fully in Section 2 of the Analysis, the existing transmission system is inadequate to connect the Clean Energy Resource to the electric grid in New England. The Project will address that need by providing a reliable means to bring electricity from the Clean Energy Resource in the federally-designated WEA to the New England electric grid. Without the connector Project, the Clean Energy Resource would not be able to interconnect with the regional transmission system and deliver its clean energy to Massachusetts and the rest of New England.

20. As described in Sections 2 and 6 of the Analysis, strong public policy of the Commonwealth and specific legislative directives regarding climate change, clean energy and offshore wind procurement support the need for the Project.

21. As described in Sections 1 and 2 of the Analysis, the Clean Energy Resource is being developed in federal waters and is not subject to the Siting Board's jurisdiction.

22. As described in Section 2 of the Analysis, there are multiple and substantial indicators of development progress that demonstrate that the proposed Clean Energy Resource is likely to be available to contribute to the regional energy supply.

23. These indicators of progress, together with the strong public policy and legislative mandates supporting the development of the Clean Energy Resource, make it highly likely that the Clean Energy Resource will be available to contribute to the regional energy supply and meet the Siting Board's standard for a demonstration of Project need.

B. Mayflower Wind Properly Considered Alternatives to the Project.

24. Section 69J requires that a petition include "a description of alternatives to the facility." G.L. c. 164, § 69J. Such alternatives "may include: (1) other methods of transmitting or storing energy; (2) other sources of electrical power; or (3) a reduction of requirements through load management." <u>Vineyard Wind 1</u> at 16; <u>NSTAR Electric Co</u>. at 17.

25. As the Siting Board has stated, in implementing its statutory mandate, "the Siting Board requires a petitioner to show that, on balance, its proposed project is superior to such alternative approaches in terms of cost, environmental impact, and ability to meet the identified need." <u>NSTAR Electric Co.</u> at 17; <u>accord Cape Wind</u> at 21. In addition, the Siting Board "requires a petitioner to consider reliability of supply as part of its showing that the proposed project is superior to alternative project approaches." <u>NSTAR Electric Co.</u> at 17; <u>accord Cape Wind</u> at 21.

26. Mayflower Wind comprehensively identified and analyzed various alternatives to address the identified need. In order to determine the approach that best balances reliability, cost, and environmental impact, and in accordance with Section 69J and Siting Board precedent, Mayflower Wind evaluated a series of project approach alternatives for their potential to address the identified need.

27. As described in Section 3 of the Analysis, no other alternatives to the Project and the Clean Energy Resource would meet the legislative mandate to develop substantial offshore wind energy resources for the Commonwealth. No other alternative to the Project would enable delivery of the energy from the Clean Energy Resource to the regional electric grid, consistent with the policies and laws of the Commonwealth.

28. Mayflower considered multiple cable technologies and determined that a highvoltage alternating current ("HVAC") technology is the preferred technology for the proposed landing in Falmouth based on cost and the total anticipated export cable length. HVAC is a proven reliable technology and other offshore wind projects in the Northeast have used or proposed this technology. High-voltage direct current ("HVDC") technology is considered an alternate to HVAC for the Project. HVDC is being used for long-distance power transmission in overseas markets and has been proposed for some long-distance projects in the Northeast. HVDC is not necessary based on the total transmission distance (less than 75 miles) between the Clean Energy Resource and the grid interconnection point in Falmouth. <u>See</u> Analysis, Section 3.

29. Mayflower determined that, in order to bring the Project's power to shore, a voltage rated between 200 kV to 345 kV is most suitable for the export cables. Higher voltages were eliminated from consideration because there are few tested offshore cables of this type and such cables are not expected to be commercially available in a reasonable timeframe. Voltages lower

than the proposed 200 kV to 345 kV would require more cables to be placed along the seafloor, which would enlarge the impact area in the offshore environment and may increase the overall energy loss through transmission. The Project has been designed to accommodate 200 kV to 345 kV cables. See Analysis, Section 3.

30. Mayflower considered alternatives to the cross-linked polyethylene insulation ("XLPE"). XLPE insulation will be used for the Project's offshore and onshore cables. This cable type is considered state-of-the-art technology for offshore transmission worldwide. XLPE cables have proven to be more reliable with greater ease of handling than high-pressure fluid-filled and oil impregnated cables. XLPE also allows for standard and quicker jointing and termination. <u>See</u> Analysis, Section 3.

C. Mayflower Wind Properly Considered Alternative Routes and Locations.

31. Section 69J "requires a petition to construct to include a description of alternatives to the facility, including 'other site locations.'" <u>Vineyard Wind 1</u> at 19. The Siting Board "requires an applicant to demonstrate that it has considered a reasonable range of practical siting alternatives and that the proposed facilities are sited at locations that minimize costs and environmental impacts." <u>Id</u>. The Siting Board applies a two-pronged test to implement this requirement.

First, the applicant must establish that it developed and applied a reasonable set of criteria for identifying and evaluating alternative routes in a manner that ensures that it has not overlooked or eliminated any routes that, on balance, are clearly superior to the proposed route. Second, the applicant generally must establish that it identified at least two noticed sites or routes with some measure of geographic diversity.

NSTAR Electric Co. at 32; accord Cape Wind at 33.

32. Section 4 of the Analysis demonstrates that Mayflower Wind conducted a comprehensive and thorough route selection process to determine the best routes that contribute to

a reliable energy supply at the lowest possible cost and that result in the least environmental impact.

33. As detailed in Analysis Sections 1 and 4, Mayflower Wind evaluated a wide range of potential POIs, including a POI in the Town of Bourne. On October 21, 2020, ISO-NE initiated the First Cape Cod Resource Integration Study ("Cluster Study") under the ISO-NE Tariff because there were multiple projects proposing to interconnect in the same electrical area of the transmission system. As part of the Cluster Study process, ISO-NE can relocate a project's POI to facilitate the interconnection of the projects in the cluster and meet reliability requirements. ISO-NE determined that certain Mayflower Wind interconnection queue positions on Cape Cod were eligible to enter the cluster, subject to availability of capacity in the cluster after higher queued positions enter. In this cluster, ISO-NE identified Falmouth as the likely POI for Mayflower Wind's Cape Cod queue positions, therefore, Mayflower Wind proposes to construct, operate and maintain the Project in Falmouth.

34. With a POI in Falmouth, Mayflower Wind determined the best feasible landfall site and substation site options and determined the best routes from landfall to the point of change of ownership with Eversource (in the case of the Preferred Route), and to the POI (in the case of the Noticed Alternative). As described in Section 4 of the Analysis, Mayflower Wind used a weighted scoring analysis of potential routes and determined that the Preferred Route from the Worcester Avenue Landfall to the Lawrence Lynch substation site and point of change of ownership scored best.

35. With the limited space and feasible landfall options within Falmouth, and given the need to avoid conflict with existing and planned underground utility infrastructure and the desire to avoid adverse impacts to environmental justice populations, Mayflower Wind was able to

develop two feasible alternative routes with geographically distinct (i) landfall locations, (ii) routes to the respective substations, (iii) substation sites, and (iv) connections to the transmission system, with the Preferred Route connecting and ending at the point of change of ownership, and the Noticed Alternative connecting and ending at the POI with the ISO-NE-administered transmission system. Mayflower Wind also developed four different variants to these two routes. Given the circumstances of an ISO-NE-determined POI in Falmouth, limited feasible landfall locations in Falmouth, constricted space in the area, and Mayflower Wind's intent to minimize environmental impacts, these geographically distinct routes, though somewhat close to one another, provide a measure of geographic diversity in accordance with the Siting Board's standards and precedent.

D. Mayflower Wind Properly Evaluated Environmental Impacts, Costs, and Reliability of the Project and Will Seek to Minimize Costs and Environmental Impacts while Ensuring a Reliable Energy Supply.

36. Under G.L. c. 164, § 69H and § 69J,

[T]he Siting Board requires a petitioner to show that its proposed facility is sited at a location that minimizes costs and environmental impacts while ensuring a reliable energy supply. To determine whether such a showing is made, the Siting Board requires a petitioner to demonstrate that the proposed route for the facility is superior to the alternative route on the basis of balancing environmental impact, cost, and reliability of supply.

Vineyard Wind 1 at 35; NSTAR Electric Co. at 38-39; Cape Wind at 33.

The Siting Board first determines whether the Petitioner has provided sufficient information regarding environmental impacts and potential mitigation measures to enable the Siting Board to make such a determination. The Siting Board then examines the environmental impacts of the proposed facilities along the Primary and Noticed Alternative Routes and determines: (1) whether environmental impacts would be minimized; and (2) whether an appropriate balance would be achieved among conflicting environmental impacts as well as among environmental impacts, cost, and reliability. Finally, the siting Board compares the Primary Route and the Noticed Alternative Route to determine which is superior with respect to providing a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost.

Vineyard Wind 1 at 35; NSTAR Electric Co. at 39.

37. Mayflower Wind conducted a comprehensive analysis of the environmental impacts of the Project and has appropriately minimized and mitigated the environmental impacts associated with its construction. The Mayflower Wind Project will also achieve an appropriate balance among conflicting environmental concerns as well as among environmental impacts, reliability, and cost. Section 5 of the Analysis sets forth analyses of the environmental impacts, cost, and reliability.

E. The Project Meets the Siting Board's Consistency Standards.

38. Section 69J "requires the Siting Board to determine whether plans for construction of the applicant's new facilities are consistent with current health, environmental protection, and resource use and development policies as adopted by the Commonwealth." <u>Vineyard Wind 1</u> at 127; <u>NSTAR Electric Co</u>. at 87.

39. Section 6 of the Analysis explains in detail how the development of the Project and the related Clean Energy Resource are not only consistent with the Commonwealth's current relevant policies, they are also critical to effectuating the Commonwealth's goals as set forth in legislative and regulatory policies regarding the development of offshore wind resources to meet the Commonwealth's clean energy needs, while reducing the environmental impacts associated with global climate change.

40. WHEREFORE, Mayflower Wind respectfully requests that, pursuant to G.L. c. 164, Section 69J, the Siting Board conduct a public hearing on this Section 69J Petition (and on any matters referred to the Siting Board from the Department) and take such action as may be necessary to: (1) grant the authority to construct and operate the Project as more particularly described in the Analysis; (2) find that such construction and operation is required to connect the Clean Energy Resource to the regional transmission grid in order to provide a necessary clean

energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost; and (3) find that the construction of the Project is consistent with current health, environmental protection, and resource use and development policies as adopted by the Commonwealth and with the policies stated in G.L. c. 164, § 69H.

Respectfully Submitted,

MAYFLOWER WIND ENERGY LLC

By its attorneys:

In . R. Runy

Eric K. Runge Stephen Bright Day Pitney LLP One Federal Street Boston, MA 02110 (617) 345-4735 <u>ekrunge@daypitney.com</u> sbright@daypitney.com

Dated: November 17, 2021