VINEYARD OFFSHORE

# SUBMISSION FOR PURCHASE OF OFFSHORE WIND RENEWABLE ENERGY CERTIFICATES

ORECRFP24-1

PUBLIC

SEPTEMBER 9, 2024

## Confidentiality Statement

Certain information in this proposal is non-public, proprietary, commercial, and/or financial information ("Confidential Information"), which has been redacted from the version of this proposal marked "PUBLIC." Such Confidential Information has been redacted from this proposal and/or is clearly marked "CONFIDENTIAL" or "REDACTED". Vineyard Offshore intends for all such Confidential Information to remain confidential. Further, the version of this proposal marked "CONFIDENTIAL" should be treated as a non-public record that is exempt from disclosure under applicable laws and as set forth in the Request for Proposals ORECRFP24-1 Purchase of Offshore Wind Renewable Energy Certificates issued on July 17, 2024 and updated on August 13, 2024.

# Section 5.0 Project Schedule and Status

Response to New York State Energy Research and Development Authority Request for Proposals ORECRFP24-1

VINEYARD OFFSHORE

PUBLIC

## TABLE OF CONTENTS



### List of Figures



### List of Tables



### List of Attachments

# SECTION 5
PROJECT SCHEDULE AND STATUS

## 5.1 OVERVIEW

Excelsior Wind (the "Project") includes a 1,350 megawatt (MW) Offshore Wind Generation Facility (OWF) that will be installed in Lease Area OCS-A 0544 (the "Lease Area"). [redacted] The Project also includes either a high voltage alternating current (HVAC) or a high voltage direct current (HVDC) transmission system and a Delivery Point in Uniondale or Melville, New York. Vineyard Offshore has included a number of Alternate Proposals within its ORECRFP24-1 submission, as described in Table 5.1-1.

**Table 5.1-1 Project Proposals**

| Proposal ID | Delivery Point | Technology | Commercial Operation Date (COD)[1] | Interconnection Cost Sharing | [redacted] | Schedule Section |
|---|---|---|---|---|---|---|
| **Required Proposals** | | | | | | |
| **EW-A** | [redacted] | | [redacted] | | [redacted] | [redacted] |
| **EW-B** | [redacted] | | [redacted] | | [redacted] | [redacted] |
| **Alternate Proposals** | | | | | | |
| **EW-C** | [redacted] | [redacted] | [redacted] | | [redacted] | [redacted] |
| **EW-D** | [redacted] | [redacted] | [redacted] | | [redacted] | [redacted] |
| **EW-E** | [redacted] | | [redacted] | | [redacted] | [redacted] |

Notes:
1. In this section, the Uniondale Delivery Point refers to the proposed expansion of the existing 138/345 kV substation in Uniondale, referred to by NYISO as the East Garden City 138/345 kV substation.
2. COD is defined as the date on which Excelsior Wind is fully operational.

[redacted]

## 5.2 PROJECT SCHEDULE CREDIBILITY

As outlined in Sections 6.1 and 6.3, Vineyard Offshore is an experienced, well-resourced Project team and one of only a handful of offshore wind developers with direct experience developing and constructing a commercial-scale offshore wind project in the United States (US). We fully understand the scheduling risks, challenges, and opportunities associated with building offshore wind projects.

Section 6.1 outlines the extensive experience of the Vineyard Offshore team in executing projects similar to Excelsior Wind, as well as that of our owner, Copenhagen Infrastructure Partners P/S (CIP), and our supporting consultants and Project partners. Vineyard Offshore has more than 100 offshore wind specialists working on our 6 gigawatt portfolio of offshore wind projects in the US.

We are well-resourced to deliver Excelsior Wind—CIP is a global leader, market pioneer, and among the largest fund managers globally within renewable energy. CIP currently manages 12 funds and has approximately $27 billion under management from more than 150 global institutional investors. Approximately one third of CIP's investments are in offshore wind.

[redacted] Vineyard Offshore has taken all commercially reasonable steps to de-risk the Project's schedule, and we are confident that Excelsior Wind will be delivered as planned.

The Project schedule is robust because it has been informed by significant due diligence by the Project team, which has carefully examined and advanced all facets of the development process. We have considered scheduling risks and, where relevant, incorporated float to account for this in certain workstreams. The Project schedule has also been informed by our involvement in the development and ongoing construction of Vineyard Wind 1.

### 5.2.1 Federal and State Permitting

Preliminary planning for the Lease Area's federal permit applications began in Q1 2022. [redacted]

The Site Assessment Plan (SAP) for the Lease Area was submitted to the Bureau of Ocean Energy Management (BOEM) on April 19, 2023, to allow for the installation of a meteorological towers and meteorological and oceanographic ("metocean") buoy in the Lease Area. BOEM approved the SAP on February 20, 2024, and the metocean buoy was deployed in the Lease Area on May 13, 2024. [redacted]

[redacted]

Vineyard Offshore intends to seek coverage for Vineyard Mid-Atlantic LLC under Title 41 of the Fixing America's Surface Transportation Act (FAST-41). FAST-41 is designed to improve the timeliness, predictability, and transparency of the federal environmental review and authorization process for covered infrastructure projects. Under FAST-41, the Federal Permitting Improvement Steering Council will be responsible for overseeing interagency coordination during the environmental review and decision-making process for Vineyard Mid-Atlantic LLC.

The Project's schedule allows ample time for additional permits that will be required from federal agencies, including the US Army Corps of Engineers (USACE), US Environmental Protection Agency (EPA), National Marine Fisheries Service (NMFS), US Fish and Wildlife Service (USFWS), US Coast Guard, and National Park Service (NPS). USACE and NMFS will coordinate their review with BOEM's National Environmental Policy Act process and are expected to issue a joint Record of Decision with BOEM. All federal approvals are anticipated to be received in a similar timeframe as BOEM's COP approval.

New York State and local permitting will center around the completion of the Article VII process. Article VII requires the submission of detailed reviews of environmental impacts and public needs related to the siting, design, construction, and operation of all aspects of a proposed transmission facility and appurtenant facilities located within state, county, and local jurisdictions.

[redacted]

[redacted]

Section 6.2 provides further details on the Project's permitting progress.

Since acquiring the Lease Area in 2022, Vineyard Offshore has performed numerous surveys, including offshore avian, fisheries, and benthic habitat surveys, to collect baseline data on the presence of wildlife in and around the Lease Area. These site-specific surveys supplement the considerable body of existing literature and survey data for the New York Bight. As such, the ecological baseline for the Lease Area and surrounding waters is well understood and has been incorporated into the resource assessments included in the Vineyard Mid-Atlantic COP. Excerpts from the COP are included as Attachment 8.1-2 to the Fisheries Mitigation Plan and Attachment 8.2-2 to the Environmental Mitigation Plan.

We have also already analyzed the potential effects of the Project on physical, atmospheric, biological, economic, cultural, and historical resources and identified measures to avoid, minimize, and mitigate potential impacts in consultation with regulators and stakeholders.

### 5.2.2 Grid Interconnection

Vineyard Offshore has selected the Uniondale 345 kilovolt (kV) substation as the Project's Delivery Point, taking advantage of the upgrades approved as part of the Propel NY Energy's T051 Alternative 5 Project (the "Propel NY Energy project"), the selected solution to the Long Island Offshore Wind Export Public Policy Transmission Need (LI OSW PPTN). [redacted]

[redacted]

The interconnection process for the Project is explained in detail in Section 7. [redacted]

Through the Transitional Cluster Study Process, interconnection and system upgrades and the estimated schedule for their delivery will be confirmed. The timescale associated with the Transitional Cluster Study Process is summarized as follows:

- Validation of Interconnection Requests (September 2024)

- Closure of Customer Engagement Window (including Physical Infeasibility Screening) (December 2024)
- Phase 1 completion (June 2025)
- Phase 2 completion (May 2026)

To de-risk the Project and ascertain greater cost certainty, Vineyard Offshore has undertaken studies in advance of the Transitional Cluster Study Process, as described in Section 7. Through this analysis, we have ascertained the likely cost and timescales associated with additional upgrades and embedded this information in the Project schedule.

### 5.2.3 Community Engagement

We will develop, construct, and operate the Project in partnership with local communities, building on the trust and relationships already being established with stakeholders in New York.

Since January 2023, our New York outreach team has reached over 20,000 stakeholders in more than 200 individual and small group meetings and over 100 community events and presentations. We have also sponsored over 60 community events. Vineyard Offshore has identified more than 100 community organizations, institutions, local businesses, and non-profit and community-based organizations that have become collaborative partners by providing feedback, helping to amplify messaging and information, co-creating events and short- and long-term programming for stakeholders, sharing hyper-local expertise, and supporting Project development for mutual benefit.

This engagement has been a critical component of Vineyard Offshore's decision-making matrix for selecting a preferred landfall site and onshore export cable route, as well as our secondary and alternative routes. [redacted]

This level of engagement has also applied to Vineyard Offshore's federal permitting process with BOEM. Vineyard Offshore has been engaged in the New York Bight Programmatic Environmental Impact Statement process with BOEM, Tribal Nations, and other federal and local stakeholders, in particular through the BOEM Environmental Justice Forum, along with other New York Bight lessees. [redacted]

This collaborative and community-driven development process has already provided crucial inputs to the Project team and is an effective medium through which Project risks are identified and addressed, mitigating impacts on the Project's schedule.

### 5.2.4 Vendor Activity

Our procurement strategy for the Project is underpinned by extensive investigations of US supply chain capabilities and dialogue with numerous potential domestic and international manufacturers and supply chain partners. We have also leveraged our experience completing the procurement process for Vineyard Wind 1 to identify cost-effective opportunities to use and support the offshore wind supply chain that is emerging along the East Coast.

[redacted]

Following multiple initial supplier discussions, we have advanced our identification of equipment procurement packages and identified the critical items that are exposed to potential supply chain bottlenecks. [redacted]

These early actions have minimized potential cost and schedule risk for Excelsior Wind. Section 6.4 provides additional information on the contracting status of the Project's major equipment, with a comprehensive summary in Table 6.4-2.

### 5.2.5 Transport and Installation

Vineyard Offshore has also invested considerable resources into understanding potential installation and logistical solutions offered by the supply chain. The information gathered, combined with cross-project benchmark data from CIP's global development and construction experience, has formed the basis of an extensive modeling exercise involving multiple logistical concepts, installation scenarios, and sensitivities considering various installation vessels, transport and installation (T&I) methods, and component sourcing assumptions.

[redacted]

Vineyard Offshore has previously validated this scheduling approach with key suppliers in connection with Vineyard Wind 1. Continued analysis of the logistical approach for Vineyard Wind 1, in consultation with suppliers, has yielded key insights into the ability to scale the same

approach to larger projects like Excelsior Wind. We are therefore confident that the Project's construction schedule is achievable and that the Project will be delivered as planned.

## 5.3 PROPOSAL EW-B SCHEDULE AND CRITICAL PATH

In developing the schedule and critical path for the Project, Vineyard Offshore first identified the critical steps and workstreams and then mapped out the primary activities to deliver the Project in accordance with the key milestones. The Project schedule is based on a rolling wave planning principle in which the schedule gradually expands as the Project progresses.

Figure 5.3-1 presents the Project schedule for Proposal EW-B. Section 5.6 provides further information on a detailed Project schedule.

**Figure 5.3-1 Proposal EW-B Project Schedule**

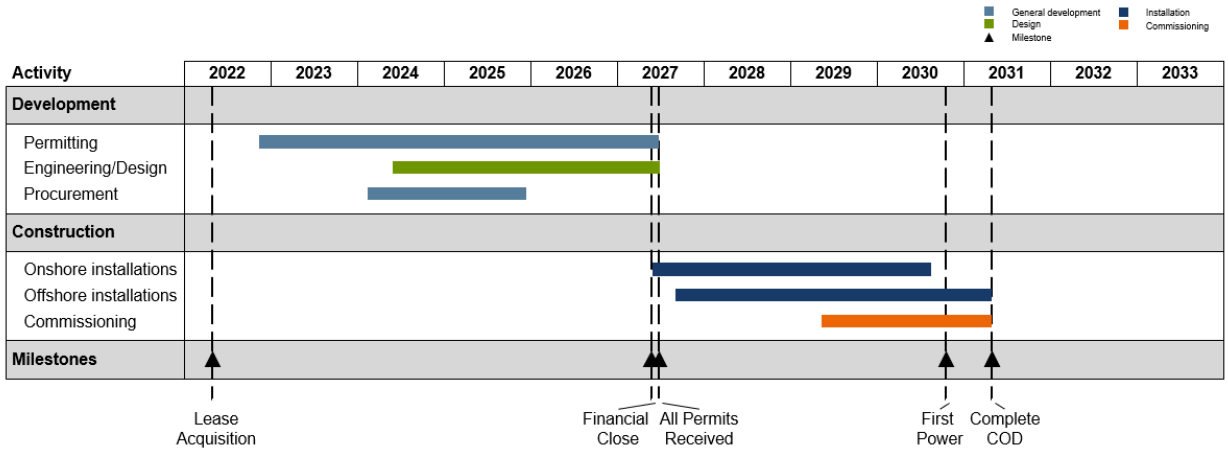



Table 5.3-1 provides a description of the critical path activities, and Table 5.3-2 provides the status of other key activities.

**Table 5.3-1 Status of Critical Path Activities**

**Table 5.3-2 Status of Other Key Activities**

| [redacted] | [redacted] | [redacted] |
|---|---|---|
| [redacted] | | |
| [redacted] | [redacted] | [redacted] |
| [redacted] | | |
| [redacted] | [redacted] | [redacted] |
| [redacted] | [redacted] | [redacted] |
| [redacted] | [redacted] | [redacted] |

**Table 5.3-2 Status of Other Key Activities (continued)**

| [redacted] | [redacted] | [redacted] |
|---|---|---|
| [redacted] | | |
| [redacted] | [redacted] | [redacted] |
| [redacted] | | |
| [redacted] | [redacted] | [redacted] |
| [redacted] | [redacted] | [redacted] |

**Table 5.3-2 Status of Other Key Activities (continued)**

| [redacted] | [redacted] | [redacted] |
|---|---|---|
| [redacted] | | |
| [redacted] | [redacted] | [redacted] |
| [redacted] | [redacted] | [redacted] |
| [redacted] | | |
| [redacted] | [redacted] | [redacted] |

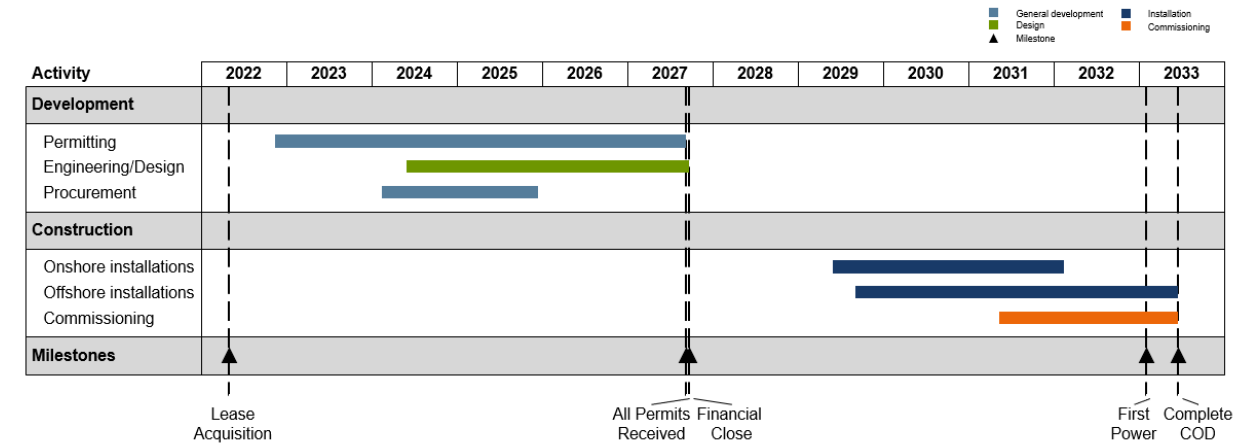
**Table 5.3-2 Status of Other Key Activities (continued)**

| [redacted] | [redacted] | [redacted] |
|---|---|---|
| [redacted] | | |
| [redacted] | [redacted] | [redacted] |
| [redacted] | [redacted] | [redacted] |
| [redacted] | [redacted] | [redacted] |
| [redacted] | [redacted] | [redacted] |

## 5.4 PROPOSAL EW-A

Figure 5.4-1 presents the Project schedule for Proposal EW-A. Section 5.6 provides further information on a detailed Project schedule.

**Figure 5.4-1 Proposal EW-A Project Schedule**




[redacted]

## 5.5 PERMISSIBLE CONSTRUCTION WINDOWS

Several potential offshore and onshore construction restrictions may impact the permissible construction windows for the Project and have been accounted for in each of the schedules. These construction restrictions, which were identified based on Vineyard Offshore's experience with the Vineyard Wind 1 and stakeholder input, include the following:

- Seasonal pile driving restrictions during marine mammal (particularly the North Atlantic right whale [NARW; *Eubalaena glacialis*]) migratory periods
- Seasonal and/or time-of-year restrictions for offshore export cable installation in nearshore waters
- Seasonal and/or time-of-day restrictions for landfall site installation, onshore export cable installation, and onshore substation or onshore converter station civil works.

[redacted]

Offshore export cable installation activities in the waters surrounding Long Island may be restricted during certain times of year or seasons to limit potential impacts to sensitive habitats, fisheries resources, and/or commercial fishing operations. Final permissible construction windows will be determined through further assessment of fishing activity and critical habitat stages for key species in consultation with federal and New York State agencies and fisheries stakeholders.

For onshore construction activities, final permissible construction windows for the Project, including potential blackout periods and construction embargoes for roadwork, will be determined in consultation with New York State agencies, local communities, and other relevant stakeholders.

As appropriate, Vineyard Offshore will incorporate schedule constraints in the final construction phase schedule developed for the Project.

## 5.6 PROJECT SCHEDULE

[redacted]

# Section 5.0 Attachments

Response to New York State Energy Research and Development Authority Request for Proposals ORECRFP24-1

VINEYARD OFFSHORE

PUBLIC


# Attachment 5.6-1: [redacted]

**Redacted**

VINEYARD OFFSHORE

# Attachment 5.6-2: [redacted]

**Redacted**