DRI 277-M Tisbury Marine Terminal Expansion

Additional commissioner and staff questions
9/22/2021

Commissioner Questions

Some of the Commissioner questions provided to TMT pertain to operations of Vineyard Wind in locations separate and distinct from the Development. In particular, Questions 1, 5, 9, 10, 12, 22, 23, and Question 4 of the Staff questions do not pertain to the current DRI under review. Nonetheless, to be responsive to the Commission’s request, TMT has consulted with Vineyard Wind, a likely future tenant at TMT. Vineyard Wind provided its comments on those questions in Attachment 1 to this memorandum.

1. Please clarify the number of employees, full-time and seasonal, involved in all aspects of VW operations, including specific positions.

The number of employees associated with the Development under review in this DRI can be found below in Table 1. No incremental jobs are directly associated with the TMT barge operation. The specific hiring needs and salaries for the O&M Wind Farm Terminal will be determined by the tenant or its affiliates and contractors, but the Applicant expects will be similar to those specified below.

<table>
<thead>
<tr>
<th>Table 1: Projection of New Employees Associated with DRI #277m</th>
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<tr>
<td><strong>Jobs Associated</strong></td>
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<tr>
<td>TMT Barging Operations (DRI #277)</td>
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<td>O&amp;M Offshore Wind Terminal (DRI #277m)</td>
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¹2018 Massachusetts Offshore Wind Workforce Assessment
²The Average Annual Wage inflated to 2020 dollars, as determined by the US Bureau of Labor and Statics (https://www.bls.gov/data/inflation_calculator.htm)

Please see Attachment 1 for estimated jobs not associated with this DRI.

2. How will new employees at the TMT site get to work, and where will they park?

The 3 to 6 Vessel Operators are expected to drive directly to the O&M Offshore Wind Farm Terminal and park on the pier. These trips have been accounted for within the traffic analysis of the proposed O&M Offshore Wind Farm Terminal operations. There are no added jobs/employees associated with the TMT Barge Operations.

3. (A) Please describe the consequences of a storm more severe than a 50-year storm on the infrastructure and surrounding area.
The O&M Wind Farm Terminal is located in both FEMA VE 13 & AE 10 zones. The 100-year still water elevation is 10’ NAVD88 with the velocity zone extending the impact to elevation 13’ NAVD88. During a 100-year storm event, the terminal and surrounding areas along Beach Road will be flooded and subject to wave action.

The proposed Tisbury Marine Terminal Barging Operations (TMT) will be reconstructed and improved at its present height of 6’ NAVD88 and will not significantly improve the site ability to mitigate for 100-year storm events.

The MassDOT is presently reconstructing Beach Road, and the proposed improvements will be limited to repaving, installation of sidewalks and burying electrical and utility service. No improvements to the drainage system are proposed and the project will not significantly improve the roadway’s ability to mitigate for 100-year storm events.

The proposed design of the O&M Wind Farm Terminal has been improved since the beginning of the local, state and federal permitting process in 2019. As a result of the permit process as well as the operational requirements, the O&M Terminal pier will be constructed with pre-cast concrete components and elevated 4’ above Beach Road. The O&M Wind Farm Terminal will be designed to withstand design wave forces and protect docked vessels and terminal cargo and supplies from coastal storm events. The proposed terminal Convault tank, container restroom and transformer box are intentionally located outside of the FEMA VE 13 zone. In the event of a major storm (tropical storm or hurricane) forecast, the terminal will cease operations with the retreat of the Crew Transfer Vessels to New Bedford Harbor and removal of all potentially vulnerable containers and supplies from the pier.

(B) Please also explain in more detail how designing the project for the 100-year storm would conflict with existing infrastructure.

The O&M Wind Farm Terminal is located in both FEMA VE 13 & AE 10 zones. The adjacent infrastructure is comprised of the Tisbury Marine Terminal Barging Operations (TMT) at elevation 6’ NADV88 and Beach Road at elevation 4’ NAVD88. The proposed elevation of the O&M Wind Farm Terminal will be 8’ NAVD88 to accommodate for an anticipated 2’ sea-level rise by 2050 (UMASS 2018). The proposed O&M Wind Farm Terminal will have a 5% sloped ramp to provide for vehicular access Beach Road. In order to design the O&M Wind Farm Terminal above the FEMA VE 13 zone, the required elevation of the pier would need to be raised to elevation 18’ NAVD88, limiting Beach Road access to the facility and hampering its function as a vessel terminal facility.

4. What are the plans for upgrading O&M vessels to all-electric? Would it be feasible now to plan the terminal facilities to accommodate electric charging for O&M vessels in the future?

The Development’s project team acknowledges that vessel technology is evolving and is closely monitoring the advancements to the industry. The next generation of Crew Transfer Vessels (CTVs) is expected to be an electric hybrid. Currently, these vessels are not widely available. However, the O&M Wind Farm Terminal is planning for a 480-volt three-phase service that would potentially support next generation electric hybrid vessel solutions in the future. Service could be upgraded as necessary to accommodate any future generation of vessels.
5. Is it contemplated that the VW marine facilities will serve as a hub for non-VW operations? If so, what are the details of any such plan? Will all three berths be for the exclusive use of VW? If not, can the berths be subleased, and who has rights to allow a third party to use the berths?

Please see attachment 1.

6. What are “temporary truck deliveries & site trucks” mentioned in the Aug. 19 response to staff questions, and how many are anticipated? Can they be scheduled for specific times?

The “temporary truck deliveries & site trucks” are the material deliveries to the O&M Wind Farm Terminal pier. The truck and site truck deliveries are considered ‘temporary’ as they are not anticipated to remain on the pier for long periods of time but rather only to drop off material. The current operations and traffic plan anticipates 2-3 trips to the O&M Wind Farm Terminal pier in the early morning and 2-3 trips in the later afternoons for material deliveries. These trips, to the extent feasible, will be scheduled in alignment to avoid peak traffic on Beach Road.

7. What other vehicles will access the marine facilities besides the above AM/PM deliveries, vans carrying technicians, and the temporary truck deliveries?

November 1 – May 1
- Estimated 3 vessel crew members cars will report to the O&M Wind Farm Terminal to park
- Delivery of material, supplies, and maintenance equipment to the O&M Wind Farm Terminal to be taken offshore: 2-3 trips in the AM, 2-3 trips in the PM

May 1 – November 1
- Estimated 6 crew members cars will report to O&M Wind Farm Terminal to park
- 2 van trips in AM & PM carrying 12 technicians
- Delivery of material, supplies, and maintenance equipment to the O&M Wind Farm Terminal to be taken offshore: 2-3 trips in the AM, 2-3 trips in the PM

8. Please clarify logistics for the VW site. The average number of combined vessel trips in season is stated to be 35/day, based on a 180-day season. With an actual vessel deployment noted at approximately 126 days, the average rises to 50. Is this 50 incoming and outgoing, combined, or 50 return trips? Will these be scheduled continuously during the day?

The traffic mentioned in this question does not refer to vessel traffic but rather the car & truck traffic entering the O&M Wind Farm Terminal. The vessels will depart from the O&M Wind Farm Terminal in the early morning, remain offshore for the day, and return at the end of the day to berth overnight. The vessels are not anticipated to make multiple daily trips back and forth.

9. Please explain how the average daily trips annually for the future maintenance building and airport hangar (90 and 33, respectively) were derived from the all-year and seasonal estimates in each case.

Please see attachment 1.
10. **In regard to projected trips to the TMT/O&M terminal, please indicate the seasonal, weekly, and daily highs associated with the terminal site, maintenance building, and airport hangar.**

Please see attachment 1.

11. **The number of supply deliveries is stated to be 4-6 trips/day. Are the AM/PM supply deliveries intended to accommodate all vessel trips during the day?**

Yes, the 4-6 trips/day, this is anticipated to account for all vessel trips. As indicated in Question 8, the vessels will depart in the AM and remain offshore all day and return in the PM.

12. **How do the materials stored at the O&M facility get to the Island? How many truck trips to the Island would be involved during the high season/day, and how would they be scheduled? Is the projected traffic to the future maintenance building (3 deliveries per week from off-Island) a high-season average?**

Please see attachment 1.

13. **Until approval of the maintenance building, what activities can be conducted at the marine terminal site, and how many employees are required to perform any such work? Please specify the number of those employees, their job titles, and pay. What, if any, housing arrangements will be made for those employees?**

The TMT Barging Operations are unaffected by an O&M Support Building. The O&M Wind Farm Terminal can function without an O&M Support Facility at an alternate location if an offshore wind company or its contractors utilize an alternate location. The main function of the O&M Wind Farm Terminal Pier is to support the offloading and onloading of spares and other maintenance equipment to the vessels that will then transport offshore to maintenance a wind farm. As noted in Question 1, some of the 3-6 jobs associated with O&M Wind Farm Terminal may be locally sourced and thus not require any incremental housing. In addition, the compensation of vessel operators described in the response to Question 1 is anticipated to be sufficient for the operators to afford market housing.

14. **If the maintenance building is approved, how many more employees will be reporting to or working at the marine terminal site?**

Whether or not the O&M Support Building is approved at an alternate location, the anticipated employees that will report to the O&M Wind Farm Terminal will remain the same. The 3-6 Vessel operators will report to the O&M Wind Farm Terminal.

15. **Please clarify that the additional wastewater flow (190 gallons for the 2 vessels and 60 gallons for a single portable toilet, according to the Aug. 19 memo response) is within the allocation granted to TMT, including the exact gallons per day currently allotted for the property. Please also provide any documentation as to the gentlemen’s agreement for additional wastewater flow that the applicant mentioned at the LUPC meeting on Sept. 2.**
TMT has requested documentation from the Tisbury Publicly Owned Treatment Works (POTW) and expects to have documentation in advance of the hearing. TMT is also prepared to speak to the matter at the hearing.

16. The applicant’s slide presentation states, “Reduces, or optimizes, peak traffic through 5 Corners and Oak Bluffs.” Please explain.

The TMT Barging Operation provides alternative off-peak transportation for island cargo that would otherwise be shipped through the Steamship Authority terminals at Vineyard Haven & Oak Bluffs. The enhancement of the terminal will not only improve island resiliency it will enable future opportunities to haul trash, wastewater, hazardous materials, and sand/aggregate with potential additional benefits of removing noxious cargo from ferries and parking lots.

17. What is the current level of barge traffic using the TMT facilities (i.e. how may incoming trips per day)? What are the planned uses for the “enhanced” TMT facilities? What are the plans for additional barge traffic? Are any approvals, including from the town or SSA, required if TMT wants to increase its barge traffic?

The Development project team has been in coordination with Captain Charles Monteiro at the Steamship Authority on the proposed plan for the Development (including TMT Barging Operations and the O&M Wind Farm Terminal). The O&M Wind Farm Terminal will need to obtain a Harbor Use permit from the Town of Tisbury and anticipates filing this application after Martha’s Vineyard Commission Review.

The current level of traffic for DRI #277m under review is described below:

**TMT Barging Operations:** <1 average incremental daily trips

a. The TMT Barding Operations provides critical and essential services for the entire economy of Martha’s Vineyard. The TMT Barging Operations transported 84,000+/- tons of freight and 53 modular homes on average annually over the last five years. This is the equivalent of 6,500 one-way truck trips that are not transported by the Steamship Authority ferries.

b. The enhancement and upgrades to the TMT Barging Operation will result in negligible increase in traffic under the following assumptions:
   i. Assuming a projected annual economic growth of 4% increase in traffic related to existing operations (according to the Martha’s Vineyard Commission projected economic growth rate).
   ii. Current annual one-way truck trips are estimated at 6,500. 6,500 average annual one-way truck trips x 4% assuming economic growth = an estimated increase of less than 1 truck-load per day or 260+/ truck loads a year.

c. Traffic projections for the TMT barging operations assumes regular operations and does not account for unforeseen “short term” large projects on Martha’s Vineyard for limited durations such as those described in Question 20 below.

**Operation and Maintenance (O&M) Wind Farm Terminal:** ~25 average daily trips

a. November 1 – May 1 (180 days): 14 average daily trips seasonally
   i. Vessel 1 will not be deployed
ii. Vessel 2 will operate an estimated 65 days (36% Vessel weather accessibility in winter)

iii. 3 Vessel crew members will report to the O&M Wind Farm Terminal on 180 days

iv. On days accessible by Vessel (65 days) material supplies will be transferred between the O&M Support Building (offsite) and the O&M Wind Farm Terminal: 2-3 trips AM, 2-3 trips PM

b. May 1 – November 1 (180 days): 35 average daily trips seasonally

v. Both Vessel 1&2 will operate an estimated 126 days (70% Vessel availability in summer)

1. 6 crew members will report to O&M Wind Farm Terminal 180 days (3 crew per Vessel)

vi. 2 van trips in AM & PM carrying 12 technicians 126 days

vii. On days accessible by Vessel (126 days) material supplies will be transferred between the O&M Support Building (offsite) and the O&M Wind Farm Terminal: 2-3 trips AM, 2-3 trips PM

18. What specific activities are currently permitted by the Steamship Authority? Please provide documentation.

Tisbury Towing and Transportation (TMT) has a good working relationship with the Steamship authority by which Tisbury Towing and Transportation is authorized to ship certain goods to Martha’s Vineyard to both parties’ mutual benefit. TMT is prepared to speak to the working relationship with the Steamship Authority at the hearing.

19. The Aug. 19 memo response states that the plans for the TMT facilities include the “transport of bulk, cargo and other products essential for life on the island of Martha’s Vineyard.” What is included in the term “other products essential for life on the island of Martha’s Vineyard”? Are those products currently supplied by the Packer operation?

“Other products essential for life on the island of Martha’s Vineyard” includes fuel, building materials, aggregate, and modular homes. All of the mentioned products are currently products of the TMT Barging Operations.

20. What constitutes the unforeseen “short-term” large projects mentioned in the Aug. 19 memo response?

For example, one such project was the repaving of the Martha’s Vineyard Airport. Many of the materials required for this project were brought into the TMT Barging Operations property. The traffic study completed was for normal TMT Barging Operations. Other examples of unforeseen “short term” large projects could include shoreline construction project, commercial and residential building products, municipal building projects, etc.

21. Does the projected increase in truck trips (260+/- per year) for the TMT facilities result from offloading of cargo from barges to trucks for distribution on-Island?
Yes. Please see the answer to Question 17 for more detail.

22. Under what conditions is Packer/TMT entitled to terminate the lease (or option to lease, as the case may be) of the subject property to VW? Please provide a copy of the lease with VW, if possible, or at least the table of contents and index, and the conditions under which the lease would expire, terminate, or be renewed. Is the lease exclusive for VW?

Please see Attachment 1.

23. Please describe GE’s role in the project.

Please see Attachment 1.

**Staff questions (1-3 were previously submitted)**

1a) Was there consideration given to extending the catwalk atop the breakwater to the Beach Road ROW and integrating with the existing adjacent ped access? The viewing platform will be a great addition, but a breakwater with dual benefits that includes public use, extending nearly a 1/12 mile into the harbor would be unrivaled and a unique perspective to watch service vessels, steamship ferries, and the working waterfront as a whole. The margin between the concrete deck and the property line to the east suggests there may be enough space to accomplish this without interfering in operations.

The primary intent of beach viewing platform along Beach Road is to provide DEP Chapter 91 required public access to Commonwealth tidelands. The Development project team originally considered public access along the breakwater and determined that the public catwalk would not be compatible with O&M Wind Farm Terminal operational safety and security requirements and therefore developed the alternative location in partnership with the Town of Tisbury.

1b) Has the Town’s Open Space & Rec C’tee raised this concept?

The Development project team has not received any comments regarding the public breakwater catwalk from the Open Space Recreational Committee (OSRC). All discussions have been focused on the viewing platform.

2) What is the height of the fence behind the entry gates, relative to the Beach Road (which will be 3’ lower than the concrete deck)? We have mock ups of the site with the entry gates open, but a rendering of what the site will look like when the gates are closed is important to visualizing the future of that corridor.

The O&M Wind Farm Terminal perimeter fence is 6’ high off the concrete deck and the entry gates will be 8’ high. The Development project team will add a closed entry gate slide to the project presentation.

3) Has any consideration been given to including some form of vegetation that can establish roots in sand and climb the fence behind the entry gates? That said, perhaps all parties involved are perfectly fine with the more imposing industrial facade. I think the vegetation idea might pivot on just how high the fence is relative to the road.
The Development project team has reached out to Mr. Tim Boland at the Polly Hill Arboretum in West Tisbury, MA and inquired about non-evasive coastal vines that may be suitable for planting along the terminal perimeter fence.

4) Has VW already been awarded a lease on the TMT property? If not, when would that occur?

Please see Attachment 1.

5) Please show the location of all fuel tanks at 190 Beach Road (existing and proposed), and the type of fuel and capacity.

To be provided on updated plans dated 9/17/2021.
Attachment 1: Information Provided by Vineyard Wind in Response to Commissioner Questions

Question 1: Please clarify the number of employees, full-time and seasonal, involved in all aspects of VW operations, including specific positions.

The 2018 Massachusetts Offshore Wind Workforce Assessment provides a comprehensive analysis of the workforce needs and economic development impacts associated with the deployment of offshore wind in Massachusetts. The report describes the jobs associated with planning, constructing, and servicing offshore wind projects and provides information on the education, skills and health and safety credentials required for each job. The table below summarizes the potential Operation and Maintenance (O&M) job titles, descriptions, typical qualifications, and salaries. All salaries are indicative and subject to change. Because the Workforce Assessment did not contain information relating to aviation-related jobs; instead, Vineyard Wind provides information from the US Bureau of Labor and Statistics page, for Helicopter Pilots and Aircraft Equipment Mechanics. The specific hiring needs, credentials, and salaries will be determined by Vineyard Wind or by vendors, contractors, and subcontractors of Vineyard Wind, but Vineyard Wind expects them to be similar to those in Table 1.

Table 1: Expected Job Titles, Education Credentials, Average Wages and Descriptions

<table>
<thead>
<tr>
<th>Potential Job Titles¹</th>
<th>Common Education Credentials</th>
<th>Average Annual Wage²</th>
<th>Description¹</th>
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<tbody>
<tr>
<td>Onshore</td>
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<tr>
<td>OSW Plan Operator(s)</td>
<td>Bachelor’s</td>
<td>$87,550</td>
<td>Direct all O&amp;M activities and daily activities of power generation, coordinate teams of technicians, contractors, and equipment suppliers, and manage the supply of components that operations must maintain to service turbine.</td>
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<tr>
<td>Warehouse Manager /</td>
<td>Associate’s</td>
<td>$122,175</td>
<td>Completes various management, organization and planning tasks to maintain high performance of the warehouse's storage and shipment processes. Is aware of the safety regulations and have experience managing the logistics of an industrial supply chain.</td>
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<tr>
<td>Storage &amp; Distribution Manager</td>
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<tr>
<td>Electrical Engineer</td>
<td>Bachelor’s</td>
<td>$125,850</td>
<td>Primarily responsible for remotely monitoring the OSW plant’s electrical systems and power production levels during the O&amp;M phase to ensure that the turbines are functioning properly and efficiently. This position requires a bachelor’s or master’s degree in electrical engineering, experience working in the electrical transmission or generation industry, experience with Supervisory Control and Data Acquisition (SCADA) or other supervisory control systems, and training from turbine equipment manufacturers on proprietary software and hardware.</td>
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<tr>
<td>Role</td>
<td>Education</td>
<td>Salary</td>
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<td>-------------------------------------------</td>
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<tr>
<td>Mechanical Engineer</td>
<td>Bachelor’s</td>
<td>$109,119</td>
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<td>Support the maintenance team by developing and executing a service and maintenance plan, and supervising a team of technicians, occasionally offshore.</td>
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<tr>
<td>Quality Engineer / Manager</td>
<td>Bachelor’s</td>
<td>$106,151</td>
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<td>Assist the O&amp;M team with developing and maintaining quality control standards for turbine operation and maintenance. This position requires a bachelor’s or master’s degree in engineering with a concentration in civil, electrical, or mechanical engineering, and an understanding of how the different systems of a turbine interact to produce energy efficiently, and what interventions improve energy production.</td>
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<tr>
<td>Health and Safety Engineer / Manager</td>
<td>Bachelor’s</td>
<td>$113,518</td>
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<td>Develop and maintain compliance for safely performing maintenance on the turbines, crew transfer, and warehouse duties. This position requires a knowledge of turbine systems and the duties of O&amp;M workers to understand the limitations of components and potential hazards, and a bachelor’s degree in engineering with experience in industrial health and safety monitoring.</td>
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<tr>
<td>Maritime</td>
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<tr>
<td>Water Transportation Workers</td>
<td>Postsecondary Training or Associate’s</td>
<td>$73,200</td>
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<td>Include all vessel crews, such as captains, mates, and ship engineers, responsible for transporting turbine components to the wind farm site and piloting vessels. Workers would need to be trained in general sea safety techniques and have experience in piloting ships in a working industrial harbor and specific training on how to operate in a marine construction environment.</td>
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<tr>
<td>Offshore</td>
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<tr>
<td>O&amp;M Technicians</td>
<td>Postsecondary Training or Associate’s</td>
<td>$77,365</td>
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<td>Account for the bulk of the O&amp;M workforce. They conduct both routine and emergency maintenance on all equipment inside the nacelle after receiving training from the manufacturer. Becoming an O&amp;M technician requires a high school diploma and knowledge of turbine mechanical, hydraulic, and electrical systems. Willingness and physical stamina to work in hazardous conditions is critical. Trade workers/construction laborers who worked on the construction of the wind farm are considered well qualified to transition into this role.</td>
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<tr>
<td>Aviation</td>
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<tr>
<td>Helicopter Operator</td>
<td>Bachelor’s</td>
<td>$136,9963</td>
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<td>Pilots plan flights by checking that the aircraft is operable and safe, that the cargo has been loaded correctly, and that weather conditions are acceptable. They file flight plans with air traffic control and may modify the plans in flight because of changing weather conditions or other factors. They require close coordination among the pilot; copilot; flight engineer if present; air traffic controllers; and ground personnel. After landing, pilots fill out records that document their flight and the status of the aircraft.</td>
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Vineyard Wind acknowledges the Commission’s request to the Applicant for information about employment aspects of Vineyard Wind’s operations in areas of Martha’s Vineyard other than the O&M Wind Farm Terminal. Vineyard Wind notes that any location identified by Vineyard Wind operations outside the O&M Wind Farm Terminal will not be owned, operated, or controlled by the Applicant (or any affiliated entity) and is not part of the Applicant’s DRI application presently under Commission review. DRI Applications are forthcoming that might more formally address the Commission’s questions, specifically DRI Applications relating to the other locations to be used by Vineyard Wind as an O&M Support Building and for aviation support. Thus, any information Vineyard Wind provides below is solely for informational purposes and not for inclusion in this DRI. Vineyard Wind anticipates addressing questions about employment by reference to Tables 1 above and 2 below. Those figures are approximate and subject to change because the specific staffing in O&M Support Building and associated offshore operations, or at the airport are not expected to commence for approximately the next 1.5 - 2 years. The estimated jobs in Table 2 associated with Vineyard Wind are not necessarily direct employees of Vineyard Wind; others may be employed by vendors, contractors, and subcontractors of Vineyard Wind.

**Table 2: Expected Jobs Associated with Forthcoming DRIs**

<table>
<thead>
<tr>
<th>O&amp;M Support Building (Separate DRI) and offshore operations</th>
<th>Jobs Associated</th>
<th>Range of Salaries¹</th>
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<tbody>
<tr>
<td></td>
<td>~20 All Year Onshore Jobs</td>
<td>$87,550 - $125,850</td>
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<td></td>
<td>Median: $107,635</td>
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<tr>
<td></td>
<td>~24 All Year Offshore Technicians</td>
<td>$77,365</td>
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<td></td>
<td>~12 Seasonal Offshore Technicians</td>
<td></td>
</tr>
<tr>
<td></td>
<td>~5 All Year Aviation Jobs</td>
<td>$70,199 - $136,996</td>
</tr>
</tbody>
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¹The Average Annual Wage inflated to 2021 dollars, as determined by the US Bureau of Labor and Statics (https://www.bls.gov/data/inflation_calculator.htm)

Question 5: Is it contemplated that the VW marine facilities will serve as a hub for non-VW operations? If so, what are the details of any such plan? Will all three berths be for
the exclusive use of VW? If not, can the berths be subleased, and who has rights to allow a third party to use the berths?

Vineyard Wind’s option to lease includes all three berths, which Vineyard Wind has determined are necessary to be the hub of the project operations and maintenance needs of Vineyard Wind and its employees, vendors, contractors, subcontractors, surveyors, and other invitees.

**Question 9: Please explain how the average daily trips annually for the future maintenance building and airport hangar (90 and 33, respectively) were derived from the all-year and seasonal estimates in each case.**

The Applicant previously provided traffic information for DRI #277m in its August 19, 2021 memorandum entitled “Response to post-LUPC meeting comments on the Tisbury Marine Terminal expansion (DRI #277m)”. That information pertains to the Development under consideration in this DRI process.

Question 9 pertains to traffic trips to and from the O&M Support Building and the airport. As previously discussed, the O&M Support Building (and the airport) will be physically separate from the O&M Wind Farm Terminal and TMT Barging Operations. They are not relevant to the Development under consideration in this DRI.

Vineyard Wind provides this response to Question 9 for informational purposes only. The O&M Support Building will be subject a forthcoming DRI application, as will the proposed development of facilities at the airport. The response is subject to change and refinement because the specific staffing in O&M Support Building and associated offshore operations, and at the airport, are not expected to commence for approximately 1.5 - 2 years.

With those caveats, Vineyard Wind provides the following:

**The offsite O&M Support Building** (Separate DRI application to be filed / Not relevant for the current DRI #277m): **~90 average daily trips annually**

a. All Year (251 days M-F): 57 average daily trips annually
   i. 3 deliveries weekly from off-island
   ii. Onshore Staff [onshore/back office/warehouse manager] – 20 persons daily
b. November 1 – May 1 (180 days): 17 average daily trips seasonally
   i. On helicopter weather restricted days (65 days) the 12 Technicians will report to O&M Support Building
c. May 1 – November 1 (180 days) 48 average daily trips seasonally
   i. 2 van trips in AM & PM carry 12 technicians arriving for work for 126 days [other 12 technicians will report to the airport]
   ii. During the 54 weather days all 24 technicians will report to the O&M Support Building and/or the airport
   iii. On vessel accessible days (126 days) material supplies will be transferred between O&M Support Building and the O&M Wind Farm Terminal: 2-3 trips AM, 2-3 trips PM

**Martha’s Vineyard Airport** (Separate DRI application to be filed / Not relevant for the current DRI #277m): **~33 average daily trips annually**

d. All Year (251 days M-F): 17 average daily trips annually
   i. 2 deliveries daily from the O&M Support Building
ii. Aviation Staff [Heli maintenance crew and Heli operators] – 5 persons daily
e. November 1 – May 1 (180 days): 15 average daily trips seasonally
   i. On helicopter weather accessible days (115) 12 technicians will report to the airport
f. May 1 – November 1 (180 days) 17 average daily trips seasonally
   i. 12 technicians arrive to the Airport for work for 126 days [other 12 technicians will report to the O&M Support Building

Question 10: In regard to projected trips to the TMT/O&M terminal, please indicate the seasonal, weekly, and daily highs associated with the terminal site, maintenance building, and airport hangar.

Please see the response to Question 9 above (and to the Commission’s question 3 directed to the Applicant). The estimates above are based on individual daily, weekly, or seasonal highs. For isolated events (e.g., hurricanes, emergency conditions) trips will vary according to the project needs.

Question 12: How do the materials stored at the O&M facility get to the Island? How many truck trips to the Island would be involved during the high season/day, and how would they be scheduled? Is the projected traffic to the future maintenance building (3 deliveries per week from off-Island) a high-season average?

The 3 deliveries per week from off-island is the assumed conservative high season average. The off-island deliveries will likely utilize the Steamship Authority and the times will based on the steamship authority’s schedule. The Crew Transfer Vessels could also pick up deliveries from off-island directly. The deliveries will be taken to the O&M Support Building not the O&M Wind Farm Terminal.

Question 22: Under what conditions is Packer/TMT entitled to terminate the lease (or option to lease, as the case may be) of the subject property to VW? Please provide a copy of the lease with VW, if possible, or at least the table of contents and index, and the conditions under which the lease would expire, terminate, or be renewed. Is the lease exclusive for VW?

The lease has not been executed by the Applicant and Vineyard Wind. Because the lease is an unexecuted document containing nonpublic business confidential information, Vineyard Wind respectfully declines any details of the lease. As in any lease, there will be termination and expiration provisions.

Question 23: Please describe GE’s role in the project.

General Electric will manufacture the turbines located in federal waters for the Vineyard Wind 1 project. GE is expected to conduct certain operations and maintenance activities relating to those turbines, in part using the O&M Wind Farm Terminal. Vineyard Wind’s projected usage of and staffing for the O&M Wind Farm Terminal is inclusive of use by Vineyard Wind’s contractors, subcontractors, and vendors.

Staff questions (1-3 were previously submitted)
Question 4: Has VW already been awarded a lease on the TMT property? If not, when would that occur?

Vineyard Wind has already obtained an option to lease the O&M Wind Farm Terminal portion of the Development property subject to review in this DRI process. It does not hold the lease at this time.
TISBURY MARINE TERMINAL
SHORELINE INFRASTRUCTURE

TISBURY, MARTHA'S VINEYARD
DUKES COUNTY, MA
SEPTEMBER, 2021

Prepared by:
Foth Infrastructure & Environment, LLC
Sept. 22, 2021
DRI 277-M Tisbury Marine Terminal Expansion
Response to MVC questions, with follow-ups in red

Please see the responses in orange below.

Applicant responses

5) Please show the location of all fuel tanks at 190 Beach Road (existing and proposed), and the type of fuel and capacity.

To be provided on updated plans dated 9/17/2021.

The plans that were attached (dated 8/26/21) appear to show only the existing fuel tanks. Please clarify the location of any proposed fuel tanks.

FIXED & SUBMITTED

Vineyard Wind Responses

Question 1: Please clarify the number of employees, full-time and seasonal, involved in all aspects of VW operations, including specific positions.

[Excerpt:] Vineyard Wind notes that any location identified by Vineyard Wind operations outside the O&M Wind Farm Terminal will not be owned, operated, or controlled by the Applicant (or any affiliated entity) and is not part of the Applicant’s DRI application presently under Commission review.

Please clarify whether the proposed O&M Support Building will be owned or operated by Vineyard Wind.

The intention is the O&M Support Building will be owned and operated by Vineyard Wind if it located at 61 Beach Road. If it is not located at 61 Beach Road, we do not know who the owner or applicant would be.

Question 5: Is it contemplated that the VW marine facilities will serve as a hub for non-VW operations? If so, what are the details of any such plan? Will all three berths be for the exclusive use of VW? If not, can the berths be subleased, and who has rights to allow a third party to use the berths?

Vineyard Wind’s option to lease includes all three berths, which Vineyard Wind has determined are necessary to be the hub of the project operations and maintenance needs of Vineyard Wind
and its employees, vendors, contractors, subcontractors, surveyors, and other invitees.

**Will all three berths be for the exclusive use of VW? Can the berths be subleased, and who has rights to allow a third party to use the berths?**

Vineyard Wind’s option to lease includes all three berths, which Vineyard Wind has determined are necessary to be the hub of the project operations and maintenance needs of Vineyard Wind and its employees, vendors, contractors, subcontractors, surveyors, and other invitees. Vineyard Wind has no intention of subleasing the berths. Only Vineyard Wind has the right to sublease the berths.

**Question 9: Please explain how the average daily trips annually for the future maintenance building and airport hangar (90 and 33, respectively) were derived from the all-year and seasonal estimates in each case.**

The Applicant previously provided traffic information for DRI #277m in its August 19, 2021 memorandum entitled “Response to post-LUPC meeting comments on the Tisbury Marine Terminal expansion (DRI #277m)”. That information pertains to the Development under consideration in this DRI process.

Question 9 pertains to traffic trips to and from the O&M Support Building and the airport. As previously discussed, the O&M Support Building (and the airport) will be physically separate from the O&M Wind Farm Terminal and TMT Barging Operations. They are not relevant to the Development under consideration in this DRI.

Vineyard Wind provides this response to Question 9 for informational purposes only. The O&M Support Building will be subject a forthcoming DRI application, as will the proposed development of facilities at the airport. The response is subject to change and refinement because the specific staffing in O&M Support Building and associated offshore operations, and at the airport, are not expected to commence for approximately 1.5 - 2 years.

With those caveats, Vineyard Wind provides the following:

**The offsite O&M Support Building (Separate DRI application to be filed / Not relevant for the current DRI #277m): ~90 average daily trips annually, ~105 peak daily trips annually**

a. All Year (251 days M-F): 57 average daily trips annually  
   i. 3 deliveries weekly from off-island  
   ii. Onshore Staff [onshore/back office/warehouse manager] – 20 persons daily  
b. November 1 – May 1 (180 days): 17 daily trips seasonally  
   i. On helicopter weather restricted days (65 days) the 12 Technicians will report to O&M Support Building  
c. May 1 – November 1 (180 days) 48 daily trips seasonally  
   i. 2 van trips in AM & PM carry 12 technicians arriving for work for 126 days
[other 12 technicians will report to the airport]
i. During the 54 weather days all 24 technicians will report to the O&M Support Building and/or the airport
ii. On vessel accessible days (126 days) material supplies will be transferred between O&M Support Building and the O&M Wind Farm Terminal: 2-3 trips AM, 2-3 trips PM

Martha’s Vineyard Airport (Separate DRI application to be filed / Not relevant for the current DRI #277m): ~33 average daily trips annually, ~34 peak daily trips annually
d. All Year (251 days M-F): 17 average daily trips annually
   i. 2 deliveries daily from the O&M Support Building
   ii. Aviation Staff [Heli maintenance crew and Heli operators] – 5 persons daily
e. November 1 – May 1 (180 days): 15 daily trips seasonally
   i. On helicopter weather accessible days (115) 12 technicians will report to the airport
f. May 1 – November 1 (180 days) 17 daily trips seasonally
   i. 12 technicians arrive to the Airport for work for 126 days [other 12 technicians will report to the O&M Support Building

See follow-up to Question 10 below.

The Development (under current DRI review incl. TMT Barging Operations and O&M Wind Farm Support Terminal): ~36 peak daily trips annually
The offsite O&M Support Building: ~105 peak daily trips annually
Martha’s Vineyard Airport: ~34 peak daily trips annually

Question 10: In regard to projected trips to the TMT/O&M terminal, please indicate the seasonal, weekly, and daily highs associated with the terminal site, maintenance building, and airport hangar.

Please see the response to Question 9 above (and to the Commission’s question 3 directed to the Applicant). The estimates above are based on individual daily, weekly, or seasonal highs. For isolated events (e.g., hurricanes, emergency conditions) trips will vary according to the project needs.

Question 3 related to potential storm damage. Do you mean Questions 6-8?

The reference should have been pointed to the Commission’s Question 17 directed to the Applicant.

The estimates in your response to Question 9 above show average daily trips for certain parts of the year. If possible, please project the annual peak trips per day for each of the three sites (TMT facility, O&M support building, and airport hangar). For instance, if the average seasonal
high for the O&M support building site is 105 trips per day (accounting for both the in-season and all-year traffic), what is the seasonal peak?

The information above has been clarified to indicate the average and the seasonal peak traffic.
MEMORANDUM

Date         September 23, 2021

To           Tisbury Marine Terminal, Attn. Ralph Packer (Property Manager)

From         Jared Meader, Tisbury Wastewater Superintendent

Subject      Tisbury Marine Terminal (TMT), 190 Beach Road (10-A-1)

TMT has requested that Tisbury Wastewater Department provide documentations providing assurance of available capacity at the Tisbury Wastewater Treatment Facility to accommodate the proposed employee bathroom facility.

190 Beach Road (10-A-1) had an initial flow estimate of 250 gpd, which was used to determine size of the facility and collection system that was being constructed and the betterments to be assessed for the user portion of the construction costs and was approved by the voters at annual town meeting.

Due to multiple properties in the sewer district that have not connecting to the collection system, Tisbury Wastewater Department with Environmental Partners Group LLC, has set aside flow capacity to accommodate these properties when they submit their request to connect to the system.

Sincerely,

Jared A. Meader
Wastewater Superintendent

The Town of Tisbury is an equal opportunity provider and employer.
COMMONWEALTH OF MASSACHUSETTS

DUKES COUNTY, SS. SUPERIOR COURT DEPARTMENT
CIVIL ACTION NO. DUCV2008-00051

WOODS HOLE, MARTHA'S VINEYARD AND NANTUCKET STEAMSHIP AUTHORITY, Plaintiff,

VS.

TISBURY TOWING & TRANSPORTATION CO., INC. and RALPH M. PACKER, JR., Defendants.

DECLARATION OF RIGHTS AND LEGAL RELATIONS

Pursuant to M.G.L. c. 231A, § 1, and upon agreement by all of the remaining parties, the following declaration of rights and legal relations is made:

1. Defendant Tisbury Towing & Transportation, Inc. ("Defendant") and all persons acting in concert with it, are hereby enjoined and prohibited from operating a barge to carry vehicles (regardless of whether they are for rent or otherwise) between the island of Martha's Vineyard and/or Nantucket and/or the Massachusetts mainland for hire by water without a license or permission from the Woods Hole, Martha's Vineyard and Nantucket Steamship Authority (the "Steamship Authority") in writing to do so, except as allowed in the following paragraph.
2. The Steamship Authority acknowledges and accepts that:

(a) Defendant historically has carried by barge for hire by water between the islands of Martha’s Vineyard and/or Nantucket and/or the Massachusetts mainland cranes and other large construction equipment that cannot reasonably be carried on the Steamship Authority’s vessels because of their size; modular homes; petroleum in bulk; other bulk, break-bulk and containerized cargoes; and vehicles carried in connection with and incidental to the carriage of the same and used for their continued transport once they are unloaded from the barge;

(b) Defendant does not require a license or permission from the Steamship Authority in writing to continue to carry the same types of cargos and incidental vehicles described in sub-paragraph 2(a) above that Defendant has carried in the past; and

(c) Nothing in this Declaration of Rights and Legal Relations or otherwise shall be construed as limiting or interfering with Defendant’s right, now or in the future, to carry the same types of cargos and incidental vehicles described in sub-paragraph 2(a) above that Defendant has carried in the past.

Continued on the following page
Dated: 9 May 2011

Agreed to and Accepted by:

WOODS HOLE, MARTHA’S VINEYARD
AND NANTUCKET STEAMSHIP
AUTHORITY, Plaintiff

By its attorney,

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BB No. 412260
Reynolds, Rappaport, Kaplan
& Hackney, LLC
106 Cooke Street
P.O. Box 2540
Edgartown, MA 02539
Tel. (508) 627-3711

By its General Manager:

Wayne C. Lamson
Woods Hole, Martha's Vineyard
& Nantucket Steamship Authority
P.O. Box 284
Woods Hole, MA 02543

By the Court:

Ref.
JES & CK.

Tisbury Towing &
Transportation Co., Inc.,
Defendant

By its attorney,

Bradley F. Gandrup, Jr.
BB No. 549794
180 South Main Street
Providence, RI 02903
Tel. (401) 861-8200
Fax (401) 861-8210

By its Secretary:

Dorothy P. Packer
April 26, 2011

Wisbury Towing &
Transportation Co., Inc.
P.O. Box 308
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