## IN THE MATTER OF THE PETITION OF OCEAN WIND, LLC PURSUANT TO N.J.S.A. 48:3-87.1(F) FOR A DETERMINATION THAT EASEMENTS ACROSS GREEN ACRES-RESTRICTED PROPERTIES AND CONSENTS NEEDED FOR CERTAIN ENVIRONMENTAL PERMITS IN, AND WITH RESPECT TO, THE CITY OF OCEAN CITY ARE REASONABLY NECESSARY FOR THE CONSTRUCTION OR OPERATION OF THE OCEAN WIND 1 QUALIFIED OFFSHORE WIND PROJECT

## BPU Docket No. QO22020041

## OCEAN WIND'S RESPONSES TO BPU'S SUPPLMENTAL QUESTIONS

General:

1. Please list the criteria that were used to evaluate the different cable routes, and describe how the criteria were weighed in the selection process.

Response:

Ocean Wind applied the following criteria to identify and screen alternatives for the Ocean Wind 1 ("Project" or "Ocean Wind 1") components (see **Table 1-1** below).

#### Table 1-1. Summary of criteria for Project screening and siting.

Project Component	Criteria	
Point of Interconnection (POI)	• Capable of accepting all or a portion of the power from the Project with minimal upgrades	
	• Located within 10 miles of the coastline to minimize environmental impacts and optimize cable route length	
	• Avoid or minimize impacts to environmental features (e.g., critical habitat, wetlands, cultural resources, existing contamination).	
	• Consistency with, and reduced or low potential impacts on, adjacent land uses.	
	• Constructability (e.g., land use, slopes, access, temporary staging areas, and utility locations).	
	• Availability of suitable landfall locations (i.e., those that minimize environmental impacts and are within 10 miles of the POI).	
Onshore Substations	• Proximity to POI (within 10 miles) to minimize environmental impacts and optimize cable route length	
	• Avoid or minimize impacts to environmental features (e.g., critical habitat, wetlands, cultural resources, existing contamination).	
	• Proximity to the export cable route to minimize environmental impacts, neighborhooddisruption (e.g., disturbances, interruptions, or changes), and costs associated with the cable connections to the POI).	
	• Sufficient land available (a minimum of 6 acres).	
	• Consistency with, and reduced or low potential impacts on, adjacent land uses.	
	• Constructability (e.g., land use, slopes, access, temporary staging areas, and utility locations).	
	Optimization of cable route lengths.	
	• Availability of suitable landfall locations (i.e., those that minimize environmentalimpacts and are within 10 miles of the substation).	
Export Cable Landfalls	• Avoid or minimize impacts to environmental features (e.g., critical habitat, shellfish lease areas, fish spawning areas, cultural resources, and existing contamination) by leveraging existing conditions (i.e., existing roadways or parking lots or previously disturbed areas).	
	• Prioritize property availability, including State- and county-owned roadways, and existing utility ROW	
	• Consistency with, and reduced or low potential impacts on, adjacent land	

Project	Criteria				
Component					
	uses.				
	• Constructability (e.g., land use, slopes, access, temporary staging areas, and utility locations).				
	Optimization of cable route lengths.				
	• Availability of suitable landfall locations (i.e., are within 10 miles of the substation to minimize onshore impacts to local communities and sensitive natural resources).				
	• Use of existing ROWs to access the water when a parcel for the landfall location was not adjacent to the water.				
Offshore Export Cable Route within NJ State Waters	Minimize extreme changes in slope and water depths.				
	• Coarse grain sediments of sufficient depth to meet target cable burial depths whileavoiding pockets of contaminated sediments and organic sediments.				
	Optimization of cable route lengths.				
	• Avoid or limit crossing navigation channels and anchorage areas.				
	• Avoid known submerged shipwrecks and other cultural resources.				
	• Avoid mining and or dredge spoil areas.				
	• Minimize number of infrastructure (e.g., utility) crossings.				
	• Minimize impacts to aquatic communities and sensitive habitats.				
	• Constructability (e.g., habitat type, depths, slopes, access, and utility locations).				
Onshore Export	Minimize extreme changes in slope.				
Cable Route	• Prioritize property availability, including State- and county-owned roadways, and existing utility ROW.				
	• Avoid known Superfund Sites or sites designated as hazardous.				
	• Avoid known locations of historic or archaeological resources.				
	• Avoid or minimize number of infrastructure (e.g., roads, bridges, culverts) crossings to reduce impacts to existing onshore infrastructure.				
	Minimize impacts to wetlands and floodplains.				
	• Minimize the overall length of the route to minimize impacts to terrestrial communities, wildlife species, and sensitive habitats.				
	Minimize impacts to aesthetic resources.				
	• Minimize impacts to sensitive receptors such as hospitals, schools, and churches.				

The criteria described in **Table 1-1** was applied to the alternatives for each Project component in each of the three phases as described below:

<u>Phase 1</u>: Initial screening which involved a high-level review and evaluation of each project component, taking into consideration Ocean Wind's purpose and need, proposed project technologies, and the criteria summarized in **Table 1-1**.

<u>Phase 2</u>: Desktop studies that analyzed opportunities and constraints for the Project components. Resource maps were developed using existing GIS resource data (no new data were generated for this study) and were based on the application of Project criteria (**Table 1-1**).

In the case of export cable routes, this phase also included a review of existing resources including but not limited to: bathymetry, geology, contaminated soils/sediments, commercial and recreational fishing activities, navigation channels, anchorage areas, shipping activities, restricted areas, public open space, environmentally sensitive areas, known cultural and historical resources, existing infrastructure, surface waters (wetlands and watercourses), and threatened and endangered species, as these resources are likely to impact the development, permitting, and construction of the Project. Windshield surveys were conducted to ground truth the GIS desktop study and stakeholder outreach was conducted to collect additional information to assist in routing and siting. Disruption to local residents and communities due to cable installing including road closures, traffic diversions, and similar impacts was also considered.

<u>Phase 3</u>: Site specific surveys were conducted at selected alternatives to refine routing and siting, support cable design and environmental assessments, and identify preferred options.

Additionally, the routing and siting process included coordination with Federal and State agencies, local municipalities and various stakeholders including non-government organizations (NGOs) and communities in each Phase as appropriate. During this coordination and outreach, additional substation and export cable route options were developed and analyzed based on agency feedback and to minimize impacts to sensitive resources (community and natural resources).

Ocean Wind ultimately selected the proposed routes to each interconnection point based on technical feasibility of cable design, constructability, real estate availability, environmental impacts, and stakeholder considerations. Onshore components of the Project have been sited within previously disturbed areas and existing road rights-of-way (ROWs) to the maximum extent practicable to minimize environmental impacts.

2. Please describe the qualifications of the individuals involved in the cable route selection process.

#### Response:

Project routing and site selection was conducted by an interdisciplinary team of Project staff that included professional engineers, construction experts, federal permitting experts, New Jersey permitting experts, environmental scientists, real estate professionals, and project senior management. This multidisciplinary team allowed for multiple viewpoints on proposed project interconnection points, substations, landfalls, and cable routes to evaluate technical feasibility, regulatory risks, and environmental impacts at an early stage of project development.

## Jason Kalwa testimony, Page 11, lines 10-21:

3. Please provide an assessment as to whether construction methods as well as impact from construction would differ substantially between different cable routes. Note any differences in impact on traffic as well as public access, especially as it relates to tourism. How did these impacts weigh in the cable route selection process?

#### Response:

Construction methods are not expected to differ substantially between different onshore cable routes. However, differences in construction methods would be anticipated for the abandoned railroad option because large sections are not within paved roadways. Installing construction access on this route option would create further disturbance versus the other routes.

In general, longer routes give rise to greater disturbance than shorter routes. The Preferred Route is the shortest route as described in Ms. Patterson's testimony (page 9, lines 10 through 13).

In terms of the route selection process, impacts from construction methods, including impacts on traffic and tourism, are taken into account, with the intent to minimize such impacts consistent with Ms. Patterson's testimony (pg. 11, lines 12 through 14). In addition, the Project's construction schedule attempts to reduce impacts on both tourism and traffic by optimizing the off-peak season to the extent feasible, practicable, and on a timeline consistent with meeting the Project's construction milestones.

# Pilar Patterson testimony, page 4, lines 21 through page 5, lines 9:

4. Please provide more detail on the factors that would affect the identified impacts, upgrade costs, and timeline associated with the choice of Higbee and Ontario as POI.

## Response:

For context, the BLE POI is able to receive up to 432MW without any grid upgrades. Only a limited facility upgrade (within BLE substation) will be required for approximately \$1.5 million.

At Higbee, given the substation characteristics (69kV operating voltage vs. 138kV for BLE), this POI is not able to accommodate Ocean Wind 1 without significant grid upgrades. PJM indicated that a 300MW injection (30% below what is required by Ocean Wind 1) could cost approximately \$350 million and trigger multiple network upgrades across New Jersey and Pennsylvania along with significant permitting/schedule risks.

At Ontario, given the same substation characteristics as Higbee (69kV operating voltage vs. 138kV for BLE), this POI is also not suitable to receive the amount of energy delivered by Ocean Wind 1. Therefore, this POI was removed from consideration.

## Pilar Patterson testimony, page 7, lines 1-8:

5. Please provide supporting information, including data sources, on how "inlets, wildlife refuges, and wildlife management areas" were defined. For any GIS data used in the resource maps, please clarify whether temporal accuracy considerations were made regarding updates to these data sources and how these may have influenced the resulting information.

#### Response:

Inlets, wildlife refuges, and wildlife management areas were defined based on federal and state GIS data sets, publicly available reports, and coordination with agencies.

Inlets were identified based on several data sources including NOAA navigational charts and New Jersey Department of Transportation Office of Marine Resources. Inlets and channels were evaluated based on their designation as either federal- or state-maintained to specific depths for navigational purposes. For resource maps that utilized GIS, data sets were collected from the latest NOAA charts available online through the NOAA website. After identification of listed federal- and state-maintained channels via GIS resource maps, the Project team scheduled preapplication meetings with applicable agencies to confirm designated channel dimensions, maintained depths, and required burial depths for submarine cables within the channel. This coordination was incorporated into the phased siting and routing approach discussed in item #1 above.

Wildlife Refuges were defined based on publicly available data sets including the Ocean County Comprehensive Master Plan (Ocean County Planning Board, 2018), U.S. Fish and Wildlife Service Final Environmental Assessment and Land Protection Plan Proposal to Expand the Boundary of the Edwin B. Forsythe National Wildlife Refuge (1994), Edwin C. Forsythe National Wildlife Refuge's website (USFWS 2009, 2018d), BOEM Atlantic Region Wind Energy Development: Recreation and Tourism Economic Baseline Development Impacts of Offshore Wind on Tourism and Recreation Economies (BOEM 2012), and New Jersey Department of Fish & Wildlife designated Wildlife Management Areas (NJDEP 2018). During the interactive screening process (See Phase 1 and Phase 2 of Item #1 above), digital data sets from NJ-Geowebs were utilized on a regular basis to provide the latest datasets for National Wetland Inventory and Wildlife Refuges as appropriate. Following Phases 1 and 2, site specific surveys were conducted to provide habitat delineations of the proposed project areas, which were used for impact calculations in support of NJDEP permitting applications.

Wildlife Management Areas are multi-use public lands administered by the NJDFW and managed by the New Jersey Division of Bureau of Land Management. They are maintained and managed for a diversity of wildlife species through forest/field manipulation and habitat improvement, as well as for public access (NJDFW 2018b). Wildlife Management Areas were defined based on publicly available data sets including New Jersey Department of Fish & Wildlife designated Wildlife Management Areas (NJDFW 2018a), National Wetlands Inventory data sets, U.S. Fish and Wildlife Service WMA Impoundment Management report (USFWS 2018b), and National Park Service website regarding National Natural Landmarks, Manahawkin Bottomland Hardwood Forest (NPS 2016).

Reference:

Bureau of Ocean Energy Management (BOEM). 2012. Atlantic Region Wind Energy Development: Recreation and Tourism Economic Baseline Development Impacts of Offshore Wind on Tourism and Recreation Economies. BOEM 2012-085. Retrieved from: https://www.boem.gov/ESPIS/5/5228.pdf.

Ocean County Planning Board. 2011. Ocean County Comprehensive Master Plan. Retrieved from: <u>http://www.co.ocean.nj.us//WebContentFiles//fedb8826-cb81-4b9f-be8d-</u><u>e71e4fcd1fa4.pdf</u>.

National Park Service (NPS). 2016. National Natural Landmarks. Manahawkin Bottomland Hardwood Forest. Retrieved from: https://www.nps.gov/subjects/nnlandmarks/site.htm?Site=MABO-NJ.

New Jersey Department of Fish & Wildlife (NJDFW). 2018. Wildlife Management Areas. Retrieved from: <u>https://www.state.nj.us/dep/fgw/wmaland.htm</u>.

U.S. Fish and Wildlife Service (USFWS). 1994. Final Environmental Assessment and Land Protection Plan Proposal to Expand the Boundary of the Edwin B. Forsythe National Wildlife Refuge, Ocean County, New Jersey. Hadley, MA

U.S. Fish and Wildlife Service (USFWS). 2009. Edwin B. Forsythe National Wildlife Refuge. Retrieved from:

https://www.fws.gov/uploadedFiles/Region\_5/NWRS/North\_Zone/Edwin\_B\_Forsythe/Forsythe Brochure.pdf.

U.S. Fish and Wildlife Service (USFWS). 2018a. Edwin B. Forsythe National Wildlife Refuge. Retrieved from: <u>https://www.fws.gov/refuge/Edwin\_B\_Forsythe/about.html</u>

U.S. Fish and Wildlife Service (USFWS). 2018b. Tuckahoe WMA Impoundment Management. Retrieved from: <u>https://www.state.nj.us/dep/fgw/news/2018/tuckahoe\_improvements18-2.htm</u>.

# *Pilar Patterson testimony, page 7, lines 9-12:*

6. Please list the design and construction criteria that were used to remove potential alternative landfall sites from further consideration.

## Response:

Design and Construction Criteria that were used to remove potential alternative landfall sites from further consideration are summarized in the Table 1-1 above (See "Export Cable Landfalls" for more details).

Several landfalls, onshore cable routes, and offshore cable routes were evaluated to avoid specific sensitive resources and/or communities. If an evaluated landfall was determined to be impracticable or inconsistent with the criteria listed in **Table 1-1**, it was eliminated from consideration and the cable route was not further evaluated. For landfalls that were determined to be practicable there were several cable routes evaluated that utilized the evaluated landfall. During Phase 1, several landfalls and cable routes were determined to be not practicable and were not carried forward for further analysis.

Phase 1 of this analysis eliminated landfall and onshore and offshore export cable alternatives based on the alternative's use of a technology that was not carried forward (e.g., HVDC or HVAC booster station) or because they were inconsistent with the criteria in **Table 1-1**. These alternative landfalls and routes are summarized in **Table 1-2** below.

Alternative Name	Reasons the Alternative was Determined Not Practicable		
Great Egg Harbor Route	Engineering Constraints		
	<ul> <li>Sediments in the inlet are dynamic; therefore, additional cable protection such as cable mattresses would be needed, resulting in additional impacts to natural resources.</li> </ul>		
	<ul> <li>There is an existing USACE borrow area at the mouth of the inlet. USACE typically</li> </ul>		
	does not authorize crossing of borrow areas or would require impracticable mitigations		
	including burial depths of up to 80 feet below the federal project limit.		
	Community/Environmental Constraints		
	<ul> <li>Access to the inlet by other vessels would be restricted during construction, which</li> </ul>		
	would result in additional impacts to other marine uses and navigation.		
	o In-water route through the Great Egg Harbor Bay and Shipping Channel would result in		
	5.8 miles of cable burial within designated shellfish habitat.		
	<ul> <li>The route would cross under two historic bridges with low clearance, making</li> </ul>		
	construction significantly challenging.		

 Table 1-2. BL England Cable Landfall and Route Alternatives Determined Impracticable

Alternative Name	Reasons the Alternative was Determined Not Practicable				
Sea Isle City Landfall	Engineering Constraints				
and Route	<ul> <li>The onshore route following Sea Isle City Boulevard and Route 9 would involve several stream crossings, including a major tributary of Ludlam Bay (intracoastal waterway), as well as crossings of underground pipeline connectors. These types of crossings would not be necessary using the proposed route</li> <li>Community/Environmental Constrains         <ul> <li>The offshore cable route would cross USACE and state borrow areas, prime fishing areas, an artificial reef and Carl Shuster Horseshoe Crab Reserve.</li> <li>The landfall would cross a Green Acres encumbered parcel and a USACE beach nourishment project with a constructed dune in place.</li> <li>The onshore route would cross or be adjacent to multiple historic sites and districts including the Atlantic City Railroad Cape May Division Historic District.</li> <li>The route may abut or cross through several National Heritage Priority Sites, including the Corson Inlet South and Whale Beach, the Seaville Methodist Church Site, and the Magnolia Lake Site.</li> <li>The route would potentially cross or abut Excursion Park and/or JFK Boulevard Park</li> </ul> </li> </ul>				
	and Pinelands regional growth and forest areas and would cross a known groundwater				
Strathmara Landfall	contamination area				
Strathmere Landfall and Route	<ul> <li>Engineering Constraints         <ul> <li>The route would make landfall within Strathmere and then follow Commonwealth Ave into Sea Isle City and would be co-located along that route.</li> <li>The onshore route following Sea Isle City Boulevard and Route 9 would involve several stream crossings, including a major tributary of Ludlam Bay (intracoastal waterway), as well as crossings of underground pipeline connectors. These types of crossings would not be necessary using the proposed route</li> <li>Community/Environmental Constraints</li> </ul> </li> </ul>				
	<ul> <li>The offshore export cable route to Strathmere (Upper Township) would cross prime fishing areas, extensive borrow areas, and the Carl Shuster Horseshoe Crab Reserve.</li> <li>The landfall would cross a Green Acres encumbered parcel and a USACE beach nourishment project with a constructed dune in place. The route would make landfall within Strathmere and then follow Commonwealth Ave into Sea Isle City and would be co-located along that route.</li> <li>The onshore route would cross or be adjacent to multiple historic sites and districts including the Atlantic City Railroad Cape May Division Historic District.</li> <li>The route may abut or cross through several National Heritage Priority Sites, including the Corson Inlet South and Whale Beach, the Seaville Methodist Church Site, and the Magnolia Lake Site.</li> <li>The route would potentially cross or abut Excursion Park and/or JFK Boulevard Park</li> </ul>				
	and Pinelands regional growth and forest areas and would cross a known groundwater contamination area				

## Pilar Patterson testimony, page 7, lines 12-17:

7. Please elaborate on the methodology for the additional screening (i.e. based on real estate availability, windshield surveys, and meeting with local municipalities) that was conducted to narrow the number of landfall options.

## Response:

The additional screening activity undertaken to narrow the number of landfall options included windshield surveys that were conducted to ground truth, the GIS desktop study, and stakeholder outreach, each of which was conducted to collect additional information to assist in routing and siting. Windshield surveys include collecting on-site, visual observations of potential project sites taken from either publicly available locations, including roadways, parks, parking lots, etc. or from private lands where Ocean Wind has secured access agreements. During the windshield surveys, staff members would: (i) note potential disruption to local residents and communities due to cable installation, including road closures, traffic diversions, and similar impacts; and (ii) document site conditions via photographs.

Some potential landfall locations and/or export cable routes were within private property, requiring additional coordination for windshield surveys, site specific surveys, easements for project components, or purchase of a property for the project use, if necessary. In certain instances, Ocean Wind was not able to secure either access rights, an easement, or property ownership for several landfalls, and therefore such landfalls were not considered practicable. For examples of instances where real estate availability made a landfall impracticable, please refer to **Table 1-2**, above.

Additionally, the routing and siting process included coordination with Federal and State agencies, local municipalities and various stakeholders, including non-government organizations (NGOs) and communities, in each Phase, as appropriate. During this coordination and outreach, additional substation and export cable route options were developed and analyzed based on agency feedback and to minimize impacts to sensitive resources (community and natural resources).

#### Pilar Patterson testimony, page 8, lines 6-9:

8. Please explain why the existing, previously disturbed Right of Way on and around the Roosevelt Bridge could not be used, and a Green Acres diversion is needed.

# Response:

Ocean Wind has considered several alternatives for the Peck Bay crossing at Roosevelt Bridge:

#### 1. Preferred Route along Roosevelt Boulevard

The Preferred Route along Roosevelt Boulevard follows the north side of Roosevelt Boulevard to an HDD entry point on the east side of the bridge over Peck Bay, continues under wetlands and Peck Bay to an HDD exit point on the west side of Peck Bay, and then continues to State Route 9. The Preferred Route crosses Ocean City-owned Green Acres encumbered land adjacent to Peck Bay. The area north of Roosevelt Boulevard is zoned as Conservation area and is a phragmites dominated tidal marsh along Peck Bay with a boat ramp and floating dock for recreation (Block 3350.01/Lot 17). Land use/land cover is mapped as wetlands and water (Block 3350.01/Lot 17)(NJDEP n.d). The property west of Peck Bay crossed by the HDD is privately owned, so Ocean Wind would need to acquire easements from the landowner.

*Justification*: HDD installation under Peck Bay will allow for avoidance of impacts to shellfish, wetlands, recreational facilities (a floating dock and nearby boat launch), at the Green Acres encumbered parcel (Block 3350.01/Lot 17). HDD installation under Peck Bay will allow the project to avoid impacts to sensitive resources such as wetlands and waterbodies and minimize impacts to recreational facilities (boat launch and floating dock). The location on the north side of Roosevelt Boulevard will eliminate multiple crossings of Roosevelt Boulevard and conflicts with existing utilities on the south side of Roosevelt Boulevard, as well as minimizes impacts to residential and recreation uses.

#### 2. Roosevelt Boulevard Parcel Alternative 1

Roosevelt Boulevard Parcel Alternative 1 diverts from the Preferred Route east of the bridge over Peck Bay, crosses Roosevelt Boulevard, continues west to a parking lot south of the bridge at the end of Nautilus Drive, continues west adjacent to the bridge, crosses over Roosevelt Boulevard on the west side of the bridge, and then rejoins the Preferred Route. The parcels crossed are zoned Conservation and Residential Multi-Family Bayfront and the surrounding area is zoned Residential Two-family (Ocean City 2016). Land use/land cover is mapped as urban, wetlands and water (NJDEP n.d). The area is currently wetland, water, a dock, a boat launch and associated parking facilities, and existing utilities.

Overall, the Alternative 1 route is slightly longer than the Preferred Route, but the HDD segment is shorter, which would reduce associated noise impacts. Alternative 1 would avoid Green Acres encumbered parcels and the need for a diversion. The Alternative 1 route is also believed to be contained entirely within public right of way. Permits required would be the same as for the Preferred Route. Ocean Wind is still determining whether this alternative route is technically feasible.

#### 3. Roosevelt Boulevard Parcel Alternative 2

Roosevelt Boulevard Parcel Alternative 2 diverts from the Preferred Route east of the bridge over Peck Bay, crosses Roosevelt Boulevard, continues west to an HDD entry point in Nautilus Drive, continues under Peck Bay to the south of the Bridge and existing

utilities to an HDD exit point west of Peck Bay, crosses over Roosevelt Boulevard on the west side of the bridge, and then rejoins the Preferred Route. The parcels crossed are zoned Residential Multi-Family Bayfront and the surrounding area is zoned Residential Two-family (Ocean City 2016). Land use/land cover is mapped as urban, wetlands and water (NJDEP n.d). The area is currently existing roadway, wetland and water.

The route would avoid Green Acres encumbered parcels and would not require a diversion per the Green Acres regulations at <u>N.J.A.C</u>. 7:36-26.9. However, the route would be longer than the Preferred Route, would involve multiple a crossings of Roosevelt Boulevard, and would be immediately adjacent to residential development, resulting in greater noise impacts to residents and longer construction period. The curved HDD would also be a more complex drilling option. Furthermore, the property west of Peck Bay crossed by the HDD is privately owned, so Ocean Wind would need to acquire easements from the landowner. In addition, more workspace would be needed and there would be conflicts with existing utilities. This route is no longer being considered.

#### 4. Roosevelt Boulevard Parcel Alternative 3

Ocean Wind also considered attaching the export cable to the Roosevelt Boulevard bridge; however, Cape May County, the owner of the bridge, refused the request. Despite its attempts, the Ocean Wind has not been able to ascertain from Cape May County an explanation as to why the bridge crossing request was refused. However, given that the bridge was originally constructed in the 1960s, the Ocean Wind has concerns that a bridge replacement may be required during the Project's lifetime, potentially requiring premature re-routing or disruption of the cable. Without the cooperation of Cape May County's engineering department, Ocean Wind is not able to definitively determine the feasibility of this alternative.

# Pilar Patterson testimony, page 8, line 20 through page 11, line 9:

9. Please compare the easements and permits that would be required for the alternative routes, to the easements and permits required for the "Preferred Route." Note any differences in Green Acres diversions needed.

#### Response:

As noted in the Ms. Patterson's direct testimony, Ocean Wind evaluated a number of siting and route alternatives, including 15 interconnection points, three substation locations within Upper Township for the B.L. England onshore substation, and six onshore route alternatives (three in Ocean City, Great Egg Harbor Inlet, Strathmere, and Sea Isle City Landfall). The alternatives evaluation process and route analysis is an in-depth process taking into consideration numerous constraints as described elsewhere in Ms. Patterson's testimony. The determination of easements and permits requires an engineering and environmental analysis, including on-site surveys, to identify specific cable location, the determination of site-specific constraints such as wetlands, locations of existing utilities, and construction access areas, among other site-specific

evaluations. As such, the identification of site-specific easements and permits for each of the route alternatives was appropriately conducted on the Preferred Route, and has not been conducted for routes that were dropped from consideration.

#### Pilar Patterson testimony, page 10, lines 10-13:

10. Are there any potential use conflicts associated with the offshore cable route of the "Preferred Route" (e.g. prime fish grounds, borrow areas, environmental preserves, historic sites)? If yes, please describe and explain how they compare to similar issues cited in association with other cable routes considered by Ocean Wind.

## Response:

For the Preferred Route landing at 35th street in Ocean City, the export cable does not cross a designated prime fishing area based on data downloaded from NJDEP. The Preferred Route also does not cross a designated ocean disposal or borrow areas based on data downloaded from the United States Army Corps of Engineers. The Preferred Route does cross a portion of the Carl Shuster Preserve within federal waters.

It is important to note that the Ocean Wind 1 lease area is located partially within the Carl Shuster Preserve, including a portion of the Ocean Wind 1 array area, and the regulations associated with the Preserve do not preclude development of renewable energy projects within the Preserve boundaries.

With regard to historic resources, the Preferred Route to 35<sup>th</sup> Street has three potential submerged cultural resources and one identified geomorphic feature of archeological interest within the cable route corridor. Ocean Wind intends to avoid these cultural resources to the extent practicable through the implementation of and adherence to avoidance buffers defined by Ocean Wind's qualified maritime archaeologist. Where avoidance is not practicable, Ocean Wind will coordinate with relevant agencies and consulting parties through the Section 106 Process under the National Historic Preservation Act to determine minimization and mitigation as necessary.

# *Pilar Patterson testimony, page 11, lines 17 through page 12, line2:*

11. Please provide an assessment as to whether easements upon, across, and under Green-Acres restricted properties for cable beach crossings would differ substantially between different cable landfall locations.

# Response:

Easements upon, across, and under Green-Acres restricted properties for cable beach crossings would not differ substantially between different cable landfall locations that were considered.

## Pilar Patterson testimony, Appendix C:

12. What is the linear distance of road disturbed from the beach crossing to POI for the considered routes?

#### Response:

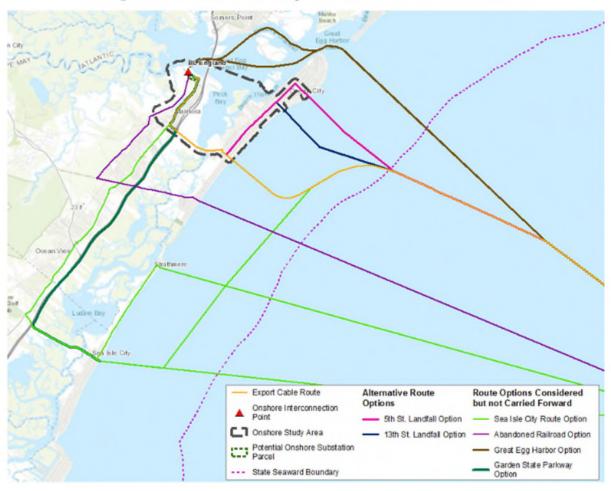
The linear distance of road that will be disturbed from the beach crossing to the POI for the Preferred Route (colored orange on Appendix C to Ms. Patterson's direct testimony) is 4.3 miles. The corresponding roadway distances for the other routes considered as depicted in Appendix C to Ms. Patterson's direct testimony are as follows:

Pink	5th St	7.7 Miles
Blue	13th St	6.6 Miles
Orange	35th St	4.3 Miles
Purple	Railroad	0.6 miles
Green	Strathmere + Rt9	16.2 Miles
GSP	Sea Isle City + GSP	12.4 Miles

#### Pilar Patterson testimony, Appendix C:

13. Please describe the "abandoned railroad option" (purple line on map in Appendix C) and what concerns or limitations are associated with this route.

#### Response:





The purple route includes a ROW that exists from an abandoned railroad line as part of the Atlantic City Railroad, later becoming part of the Pennsylvania-Reading Seashore Line. The Seashore Line provided regional service from the Philadelphia-Camden metropolitan area to several New Jersey shore cities included Ocean City, Wildwood, and Cape May from 1889 to 1981. Though the rail line is not currently in service, the former ROW for the rail line still exists and provides a previously disturbed corridor that could be utilized for the onshore cable route. This route included making landfall at 51<sup>st</sup> street via HDD and then proceeding along the roadway to the Railroad ROW near the intersection of 51<sup>st</sup> street and Haven Ave. The onshore cable would then be laid within the railroad ROW that crosses over Crook Horn Creek, Edwards Creek, Lots Creek, and continue along until intersecting with the current railroad that serviced the BL England generating station. However, as noted in **Table 1-2** above, this route was not

determined to be a practicable alternative as the railroad's ROW includes several historic properties and designated historic districts, and impacting these resources would be inconsistent with the project siting criteria listed in **Table 1-1**, above. Therefore, this route was dropped from consideration. For more details refer to **Table 1-2**, above.

#### Madeline Urbish testimony, pages 3-5:

14. Can a person present at meetings prior to Ms. Urbish employment by Ocean Wind, provide a recount of these meetings?

#### Response:

Richard Grist, Ocean Wind's Real Estate Manager, attended the meeting on November 21, 2019. Pilar Patterson, New Jersey Program Permit Manager, attended the meetings on October 20, 21, and 24, 2020 and the meetings held with City Council members in February 2021. Mr. Grist and Ms. Patterson confirm that the descriptions of those meetings as set forth in Ms. Urbish's direct testimony are accurate. Other meetings were attended by individuals no longer employed by Orsted.

#### Madeline Urbish testimony, Appendices:

15. Please provide copies of the correspondence between Ocean Wind and Ocean City Prior to May 13, 2021.

#### Response:

Copies of written correspondence between Ocean Wind and Ocean City prior to May 13, 2021 referenced in the Direct Testimony of Madeline Urbish are attached.

# ATTACHMENTS TO SUPPLEMENTAL QUESTION 15

From: Megdal, Ira Sent: Friday, August 7, 2020 1:51 PM To: 'dmccrossonlaw@comcast.net' Subject: Ocean Wind LLC

Dear Ms. McCrosson: I hope that you are well. You and I spoke a few days ago. I represent Ocean Wind LLC. I have attached for your review a Draft ordinance that I have prepared for discussion. I have based it off similar ordinances that I have prepared for regulated public utilities. After you have reviewed the same, I would like the opportunity to discuss it with you.

I have also attached two diagrams which I would like to discuss with you.

If you would confirm receipt of this email, I would greatly appreciate it.

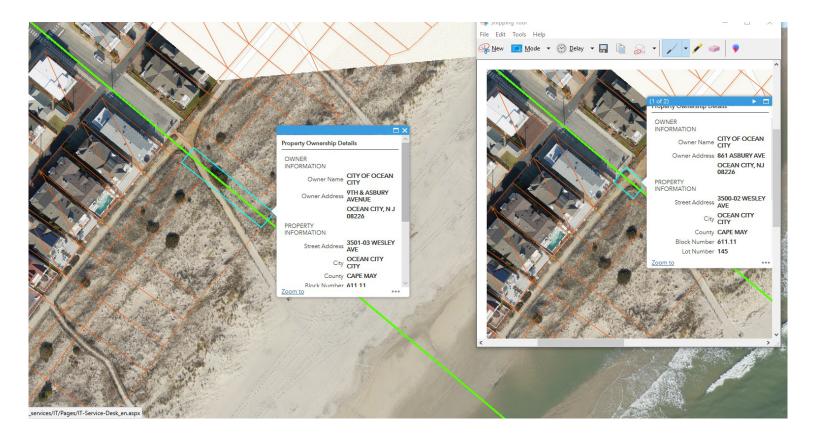
Thank you.

Ira



Ira G. Megdal Member | Cozen O'Connor Suite 300 Liberty View, 457 Haddonfield Road P.O. Box 5459 | Cherry Hill, NJ 08002 P: 856-910-5007 F: 877-259-7984 C: 856/912-3941 Email | Bio | LinkedIn | Map | cozen.com

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#### Ordinance No.

#### AN ORDINANCE

#### GRANTING CONSENT AND PERMISSION TO OCEAN WIND LLC TO INSTALL ELECTRICAL CABLE SYSTEMS AND CONDUIT IN THE CITY OF OCEAN CITY

WHEREAS, the City of Ocean City hereby grants consent and permission to Ocean Wind LLC ("Ocean Wind"), a Delaware Limited Liability Company to install and maintain electrical cable systems and conduit in the City of Ocean City as more particularly set forth below:

WHEREAS, Ocean Wind is a Qualified Offshore Wind Project ("QOWP") pursuant to N.J.S.A. 48:3-87.1 *et seq.* presently seeking the municipal consent of the City to permit said QOWP to install electrical cable systems and conduit in the City as more particularly set forth below.

WHEREAS, Ocean Wind has requested the consent of the City to install electrical cable systems and conduit as more particularly set forth below beneath and within and restore such public roads, streets and places as it may deem necessary for its corporate purposes, free from all charges to be made for said privilege (except that fees for road opening permits shall be paid), provided that said cable systems and conduit shall be laid at least three feet (3') below the surface except for certain apparatus for the operation and maintenance of the cable systems and conduit which will be less than 3 feet (3') below the surface [which apparatus shall include but not be limited to manholes, grounding devices, concrete suport, certain ancillary cables and certin ancillary boxes] and shall not in any way unnecessarily obstruct or interfere with the public travel or cause or permit other than temporary damage to public or private property; and

WHEREAS, it is deemed to be in the best interest of the citizens of the City to provide this consent:

WHEREAS, the Mayor and Council of the City have concluded that granting of said consent shall enhance the health, safety and welfare of the citizens of the City.

NOW THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY AS FOLLOWS:

Section 1. That perpetual consent and permission is given to Ocean Wind, its successors and assigns, without charge therefore, (except that fees for road opening permits shall be paid) as the same may be required in order to permit Ocean Wind to place, replace, construct, reconstruct, install, reinstall, add to, extend, use, operate, inspect and maintain said electrical cable systems and conduit in the public property described herein. This shall include permission to lay said cable systems and conduit beneath the public roads, streets and public property. The public property shall include all roads, streets and public places. The privilege granted herein shall include the construction, installation and maintenance of electrical cable systems and conduit, concrete encasements and all equipment and apparatus required to energize and operate the electrical cable systems and conduit and all appurtenances thereto on, in, below and along the roads of the City as well as streets, parks and public places at all locations within the City. Section 2. That the consent granted herein shall be subject to the Ocean Wind complying with all applicable laws of the City and/or the State of New Jersey including, but not limited to, any and all statutes and administrative agency rules and/or regulations.

Section 3. The Business Administrator, Mayor and the Clerk of the City are authorized to execute the documents and agreements necessary to effectuate this municipal consent and to protect the rights of the public involved.

Section 4. Each section, subsection, sentence, clause and the phrase of this Ordinance is declared to be an independent section, subsection, sentence, clause and phrase, and the finding or holding of any such portion of this Ordinance to be unconstitutional, void, or ineffective for any cause, or reason, shall not affect any other portion of this Ordinance.

Section 5. All ordinances or parts of ordinances inconsistent with this Ordinance are hereby repealed to the extent of such inconsistency.

From: Sent: To: Subject: Dottie McCrosson <dmccrossonlaw@comcast.net> Tuesday, August 25, 2020 3:06 PM Megdal, Ira Re: FW: Ocean Wind LLC

#### **\*\*EXTERNAL SENDER\*\***

Ira:

I apologize. I know that we are not ready to bring this matter forward for this week's Council meeting, so I have been working on more time sensitive issues.

I will take a look and give you a call later today or tomorrow.

Dorothy F. McCrosson, Esquire McCrosson & Stanton, P.C. 200 Asbury Avenue Ocean City, NJ 08226 609-399-2411 phone

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Thank you.

On 08/25/2020 2:53 PM Megdal, Ira wrote:

Dear Ms. McCrosson: I hope that you are well. Since my email below, I have called to discuss this matter on 2 occasions, and would very much like to speak to you. I am working with Upper Township on a similar ordinance, and that is moving smoothly. If you could let me know when we could speak, I would very much appreciate it.

Ira



Ira G. Megdal Member | Cozen O'Connor Suite 300 Liberty View, 457 Haddonfield Road P.O. Box 5459 | Cherry Hill, NJ 08002 P: 856-910-5007 F: 877-259-7984 C: 856/912-3941 Email | Bio | LinkedIn | Map | cozen.com From: Sent: To: Subject: Dottie McCrosson <dmccrossonlaw@comcast.net> Friday, September 4, 2020 2:45 PM Megdal, Ira RE: FW: Ocean Wind LLC

#### **\*\*EXTERNAL SENDER\*\***

Ira:

The introduction of the ordinance is slated for September 24, 2020.

So far, my side does not have any questions. I will advise if/when any arise.

Dorothy F. McCrosson, Esquire McCrosson & Stanton, P.C. 200 Asbury Avenue Ocean City, NJ 08226 609-399-2411 phone

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Thank you.

On 09/04/2020 1:55 PM Megdal, Ira wrote:

Hi Dottie: Ii hope that you are well. It has been nearly a month since I sent the below materials to you. I would very appreciate a return call from you.

Ira



Ira G. Megdal Member | Cozen O'Connor Suite 300 Liberty View, 457 Haddonfield Road P.O. Box 5459 | Cherry Hill, NJ 08002 P: 856-910-5007 F: 877-259-7984 C: 856/912-3941 Email | Bio | LinkedIn | Map | cozen.com

From: Dottie McCrosson Sent: Tuesday, August 25, 2020 3:06 PM To: Megdal, Ira Subject: Re: FW: Ocean Wind LLC

#### **\*\*EXTERNAL SENDER\*\***

Ira:

I apologize. I know that we are not ready to bring this matter forward for this week's Council meeting, so I have been working on more time sensitive issues.

I will take a look and give you a call later today or tomorrow.

Dorothy F. McCrosson, Esquire McCrosson & Stanton, P.C. 200 Asbury Avenue Ocean City, NJ 08226 609-399-2411 phone

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Ira



Ira G. Megdal Member | Cozen O'Connor Suite 300 Liberty View, 457 Haddonfield Road P.O. Box 5459 | Cherry Hill, NJ 08002 P: 856-910-5007 F: 877-259-7984 C: 856/912-3941 Email | Bio | LinkedIn | Map | cozen.com From: Megdal, Ira Sent: Tuesday, October 6, 2020 12:33 PM To: 'Dottie McCrosson' Subject: Ocean Wind

Hi Dottie: I hope that you are well.

When the proposed ordinance did not make the September Agenda, you advised me that it was not any reflection on the merits of the ordinance, but that it was due to a busy agenda, and that it would be on the October 8 Agenda. However, it does not appear to be on the October 8 agenda either.

With your permission, I will call this afternoon to discuss with you.

Ira



Ira G. Megdal Member | Cozen O'Connor Suite 300 Liberty View, 457 Haddonfield Road P.O. Box 5459 | Cherry Hill, NJ 08002 P: 856-910-5007 F: 877-259-7984 C: 856/912-3941 Email | Bio | LinkedIn | Map | cozen.com

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#### **\*\*EXTERNAL SENDER\*\***

Ira:

The agenda meeting is underway as I write this.

The ordinance is among the items which the administration and Council leadership are considering for inclusion on the October 22nd Council meeting. I again expect it to be included on the agenda (though, your skepticism would be understandable, given the delaly to date...). I should know for sure by day's end, and will so advise you.

Dorothy F. McCrosson, Esquire McCrosson & Stanton, P.C. 200 Asbury Avenue Ocean City, NJ 08226 609-399-2411 phone

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Thank you.

On 10/12/2020 9:50 AM Megdal, Ira wrote:

Hi Dottie: After sending you the below email I tried calling you at your office. I would very much appreciate the courtesy of a reply. Can you tell me the status of this ordinance?

Ira



Ira G. Megdal Member | Cozen O'Connor Suite 300 Liberty View, 457 Haddonfield Road P.O. Box 5459 | Cherry Hill, NJ 08002 P: 856-910-5007 F: 877-259-7984 C: 856/912-3941 Email | Bio | LinkedIn | Map | cozen.com