

# Ocean Wind Offshore Wind Farm

**Green Acres Diversion Application** 

**Section 1** 

**Detailed Description of the Proposed Major Diversion for BL England Point of Interconnection** 



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# **Abbreviations and Acronyms**

AC alternating current

BOEM Bureau of Energy Management

HDD horizontal directional drilling

Lease Ocean Wind BOEM Lease Area OCS-A 0498

LULC land use/land cover

MHW mean high water

MW megawatt

NJBPU New Jersey Board of Public Utilities

NJDEP New Jersey Department of Environmental Protection

Ocean Wind Ocean Wind LLC

OCW01 Ocean Wind 1 Offshore Wind Farm

OREC Offshore Wind Renewable Energy

OWEDA Offshore Wind Energy Development Act

PSEG Public Service Enterprise Group Renewable Generation LLC

WTG wind turbine generators



# 1. Description of the Proposed Diversion

This section of the application package provides a description of the proposed major diversion, in accordance with the Green Acres regulations at N.J.A.C. 7:36-26.9 and 26.11.

# 1.1 Project Description

Ocean Wind, LLC (Ocean Wind 1), a joint venture between Ørsted Wind Power North America LLC (Ørsted) and Public Service Enterprise Group Renewable Generation LLC (PSEG), proposes to construct and operate the Ocean Wind 1 Offshore Wind Farm (Project). The purpose of the Project is to develop an offshore wind generation project within the Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0498 and connected to the grid, that meets the need to deliver competitively priced renewable energy and additional capacity to meet State and regional renewable energy demands and goals. Once complete, the Project will fulfill the requirements of the State's Offshore Wind Economic Development Act, which mandates the development of a minimum of 1,100 megawatts (MW) of offshore wind resources. The Project will also contribute to meeting the goals of both Executive Order 8 (2018), which set a goal of 3,500 MW of renewable energy by 2030, and Executive Order 92, which in November 2019 increased the goal to 7,500 MW by 2035.

The Project includes up to 98 wind turbine generators (WTGs), up to three offshore alternating current (AC) substations, array cables linking the individual turbines to the offshore substations, substation interconnector cables linking the substations to each other, offshore export cables, an onshore export cable system<sup>1</sup>, two onshore substations, and connections to the existing electrical grid in New Jersey (underground cables or overhead transmission lines would be required to connect each onshore substation to the existing grid). The WTGs and offshore substations, array cables, and substation interconnector cables will be located in Federal waters approximately 13 nautical miles (nm, 15 statute miles) southeast of Atlantic City. The offshore export cables will be buried below the seabed surface within Federal and State waters. The onshore export cables, substations, and grid connections will be located in Ocean, Atlantic, and/or Cape May Counties, New Jersey. The boundaries of the Project Area are depicted on **Figure 1.1-1** through **Figure 1.1-3** and specifically consist of:

- Wind Farm Area: This is the area where the turbines, array cables, offshore substation(s), substation interconnector cables, and portions of the offshore export cables will be located;
- Offshore export cable route corridor: Area in which the offshore export cable systems will be installed;
- Onshore export cable route corridor: Area in which onshore export cable systems will be installed;
- Onshore substations: and
- Onshore grid connections.

The proposed Project is scheduled for installation beginning in 2023, first power is 2024.

<sup>&</sup>lt;sup>1</sup> The onshore export cable system will include the onshore export cable, transition joint bays, onshore splice vaults/grounding link boxes and fiber optic system, including manholes.



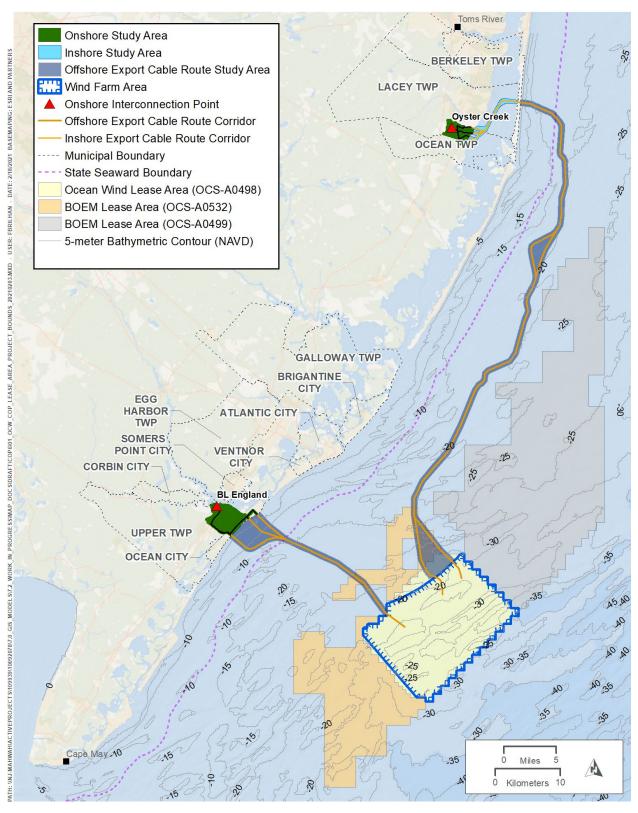


Figure 1.1-1. Lease Area and Project Boundaries.



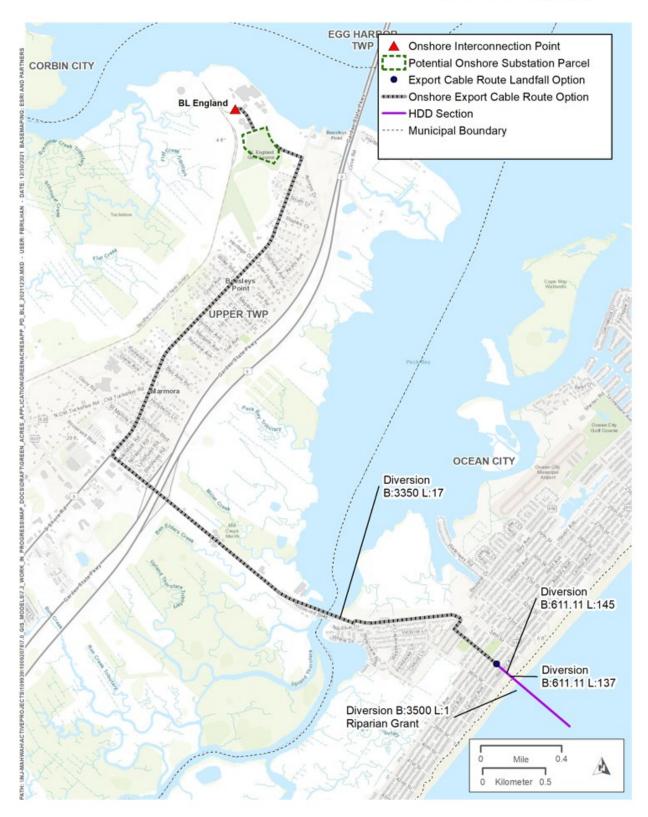


Figure 1.1-2. Project Location - BL England.



# 1.2 Description of Lands Affected

The proposed transmission cables will cross Green Acres encumbered parcels en route to the BL England substation. At the landfall near 35<sup>th</sup> Street in Ocean City, four parcels owned by Ocean City including a riparian grant, will be crossed (Figure 1.2-1). An additional parcel owned by Ocean City will be crossed by the BL England export cable route along the north side of Roosevelt Boulevard east of the Roosevelt Boulevard bridge (Figure 1.2-2). The block and lot information, along with the affected acreage for each crossing are provided in Table 1.2-1. Figures 1.2-1 and 1.2-2 show the locations of Green Acres parcels crossed by the export cables.

Table 1.2-1. Block and Lot Information for Parcels Crossed by the Export Cables.

Block/Lot	Owner	Interest and Type	County/ Municipality/Street Address	Acreage of Permanent Easement through Green Acres Restricted Areas
Block 611.11/ Lot 145	City of Ocean City	Fee Simple Municipal	Cape May County/ Ocean City/ 3500-02 Wesley Ave	0.026 acre
Block 611.11/ Lot 137	City of Ocean City	Fee Simple Municipal	Cape May County/ Ocean City/ 3501-03 Wesley Ave	0.362 acre
Block 3500, Lot 1 (including Riparian Grant)	City of Ocean City	Fee Simple Municipal	Cape May County/Ocean City	0.191 acre <sup>2</sup>
Block 3350.01/ Lot 17	City of Ocean City	Fee Simple Municipal	Cape May County/ Ocean City/ Bay Ave and 34 <sup>th</sup> St	0.068 acre

<sup>&</sup>lt;sup>2</sup> Since the March 7, 2022 Scoping Hearing, Ocean Wind 1 reduced impacts to the Green Acres parcels at landfall. Specifically, acreage impacts at landfall went from 0.77 acres to 0.579 acres.



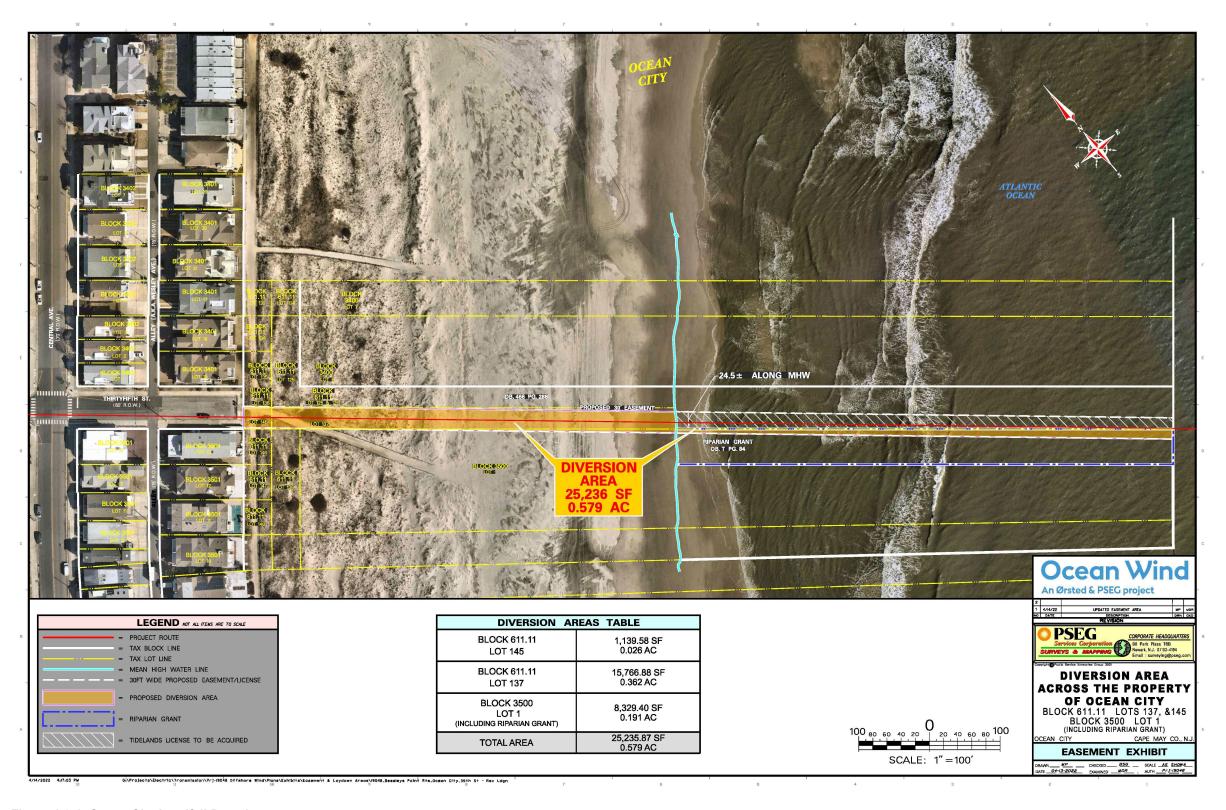


Figure 1.2-1. Ocean City Landfall Parcels.





Figure 1.2-2. Roosevelt Boulevard Parcel Project Location.



# 1.3 Purpose and Need

# 1.3.1 Purpose of the Proposed Project

The purpose of the Project is to develop an offshore wind generation project within the BOEM Lease Area OCS-A 0498 and connected to the grid, that meets the need to deliver competitively priced renewable energy and additional capacity to meet State and regional renewable energy demands and goals.

On February 3, 2022, Ocean Wind 1 filed a petition with the New Jersey Board of Public Utilities (BPU) pursuant to N.J.S.A. 48:3-87.1(f)(2) to acquire the permanent rights of way and easements needed to install an underground cable in connection with the Project across Green Acres encumbered parcels owned by Ocean City and identified above herein.

#### 1.3.2 Description of Public Need and/or Significant Benefit

The Project is proposed to meet New Jersey's need to fulfill the State's Offshore Wind Economic Development Act, which mandates the development of a minimum of 1,100 megawatts (MW) of offshore wind resources. The Project also contributes to meeting the need established by both NJ Executive Order 8, which set a goal of 3,500 MW of renewable energy by 2030, and Executive Order 92, which in November 2019 increased the goal to 7,500 MW by 2035.

Under the New Jersey Offshore Wind Energy Development Act (OWEDA), the New Jersey Board of Public Utilities (NJBPU) is required to establish an Offshore Wind Renewable Energy Certificate (OREC) program requiring a percentage of electricity sold in the State be derived from offshore wind energy, in order to support at least 1,100 MW of generation from qualified projects. On June 21, 2019, the NJBPU selected the Ocean Wind 1 Project for an OREC award (NJBPU Docket No. QO18121289). The OREC allowance includes 4,851 gigawatt hours per year (GWh/year) of energy production, and Ocean Wind 1 has contractual commitments to the NJBPU pursuant to the 2019 Power Purchase Agreement resulting from the NJBPU's competitive selection process. The Order envisions a schedule for commercial operation starting in late 2024.

The Project's benefits include the following:

- Contributing to meeting state renewable energy goals and replacing fossil fuel-based energy sources;
- Improving regional air quality through the net reduction of regional air pollution over the life of the Project;
- Creating artificial reefs through the placement of WTGs, which will create hard substrate habitats for a new, more diverse community of finfish and invertebrates; and
- Increased job opportunities, increased property tax revenue, and increased income associated with local
  construction employment. Long-term employment opportunities during the operations phase will include
  the creation of operations and maintenance jobs. Artificial reefs are expected to increase the number of
  trips and revenue for recreational fishermen.

## 1.4 Description of How the Parkland is Proposed to be Diverted

# 1.4.1 Name of Prospective Buyer, Lessee, or Grantee of an Easement

The proposed permanent easement will be in the name of "Ocean Wind, LLC."

#### 1.4.2 Description and Type of Legal Interest to be Conveyed

Ocean Wind 1 is seeking to acquire permanent easements for the construction and operation of electric transmission infrastructure on lands within Ocean City. The lands in question are encumbered by State of New Jersey Green Acres regulations and, therefore, are subject to this application for diversion. Easements acquired by Ocean Wind 1 may be removed, by (metes and bounds) description, from the list of lands encumbered by



Green Acres restrictions. However, since the project facilities across parcels owned by Ocean City will be constructed via horizontal directional drill (HDD), the practical use of the land surface will remain the same.

Specifically, permanent easements (totaling approximately 0.647 acres) across four tracts of land which are owned in fee by Ocean City, including one riparian grant to Ocean City, are needed for the project. No additional temporary construction workspace will be required across these parcels.

# 1.4.3 Description of any Conditions or Restrictions on the Intended Use of Parkland

The intended use of the parkland is for an underground transmission line. Restrictions include the need to maintain a utility easement; no permanent structures could be placed on or within the ROW; any vegetation planted would be native grass or small shrub (no trees or other deep rooting species); and future utility installations would be limited in the easement area without Ocean Wind 1's consent.

# 1.4.4 Draft of Lease or Use Agreement

A lease or use agreement will not be required as part of the proposed transmission line installation.

# 1.4.5 Statement of Total Compensation Proposed

As noted above, Ocean Wind 1 has filed a petition with the BPU to acquire permanent easements totaling 0.647 acres across lands owned by Ocean City subject to Green Acres restrictions held by the New Jersey Department of Environmental Protection (NJDEP). Ocean Wind 1 proposes to provide compensation in accordance with N.J.S.A. 48:3-87.1(f)(2). A more detailed compensation proposal is provided as part of this application at Section 12.

#### 1.4.6 Infrastructure Plans

Ocean Wind 1 proposes to install electrical infrastructure, specifically electric transmission cables, under the Green Acres encumbered parcels identified in Section 1.2 using HDD installation technology. Preliminary plans for the installation of the cables are provided in **Figures 1.2-1** and **1.2-2**.

# 1.5 General Description of Natural Features, History, and Current Use of Parkland

What follows is a general description of the natural features, history, and current use of the parcels that are subject to this proposed diversion. Additional details are provided in Section 3 (Environmental Assessment).

## 1.5.1 Natural Features

The proposed landfall and onshore portions of the export cable route to the BL England substation are located on the barrier island of Ocean City and mainland New Jersey in Upper Township, New Jersey. Based on the NJDEP land use/land cover (LULC) data, land uses in the vicinity of the onshore export cable routes are classified in six groups: water, wetlands, barren land, forest, urban, and agriculture (See **Figure 3.3.1-1** in Section 3; NJDEP 2015). Dominant land uses along the onshore export cable corridor include wetlands and urban development.

The area proposed for diversion at the landfall in Ocean City is classified as barren land and is part of the beach in Ocean City. The area proposed for diversion along Roosevelt Boulevard is classified as wetland and Ocean Wind 1 has delineated it as tidal wetland. Further details are provided within Section 3, Environmental Assessment.

# 1.5.2 History

With regard to the Green Acres encumbered parcels at the landfall, there is no existing development at these parcels. Block 611.11 Lot 145 was acquired by the City of Ocean City in 1928. Block 611.11 Lot 137 was acquired



by Ocean City in 1928 and 1945, respectively. Both lots are unfunded parkland and included in the City's Recreation and Open Space Inventory (ROSI), as incorporated into a Declaration of Encumbrance recorded in Cape May County Clerk's Office on October 17, 2016. The Riparian Grant to Ocean City occurred in 1912.

At the Roosevelt Boulevard parcel, Block 3350.01 Lot 17 was acquired by Ocean City in 2002. This parcel is listed on NJDEP's ROSI database.

#### 1.5.3 Current Use

As discussed in Section 1.5.1, the parcels proposed for diversion at landfall are currently used for recreation as undeveloped beach in Ocean City. The parcel adjacent to Roosevelt Boulevard is tidal marsh.

# 1.6 Detailed Description of Recreation and Conservation Facilities and Activities to be Affected by Project

The parcels at the beach in Ocean City are used for passive recreation by members of the public. The proposed diversion includes approximately 0.579 acre of permanent easement across these beach parcels. Since the March 7, 2022 Scoping Hearing, Ocean Wind 1 reduced impacts to the Green Acres parcels at landfall. Specifically, acreage impacts at landfall went from 0.77 acres to 0.579 acres.

Because the cable will be installed under the beach and riparian area by trenchless technology (such as HDD), impacts are expected to be limited to visual and noise impacts during active installation. Installation of the cable will occur during the offseason so as to minimize impacts to the community to the maximum extent practicable. However, beach access and street parking may be limited at 35th Street during construction to ensure pedestrian safety in proximity to construction equipment. Specifically, the public will likely be able to access the beach at 35th Street using pedestrian sidewalks, though the sidewalks may be limited at various times during construction to ensure pedestrian safety. Parking at the end of 35th Street to Central Avenue will be unavailable during construction. Ocean Wind 1 is generating a site-specific traffic control plan for maintaining traffic flow around the landfall work area. Appropriate construction barriers and signs will provide the general public guidance for permissible areas of access while construction is underway.

In the unlikely event of an inadvertent return during drilling or failure of the drill, the beach may be utilized within the permanent easement area and access to the beach would be restricted within the work area using fencing or similar demarcation. Ocean Wind 1 will develop and implement an Inadvertent Return Plan that includes measures to prevent inadvertent returns of drilling fluid to the extent practicable and measures to be taken in the event of an inadvertent return. Work on the beach would be coordinated with the appropriate regulatory authorities. Following installation, the public would still have access to the areas affected and the current use would continue, so no long-term impacts are anticipated.

The parcel adjacent to Roosevelt Boulevard is tidal wetland. The proposed diversion includes 0.068 acre of permanent easement. The cable would be installed under the parcel using HDD to avoid impacts to the natural resources. The HDD entry pit would be located in an upland area within the loop formed by the exit ramp from Roosevelt Boulevard and/or within the paved ramp. During construction, this area would be temporarily disturbed. The upland area and paved area would be restored following construction and would return to its current use. Following installation, the public would still have access to the surface and the current use would continue, so no long-term impacts are anticipated.