



Consistency with Delaware State Coastal Zone Management Policies

Maryland Offshore Wind Project
Lease OCS-A 0490

PREPARED FOR:

US Wind, Inc.
401 East Pratt Street – World Trade Center
Baltimore, Maryland 21202

PREPARED BY:

ESS Group, Inc.
10 Hemingway Drive, 2nd Floor
East Providence, RI 02915

ESS Project No. U167-000

November 2021





Consistency with Delaware State Coastal Zone Management Policies

**Maryland Offshore Wind Project
Lease OCS-A 0490**

Prepared for:

US Wind, Inc.
401 East Pratt Street – World Trade Center
Baltimore, Maryland 21202

Prepared by:

ESS Group, Inc.
10 Hemingway Drive, 2nd Floor
East Providence, RI 02915

ESS Project No. U167-000

November 2021



TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 INTRODUCTION.....	1
2.0 LOCATION AND DESCRIPTION OF PROPOSED PROJECT.....	1
3.0 CONSISTENCY WITH DELAWARE STATE COASTAL ZONE MANAGEMENT POLICIES	4
3.1 Wetlands Management.....	4
3.2 Beach Management	6
3.3 Coastal Waters Management.....	9
3.4 Subaqueous Lands and Coastal Strip Management.....	17
3.5 Public Lands Management.....	32
3.6 Natural Areas Management.....	34
3.7 Flood Hazard Areas Management	35
3.8 Historic and Cultural Areas Management.....	35
3.9 Living Resources	36
3.10 State Owned Coastal Recreation and Conservation.....	41
3.11 Public Trust Doctrine	41
3.12 Energy Facilities	42
3.13 Air Quality Management	42
3.14 Waste Disposal Management.....	42
3.15 Development.....	42
3.16 Pollution Prevention.....	43
3.17 Coastal Management Coordination.....	44
4.0 STATEMENT OF CONSISTENCY	44
5.0 REFERENCES.....	45



1.0 INTRODUCTION

US Wind, Inc. (US Wind) has prepared this Consistency Certification to demonstrate that its proposed development of the Maryland Offshore Wind Project within Bureau of Ocean Energy Management (BOEM) Lease OCS-A 0490 is consistent with the provisions identified as enforceable by the Coastal Management Programs (CMPs) of the State of Delaware. As described herein and in the Construction and Operations Plan (COP), the proposed activity complies with the enforceable policies of the approved management programs and will be conducted in a manner consistent with such programs. This document is provided pursuant to the requirements of 15 CFR 930.57 of the Coastal Zone Management Act (CZMA) Federal Consistency regulations.

Section 307(c) (1) of the CZMA, as amended, requires that each federal agency activity within or outside the coastal zone affecting any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent with the enforceable policies of federally-approved state management programs.

2.0 LOCATION AND DESCRIPTION OF PROPOSED PROJECT

US Wind is developing the Maryland Offshore Wind Project¹ (the Project), an offshore wind project of up to 2 gigawatts of generating capacity within OCS-A 0490 (the Lease), an area off the coast of Maryland on the Outer Continental Shelf. US Wind obtained the Lease in 2014 when the company won an auction for two leases from the Bureau of Ocean Energy Management (BOEM) which in 2018 were combined into the Lease. The Project will include as many as 121 wind turbine generators (WTG), up to four (4) offshore substations (OSS), and one (1) met tower in the approximately 80,000-acre Lease area. The Project will be interconnected to the onshore electric grid by up to four new 230 kV export subsea electric transmission cables that will ultimately connect with a substation near Millsboro, Delaware.

Infrastructure related to the connection of the wind farm to the regional electric grid would be installed on the OCS, in Delaware state waters, and in Delaware. The offshore export cables would be buried on the OCS and Delaware state waters until reaching the 3R's Beach or Tower Road landfall in Delaware. From there the onshore export cables would connect to the Interconnection Facilities.

The proposed route for the onshore export cables is Onshore Export Cable Corridor 1, however, the Project contemplates additional cable routing options on land. Interconnection Facilities are proposed in the vicinity of the Indian River Substation, although additional options to interconnect the wind farm are contemplated.

Below is a description of each onshore cable corridor, the landfall associated with each, as well as the point of interconnection.

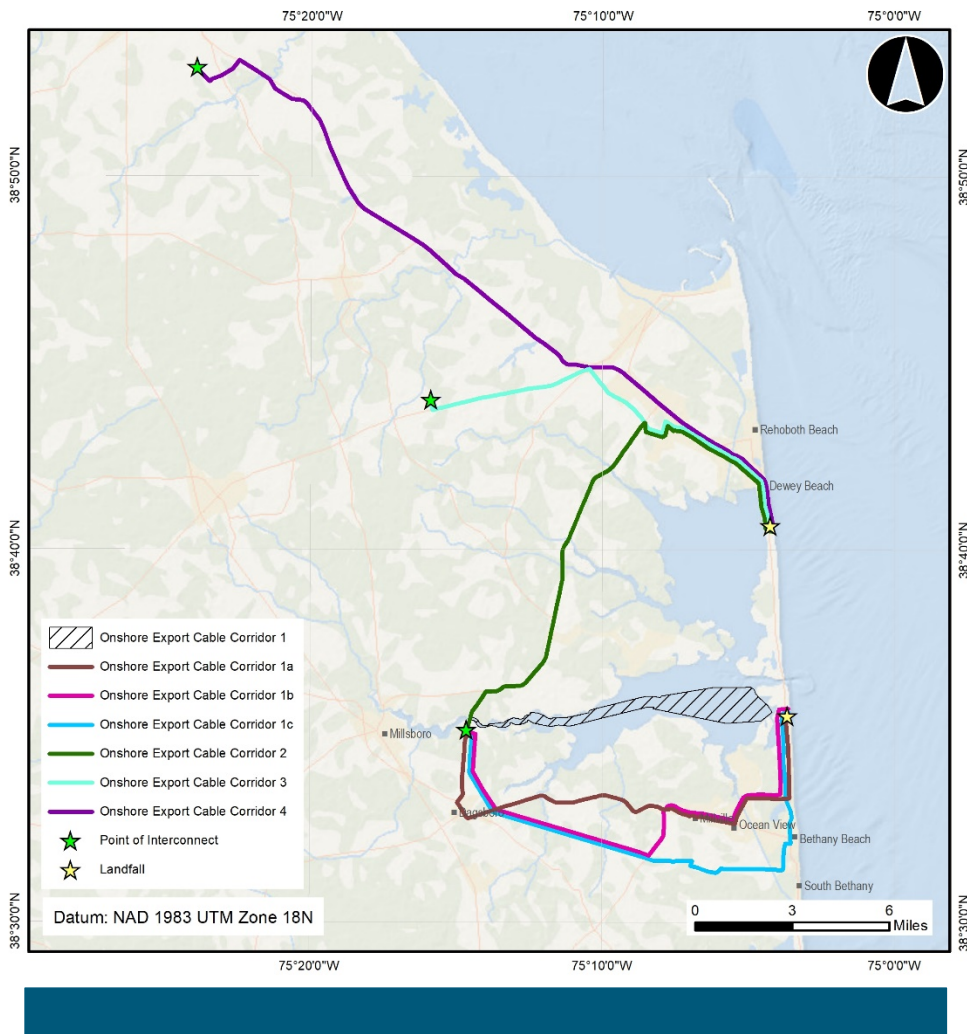
- Onshore Export Cable Corridor 1a: Approximately 26 km (16 mi) from the landfall at 3R's Beach along existing DelDOT ROWs to Indian River POI via a southern route around Indian River Bay. The cables would exit the transition vaults at 3R's Beach, traverse south along Coastal Highway (Route 1), turning west on Fred Hudson Road, south on Central Avenue then along Route 26/Atlantic Avenue to Dagsboro, continuing north on Route 26/Main Street through

¹ The Project includes MarWin, a wind farm of approximately 300 MW for which US Wind was awarded Offshore Renewable Energy Credits (ORECs) in 2017 by the state of Maryland; and Momentum Wind, up to 1205.4 MW, which US Wind has bid into a second round (2021) Maryland OREC process currently in progress; and any subsequent wind energy development within the remaining Lease area.

Dagsboro, and then generally north along Iron Branch Road/Road 332 to the US Wind substation.

- Onshore Export Cable Corridor 1b: Approximately 26 km (16 mi) along existing DelDOT and Sussex County ROWs from landfall at 3R's Beach to Indian River POI. Cables would exit the transition vaults at 3R's Beach along same route as Onshore Export Cable Corridor 1a until west of Millville then south on Route 17 until turning west/northwest along a Sussex County water line ROW, currently under development, across Route 26 then north in parallel with Iron Branch Road/Road 332 to the US Wind substation.
- Onshore Export Cable Corridor 1c: Approximately 27 km (17 miles) along existing DelDOT and Exelon overhead power line ROWs from landfall at 3R's Beach to Indian River POI. The cables would exit transition vaults at 3R's Beach, traverse south along Route 1 through Bethany Beach turning west on Wellington Avenue, south on Kent Avenue to an Exelon substation then turning generally west along an Exelon ROW, picking up the Sussex County ROW after crossing Route 17 and then traversing the same remaining route to the Indian River POI as Onshore Export Cable Corridor 1b.
- Onshore Export Cable Corridor 2: Approximately 28 km (17 miles) along existing DelDOT ROWs from landfall at Tower Road to Indian River POI via a northern route around Indian River Bay. Cables would exit transition vaults at the Tower Road landfall, traverse north along Coastal Highway/Route 1 through Dewey Beach and Rehoboth, turning west along Airport Road, continuing south along Road 274, west along Route 1D, connecting to Route 24 south/ John J Williams Highway to an Exelon overhead power line ROW, and then crossing Indian River via horizontal directional drill and continuing underground to the POI.
- Onshore Export Cable Corridor 3: Approximately 22 km (14 miles) along existing DelDOT ROWs from landfall at Tower Road to Cool Spring Substation. On this route, cable would exit transition vaults at Tower Road along same route as Onshore Export Cable Corridor 2, continuing Route 1D instead of turning along Route 24/ John J Williams Highway. The cables would continue along Route 1D to Belltown then west along Route 404/9 / Lewes-Georgetown Hwy until north to Cool Spring POI.
- Onshore Export Cable Corridor 4: Approximately 39 km (24 miles) along existing DelDOT ROWs from the Tower Road landfall location to Milford Substation. Cables would exit transition vaults at the Tower Road landfall, traverse north along Coastal Highway/Route 1 through Rehoboth and Nassau for approximately 36 km (22 miles) before turning south along County Road 207, then northwest along County Road 211 to the Milford Substation.

US Wind is evaluating the potentially crowded conditions in the ROWs to determine the number of cables that could be accommodated if a particular corridor is selected. Cables in any existing DelDOT ROW may require additional approvals or authorizations as described in Volume I, Section 8.1 of the COP.



The proposed Interconnection Facilities would consist of up to two additional substations (US Wind substations) and an interconnection expansion to the Delmarva Power and Light (DPL) Indian River 230 kV substation (Indian River Substation) located adjacent to NRG's Indian River Power Station near Millsboro, Delaware. The proposed US Wind substations and the interconnection expansion would be located generally northwest of the Indian River Substation. Up to four onshore export cables are planned to enter the US Wind substations underground and transition to an overhead configuration. A short overhead line would make the connection from each Project substation to the Indian River Substation.

US Wind is evaluating additional options Onshore Export Cable Corridors and Interconnection Facilities in Delaware. Onshore Export Cable Corridors 3 and 4 would terminate at Cool Spring and at Milford Substations, respectively. For these corridors, the offshore export cables would make landfall at Tower Road parking lot via HDD. Transition vaults for the cables would be installed under the previously disturbed parking lot footprint. From the transition vaults, the onshore export cables would traverse existing DelDOT



ROWs to the associated substation. The Interconnection Facilities planned in the vicinity of either Cool Spring or Milford are anticipated to have the same footprint as the Interconnection Facilities in the vicinity of Indian River Substation.

Temporary cofferdams, if necessary, are anticipated to be installed at the Atlantic Ocean, Indian River Bay, and Indian River landfall HDD locations. The cofferdams will be removed upon completion of the HDD duct installation.

As described in the COP, the Project has significant environmental benefits. The electricity generated by the Project will displace electricity generated by higher-polluting fossil fuel-powered plants and result in a significant net reduction in emissions over the lifespan of the Project. The Project is also expected to bring significant employment and other economic benefits to the region and contribute to the development of a utility scale, domestic offshore wind industry.

3.0 CONSISTENCY WITH DELAWARE STATE COASTAL ZONE MANAGEMENT POLICIES

The entire state of Delaware is considered a Coastal Management Area for the purposes of the federally approved Coastal Management Program 7 Del. C. c. 5104 § 1.3. The Project has been sited and designed, and will be constructed and operated, in a manner that is consistent with the applicable Delaware Department of Natural Resources and Environmental Control (DNREC) Coastal Management Program (CMP) policies (updated November 2018). The policies that are relevant to the Project are listed below and accompanied by a brief description of the manner in which the Project is consistent with them. US Wind's primary objective throughout the siting, design, and development of the Project, has been to avoid or minimize impacts to environmental and coastal resources.

3.1 Wetlands Management

Delaware Policy 5.1.1: The productive public and private wetlands in the State shall be preserved and protected to prevent their despoliation and destruction consistent with the historic right of private ownership of lands. [7 Del.C. §6602]

The Project has been sited and designed to avoid and minimize potential impacts to wetlands by utilizing previously disturbed areas, such as existing rights-of-way or rights-of-way under development, as practicable, and the use of HDD technology to install the onshore export cables under wetland areas. Where avoidance is not possible, the Project proposes to minimize wetland impacts during construction by maintaining buffers around wetlands, implementing best management practices (BMP) for erosion and sediment control, and maintaining natural surface draining patterns, as practicable.

The Project is consistent with this policy.

Delaware Policy 5.1.2: Activities in or adjacent to wetlands shall be conducted so as to minimize wetlands destruction or degradation, to preserve the natural and beneficial values of wetlands, and to protect the public interest therein. [7 Del.C. §§6602, 6603(a)(2), 6119, 4001]

As discussed above in response to Policy 5.1.1, the Project has been sited and designed to avoid and minimize potential impacts to wetland resources.



The Project is consistent with this policy.

Delaware Policy 5.1.9: Activities which may adversely affect wetlands shall require State approval pursuant to the policy statements below. The CMP, however, requires no such approval for the following activities: construction of foot bridges, duck blinds, wildlife nesting structures, boundary markers, or aids to navigation that do not prevent the ebb and flow of the tide; mosquito control activities authorized by the DNREC; and hunting, fishing, haying, trapping, and grazing of domestic animals. [7 Del.C. §§6604, 6606; 7 DE Admin. Code 7502 subsection 6.1.4]

The Project may adversely affect wetlands. Therefore, US Wind is seeking approval under the CMP for work under wetlands and on, over, under, and in subaqueous lands. US Wind will consult with DNREC and obtain all necessary approvals for this Project.

The Project is consistent with this policy.

Delaware Policy 5.1.10: In order to assure that any activity in the wetlands is appropriate, State approval shall be required prior to the initiation of such activities, except no such approval shall be required for the activities identified in policy statement number 5.1.9. The following factors shall be considered prior to such approval: the environmental impact of the proposed use; the number and type of supporting facilities required and their impact; the effect of the activity on neighboring land uses; the appropriate State and local comprehensive plans for the general area; the economic impact of the activity in terms of jobs, taxes generated, and land area required; and the aesthetic impact of the proposed activity. Alternative methods of construction shall also be considered prior to permit approval. [7 Del.C. §6604, 7 DE Admin. Code 7502]

State wetlands approval will be sought prior to the start of the Project. Alternative methods of construction will be considered, with the least impactful option implemented.

The Project is consistent with this policy.

Delaware Policy 5.1.11: The cumulative impact of individual projects shall be considered when evaluating the environmental impacts of a proposed activity in wetlands. [Delaware Executive Order 43, August 15, 1996]

The cumulative impact of all individual components of the Project will be considered when evaluating the environmental impacts.

The Project is consistent with this policy.

Delaware Policy 5.1.12: No permit will be issued to:

5.1.12.4 Utilize wetlands for any activity unless it:

5.1.12.4.1 Requires water access for the central purpose of the activity; and

The Project involves bringing offshore wind energy to shore which will require water access.



The Project is consistent with this criterion.

5.1.12.4.2 Has no alternative on adjoining non-wetland property of the owner.

US Wind does not own any adjoining property.

The Project is consistent with this criterion.

US Wind will consult with DNREC and obtain all necessary permits for this Project.

The Project is consistent with this policy.

3.2 Beach Management

Delaware Policy 5.2.1: The public and private beaches of the State shall be preserved, protected, and enhanced to mitigate beach erosion and to prevent their destruction and despoliation. [7 Del.C. §§6801, 6803, 6810]

The public and private beaches will be preserved and protected throughout the Project. The Project will utilize HDD technology to protect the beaches at the 3 R's Beach and Tower Road landfalls. The HDD operations will disturb the ground at the bore entry and exit for each cable. By minimizing ground disturbance, the Project minimizes impacts to the beaches. The offshore export cables will be buried below the seafloor to reduce the risk of exposure at the 3R's Beach or Tower Road landfalls.

US Wind will consult with DNREC and the Division of Parks and Recreation for coordinating installation activities to reduce potential impacts to the beach areas.

The proposed Project is not anticipated to have an impact on beach erosion.

The Project is consistent with this policy.

Delaware Policy 5.2.2: Publicly owned beaches and shorelines shall be managed and maintained to assure adequate and continued public access to these areas within the carrying capacity of the resource. [7 Del.C. §4701]

Access to beaches may be temporarily impacted, however Project construction activities will be scheduled to avoid peak beach usage periods. During installation activities at the 3R's Beach or Tower Road landfalls, the Project will likely require limiting public access around the construction area for safety purposes. Coordination with local and state officials will help facilitate the closures to be least impactful.

The Project is consistent with this policy.

Delaware Policy 5.2.3: Beaches are the areas from the Delaware/Maryland line at Fenwick Island to the Old Marina Canal north of Pickering Beach, which extend from the Mean High Water line of the Atlantic Ocean and Delaware Bay seaward 2,500 feet, and landward 1,000 feet. [7 Del.C. §6802(1)]

As discussed in response to Policies 5.2.1 and 5.2.2, construction activities will take place in these areas. All necessary permits will be filed and all relevant authorities notified.



The Project is consistent with this policy.

Delaware Policy 5.2.4: No person shall, without first having obtained a permit or letter of approval from the Department, undertake any activity:

5.2.4.1: To construct, modify, repair or reconstruct any structures or facility on any beach seaward of the building line.

5.2.4.2: To alter, dig, mine, move, remove or deposit any substantial amount of beach or other materials, or cause the significant removal of vegetation, on any beach seaward of the building line which may affect the enhancement, preservation or protection of beaches. [7 Del. C. §6805(a)]

Construction and installation activities will take place seaward of beach building lines. These activities are primarily related to bay bottom alteration and will require moving some sediment for temporary cofferdam installation and jet plow embedment of the offshore and onshore export cables. All of the necessary permits will be acquired prior to the commencement of construction activities.

The Project is consistent with this policy.

Delaware Policy 5.2.5: Construction activities landward of the building line on any beach, including construction of any structure or the alteration, digging, mining, moving, removal or deposition of any substantial amount of beach or other materials, shall be permitted only under a letter of approval from the Department of Natural Resources and Environmental Control. [7 Del. C. §6805(c)]

US Wind will obtain a letter of approval from DNREC for all construction activities landward of the building line on any beach prior to any construction activities.

The Project is consistent with this policy.

Delaware Policy 5.2.11: No person shall commence or conduct without a permit therefore from the DNREC, construction seaward of the Building Line, of any pipeline, dock, pier, wharf, ramp or other harbor work. [7 DE Admin Code 5102 subsection 4.4.1]

All necessary permits will be acquired prior to commencement of Project construction.

The Project is consistent with this policy.

Delaware Policy 5.2.13: The following activities are prohibited:

5.2.13.1: The operation of any motorized vehicle or machine on, over or across the primary dune on any State-owned beach except at those locations specified by the Department for such use;

Actions will be taken to avoid and minimize the use of any machinery and pedestrian traffic on, over or across dune habitat, or State-owned beaches. The transition vaults will be installed and HDD operations will occur in the existing 3 R's Beach or Tower Road parking lot, which is already disturbed. Limiting ground disturbance to the parking lot also avoids impacting the hydrology of the site since the parking lot is already a compacted surface.



The onshore export cables will be installed using HDD. The HDD operations will only disturb the ground at the bore entry and exit for each cable. By minimizing ground disturbance, the Project minimizes the area in which complex vegetation re-establishment may be needed.

The Project is consistent with this policy.

5.2.13.2: Pedestrian traffic on, over or across the primary dune on any State-owned beach except at those locations specified by the Department for such use;

Actions will be taken to avoid and minimize pedestrian traffic on, over or across dune habitat, or State-owned beaches. See response to Policy 5.2.13.1 above.

The Project is consistent with this Policy.

5.2.13.3: The alteration, moving or removal of any facility, improvement or structure installed or maintained by the DNREC for enhancement, preservation or protection of any beach; and

The Project does not propose the alteration, movement or removal of any facility, improvement or structure installed or maintained by the DNREC for enhancement or protection of any beach.

Therefore, this policy is not applicable to the Project.

5.2.13.4: The damaging, destruction or removal of any trees, shrubbery, beach grass or other vegetation growing on any State-owned or maintained beach seaward of the Building Line. [Delaware Regulations Governing Beach Protection and the Use of Beaches, Section 2.08, revised December 27, 1983]

Actions will be taken to avoid and minimize the damage, destruction, and removal of trees, shrubbery, beach grass or other vegetation. The installation methods proposed are the least environmentally damaging and will minimize or avoid impacts where possible. Use of HDD at the landfalls will avoid and minimize the disturbance of trees, shrubbery, beach grass and other vegetation in the nearshore environment. The transition vaults will be installed and HDD operations will occur in the existing 3 R's Beach or Tower Road parking lot, which is already disturbed and outside of vegetated areas.

The Project is consistent with this policy.

Delaware Policy 5.2.17: Efforts shall be made to utilize shoreline erosion control methods that best provide for the conservation of aquatic nearshore habitat, maintain water quality, and avoid other adverse environmental effects. Non-structural erosion control methods are preferred. However, structural erosion control measures may be allowed where it can be shown, through a review of site conditions and generally accepted engineering standards, that nonstructural measures would be ineffective in controlling erosion. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 3.04, amended September 2, 1992]

Shoreline erosion control techniques will be utilized as required to further minimize associated impacts.

The Project is consistent with this policy.



3.3 Coastal Waters Management

Delaware Policy 5.3.1.1: The development and utilization of the land and water resources of the state shall be regulated to ensure that water resources are employed for beneficial uses and not wasted, to protect beneficial uses of water resources, and to assure adequate water resources for the future. [7 Del. C. §6001 (a)(2)(3)]

The Project is a water-dependent use that will connect the WTGs in the Lease area to the Interconnection Facilities in Sussex County, Delaware. The Project has been sited and designed to minimize and avoid impacts to land and water resources of the state where possible. All necessary permits will be acquired prior to commencement of Project construction. The Project is intended to reduce the region's reliance on fossil fuels.

The Project is consistent with this policy.

Delaware Policy 5.3.1.2: The water resources of the state shall be protected from pollution which may threaten the safety and health of the general public. [7 Del. C. §§6001 (a)(5), 6001 (c)(2)]

During the course of Project construction, pollutants may be discharged into the environment as part of routine activities, such as the operation of construction vessels and vehicles, or due to accidental spills. Pollutants may be discharged directly into a waterbody or discharged into the air and deposited on the surface of a waterbody. US Wind does not anticipate any ongoing source of water pollution, although specific activities during construction may be considered a regulated discharge. US Wind will seek the necessary permits for any such discharge.

Nearshore waters of the Atlantic, Indian River Bay, and the Indian River could be affected by localized release of HDD drilling fluids from deeper subsurface borehole drilling, if drilling fluids are released and not properly contained. However, HDD drilling fluids (bentonite, clay and water) are biologically inert and would not cause appreciable poor water quality conditions. The bentonite contained in the drilling fluid will gel or coagulate upon contact with saline or brackish water. In the event of a fluid release, the bentonite fluid density and composition will cause it to remain as a cohesive mass on the bay bottom, which can be quickly cleaned up and removed by diver-operated vacuum equipment. The HDD operation will include a drilling fluid fracture or overburden breakout monitoring program during borehole drilling operations to minimize environmental effects which at worst will be temporary and very localized. Given the small area covered and short-term duration of HDD operations, impacts to water quality are expected to be negligible.

Construction vehicles will also emit particulates into the air as they combust fuel. While these particles could settle on the surface of the Indian River, Indian River Bay, or the Atlantic Ocean, much of the pollution associated with vehicle emissions will settle over land. The operation of construction vehicles in the Project area will be short-term and temporary, and insignificant when compared to existing sources of atmospheric pollutants that impact the Inland Bays and the Atlantic Ocean. Therefore, water quality impacts due to routine and accidental releases are anticipated to be negligible in nearshore waters. Actions will be taken to avoid and minimize harm to the surrounding environment and avoid pollution entering water resources of the state.



It is anticipated that these releases will have a negligible impact on water quality. The Project is consistent with this policy.

Delaware Policy 5.3.1.3: The coastal water resources of the state shall be protected and conserved to assure continued availability for public recreational purposes and for the conservation of aquatic life and wildlife. [7 Del. C. §6001(a)(4)]

The Project has been sited and designed to avoid or minimize impacts to the coastal water resource of the state. Impacts to coastal resources are anticipated to be temporary, localized, and minor to negligible as discussed more specifically throughout this consistency document.

The Project is consistent with this policy.

Delaware Policy 5.3.1.4: It is the policy of the DNREC to maintain within its jurisdiction surface waters of the State of satisfactory quality consistent with public health and public recreation purposes, the propagation and protection of fish and aquatic life, and other beneficial uses of the water. [DNREC Regulations, Delaware Surface Water Quality Standards, Section 1.1, amended July 11, 2004]

Actions will be taken to avoid and minimize harm to the surrounding environment including public health and public recreation, propagation and protection of fish and aquatic life, and other beneficial uses of the water.

The Project is consistent with this policy.

Delaware Policy 5.3.1.5: The designated uses applicable to the various stream basins represent the categories of beneficial use of waters of the state which must be maintained and protected through application of appropriate criteria. Such uses shall include public water supply; industrial water supply; primary contact recreation involving any water-based form of recreation, the practice of which has a high probability for total body immersion or ingestion of water such as swimming and water skiing; secondary contact recreation involving a water-based form of recreation, the practice of which has a low probability for total body immersion or ingestion of water such as wading, boating and fishing; maintenance, protection and propagation of fish, shellfish, aquatic life and wildlife preservation; agricultural 26 water supply; and waters of exceptional recreational or ecological significance (ERES waters). [Delaware Surface Water Quality Standards, Sections 2 and 3, amended July 11, 2004]

The Project will maintain the beneficial uses of waters of the state and protect them. Actions will be taken to avoid and minimize harm to the surrounding environment. Potential impacts are associated with the installation of the offshore and onshore export cables and installation and removal of the temporary cofferdams to be installed at the 3R's Beach or Tower Road landfalls, in Indian River Bay, and in the Indian River. Impacts are expected to be temporary and negligible to minor.

The Project is consistent with this policy.

Delaware Policy 5.3.1.6: Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. Degradation of water quality in such a manner that results in reduced number, quality, or river or stream mileage of existing uses shall be prohibited.



Degradation shall be defined for the purposes of this section as a statistically significant reduction, accounting for natural variations, in biological, chemical, or habitat quality as measured or predicted using appropriate assessment protocols. [Delaware Surface Water Quality Standards, Section 5.1, amended July 11, 2004]

The Project is not anticipated to impact existing water uses within Indian River or Indian River Bay. Water quality impacts are anticipated to be temporary, localized, and negligible to minor along Onshore Export Cable Corridor 1 and around the temporary cofferdams.

Suspended sediment/deposition associated with construction is anticipated to have a negligible to minor impact on water quality. Jet plow operations during cable laying and embedment will disturb sediment on the seafloor. HDD operations at the landfall locations are also expected to result in some sediment disturbance in and around the temporary cofferdams.

Some of the material suspended by the plow may contain elevated levels of arsenic and nickel that are common in the Project area. Therefore, water quality impacts associated with jet plow operations are expected to be minor.

Increases in sediment suspension beyond baseline conditions will be limited during anchoring. Sediment suspension is expected to be localized to the area of anchorage and sediments directly disturbed by the anchor. The small volume of sediment displaced is expected to settle to the seafloor shortly thereafter. Therefore, water quality impacts associated with anchoring are expected to be negligible.

Although jet plow embedment is the least impactful method for installing submarine cables, jet plow operations during cable laying and embedment will result in disturbance of sediments along Onshore Export Cable Corridor 1. The vast majority of sediments disturbed by the jet plow will quickly return to the cable installation trench. A portion of the disturbed sediments will leave the immediate trench area, resulting in measurable, but temporary increases in suspended sediment that are anticipated to occur within 600 m (1,968 ft) of jet plow operations. Areas of sediment deposition greater than 0.5 millimeters (0.02 inches) are also anticipated to occur within 600 m (1,968 ft) of jet plow operations. Sediment suspension and deposition are expected to be locally higher in the immediate vicinity of jet plow operations. However, suspended sediment concentrations are expected to return to background levels no more than 24 hours after jet plow passage. Although concentrations of total suspended solids (TSS) associated with jet plow operations depend on the type of sediment present and the strength of local water currents, a study of particle settlement during cable laying for the Block Island Wind Farm found that measured TSS concentrations during and after plowing were as much as two orders of magnitude smaller than modeled concentrations and measured TSS concentrations two weeks post plowing were rarely distinguishable from background levels (Elliott et al. 2017). Additionally, some of the material suspended by the plow may contain elevated levels of arsenic and nickel that are common in the Project area. Water quality impacts associated with jet plow operations are expected to be minor.

The use of HDD at the landfalls will minimize water quality impacts in the nearshore environment, and temporary cofferdams will help to contain sediment that becomes suspended in the water column. Some sediment may be displaced during the installation and removal of the cofferdams; however, this would be

a relatively small volume of material that would settle out relatively quickly. Consequently, water quality impacts associated with HDD are anticipated to be negligible.

Appropriate avoidance, minimization, and mitigation measures for potential impacts associated with the low concentrations of heavy metals and polycyclic aromatic hydrocarbons (PAHs) that were detected in some of the sediment samples collected along Onshore Export Cable Corridor 1 will be addressed in the water quality certificate obtained for this project under Section 401 of the Clean Water Act. For example, turbidity monitoring will be conducted for the Project during construction, if required by permitting authorities.

Nearshore waters of the Atlantic Ocean, Indian River Bay, and the Indian River could be affected by localized release of HDD drilling fluids from deeper subsurface borehole drilling, if drilling fluids are released and not properly contained. However, HDD drilling fluids (bentonite, clay and water) are biologically inert and would not cause appreciable poor water quality conditions. The bentonite contained in the drilling fluid will gel or coagulate upon contact with saline or brackish water. In the event of a fluid release, the bentonite fluid density and composition will cause it to remain as a cohesive mass on the bay bottom, which can be quickly cleaned up and removed by diver-operated vacuum equipment. The HDD operation will include a drilling fluid fracture or overburden breakout monitoring program during borehole drilling operations to minimize environmental effects which at worst will be temporary and very localized. Given the small area covered and short-term duration of HDD operations, impacts to water quality are expected to be negligible.

Construction vehicles will also emit particulates into the air as they combust fuel. While these particles could settle on the surface of the Indian River, Indian River Bay, or the Atlantic Ocean, much of the pollution associated with vehicle emissions will settle over land. The operation of construction vehicles in the Project area will be short-term and temporary, and insignificant when compared to existing sources of atmospheric pollutants that impact the Inland Bays and the Atlantic Ocean. Therefore, water quality impacts due to routine and accidental releases are anticipated to be negligible in nearshore waters.

The Project is consistent with this policy.

Delaware Policy 5.3.1.7: Where the quality of the waters exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that water quality shall be maintained and protected. In the case of ERES waters, existing quality shall be maintained or enhanced. Limited degradation may be allowed if the DNREC finds, after review, that allowing lower water quality would result in a substantial net environmental or public health benefit and does not impede existing uses in the area in which the waters are located while allowing for full protection of existing uses. [Delaware Surface Water Quality Standards, Sections 2 and 5.2, amended July 11, 2004]

Anticipated water quality impacts are described above in response to Policy 5.3.1.6. Water quality impacts associated with installation of the onshore export cables and temporary cofferdams are anticipated to be negligible to minor and are expected to return to pre-construction conditions after installation activities are completed. Operation of the onshore export cable is not anticipated to impact water quality.

The Project is consistent with this policy.



Delaware Policy 5.3.1.10: All surface waters of the State shall be free from substances that are attributable to wastes of industrial, municipal, agricultural or other human-induced origin. Examples include but are not limited to the following:

5.3.1.10.1: Floating debris, oil, grease, scum, foam, or other materials on the water surface that may create a nuisance condition, or that may in any water interfere with attainment and maintenance of designated uses of the water.

5.3.1.10.2: Setttable solids, sediments, sludge deposits, or suspended particles that may coat or cover submerged surfaces and create a nuisance condition, or that may in any way interfere with attainment and maintenance of designated uses of the water.

5.3.1.10.3: Any pollutants, including those of a thermal, toxic, corrosive, bacteriological, radiological, or other nature that may interfere with attainment and maintenance of designated uses of the water, may impart undesirable odors, tastes, or colors to the water or to aquatic life found therein, may endanger public health, or may result in dominance of nuisance species. [Delaware Surface Water Quality Standards, Section 4.1, amended July 11, 2004]

Impacts to surface waters of the State will be limited to installation and construction activities. See response to Policy 5.3.1.6.

The Project is consistent with this policy.

Delaware Policy 5.3.1.13: Designated exceptional recreational or ecological significance (ERES) waters shall be accorded a level of protection and monitoring in excess of that provided most other waters of the State. These waters are recognized as special natural assets of the State, and must be protected and enhanced for the benefit of present and future generations of Delawareans. [Delaware Surface Water Quality Standards, Section 5.6.1.1, amended July 11, 2004]

The Inland Bays are designated as ERES waters. HDD technology will be used at the landfalls and jet plow technology will be used to install the onshore export cables below the bay bottom in Indian River Bay. These installation technologies were chosen as they are proven and the least environmentally damaging. Jet plow installation limits the extent and duration of suspended sediments within the water columns and subsequent impacts to benthic communities and other significant coastal habitats and species. HDD installation allows cables to be installed at the landfalls and avoiding impacts to sensitive coastal habitats. See discussion above in Policy 5.3.1.10. US Wind has taken the necessary precautions to protect the integrity of these waters.

The Project is consistent with this policy.

Delaware Policy 5.3.1.15: The discharge of oil from a vessel, truck, pipeline, storage, tank or tank car which causes or poses a threat of making a film on, emulsion in or sludge beneath the waters of the state or its shoreline shall be prohibited. [7 Del. C. §§6203, 6202(7)(5)(9)]

Vessel traffic associated with construction activities is expected to produce routine and accidental releases of pollutants that will have negligible impacts on coastal habitat. Construction-related impacts from routine



and accidental releases, including drilling fluid that could be released in the event of a frac-out during HDD. Spills of oil and hazardous chemicals can inhibit the growth of aquatic plants and harm or kill aquatic animals. Litter and other marine debris can also injure or suffocate aquatic animals. However, since the routine releases associated with this Project are anticipated to be small quantities of clean discharge and accidental releases associated with this Project are unlikely, the impacts of routine and accidental releases associated with the Project are anticipated to be negligible.

It is anticipated that routine and accidental releases associated with the Project will have negligible impacts on water quality during operations. Boats traveling to the Project area for maintenance activities may discharge sanitary waste, litter, and engine emissions into the Atlantic Ocean. However, the discharged volume of these materials would be small and unlikely to have a measurable impact on water quality. Materials such as paint, solvent, or lubricant could also be spilled during maintenance work, but these would also be used in relatively small quantities. Boats may also experience accidental oil spills. Because marine discharges are not a part of routine operations for the Project, it is anticipated that they will have a negligible impact on water quality.

A Project Oil Spill Response Plan has been developed.

The Project is consistent with this policy.

Delaware Policy 5.3.1.19: No person shall, without first having obtained a permit from the Delaware Department of Natural Resources, undertake any activity:

5.3.1.19.1: In a way which may cause or contribute to the discharge of an air contaminant;

All necessary Project air quality permits will be obtained prior to construction.

The Project is consistent with this policy.

5.3.1.19.2: In a way which may cause or contribute to the discharge of a pollutant into any surface or ground water;

The only anticipated potential discharge due to Project activities is stormwater. US Wind will develop and implement a Stormwater Pollution Prevention Plan (SWPPP), which will be submitted for agency approval prior to commencement of construction activities.

The Project is consistent with this policy.

5.3.1.19.3: In a way which may cause or contribute to withdrawal of ground water or surface water or both;

The Project will not withdraw ground water or surface water.

Therefore, this policy is not applicable.

5.3.1.19.4: In a way which may cause or contribute to the collection, transportation, storage, processing or disposal of solid wastes, regardless of the geographic origin or source of such solid wastes;



The Project will obtain the necessary permits to properly dispose of any construction-related solid wastes.
The Project is consistent with this policy.

5.3.1.19.5: To construct, maintain or operate a pipeline system including any appurtenances such as a storage tank or pump station;

The Project does not involve a pipeline. Therefore, this policy is not applicable.

5.3.1.19.6: To construct any water facility; or

The Project does not propose to construct a water facility. Therefore, this policy is not applicable.

5.3.1.19.7: To plan or construct any highway corridor which may cause or contribute to the discharge of an air contaminant or discharge of pollutants into any surface or ground water. [7 Del. C. § 6003(a)]

The Project does not involve the planning or construction of a highway corridor. Therefore, this policy is not applicable.

Delaware Policy 5.3.1.20: No person shall, without first having obtained a permit from the Delaware Department of Natural Resources and Environmental Control, construct, install, replace, modify or use any equipment or device or other article:

5.3.1.20.1: Which may cause or contribute to the discharge of an air contaminant;

US Wind will obtain any necessary air permits from DNREC prior to construction.

The Project is consistent with this policy.

5.3.1.20.2: Which may cause or contribute to the discharge of a pollutant into any surface or ground water;

The Project will not cause or contribute to the discharge of a pollutant into any surface or ground water.

Therefore, this policy is not applicable.

5.3.1.20.3: Which is intended to prevent or control the emission of air contaminants into the atmosphere or pollutants into surface or ground waters;

The Project will obtain any necessary air permits from DNREC prior to construction

The Project is consistent with this policy.

*5.3.1.20.4: Which is intended to withdraw ground water or surface water for treatment and supply;
or*

The Project will not withdraw ground water or surface water.

Therefore, this policy is not applicable.



5.3.1.20.5: For disposal of solid waste. [7 Del. C. §6003(b)]

The Project will obtain any necessary permits to properly dispose of construction-related solid wastes.

Actions will be taken to avoid and minimize harm to the surrounding environment. Effects are expected to be temporary and negligible to minor and in the case of air emission will provide a net benefit.

The Project is consistent with this policy.

Delaware Policy 5.3.1.21: Regulatory variances for the activities identified in the preceding policy statement may be granted pursuant to 7 Del. C. §6011 if all of the following conditions exist in the opinion of the Secretary of the Delaware Department of Natural Resources and Environmental Control:

5.3.1.21.1: Good faith efforts have been made to comply with these policies;

5.3.1.21.2: The cost of compliance is disproportionately high with respect to the benefits which would be bestowed by compliance, or the necessary technology is unavailable;

5.3.1.21.3: Available alternative operating procedures or interim control measures are being or will be used to reduce adverse impacts; and

5.3.1.21.4: The activities are necessary to the national security or to the lives, health, or welfare of the occupants of Delaware. [7 Del. C. §6011(b)]

The Project does not require a variance for the activities discussed in Section 2.0 as the Project complies with Delaware's policies. The Project has been sited and designed to minimize impacts to the surrounding environment. Least environmentally damaging installation methodologies have been chosen for construction.

Since no variance is being requested, this policy is not applicable.

Delaware Policy 5.3.1.26: No person or entity shall:

5.3.1.26.1: Engage in the drilling, boring, coring, driving, digging, construction, installation, removal, or repair of a water well or water test well, except as or under the supervision of a licensed water well contractor;

5.3.1.26.2: Construct, repair, install or replace any part of a septic tank system except by or under the supervision of a licensed septic tank installer; or

5.3.1.26.3: Operate any liquid waste treatment system without a licensed liquid waste treatment plant operator.

5.3.1.26.4: No permits or licenses shall be issued for these activities unless the DNREC finds that the applicant is prepared and willing to conduct such activities in a manner which is consistent with the CMP policies. [7 Del. C. §6023; Delaware Executive Order 43, August 15, 1996]



The Project will not involve any well or septic tank system installation or repair, or the operation of any liquid waste treatment system.

Therefore, this policy is not applicable to the Project.

Delaware Policy 5.3.1.31: After July 1, 1991, unless a particular activity is exempted by these regulations, a person may not disturb land without an approved sediment and stormwater management plan from the appropriate plan approval agency. [Delaware Sediment and Stormwater Regulations, Section 8(1), amended April 11, 2005]

US Wind will develop a sediment and stormwater management plan for agency approval prior to the commencement of Project construction activities.

The Project is consistent with this policy.

3.4 Subaqueous Lands and Coastal Strip Management

Delaware Policy 5.4.1: The "coastal zone", referred to in these policies as the "coastal strip", is defined as all that area of the State, whether land, water or subaqueous land between the territorial limits of Delaware in the Delaware River, Delaware Bay and Atlantic Ocean, and a line formed by certain Delaware highways and roads. [7 Del. C. §7002]

Portions of the Project will be located within the coastal zone. The Project has been sited and designed to minimize and avoid impacts to the coastal zone where possible. The construction and installation methods have been chosen as they are proven technologies with the least environmentally damaging impacts and are discussed throughout this consistency statement.

The Project is consistent with this policy.

Delaware Policy 5.4.2: The natural environment of the coastal strip shall be protected from the impacts of heavy industry and oil pollution for the purpose of recreation, tourism, fishing, crabbing, and gathering other marine life useful in food production. [7 Del. C. §§7001, 6201]

Actions will be taken to protect the coastal strip. All associated impacts will be temporary during construction or routine maintenance or repairs.

Vessel traffic associated with construction activities may produce routine and accidental releases of pollutants that will have negligible impacts on coastal habitat, water quality, and aquatic plants and animals. Since the routine releases associated with this Project are anticipated to be small quantities of clean discharge and accidental releases associated with this Project are unlikely, the impacts of routine and accidental releases associated with the Project are anticipated to be negligible.

The Project is consistent with this policy.

Delaware Policy 5.4.3: The need for protection of the natural environment in the coastal strip shall be balanced with the need for new industry in the State's coastal areas. [7 Del. C. §7001]



Actions will be taken to protect the coastal strip as discussed above in Policy 5.4.2. The construction activities being conducted within the coastal strip support industrial activities taking place in Delaware's coastal areas. The Project involves the construction and operation of offshore WTGs on the OCS. The offshore WTGs will provide clean renewable energy and reduce the region's reliance on fossil fuels, and provide reduction in emissions.

The Project is consistent with this policy.

Delaware Policy 5.4.15: Avoidable pollution or avoidable contamination of the ocean and of the waters covering submerged lands, avoidable pollution or avoidable contamination of the beaches or land underlying the ocean or waters covering submerged lands, or any substantial impairment of and interference with the enjoyment and use thereof, including but not limited to bathing, boating, fishing, fish and wildlife production, and navigation, shall be prohibited and the lessee shall exercise a high degree of care to provide that no oil, tar, residuary product of oil or any refuse of any kind from any well or works shall be permitted to be deposited on or pass into the waters of the ocean, any bay or inlet thereof, or any other waters covering submerged lands; provided, however, that this policy does not apply to the deposit on, or passing into, such water or waters not containing any hydrocarbons or vegetable or animal matter. [7 Del. C. §6119(a)]

As addressed in previous policy responses, there is potential for unavoidable pollution or contamination of the oceans, waters, and beaches. However, the Project will implement plans to prevent avoidable pollution and avoidable contamination of the ocean and of all waters covering submerged lands, avoidable pollution or avoidable contamination of the beaches or land underlying the ocean or waters covering submerged lands, or any substantial impairment of and interference with the enjoyment and use thereof, including but not limited to bathing, boating, fishing, fish and wildlife production, and navigation.

The Project is consistent with this policy.

Delaware Policy 5.4.16: For the purposes of this section, "avoidable pollution" or "avoidable contamination" means pollution or contamination arising from:

5.4.16.1: The acts of omissions of the lessee or its officers, employees or agents; or

5.4.16.2: Events that could have been prevented by the lessee or its officers, employees or agents through the exercise of a high degree of care. [7 Del. C. §6119(b)]

See the above response to Policy 5.4.15.

The Project is consistent with this policy.

Delaware Policy 5.4.17: State subaqueous lands within the boundaries of Delaware constitute an important resource of the State and shall be protected against uses or changes which may impair the public interest in the use of tidal or nontidal waters. [7 Del. C. Ch. 72]



State subaqueous lands utilized for this Project will not impair the public interest in the use of tidal or nontidal waters. There will be temporary, localized impacts to these subaqueous lands during the installation of the onshore export cables and during temporary cofferdam installation and removal. However, once the cables are installed and the temporary cofferdams are removed, there are no anticipated impacts to subaqueous lands or public interest in the use of these waters. Routine maintenance or repairs, as required, of the onshore export cables will be localized and on a smaller scale than installation.

The Project is consistent with this policy.

Delaware Policy 5.4.18: No person shall deposit material upon or remove or extract materials from, or construct, modify, repair or reconstruct, or occupy any structure or facility upon submerged lands or tidelands without first having obtained a permit, lease or letter of approval from the DNREC. Such permit, lease or letter of approval, if granted, may include reasonable conditions required in the judgment of the DNREC to protect the interest of the public. If it is determined that granting the permit, lease or approval will result in loss to the public of a substantial resource, the permittee may be required to take measures which will offset or mitigate the loss. [7 Del. C. §7205]

All necessary permits will be acquired prior to the commencement of the Project. The jet plowing technique does not require the removal or disposal of materials. Temporary cofferdam installation for HDD conduit installation would require the removal/excavation of sediment at the HDD locations in the Atlantic Ocean, Indian River Bay, and Indian River. Removal and disposal of this material will comply with all necessary permits and other regulatory requirements. The small area of disturbance associated with the temporary cofferdam installation and removal, at locations outside of sensitive resources areas will not result in a loss to the public of a substantial resource.

The Project is consistent with this policy.

Delaware Policy 5.4.19: The extent of jurisdictional authority over public or private subaqueous lands includes any activity in a navigable stream or waterbody, which have a hydrologic connection to natural waterbodies". "Activity" includes, but is not limited to, any human induced action, such as dredging, draining, filling, grading, bulkheading, mining, drilling, extraction of materials or excavation, or construction of any kind, including, but not limited to, construction of a boat ramp or slip, breakwater, residences, bridge, bulkhead, culvert, dam, derrick, deck, groin, jetty, lagoon, gabion, rip-rap, launching facility, marina, mooring facility, pier, seawall, walkway, or wharf. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 1.02(A)(1) and Definition #1, amended September 2, 1992]

The installation of temporary cofferdams and associated excavation/dredging of material on public subaqueous lands is considered a human-induced action and is within Delaware's jurisdiction. The temporary cofferdams will be installed within the state waters of the Atlantic Ocean, Indian River Bay, and Indian River. All necessary permits will be acquired prior to the commencement of Project construction activities.

The Project is consistent with this policy.



Delaware Policy 5.4.20: The following types of activities in, on, over, or under private subaqueous lands require a permit or letter of authorization from the DNREC:

5.4.20.1: Construction of a convenience structure or boat docking facility.

5.4.20.2: Construction of a shoreline erosion control structure or measure.

5.4.20.3: Dredging, filling, excavating or extracting of materials.

5.4.20.4: Excavation, creation, or alteration of any channel, lagoon, turning basin, pond, embayment, or other navigable waterway on private subaqueous lands which will make connection with public subaqueous lands.

5.4.20.5: Dredging of existing channels, ditches, dockages, lagoons and other navigable waterways to maintain or restore the approved depth and width.

5.4.20.6: Excavation of land which makes connection to public subaqueous lands.

5.4.20.7: The laying of any pipeline, electric transmission line, telephone line, or any other utility structure in, on, over, or under the beds of private subaqueous lands.

5.4.20.8: Installation of temporary or permanent mooring buoys or private marker buoys.

5.4.20.9: Establishment of an anchorage for the use of a mooring for more than two (2) boats or for appurtenant onshore services.

5.4.20.10: Anchoring or mooring a floating platform over private subaqueous lands and for a period of twenty-four (24) consecutive hours or more.

5.4.20.11: Anchoring or mooring any vessel or platform over private subaqueous lands for revenue generating purposes.

5.4.20.12: Repair and replacement of existing serviceable structures over private subaqueous lands, except no permit or letter is required for repairs or structural replacements which are above the mean low tide and which do not increase any dimensions or change the use of the structure. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 1.03(C), amended September 2, 1992]

The Project will obtain any necessary permits from DNREC for any activities in, on, or under private subaqueous lands prior to construction.

The Project is consistent with this policy.

Delaware Policy 5.4.21: The following types of activities on public subaqueous lands require a lease, permit, or letter of authorization from the DNREC:



5.4.21.1: Construction or use of any structure on, in, under, or over public subaqueous lands, including but not limited to, any convenience structures, shoreline erosion control structure or measure, or boat docking facility.

The Project will obtain any necessary permits from DNREC for the construction of the temporary cofferdams at the Atlantic Ocean, Indian River Bay, and Indian River HDD locations prior to construction.

The Project is consistent with this policy.

5.4.21.2: Dredging, filling, excavating or extracting of materials.

Dredging or excavation of public subaqueous lands will be required for the installation of the temporary cofferdams at the at the Atlantic Ocean, Indian River Bay, and Indian River HDD locations. The Project will obtain any necessary permits from DNREC for the construction of the temporary cofferdams prior to construction.

The Project is consistent with this policy.

5.4.21.3: Continuous anchoring or mooring of a commercial vessel used in a commercial activity on or over public subaqueous lands for thirty (30) or more calendar days during any consecutive three (3) months.

If applicable, US Wind will obtain the required lease, permit, or letter of authorization from the DNREC.

The Project is consistent with this policy.

5.4.21.4: The laying of any pipeline, electric transmission line, or telephone line in, on, over, or under the beds of public subaqueous lands.

The onshore export cables would be installed below the bay bottom and bay bottom of public subaqueous lands. The Project will obtain the required lease, permit, or letter of authorization from the DNREC prior to their installation.

The Project is consistent with this policy.

5.4.21.5: Installation of temporary or permanent mooring buoys or private marker buoys.

If applicable, US Wind will obtain the required lease, permit, or letter of authorization from the DNREC.

The Project is consistent with this policy.

5.4.21.6: Establishment of an anchorage for mooring more than two (2) boats or which serves as a permanent place for resident vessels.

The Project does not involve the establishment of an anchorage for mooring more than two (2) boats or which serves as a permanent place for residential vessels.

Therefore, this policy is not applicable.



5.4.21.7: Anchoring or mooring a floating platform over public subaqueous lands and for a period of twenty-four (24) consecutive hours or more.

If applicable, US Wind will obtain the required lease, permit, or letter of authorization from the DNREC.

The Project is consistent with this policy.

5.4.21.8: Maintenance dredging of existing or new channels, ditches, dockages, lagoon and other waterways to maintain or restore the approach depth and width.

The Project does not involve maintenance dredging.

Therefore, this policy is not applicable.

5.4.21.9: Anchoring or mooring any vessel or platform over public subaqueous lands for revenue generating purposes.

The Project does not involve anchoring or mooring any vessel or platform over public subaqueous lands for revenue generating purposes.

Therefore, this policy is not applicable.

5.4.21.10: Repair and replacement of existing serviceable structures over private subaqueous lands, except no permit or letter is required for repairs or structural replacements which are above the mean low tide and which do not increase any dimensions or change the use of the structure.

The Project does not involve the repair or replacement of existing serviceable structures over private subaqueous lands.

Therefore, this policy is not applicable.

5.4.21.11: New dredging activities of channels, ditches, dockage, or other waterways. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 1.04(B), amended September 2, 1992]

The Project does not involve new dredging activities of channels, ditches, dockage, or other waterways.

Therefore, this policy is not applicable.

Delaware Policy 5.4.22: The DNREC shall consider the public interest in any proposed activity which might affect the use of subaqueous lands. These considerations include, but are not limited to, the following:

5.4.22.1 The value to the State or the public in retaining any interest in subaqueous lands which the applicant seeks to acquire, including the potential economic value of the interest.

The use of subaqueous lands will bring offshore wind energy to the Delaware electric grid and reduce the region's reliance on fossil fuels. The State and the public will benefit from US Wind utilizing these subaqueous lands.



The Project is consistent with this policy.

5.4.22.2 The value to the State or the public in conveying any interest in subaqueous lands which the applicant seeks to acquire.

The use of subaqueous lands will bring offshore wind energy to the Delaware electric grid and reduce the region's reliance on fossil fuels. The State and the public will benefit from US Wind utilizing these subaqueous lands.

The Project is consistent with this policy.

5.4.22.3 The potential effect on the public with respect to commerce, navigation, recreation, aesthetic enjoyment, natural resources and other uses of the subaqueous lands.

There will be localized, temporary impacts on the public with respect to commerce, navigation, recreation, aesthetic enjoyment, natural resources and other uses of the subaqueous lands. These impacts are limited to installation and removal of the temporary cofferdams at the Atlantic Ocean, Indian River Bay, and Indian River HDD locations and installation of the onshore export cables in the seabed and/or bay bottom. These impacts associated with installation may temporarily preclude the public from using the immediate construction area. US Wind will limit construction to the period outside of peak recreational activity to the extent practicable.

Once installed, the onshore export cables are not anticipated to have an effect on the public with respect to commerce, navigation, recreation, aesthetic enjoyment, natural resources and other uses of the subaqueous lands as the onshore export cables will be located below the bay bottom. There may be temporary, localized impacts for routine maintenance or repair activities associated with the onshore export cables and HDD conduits. Maintenance or repair activities are anticipated to be significantly less than installation activities.

The Project is consistent with this policy.

5.4.22.4 The extent to which any disruption of the public use of such lands is temporary or permanent.

There may be temporary disruption of the public use of these subaqueous lands. See response to 5.4.22.3.

The Project is consistent with this policy.

5.4.22.5 The extent to which the applicant's primary objectives and purposes can be realized without the use of such lands (avoidance).

US Wind's primary objective is to provide offshore wind renewable energy generation to the regional electric grid. The Project is proposing the use of Onshore Export Cable Corridor 1 through subaqueous lands because it provides the most direct route the Point of Interconnection in Delaware. As described in Section 2.0, US Wind is also assessing other Onshore Export Cable Corridors and additional Points of Interconnection that would not require the use of subaqueous lands.



The Project is consistent with this policy.

5.4.22.6 The extent to which the applicant's primary purpose and objectives can be realized by alternatives, i.e. minimize the scope or extent of an activity or project and its adverse impact.

US Wind's primary objective is to provide offshore wind renewable energy generation to the regional electric grid. The Project is proposing the use of Onshore Export Cable Corridor 1 through subaqueous lands because it provides the most direct route the Point of Interconnection in Delaware. As described in Section 2.0, US Wind is also assessing other Onshore Export Cable Corridors and additional Points of Interconnection and the potential adverse impacts associated with each alternative.

The Project is consistent with this policy.

5.4.22.7 Given the inability for avoidance or alternatives, the extent to which the applicant can employ mitigation measures to offset any losses incurred by the public.

Any detriments suffered by the public would be limited to the installation and construction activities, however, these would be temporary and negligible. Detrimental impacts may include the public not being allowed to use portions of the water sheet for navigation, fishing, or fowling; temporary closures of the beach while installation of the cables occurs; or temporary impacts to wetlands, benthic habitats, and species. These impacts will be temporary, localized, and negligible. The Project's proposed mitigation measures are detailed in COP Volume II, Section 1.5.

The Project is consistent with this policy.

5.4.22.8 The extent to which the public at large would benefit from the activity or project and the extent to which it would suffer detriment.

As described above and in the COP, the Project will benefit the state of Delaware through environmental improvements and economic benefits to the region from the development of a utility scale, domestic offshore wind industry. The use of subaqueous lands will bring offshore wind energy to the Delaware electric grid and reduce the region's reliance on fossil fuels. The State and the public will benefit from US Wind utilizing these subaqueous lands. Any detriments suffered by the public would be limited to the installation and construction activities, however, these would be temporary and negligible. Detrimental impacts may include the public not being allowed to use portions of the water sheet for navigation, fishing, or fowling; temporary closures of the beach while installation of the cables occurs; or temporary impacts to wetlands, benthic habitats, and species. These impacts will be temporary, localized, and negligible.

The Project is consistent with this policy.

5.4.22.9 The extent to which the primary purpose of a project is water-dependent. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 3.01(A), amended September 2, 1992]

The Project objective is to generate and connect offshore wind energy to the onshore power grid and it is therefore water dependent.

The Project is consistent with this policy.

Delaware Policy 5.4.23: The DNREC shall consider the impact on the environment, including but not limited to, the following:

5.4.23.1 Any impairment of water quality, either temporary or permanent, which may reasonably be expected to cause violation of the State Surface Water Quality Standards. This impairment may include violation of criteria or degradation of existing uses;

See response to Delaware Policy 5.3.1.6.

The Project is consistent with this policy.

5.4.23.2 Any effect on shellfishing, finfishing, or other recreational activities and existing or designated water uses;

Activities associated with Project construction have the potential to impact commercial and recreational fisheries, though these impacts are expected to be minor and temporary. Fishing occurs both offshore in the Atlantic Ocean as well as in the Delaware Inland Bays. However, there are a number of regulations in place in the Inland Bays due to degraded water quality. There are fish consumption advisories for striped bass and bluefish, as a result of elevated concentrations of polychlorinated biphenyls and mercury.

The most important offshore fishing ground in the vicinity of the Project area, the Old Grounds, is located offshore of Delaware. Activities associated with Project construction have the potential to impact commercial and recreational fisheries, though these impacts are expected to be minor and temporary. These potential impacts are discussed below.

Habitat Alteration

Construction activities, including cable burial, temporary cofferdam installation, and contact of anchors with the seafloor, will temporarily alter shellfish habitat in the area. Benthic organisms located in the path of the jet plow, in areas of anchor chain sweep, and within cofferdam footprints, will likely experience mortality. However, these impacts will be temporary and localized, as seafloor habitats are expected to undergo rapid physical and biological recovery following disturbance. The total area impacted by these activities will be limited, commercial and recreational fisheries are not expected to be impacted.

It is expected that demersal fish will temporarily move out of the Project area during active construction and return after construction noise and sediment disturbance have stopped.

Noise and Suspended Sediment/Deposition

Exposure to elevated sound levels associated with construction activities, including vessel noise, is expected to have negligible to minor impacts on fish within the Project area. Fish are likely to respond to this activity by temporarily avoiding the area of the sound source. Similarly, Project activities, including the installation of the onshore export cables, have the potential to result in temporary and localized increases in suspended sediment concentrations. These water quality changes could impact finfish, and individuals are likely to vacate the area immediately surrounding Project activities. As avoidance behavior in response

to noise and water quality changes will be temporally limited, commercial and recreational fishing will not be impacted.

Impacts to navigation related to fisheries are not anticipated (see the Navigational Safety Risk Assessment in Appendix II-K1 of the COP).

The Project is consistent with this policy.

5.4.23.3 Any harm to aquatic or tidal vegetation, benthic organisms or other flora and fauna, and their habitats;

No seagrass beds have been documented in the Project area. The use of HDD methods proposed for the Project would minimize and avoid impacts to sensitive habitats and tidal vegetation.

Impacts to benthic organisms and habitat are similar to those discussed in response to preceding Policy 5.4.23.2 habitat alteration and suspended sediment deposition. Impacts to benthic organisms and their habitats are anticipated to be localized, temporary and minor to negligible. These will be limited to construction activities and routine maintenance or repairs.

The Project is consistent with this policy.

5.4.23.4 Any loss of natural aquatic habitat;

No new structures have been sited in aquatic habitat as part of this Project, and installation of the offshore and onshore export cables and the transition vaults are expected to have negligible habitat alteration impacts. The transition vaults will be installed and HDD operations will occur in the existing 3 R's Beach or Tower Road parking lot, which is already disturbed. Limiting ground disturbance to the parking lot also avoids impacting vegetation on or around the site since the parking lot is already a compacted surface.

The offshore and onshore export cables will be installed using HDD. The HDD operations will only disturb the ground at the bore entry and exit for each cable.

The Project is consistent with this policy.

5.4.23.5 Any impairment of air quality either temporarily or permanently, including noise, odors, and hazardous chemicals; the extent to which the proposed project may adversely impact natural surface and groundwater hydrology and sediment transport functions. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 3.01(B), amended September 2, 1992]

Activities associated with Project construction, operation, and decommissioning have the potential to affect air quality locally. Potential offshore emission sources include tugboats, crane barges, cable laying vessels, crew boats, jack-up vessels, survey vessels, supply ships and generators. Land based emissions sources may include non-road construction equipment, worker vehicles and delivery vehicles. The WTGs and OSSs will be negligible source of air emissions and will reduce shore-based emissions from existing fossil fuel power plants. Prevailing westerly (west to east flow) winds would minimize the dispersion of offshore emissions associated with the Project to onshore areas.



Mitigation measures will be implemented to ensure that air emissions from the Project during construction, operation, and decommissioning are minimized. Examples of mitigation measures include the following:

- US Wind will obtain any necessary air permits.
- Vessel engines will meet the applicable EPA and International Maritime Organization (IMO) marine engine emission standards.
- Engines will be operated and maintained in accordance with the manufacturer's recommendations and industry practices.
- Diesel fuel for use the diesel engines will meet the per gallon fuel standards of 40 CFR 80.501(b).
- Land based engines that meet the EPA non-road engine standards will be used, as applicable.
- Unnecessary idling of engines will be limited, where practicable.
- When available, engines with add-on emission controls will also be used.

As a result of these and other measures that may be identified during the permitting process, the impacts of the Project to air quality during construction, operation, and decommissioning will be minimized and the overall impact to onshore air quality is expected to be negligible.

The onshore export cables will be buried at a depth that does not impact natural surface or groundwater hydrology. A project-specific Spill Prevention Control and Countermeasure (SPCC) Plan and an Oil Spill Response Plan (OSRP) will be developed and implemented to protect surface and groundwater from potential impacts from any accidental chemical or oil releases during construction.

See the response above to Delaware Policy 5.4.23.2 for a discussion of potential Project noise and sediment/deposition impacts.

The Project is consistent with this policy.

Delaware Policy 5.4.24: The DNREC shall also consider the following to determine whether to approve the application:

5.4.24.1 The degree to which the project represents an encroachment on or otherwise interferes with public lands, waterways or surrounding private interests.

The Project could interfere with the public lands of Delaware Seashore State Park. However, impacts would be minimized by restricting construction to occur outside of the peak recreation season. Therefore, any impacts to public lands, waterways and surrounding private interests will be limited to the installation and construction activities, and these are anticipated to be negligible to minor. Up to two Project substations will be located adjacent to the Indian River Substation on a privately-owned, industrialized parcel, with alternative locations being considered. There will be air quality, traffic and noise impacts to public lands, and surrounding private interests during construction of the onshore export cables and Interconnection Facilities, however, these impacts will be intermittent, localized, and temporary.



The Project is consistent with this policy.

5.4.24.2 The degree to which the project incorporates sound engineering principles and appropriate materials of construction.

US Wind will retain qualified engineering and construction support as required by BOEM.

The Project is consistent with this policy.

5.4.24.3 The degree to which the proposed project fits in with the surrounding structures, facilities, and uses of the subaqueous lands and uplands.

Once installed along Onshore Export Cable Corridor 1, the onshore export cables and associated structures will be buried below the bay bottom. Where the onshore export cables make landfall at the Interconnection Facilities and transition to overhead, they are located within an existing industrialized parcel so the Project is consistent with surrounding uses. The onshore export cables are a water-dependent use and will have negligible impacts on surrounding subaqueous lands and uplands.

The onshore export cables associated with Onshore Export Cable Corridor Options 1a, 1b, 1c, 2, 3, or 4 will be buried within existing rights of way or rights of way currently under development. The associated Points of Interconnection would be sited and constructed near existing utility infrastructure and would be similar in appearance and use as those surrounding structures and facilities.

The Project is consistent with this policy.

5.4.24.4 Whether the proposed activity complies with the State of Delaware's Surface Water Quality Standards both during construction and during subsequent operation or maintenance.

The Project will comply with the state of Delaware's Surface Water Quality Standards both during construction and during subsequent operation or maintenance.

The Project is consistent with this policy.

5.4.24.5 The degree to which the proposed project may adversely affect shellfish beds or finfish activity in the area. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 3.01(C), amended September 2, 1992]

Activities associated with Project construction have the potential to impact shellfish beds and finfish, though these impacts are expected to be negligible to minor and temporary. These potential impacts are discussed below.

Habitat alteration

The installation of submarine cables and operation of anchored vessels during construction would alter benthic habitat in Indian River Bay and the Atlantic Ocean. Immobile and slow-moving benthos may be lost during these installations, temporarily reducing the potential food supply for demersal fish until these species recover to pre-construction population levels. Although motile organisms may be able to vacate

installation areas and avoid direct mortality, these organisms could be temporarily displaced by construction activities.

Habitat alteration would have a negligible to minor impact on finfish. The reduction in benthic food supply would be temporary and localized, and the loss of soft-bottom habitat associated with the Project would be small relative to the overall extent of benthic habitat available within and around the Project area. No seagrass beds have been documented in the Project area. Though benthic communities will experience localized mortality and habitat disturbance during construction, these impacts are expected to be temporary and spatially limited. As the areas disturbed by construction activities will constitute only a small percentage of benthic habitats in the region, organisms are expected to rapidly recolonize these locations from surrounding undisturbed habitats.

Turbidity/Suspended sediment

Suspended sediment and sedimentation would have a negligible to minor impact on finfish and Essential Fish Habitat (EFH). Turbidity levels along Onshore Export Cable Route 1 could be significantly elevated across a 116 meter (380 foot) corridor for a period of less than 24 hours during construction. While some fish may struggle to navigate during this time due to reduced visibility and alterations in water chemistry, others may benefit from the increased turbidity because it will help conceal them from predators (Wilber and Clarke 2001). Gilled fish may also experience increased respiration during periods of increased turbidity in order to maintain sufficient oxygen intake (Newcombe and Jensen 1996). As suspended sediment settles out of the water column, fish eggs could be buried, and demersal fish that feed on benthic organisms may experience difficulty finding food (USDOI and MMS 2007). However, it is expected that most fish will seek food and shelter outside of the Project area when vessel traffic and other construction noises begin, and construction will occur from late fall through winter to avoid creating impacts during the spring spawning season. Additionally, cofferdams will be placed around HDD bore holes to contain sediment at the landfalls. As suspended sediment concentrations are expected to return to background levels quickly after construction ceases, it is anticipated that the impact of increased turbidity and suspended sediment on finfish would be negligible to minor depending on the species.

As sediments within the Project area are not known to be highly contaminated, exposure of benthic organisms to harmful levels of resuspended contaminants is not expected.

In areas where deposition is highest, benthic organisms may become buried. Surface-dwelling motile organisms and actively burrowing organisms are at low risk of harm from burial, as these species will be able to vacate the affected area during disturbance or unbury themselves. However, sessile or less motile buried organisms located in the disturbed area may experience mortality or metabolic impacts due to smothering. However, these conditions are expected to be highly localized and result in negligible impacts to benthic communities.

Noise

Vessel traffic would produce ambient noise during construction. Fish are likely to avoid the source of noise and move out of the area or away from vessels. The most severe impact would be that fish may be deterred from annual migration routes, which could interfere with their feeding and reproductive success. It is

anticipated that construction noise will have a negligible to minor impact on finfish. Finfish are likely to avoid or move away from the noise source during construction activities resulting in temporary displacement.

Vessel traffic

There is a risk that construction vessels may hit aquatic organisms, potentially causing injury or death. It is anticipated that vessel traffic will have a negligible impact on finfish. Fish may differ their spatial distribution patterns in the presence of construction vessels. For example, skipjack tunas have shown attraction responses to floating objects (NMFS 2006), which may draw them toward construction vessels. However, avoidance or attraction responses to construction vessels are not expected to have a net impact on fish, either positive or negative. In the event of collision with a construction vessel, fish are unlikely to be harmed due to their small size relative to the vessel, which allows the vessel to absorb the fish's momentum with no real impact to the fish or the vessel. Project construction vessels will follow vessel speed restrictions and any other applicable national guidance for vessel strike avoidance.

Lighting

If construction activities extend before sunrise or after sunset, artificial lighting may be used. It is anticipated that such construction lighting would have a negligible impact on finfish and EFH. While it is possible that fish may alter their movement toward or away from the light (Orr, Herz, and Oakley 2013), this reaction is not well-studied, and it is not expected that this behavior would have a net impact on fish, either positive or negative. Lighting will be limited to areas of active construction, which will leave most of the Project Area unaffected at any given time.

Routine/Accidental releases

Wastes from construction vessels may be released into Indian River Bay or the Atlantic Ocean either as part of their allowed operations or during an accidental spill. Because permissible releases are relatively clean and accidental releases would be infrequent and dilute quickly in these large bodies of water, it is anticipated that routine and accidental releases will have a negligible impact on finfish.

EMF

Once the Project is operational, electric current will be continuously transmitted through the onshore export cables. This current can produce an electromagnetic field (EMF). The EMF created by the cables could interfere with naturally occurring EMF. Burying the cables will minimize the impact of the EMFs produced by the onshore export cables, and a protective shield will be installed around the cables to further reduce the effect of EMFs produced by the onshore export cables in the Project area. EMF is unlikely to impact benthic organisms in the Project area as all onshore export cables will be buried at least 2 meters (6 feet) beneath the substrate or covered in scour protection. Therefore, impacts to benthic resources from EMF from the onshore export cables are expected to be negligible.

Impacts to shellfish beds and finfish are anticipated to be negligible to minor and temporary. These impacts are associated with the installation and construction activities.

The Project is consistent with this policy.

Delaware Policy 5.4.25: The following concerns for protecting water quality shall be specifically considered by the DNREC in evaluating applications for dredging projects:

5.4.25.1 All dredging is to be conducted in a manner consistent with sound conservation and water pollution control practices. Spoil and fill areas are to be properly diked to contain the dredged material and prevent its entrance into any surface water. Specific requirements for spoils retention may be specified by the DNREC in the approval, permit or license.

5.4.25.2 All material excavated shall be transported, deposited, confined, and graded to drain within the disposal areas approved by the DNREC. Any material that is deposited elsewhere than in approved areas shall be removed by the applicant and deposited where directed at the applicant's expense and any required mitigation shall also be at the applicant's expense.

5.4.25.3 Materials excavated by hydraulic dredge shall be transported by pipeline directly to the approved disposal area. All pipelines shall be kept in good condition at all times and any leaks or breaks shall be immediately repaired.

5.4.25.4 Materials excavated and not deposited directly into an approved disposal area shall be placed in scows or other vessels and transported to either an approved enclosed basin, dumped, and then rehandled by hydraulic dredge to an approved disposal area, or to a mooring where scows or other vessels shall be unloaded by pumping directly to an approved disposal area.

5.4.25.5 When scows or other vessels are unloading without dumping, they shall have their contents pumped directly into an approved disposal area by a means sufficient to preclude any loss of material into the body of water.

5.4.25.6 In approved disposal areas, the applicant may construct any temporary structures or use any means necessary to control the dredge effluent, except borrowing from the outer slopes of existing embankments and/or hydraulic placing of perimeter embankments. For bermed disposal sites, a minimum freeboard of two (2) feet, measured vertically from the retained materials and water to the top of the adjacent

5.4.25.7 The applicant shall not obstruct drainage or tidal flushing on existent wetlands or upland areas adjacent thereto. The applicant shall leave free, clear, and unobstructed outfalls of sewers, drainage ditches, and other similar structures affected by the disposal operations. The dredged materials shall be distributed within the disposal area in a reasonably uniform manner to permit full drainage without ponding during and after fill operations.

5.4.25.8 The dredging operation must be suspended if water quality conditions deteriorate in the vicinity of dredging or spoil disposal site. Minimum water quality standards may be included as an element of the permit and shall be monitored by the applicant. Violation of these conditions shall be cause for immediate suspension of activity and notification of the DNREC. Dredging shall not be resumed until water quality conditions have improved and the DNREC has authorized the resumption. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 3.05(C), amended September 2, 1992]



Dredging associated with the Project will be limited to the temporary cofferdams at the Atlantic Ocean, Indian River Bay, and Indian River HDD locations. Material excavated will be disposed of in a manner consistent with local, state, and federal guidelines. Dredging will be conducted in a manner consistent with sound conservation and water pollution control practices.

Cable installation will utilize jet plow techniques which is not considered dredging.

The Project is consistent with this policy.

Delaware Policy 5.4.26: The following types of dredging projects are prohibited:

5.4.26.1 Dredging of biologically productive areas, such as nursery areas, shellfish beds, and submerged aquatic vegetation, if such dredging will have a significant or lasting impact on the biological productivity of the area.

5.4.26.2 Dredging of new dead-end lagoons, new basins and new channels, which have a length to width ratio greater than 3:1. This subsection shall not apply to marina projects governed by the Marina Regulations.

5.4.26.3 Dredging channels, lagoons or canals deeper than the existing controlling depth of the connecting or controlling waterway.

5.4.26.4 Dredging channels, cleaning marinas or other subaqueous areas by using propeller wash from boats. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 3.05(D), amended September 2, 1992]

Dredging is required for temporary cofferdam installation to house the HDD conduits at the landfalls. The temporary cofferdam locations will be sited to avoid sensitive habitats and resource areas. Impacts associated with this dredging, are anticipated to be minor to negligible given the small footprint of the temporary cofferdams. If approved by appropriate agencies, upon removal of the temporary cofferdams, excavated material may be returned to these locations to backfill holes. Disturbed areas are anticipated to return to pre-existing conditions over time given tidal fluctuations and water movement in the area.

The Project is consistent with this policy.

3.5 Public Lands Management

Delaware Policy 5.5.1: State public lands shall be protected to preserve the scenic, historic, scientific, prehistoric and wildlife values of such areas. [7 Del.C. Chapters 45 and 47; Delaware Executive Order 42 and 43, August 15, 1996]

Two wildlife areas are located within the Project vicinity within Indian River Bay: Piney Point and Okie Preserve. These are both part of Assawoman Wildlife Area. Okie Preserve is located on the northern side of Indian River Bay. Piney Point is located on the western end of Indian River Bay on a peninsula southeast of the Interconnection Facilities.



Potential impacts from the Project are anticipated to be temporary and negligible, limited to the construction and installation of the onshore export cables and temporary cofferdams. The cable laying vessel may be visible from wildlife areas throughout the construction period. While there are no other anticipated impacts to these wildlife areas, the impacts to wildlife, water quality, wetlands, historic and cultural areas, and coastal habitats discussed throughout this consistency statement may be applicable to these areas. Best management practices will help prevent impacts to wildlife areas. Upon completion of installation, there are no further anticipated impacts to wildlife areas as the onshore export cables will be installed below the bay bottom. The US Wind substations adjacent to the Indian River Substation will be consistent in land use and visual impacts with the surrounding uses. The US Wind substations in the vicinity of Indian River Substation may be visible from portions of Piney Point, however this is unlikely given the existing buildings and structures between Piney Point and the US Wind substations.

The 3R's Beach and Tower Road landfalls are on state public land. The landfalls will utilize HDD to pass under and avoid sensitive coastal beach and wetlands. Transition vaults for the cables are proposed to be located in an area used for parking. The vaults will be located underground and the only associated impact will be temporary disturbance during construction which will be restored. US Wind will consult with the appropriate state agency to obtain the necessary approval for the below grade structures. US Wind will coordinate with DNREC and the DE Division of Parks and Recreation to meet this policy.

The Project is consistent with this policy.

Delaware Policy 5.5.2: The integrity of State public lands shall be protected from encroachment. [7 Del.C. Chapters 45 and 47; Delaware Executive Order 42 and 43, August 15, 1996]

The Project will not encroach onto state public lands because any permanent impacts would occur below grade.

The Project is consistent with this policy.

Delaware Policy 5.5.3: All private development on public lands, except that authorized by DNREC for public use, shall be prohibited. [7 Del.C. Chapters 45 and 47; Delaware Executive Order 42 and 43, August 15, 1996]

The 3R's Beach or Tower Road landfalls are on state public land. US Wind will seek authorization from DNREC for the use of these public lands prior to construction.

The Project is consistent with this policy.

Delaware Policy 5.5.4: The public lands shall be surveyed and remain appropriately marked with the location and coordinates tied to the state plane coordinate system and recorded with the office of the recorder of deeds for the county in which the lands lies. Detailed drawings, survey work sheets and field notes, perimeter descriptions, and other pertinent property records shall be likewise recorded. [7 Del.C. Chapters 45 and 47; Delaware Executive Order 42 and 43, August 15, 1996]



The 3R's Beach or Tower Road landfalls are on state public land. These public lands will be surveyed and marked as required, and all relevant documentation will be recorded at the Sussex County Recorder of Deeds.

The Project is consistent with this policy.

Delaware Policy 5.5.5: These lands shall be managed for public recreation purposes and for the conservation and preservation of their natural resources and beauty. A management priority shall be the maintenance of public access to the beach and ocean where such access can be accommodated without serious damage to the primary resources. The Department may lease certain portions for highway and utility purposes as it deems advisable and for the public good. Management of these lands shall be consistent with the State Comprehensive Outdoor Recreation Plan (SCORP) and in accordance with sound master planning activities. [7 Del.C. Chapters 45 and 47; Delaware Executive Order 42 and 43, August 15, 1996]

The 3R's Beach or Tower Road landfalls are on state public land. Impacts to public access will be minimized by restricting construction activities to outside of peak recreation season.

The Project is consistent with this policy.

3.6 Natural Areas Management

Delaware Policy 5.6.2.1: Water quality in the Inland Bays watersheds shall be protected and improved though:

5.6.2.1.1 Reduction of point sources;

The Project does not involve the addition of point sources.

Therefore, this policy is not applicable.

5.6.2.1.2 Establishment of riparian buffers,

The Project will avoid impacts to riparian areas by the use of HDD at the landfall locations. For the US Wind substations and any expansion of Indian River Substation, an effort would be made to establish such buffers adjacent to Indian River Bay.

The Project is consistent with this statement.

5.6.2.1.3 Use of sediment and stormwater controls, and

Sediment and stormwater controls will be implemented in the upland areas for Project activities.

The Project is consistent with this policy.

5.6.2.1.4 Proper design, installation, operation, maintenance and inspection of on-site waste water treatment and disposal systems.

There are no on-site wastewater treatment systems associated with the Project.

Therefore, this policy is not applicable.

5.6.2.1.5 For the purpose of this section, the Indian River Watershed, Indian Bay Watershed, Rehoboth Bay Watershed, and Little Assawoman Bay Watershed shall be collectively known as the "Inland Bays Watersheds". [Delaware Regulations Governing The Pollution Control Strategy For The Indian River, Indian River Bay, Rehoboth Bay And Little Assawoman Bay Watersheds, effective November 11, 2008]

3.7 Flood Hazard Areas Management

All necessary local and state flood hazard permits or approvals will be obtained.

The Project is consistent with these policies.

3.8 Historic and Cultural Areas Management

Delaware Policy 5.10.1.1: In order to protect and preserve archaeological and scientific information, matters and objects which are to be found on privately owned lands in this State, excavations on privately owned lands should be discouraged, except with when said activities are conducted in cooperation with the Division of Historical and Cultural Affairs. [7 Del. C. §5315]

US Wind will consult with the Division of Historical and Cultural Affairs as part of the Project permitting process to establish procedures to ensure the protection of any archeological finds during Project construction.

The Project is consistent with this policy.

Delaware Policy 5.10.1.2: No person shall excavate, collect, deface, injure or destroy any archaeological resource or artifact, or otherwise disturb or alter an archaeological resource or artifact or its surrounding location in context, in or on lands owned or controlled by this State, except with the permission of the Governor of this State or the person duly authorized by the Governor to extend and grant such permission. Archaeological resources and artifacts shall be defined to include any remains of past human life or activity that are at least 50 years old. [7 Del. C. §5308]

If necessary, a Division of Historical and Cultural Affairs, local historian group, and/or the person duly authorized by the Governor, would be consulted prior to the commencement of this Project to ensure that no archeological resource or artifact will be harmed.

The Project is consistent with this policy.

Delaware Policy 5.10.1.4: All activities that may impact historic and cultural areas shall be coordinated, to the maximum extent possible, with the Delaware Division of Historical and Cultural Affairs. [7 Del. C. §5301; Delaware Executive Order 42, August 15, 1996]

All Project construction activities will be coordinated with the Division of Historical and Cultural Affairs.

The Project is consistent with this policy.

Delaware Policy 5.10.1.5: When unmarked burials or human skeletal remains are known or suspected in a construction area or being encountered as a result of construction or agricultural activities, said activity shall cease immediately upon discovery and the Medical Examiner or the Director of the Division of Historical and Cultural Affairs notified of the discovery. [7 Del. C. §5403(b)]

Project construction activities will cease immediately should unmarked burials or human skeletal remains be encountered and the Medical Examiner or the Director of the Division of Historical and Cultural Affairs will be notified of the discovery.

The Project is consistent with this policy.

3.9 Living Resources

Delaware Policy 5.11.1.1: No activity shall have an adverse environmental effect on living resources and shall include consideration of the effect of site preparation and the proposed activity on the following wetland values:

5.11.1.1.1 Value of tidal ebb and flow

5.11.1.1.1.1 Production Value: carving organic matter to adjacent estuaries and coastal waters which serve as breeding areas for certain animal species (especially fish and shellfish).

The onshore export cables will be located below the bay bottom. Once installed they will not impact tidal fluctuations within the Atlantic Ocean or Indian River Bay. Suspended sediment, habitat alteration, and water quality in the water column during installation has been discussed in previous sections. Installation activities associated with onshore export cable placement and temporary cofferdam installation and removal may have negligible to minor impacts on adjacent estuaries and coastal waters which serve as breeding areas for animal species (especially fish and shellfish).

The Project is consistent with this policy.

5.11.1.1.1.2 Value as a natural protective system of absorption of storm wave energy, flood waters, and heavy rainfall, thereby decreasing flood and erosion damage.

The onshore export cables and associated structures will be located below the bay bottom or underground. Wetlands and vegetation along the coastal areas of the Atlantic Ocean and Indian River Bay will be crossed under using HDD installation methods to minimize impacts to these natural protective systems. Therefore, upon installation, the Project is not anticipated to impact the value of areas as a natural protective system of absorption of storm wave energy, flood waters, and heavy rainfall.

The Project is consistent with this policy.

5.11.1.1.1.3 The prevention of silting in certain harbors and inlets thereby reducing dredging.

US Wind will consult with DNREC to ensure that the Project is sited to not reduce any required dredging.



The Project is consistent with this policy.

5.11.1.1.1.4 Removal and recycling of inorganic nutrients.

The Project does not involve the removal and recycling of inorganic nutrients.

Therefore, this policy is not applicable.

5.11.1.1.1.5 Effect on the estuarine waters.

Onshore Export Cable Corridor 1 traverses Indian River Bay and estuarine portions of the Indian River. Although there will be temporary impacts on water quality in the estuarine portion of the Indian River as a result of temporary sediment disturbances during onshore export cable installation, those temporary impacts will be minimized by using low impact cable installation techniques, such as jet plowing, wherever feasible. The installation of the onshore export cables in the estuarine portions of the Indian River will have no permanent impacts to water quality.

The Project is consistent with this policy.

5.11.1.1.2 Habitat Value

The Project has been sited and designed to minimize permanent impacts to habitat value in the Project area. The use of HDD technology and installing the transition vaults in existing parking areas will avoid impacts to habitat at the 3R's Beach and Tower Road landfall locations, as well as using HDD at the Indian River POI. The use of jet plow installation technology and other low impact cable installation techniques wherever feasible will limit temporary disturbance to benthic habitats in Indian River Bay. The Onshore Export Cable Corridors will utilize previously disturbed areas, such as developed parcels and existing rights-of-way and planned rights-of-way, to minimize impacts to habitat value. Any tree clearing activities associated with the construction of the Interconnection Facilities will be restricted between June 1 and July 31 to minimize impacts to the northern long-eared bat during the summer maternity period.

The Project is consistent with this policy.

5.11.1.1.2.1 Habitat for resident species of wildlife including furbearers, invertebrates, finfish.

The Project will utilize previously disturbed areas, such as developed parcels and existing rights-of-way and planned rights-of-way to minimize Project impacts to habitat for resident species of furbearers. The use of HDD, jet plow, and other similar low-impact cable construction techniques will minimize any potential Project impacts to benthic and other marine species. The Project will identify and avoid any sensitive marine habitats in the Project area and minimize construction activities in areas containing anadromous fish during migration periods.

The Project is consistent with this policy.

5.11.1.1.2.2 Habitat for migratory wildlife species including waterfowl, wading birds, shorebirds, passerines, finfish, shrimp.

The Project has been sited and designed to minimize permanent impacts to migratory wildlife species. The use of HDD technology and installing the transition vaults in existing parking areas will avoid impacts to habitat at the 3R's Beach and Tower Road landfall locations, as well as using HDD at the Indian River POI. Construction activities will be scheduled to avoid impacting sensitive coastal habitats. Construction will not occur within 100 m of hummocks in Indian River Bay from Mays 1st through August 1st. The use of HDD, jet plow, and other similar low-impact cable construction techniques will minimize any potential Project impacts to benthic and other marine species. The Project will identify and avoid any sensitive marine habitats in the Project area and minimize construction activities in areas containing anadromous fish during migration periods.

The Project is consistent with this policy.

5.11.1.1.2.3 Rearing area, nesting area, breeding grounds for various species.

The Project has been sited and designed to minimize permanent impacts to rearing area, nesting areas, and breeding grounds for various species in the Project area. The use of HDD technology and installing the transition vaults in existing parking areas will avoid impacts to such areas at the 3R's Beach and Tower Road landfall locations, as well as using HDD at the Indian River POI. The use of jet plow installation technology and other low impact cable installation techniques wherever feasible will limit temporary disturbance to such areas in Indian River Bay. The Onshore Export Cable Corridors will utilize previously disturbed areas, such as developed parcels and existing rights-of-way and planned rights-of-way, to minimize impacts to such areas. Any tree clearing activities associated with the construction of the Interconnection Facilities will be restricted between June 1 and July 31 to minimize impacts to the northern long-eared bat during the summer maternity period.

The Project is consistent with this policy.

5.11.1.1.2.4 Habitat for rare or endangered plants.

Two species of rare or endangered plants may be affected by the Project. The threatened seabeach amaranth (*Amaranthus pumilus*) is highly sensitive to habitat alteration and fragmentation, but because all known populations occurred on private lands at the time of listing, critical habitat has not been designated for this species (USDOI and USFWS 1993). Beach maintenance activities, including grooming and shoreline stabilization, threaten the continued existence of beach amaranth. Erosion, flooding, herbivory, competition, and all-terrain vehicle use during the plant's flowering and fruiting also stress beach amaranth populations.

The evergreen bayberry (*Morella caroliniensis*) is listed as endangered by the state of Maryland. It is a shrub or small tree found in coastal habitats, such as dunes and wetlands.

Installation activities at the landfalls have potential to impact these species, however, the use of HDD technology minimizes the potential impact. The transition vaults will be installed and HDD operations will occur in the existing 3 R's Beach and Tower Road parking lot, which is already disturbed. Limiting ground disturbance to the parking lot also avoids impacting to dunes and the beach. Therefore, impacts to rare or endangered plants will be negligible.

The Project is consistent with this policy.

5.11.1.1.2.5 Presence of plants or animals known to be rare generally, or unique to the particular location.

Species that are classified as threatened or endangered under the federal Endangered Species Act (ESA) and species on the Delaware Endangered Species List that may be found in the Project area include the bald eagle, piping plover, rufa red knot, eastern black rail, and the northern long-eared bat.

The responses to 5.11.1.1.2.1 through 5.11.1.1.2.4 details the mitigation measures being proposed for the Project to minimize impacts to plants and animals, including plants and animals known to be threatened or endangered.

The Project is consistent with this policy.

5.11.1.1.2.6 Presence of plants or animals near the limits of their territorial range.

There are no known plants or animal within the Project area near the limits of their territorial range.

This policy is not applicable.

5.11.1.1.2.7 Presence of unique geologic or wetland features [7 Del. Admin. Code 7502 §12.2]

There are no known unique geologic features along the export cable route in Delaware waters or near the Interconnection Facilities. Wetland features and potential impacts are described in response to Policy 5.1.

The Project is consistent with this policy.

Delaware Policy 5.11.2.1: All forms of protected wildlife shall be managed and protected from negative impacts. [7 Del. C. §102(a)]

Species that are classified as threatened or endangered under the federal Endangered Species Act (ESA) and species on the Delaware Endangered Species List that may be found in the Project area include the bald eagle, piping plover, rufa red knot, eastern black rail, and the northern long-eared bat.

The responses to 5.11.1.1.2.1 through 5.11.1.1.2.4 details the mitigation measures being proposed for the Project to minimize impacts to plants and animals, including plants and animals known to be threatened or endangered.

The Project is consistent with this policy.

Delaware Policy 5.11.2.2: State shellfish resources shall be protected from further impairment and improved when possible [7 Del. C. §1902 (a)(1)(2)(5)]

Measures are in place to protect shellfish resources from the temporary impacts associated with this project. Cable laying vessels will avoid anchoring on sensitive seafloor habitats. Where impacts are unavoidable, pre- and post-construction monitoring may be conducted.



The Project is consistent with this policy.

Delaware Policy 5.11.3.1: "Nongame" is that fauna, including rare and endangered species, which are not commonly trapped, killed, captured or consumed, either for sport or profit. [7 Del. C. §202(a)]

It is not anticipated that any nongame fauna will be harmed during the construction of the Project.

The Project is consistent with this policy.

Delaware Policy 5.11.3.2: Rare and endangered species are in need of active, protective management to preserve and enhance such species. The diversity and abundance of the native flora and fauna of Delaware, particularly those deemed rare or endangered, shall be preserved and enhanced through the protection of the habitat, natural areas, and areas of unusual scientific significance or having unusual importance to their survival. [7 Del. C. §201(1)(2)]

Five coastal species that are classified as threatened or endangered under the federal Endangered Species Act (ESA) may be found in the Project area. These include four bird species and one plant species, the threatened seabeach amaranth. Piping plover and rufa red knot are migratory shorebirds that are also protected in the United States by the Migratory Bird Treaty Act. These are discussed in more detail in response to Policies 5.11.1.1.2.4 and 5.11.1.1.2.5 above.

Based on correspondence and consultation with the USFWS, NMFS, and DNREC Division of Fish and Wildlife, no federally listed or candidate species have been identified in the vicinity of the Interconnection Facilities. However, measures are in place to project wildlife from the negative temporary impacts.

For in-water work, US Wind will follow BOEM guidelines for impact avoidance and minimization, including, but not limited to: vessel strike avoidance, protected species observers, and ramp-up and shut-down procedures with respect to marine mammals and sea turtles.

The Project will avoid habitat, natural areas, and areas of unusual scientific significant or having unusual importance to the survival of rare or endangered flora and fauna. The Project has been sited and designed such that it avoids and minimizes impacts to sensitive habitats and resource areas.

The Project is consistent with this policy.

Delaware Policy 5.11.4.1: Actions which may interfere with or otherwise adversely affect fish and wildlife in Delaware shall be implemented only after careful consultation with DNREC and exploration of alternatives less damaging to such fish and wildlife.

The installation methods chosen have been proven to be the least environmentally damaging. HDD technology at the landfalls will minimize impacts to coastal habitats and jet plow installation of submarine cables will minimize impacts to benthic habitats and species. HDD and jet plow installation methodologies have been used on many submarine cable projects throughout the east coast. These technologies are proven to minimize or avoid impacts to fish and wildlife as well as their habitats.



HDD installation allows cables to be pulled through entry/exit holes and cross under sensitive habitat, such as coastal areas or wetlands. Jet plow technology limits the spatial extent of impacts (i.e. suspended sediments during jetting) and duration of impacts.

US Wind will consult with DNREC on proposed installation methodologies to further minimize or avoid damage to fish and wildlife.

The Project is consistent with this policy.

3.10 State Owned Coastal Recreation and Conservation

Delaware Policy 5.13.1: State owned lands whose natural condition or present state of use would maintain important recreational areas and wildlife habitat, or would maintain or enhance the conservation of natural, cultural or historic resources shall be managed, preserved, and protected, for conservation and recreational use. [7 Del. C. §§7301, 7504(6), 5305; 7 Del. C. Ch 45]

The Project has been sited and designed to avoid impacts to state owned lands that maintain important recreational areas and wildlife habitats, and maintain or enhance the conservation of natural, cultural and historical resources, as described throughout in the previous responses in this document and in Volume II of the COP.

The Project is consistent with this policy.

3.11 Public Trust Doctrine

Delaware Policy 5.14.1: The public have a right of navigation and fishery on all streams where the tide ebbs and flows, even though the riparian proprietor's lines cover the place; but they have no right to land fish on private property, above the high water marks. [Bickel v. Polk, Delaware Supr. 5 Harr. 325 (1851)]

The Project involves installation of HDD conduits, temporary cofferdams, and Export Cable below the high water mark within Delaware state waters (Indian River, Indian River Bay and the Atlantic Ocean). Installation activities may temporarily affect public access within the immediate construction area for fishing and navigation. For safety purposes, there may be temporary closures of portions of the 3R's Beach or Tower Road during installation that inhibit the public's ability to freely access this area. These activities will be coordinated with local and state authorities. Fishing and navigation may be temporarily displaced within the immediate vicinity of the cable laying barges during installation activities. However, given the small area of construction activities relative to this portion of the Delaware coast, these impacts during installation are anticipated to be temporary and minor.

Once the onshore export cables are installed, the Project will not affect the public's right to navigate or fish within Indian River, Indian River Bay or the Atlantic Ocean as the onshore export cable will be buried below the bay bottom or seabed. In the event of routine maintenance activities or repairs, there may be temporary, localized impacts to navigation and fishing. These impacts would be on a smaller scale than installation activity impacts and as mentioned above, given the small area affected during maintenance or repair, the impacts would be negligible to navigation and fishing.

The Project is consistent with this policy.



Delaware Policy 5.14.2: Unless otherwise proven, the Public Trust Doctrine is applicable to those properties between the high and low water marks. [Bickel v. Polk, Delaware Supr. 5 Harr. 325 (1851); 7 DE Admin Code 7504 subsection 2.2.2.3]

See response to Policy 5.14.1. Activities that inhibit the public's right to access, navigate, or fish on waters between the high and low water marks will be limited to construction and installation activities. Construction activities will be restricted to periods of low recreational activity, to the extent practicable. Therefore, impacts are anticipated to be temporary and localized. Operation of the onshore export cables is not anticipated to impact the public's rights of access, navigation, or fishing.

The Project is consistent with this policy.

3.12 Energy Facilities

Delaware Policy 5.15.2.1: The CMP supports OCS development of alternate energy facilities due to the compelling national interest provided such activities do not result in the degradation of Delaware's natural resources.

This Project involves development on the OCS of an alternative energy facility. The Project has been sited and designed to minimize and avoid impacts to natural resources of the state. The Project is intended to improve and reduce the region's reliance on fossil fuels. The Project is anticipated to have negligible impacts on surrounding land and water resources and will not degrade Delaware's natural resources. Actions will be taken to avoid and minimize harm to the surrounding environment.

The Project is consistent with this policy.

3.13 Air Quality Management

Delaware Policy 5.20.1: In view of the rapid growth of population, agriculture, industry and other economic activities, the air resources of the State must be protected, conserved and controlled to assure their reasonable and beneficial use in the interest of the people of the State. [7 Del. C. Ch 60]

See response to Delaware Policy 5.4.23.5.

The Project is consistent with this policy.

3.14 Waste Disposal Management

Any waste material generated during the construction or operation of the Project would be managed in accordance with applicable regulation or other requirements. A waste management plan will be developed and any waste will be minimized to the extent practicable, recycled where appropriate or properly disposed of.

The Project is consistent with this policy.

3.15 Development

Delaware Policy 5.23.1.3: Relating to Industry and Industrial Land Use:



5.23.1.3.1 Use of existing unused industrial sites and buildings should be encouraged wherever they can be adapted to today's industrial needs.

The Project is not proposing to use any unused industrial sites or unused industrial buildings.

This policy is not applicable to the Project.

5.23.1.3.2 Delaware should encourage the introduction of new industries that optimize the State's resources and the special skills and needs of Delaware residents.

Offshore wind is a new industry to the state of Delaware and should be encouraged by Delaware.

The Project is consistent with this policy.

5.23.1.3.3 Delaware should encourage development of industrial areas that are located so that services can be provided economically, mass transportation can serve the needs of the workers, and the industries will draw on and support existing rail lines, ports, and air terminals.

The Project does not include development of an industrial area.

This policy is not applicable to the Project.

5.23.1.3.4 Delaware should assume regulatory control over any future sites or rights-of-way for marine terminals, bulk transfer facilities, or utilities including pipelines.

This policy is not applicable to the Project.

5.23.1.3.5 Delaware and its local governments should establish standards and criteria for industrial location including optimum size, utility availability, accessibility, and the overall impact on local communities, such standards to be met prior to rezoning for industry. The State shall not promote a site for industrial purposes when utilization for that purpose is contrary to the land use plan in the area.

The Project will site the US Wind substations on parcels zoned for their purpose.

The Project is consistent with this policy.

3.16 Pollution Prevention

Delaware Policy 5.24.1.1: Whenever possible, the generation of waste should be reduced or eliminated as expeditiously as possible, and that waste that is generated should be recovered, reused, recycled, treated or disposed of in a manner that minimizes any present or future threats to human health or the environment. [7 Del.C. §7802(a)(1)]

The Project is not anticipated to generate large amounts of waste during construction. During installation of cables and construction of the Interconnection Facilities, US Wind and its contractors will reduce or eliminate waste as expeditiously as possible. Waste will be recovered, reused, recycled, treated, or



disposed of in a manner consistent with Delaware's policies. US Wind will develop a materials management plan consistent with Delaware's policies.

The Project is consistent with this policy.

Delaware Policy 5.24.2.2: Industries are encouraged to utilize the DNREC Pollution Prevention Program's services, including non-regulatory technical assistance and information, to ensure that the potential for degradation of the quality of air, land, and water is minimal.

US Wind will utilize the DNREC Pollution Prevention Program's services as appropriate.

The Project is consistent with this policy.

3.17 Coastal Management Coordination

Delaware Policy 5.25.1: State agencies shall provide an opportunity for one another, federal agencies, and other interested parties to review and comment on proposed actions which may be of more than local interest. [Delaware Executive Order No. 42, August 15, 1996]

All relevant and interested parties will have the opportunity to comment on the proposed actions during the Project permitting process. In particular, the Project will undergo review under the National Environmental Policy Act (NEPA), which has specific processes for state and federal agencies and other interested parties to review and comment on the Project.

The Project is consistent with this policy.

Delaware Policy 5.25.2: State agencies responsible for implementation of the CMP shall coordinate their CMP implementation responsibilities with each other to the extent necessary to assure well informed and reasoned program decisions. [Delaware Executive Order No. 42, August 15, 1996]

All relevant state agencies will be notified of the Project and will have an opportunity to review and comment on the Project through the NEPA process. Therefore, the implementation of the CMP will be coordinated effectively and, thus, well-informed and reasoned program decisions will be made.

The Project is consistent with this policy.

4.0 STATEMENT OF CONSISTENCY

US Wind has determined that the proposed Project complies with Delaware's approved coastal management program and will be conducted in a manner consistent with such program.

5.0 REFERENCES

- Baker, A., P. Gonzalez, R.I.G. Morrison, and B.A. Harrington. 2013. Red Knot (*Calidris canutus*). edited by Edited by A. F. Poole. Cornell Lab of Ornithology.
- Bays, Delaware Center for Inland. 2016. State of the Delaware Inland Bays.
- Bays, Delaware Center for the Inland. 2013. Inshore Fish and Blue Crab Survey of Rehoboth Bay, Indian River Bay and Little Assawoman Bay for 2012. edited by R.J. Kernehan, C.L. Lambertson, M.C. Master, D.C. Peck, R.W. Miller and D.H. Bartow.
- Cornell University. 2016. "All About Birds." <https://www.allaboutbirds.org/>.
- Cornell University. 2017. Red Knot. Cornell Lab of Ornithology.
- DCIB, Delaware Center for Inland Bays. 2016. State of the Delaware Inland Bays.
- DCIB, Delaware Center for the Inland Bays. 2017. "Habitats in the Watershed." accessed 3 January, 2019. <http://www.inlandbays.org/about-the-bays/habitats/>.
- DCIB, Delaware Center for the Inland Bays. 2018. "New Rehoboth Outfall Means Healthier Inland Bays!". <https://www.inlandbays.org/new-rehoboth-outfall-means-healthier-inland-bays>.
- Delaware Division of Fish and Wildlife. 2006. "Delaware Wildlife Action Plan." <https://www.sciencebase.gov/catalog/item/5787cb60e4b0d27deb3754c6>.
- Delaware Division of Fish and Wildlife. 2015. "The Delaware Wildlife Action Plan 2015-2025." <https://dnrec.alpha.delaware.gov/fish-wildlife/conservation/wildlife-action-plan/>
- Delaware River Basin Commission. 2018. "Bald Eagles." accessed 8 April, 2019. <https://www.state.nj.us/drbc/edweb/bald-eagle.html>.
- DNREC, Delaware Department of Natural Resources and Environmental Control. 1998. Total Maximum Daily Load (TMDL) Analysis for Indian River, Indian River Bay, and Rehoboth Bay, Delaware.
- DNREC, Delaware Department of Natural Resources and Environmental Control. 2013. "Delaware's Endangered Species." accessed February 2016. www.dnrec.delaware.gov/fw/NHESP/information/Pages/Endangered.aspx.
- DNREC, Delaware Department of Natural Resources and Environmental Control. 2015. The Delaware Wildlife Action Plan 2015-2025.
- DNREC, Delaware Department of Natural Resources and Environmental Control. 2017a. 2017 Delaware Fishing Guide.
- DNREC, State of Delaware Department of Natural Resources and Environmental Control Division of Fish and Wildlife. 2017b. "ESS 2017 Maryland Offshore Wind Energy Project."
- Dove, L.E., R.M. Nyman, and editors. 1995. Living Resources of the Delaware Estuary. The Delaware Estuary Program.
- Elliot-Smith, E., and S.M. Haig. 2004. Piping plover (*Charadrius melodus*). In *The Birds of North America Online*. Ithaca, NY: Cornell Lab of Ornithology.
- Elliott, J., K. Smith, D.R. Gallien, and A. Khan. 2017. Observing Cable Laying and Particle Settlement During the Construction of the Block Island Wind Farm. Final Report to the U.S. Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs.
- Ewart, J. W. 2013. Shellfish Aquaculture in Delaware's Inland Bays: Status, Opportunities, and Constraints. Lewes, DE: Delaware Sea Grant Program, College of earth, Ocean and Environment (CEOE), University of Delaware.
- MDNR, Maryland Wildlife and Heritage Service. 2016. List of Rare, Threatened, and Endangered Animals of Maryland. Annapolis, MD: Maryland Department of Natural Resources.
- NAS, National Audubon Society. 1996. Guide to North American Birds. National Audubon Society.
- Newcombe, C.P., and J.O.T. Jensen. 1996. "Channel Suspended Sediment and Fisheries: A Synthesis for Quantitative Assessment of Risk and Impact." *North American Journal of Fisheries Management* 16 (4):693-727.
- Niles, L.J., J. Burger, R.R. Porter, A.D. Dey, C.D.T. Minton, P.M. Gonzalez, A.J. Baker, J.W. Fox, and C. Gordon. 2010. "First results using light level geolocators to track Red Knots in the Western Hemisphere show rapid and long intercontinental flights and new details of migration pathways." *Wader Study Group Bulletin* 117 (2):123-130.



- NMFS. 2006. Final Consolidated Atlantic Highly Migratory Species Fishery Management Plan. Silver Spring, MD.
- NMFS, National Marine Fisheries Service. 2019a. "Personal communication from the National Marine Fisheries Service, Commercial Fisheries Statistics." February 20, 2019.
- NMFS, National Marine Fisheries Service. 2019b. "Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division." February 20, 2019.
- Normandeau Associates Inc. 2011. Effects of EMFs from Undersea Power Cables on Elasmobranchs and Other Marine Species. In *OCS Study BOEMRE 2011-09*, edited by T. Tricas and A. Gill. Camarillo, CA: U.S. Department of the Interior, Bureau of Ocean Energy Management, Regulation, and Enforcement, Pacific OCS Region.
- Orr, T., S. Herz, and D. Oakley. 2013. Evaluation of lighting schemes for offshore wind facilities and impacts to local environments. edited by Bureau of Ocean Energy Management U.S. Department of the Interior, Office of Renewable Energy Programs. Herndon, VA.
- Peikes, K. 2018. Rehoboth Ocean Outfall: Past, Present and Future. Delaware Public Media: Dover, DE.
- Ridgely, R.S., T.F. Allnutt, T. Brooks, D.K. McNicol, T.W. Mehlman, B.E. Young, and J.R. Zook. 2003. Digital Distribution Maps of the Birds of the Western Hemisphere. In *Digital Distribution Maps of the Birds of the Western Hemisphere*. Arlington, VA: NatureServe.
- Sibley, D. A. 2014. *The Sibley Guide to Birds, 2nd Edition*: Knopf Doubleday Publishing Group.
- USDOI, U.S. Department of the Interior, and Minerals Management Service MMS. 2007. Programmatic environmental impact statement for alternative energy development and production and alternate use of facilities on the outer continental shelf final environmental impact statement.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 1993. "Endangered and Threatened Wildlife and Plants; *Amaranthus pumilus* (Seabeach amaranth) Determined to be Threatened." *Federal Register* 58 (65).
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 1996. Piping plover (*Charadrius melodus*) Atlantic Coast population. Revised recovery plan. Hadley, MA.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2001. Endangered and threatened wildlife and plants; Final determination of critical habitat for wintering piping plovers. 66 FR 132. edited by United States Department of the Interior and United States Fish and Wildlife Service.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2003. Delaware Bay shorebird- horseshoe crab assessment report and peer review. Arlington, VA.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2008. Endangered and threatened wildlife and plants; revised designation of critical habitat for the wintering population of the piping plover (*Charadrius melodus*) in North Carolina. 73 FR 204. edited by United States Department of the Interior and United States Department of Fish and Wildlife Service.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2009a. Endangered and threatened wildlife and plants; revised designation of critical habitat for the wintering population of the piping plover (*Charadrius melodus*) in Texas. 74 FR 95. edited by United States Department of the Interior and United States Department of Fish and Wildlife Service.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2009b. Piping plover (*Charadrius melodus*) 5-year review: Summary and evaluation. edited by (MA) Northeast Region (Hadley, Midwest Region (East Lansing, MI).
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2012. 2011 Atlantic coast piping plover abundance and productivity estimates.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2013. Rufa red knot (*Calidris canutus rufa*). Factsheet, Hadley, MA: Northeast Region.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2014. Rufa Red Knot Background Information and Threats Assessment. Pleasantville, NJ: Northeast Region.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2015. Species profile: Piping plover (*Charadrius melodus*).

- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2016. United States Endangered Species Act Listing Status. In *U.S. Fish & Wildlife Service*.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2018a. "National Wetlands Inventory Online Data Mapper." accessed 3 January, 2019. <https://www.fws.gov/wetlands/data/Mapper.html>.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2018b. "Seabeach Amaranth (*Amaranthus pumilus*)." accessed 10 January 2019. <https://www.fws.gov/northeast/njfieldoffice/Endangered/amaranth.html>.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2018c. Seabeach amaranth (*Amaranthus pumilus*) 5-Year Review: Summary and Evaluation. Raleigh, NC: Southeast Region, Raleigh Ecological Services Field Office.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2019. "Bald Eagle." accessed 8 April, 2019. <https://www.fws.gov/Midwest/eagle/index.html>.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. "Species Status Assessment Report for the Eastern Black Rail (*Laterallus jamaicensis jamaicensis*)," Version 1.3. Southeast Region, Atlanta, GA.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2021. "Endangered and Threatened Wildlife and Plants; Threatened Species Status for Eastern Black Rail With a Section 4(d) Rule. 50 CFR Part 17. October 8, 2020.
- USDOI, U.S. Department of the Interior, and U.S. Fish and Wildlife Service USFWS. 2021. "Monarch Butterfly: Status and Conservation." Last updated July 19, 2021. Accessed September 2, 2021. <https://www.fws.gov/savethemonarch/>
- USEPA, U.S. Environmental Protection Agency. 2019. "EPA Green Book." <https://www.epa.gov/green-book>.
- Watts, B. D., "Status and distribution of the eastern black rail along the Atlantic and Gulf Coasts of North America" (2016). CCB Technical Reports. 315. https://scholarworks.wm.edu/ccb_reports/315
- Wilber, D.H., and D.G. Clarke. 2001. "Biological Effects of Suspended Sediments: A Review of Suspended Sediment Impacts on Fish and Shellfish with Relation to Dredging Activities in Estuaries." *North American Journal of Fisheries Management* (21):855-875.
- Williams, K.A., E.E. Connelly, S.M. Johnson, and I.J. Stenhouse, eds. 2015a. Baseline Wildlife Studies in Atlantic Waters Offshore of Maryland: Final Report to the Maryland Department of Natural Resources and the Maryland Energy Administration. Portland, ME: Biodiversity Research Institute.
- Williams, K.A., E.E. Connelly, S.M. Johnson, and I.J. Stenhouse, eds. 2015b. Wildlife Densities and Habitat Use Across Temporal and Spatial Scale on the Mid-Atlantic Outer Continental Shelf. Portland, ME: Biodiversity Research Institute.

