

Empire Offshore Wind LLC

Empire Wind 1 Project
Article VII Application

Appendix C
Coastal Zone Management Consistency Statement

June 2021

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FIGURES

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ACRONYMS

ac	acres
ConEdison	Consolidated Edison Company of New York, Inc.
CZMA	Coastal Zone Management Act
EM&CP	Environmental Management & Construction Plan
EPA	U.S. Environmental Protection Agency
Empire	Empire Offshore Wind LLC
EW 1	Empire Wind 1
ft	feet
GW	gigawatts
ha	hectares
HDD	horizontal directional drilling
HVAC	high-voltage alternating-current
km	kilometers
Lease Area	Renewable Energy Lease Area OCS-A 0512
LNM	Local Notice to Mariners
m	meter
mi	miles
MW	megawatt
nm	nautical miles
NRHP	National Register of Historic Places
NYC WRP	New York City Waterfront Revitalization Program
NYISO	New York Independent System Operator, Inc.
NYSDEC	New York State Department of Environmental Conservation
NYSERDA	New York State Energy Research and Development Authority
OSRP	Oil Spill Response Plan
POI	Point of Interconnection
ROW	right-of-way
SBMT	South Brooklyn Marine Terminal
SMIA	Significant Maritime and Industrial Area
SPCC	Spill Prevention, Control, and Countermeasures
SPDES	State Pollutant Discharge Elimination System
SWPPP	Stormwater Pollution Prevention Plan
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard

C.1 INTRODUCTION

Empire Offshore Wind LLC (Empire) proposes to construct and operate the Empire Wind 1 (EW 1) Project located in the designated Renewable Energy Lease Area OCS-A 0512 (Lease Area). The Lease Area covers approximately 79,350 acres (ac) (32,112 hectares [ha]) and is located approximately 14 statute miles (mi) (12 nautical miles [nm], 22 kilometers [km]) south of Long Island, New York and 19.5 mi (16.9 nm, 31.4 km) east of Long Branch, New Jersey. This federal consistency certification demonstrates that the proposed EW 1 Project development is fully consistent with the enforceable policies of the coastal management program (management program) of the State of New York, inclusive of the New York City Waterfront Revitalization Program (NYC WRP). Enforceable policies are defined under the Coastal Zone Management Act (CZMA) as “state policies which are legally binding through constitutional provisions, laws, regulations, land-use plans, ordinances, or judicial or administrative decisions, by which a State exerts control over private and public land and water uses and natural resources in the coastal zone” under (15 Code of Federal Regulations § 930.11(h)). The EW 1 Project will require federal permits and approvals by federal agencies and, as such, these federal actions are subject to consistency review pursuant to the CZMA. This consistency certification is included as Appendix C to the New York State Article VII Application.

As described in detail herein, the proposed activity complies with the enforceable policies of the New York approved management program and will be conducted in a manner consistent with such program. This consistency certification is provided pursuant to the requirements of 15 Code of Federal Regulations § 930.57 (the CZMA federal consistency provision).

A description of how the EW 1 Project will be fully consistent with each applicable enforceable policy is provided in Sections C.3 and C.4.

C.2 PROJECT DESCRIPTION

Empire proposes to construct and operate the EW 1 Project as one of two separate offshore wind projects to be located within the Lease Area. The proposed transmission system for the EW 1 Project will connect the offshore wind farm to the point of interconnection (POI). The EW 1 Project will interconnect to the New York State Transmission System operated by the New York Independent System Operator, Inc. (NYISO) at the Gowanus 345-kV Substation (the point of interconnection, or POI). The Gowanus 345-kV Substation is owned by the Consolidated Edison Company of New York, Inc. (ConEdison). The EW 1 Project’s onshore facilities, including the onshore cable route, onshore substation, and the POI, are located entirely within Brooklyn, Kings County, New York. The EW 1 Project Area is shown on **Figure C-1**.

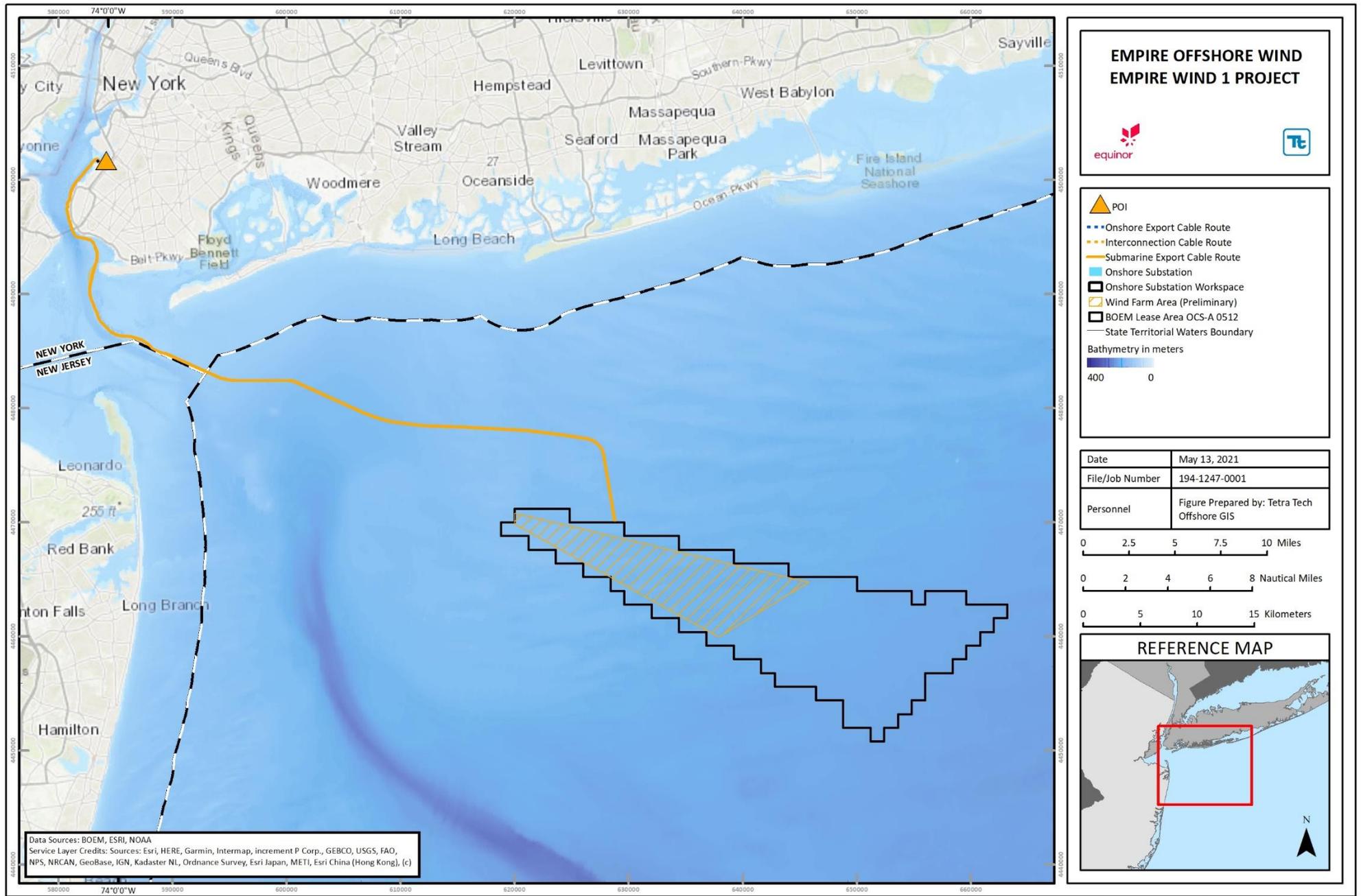


Figure C-1 Project Area

The components of the EW 1 Project assessed in the Article VII application (Project) include:

- Two three-core 230-kV high-voltage alternating-current (HVAC) submarine export cables located within an approximately 15.1-nm (27.9-km)-long, submarine export cable corridor from the boundary of New York State waters 3 nm (5.6 km) offshore to the cable landfall in Brooklyn, New York;
- A 0.2-mi (0.3-km)-long onshore cable route and substation including:
 - Two three-core 230-kV HVAC EW 1 onshore export cables buried underground from the cable landfall either directly to the cable terminations or to a vault within the onshore substation;
 - An onshore substation located at the South Brooklyn Marine Terminal (SBMT), which will increase the voltage to 345 kV for the onshore interconnection cables; and
 - Two 345-kV cable circuits, each with three single-core HVAC onshore interconnection cables, buried underground from the onshore substation to the POI.

Within this consistency statement, the transmission facilities are defined to include the submarine export cables, the EW 1 onshore export cables between the landfall and the new onshore substation, the onshore substation, and the interconnection cables between the new onshore substation and the POI substation. When the consistency review requires analysis of individual segments, they will be called out separately, but otherwise, “transmission facilities” refers to all segments. “Onshore cables” refers to EW 1 onshore export cables and interconnection cables. For the purposes of this Application, “EW 1 Project” is used to refer to the offshore wind farm and transmission facilities together, inclusive of components in federal waters outside of New York State. “Project” is used to refer specifically to the Article VII transmission facilities in New York State that are the subject of this Application.

The purpose of the Project is to meet the Applicant’s obligation to the New York State Energy Research and Development Authority (NYSERDA) to generate approximately 816 megawatts (MW) of clean, renewable electricity from an offshore wind farm located in Lease OCS-A 0512 for delivery into the New York State power grid via ConEdison’s existing Gowanus 345-kV Substation. The Project addresses the need identified by New York for renewable energy and will help the State of New York Public Service Commission achieve their renewable energy goals.

In August 2016, the State of New York Public Service Commission adopted the Clean Energy Standard.¹ Under this standard, 50 percent of New York State’s electricity must come from renewable sources of energy by 2030, with 2.4 gigawatts (GW) of electricity generated by offshore wind. In January 2019, Governor Cuomo proposed a plan that will require 70 percent of New York’s electricity to come from renewable sources by 2030 and 100 percent renewable by 2040. As part of this plan, 9 GW of electricity must come from offshore wind by 2035. In July 2019, Governor Cuomo signed the Climate Leadership and Community Project Act, which adopts a comprehensive climate and clean energy legislation and advances his mandate of 9 GW of offshore energy by 2035. On November 8, 2018, NYSERDA issued its first competitive solicitation for 800 MW or more of new offshore wind projects. On July 18, 2019, New York’s Governor Cuomo announced Empire and its 816 MW EW 1 Project as a winning bidder in the State’s competitive solicitation for Offshore Wind Renewable Energy Certificates.

¹ Case 15-E-0302 & Case 16-E-0270, (NYSERDA n.d.)

C.3 NEW YORK STATE COASTAL MANAGEMENT PROGRAM FEDERAL CONSISTENCY CERTIFICATION REVIEW

Policy 1: Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.

Response to Policy for EW 1:

This policy is not applicable because Empire is not proposing restoration, revitalization, and redevelopment of deteriorated and underutilized waterfront areas. The activities associated with the transmission facilities are consistent with this policy to the extent applicable. The onshore substation is proposed to be located within previously disturbed paved parcels of SBMT and is consistent with the existing uses of this facility. In addition, the onshore substation will be designed to comply with applicable New York building codes, electrical standards, and environmental conditions to the extent practicable. The proposed submarine export and onshore cables will be buried; therefore, no impact on the uses of the waterfront areas is anticipated.

Policy 2: Facilitate the siting of water dependent uses and facilities on or adjacent to coastal waters.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. The proposed submarine export cables, to be located within the Sunset Park Significant Maritime and Industrial Area (SMIA), are water-dependent use since they originate from an offshore site and will be buried under the seabed to the shoreline. Construction and maintenance of the proposed buried submarine export cables and onshore cables both onshore and offshore will not limit or impede current or future water-dependent and industrial uses. Additionally, the proposed onshore cables will be buried and follow existing rights-of-ways (ROWs) to the extent practicable, connecting to a proposed onshore substation and existing POI, respectively. The onshore substation location for EW 1 is not a water-dependent facility.

Policy 3: Further develop the State's major ports of Albany, Buffalo, New York, Ogdensburg, and Oswego as centers of commerce and industry, and encourage the siting, in these port areas, including those under the jurisdiction of State public authorities, of land use and development that is essential to, or in support of, the waterborne transportation of cargo and people.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. Siting, design, construction, and operation of these Project components is not anticipated to significantly interfere with or impede the use of any of these major ports. In addition, the submarine export cables will be buried under the seafloor or underground in existing ROWs to the extent practicable. Routing of the submarine export cables was refined based on feedback with the maritime community, including the Port Authority of New York and New Jersey.

As part of the initial cable installation studies, Empire determined that mechanical dredging may be required to facilitate installation of the EW 1 export cable at the SBMT landfall. In addition to the proposed dredging activity, New York City Economic Development Corporation will conduct additional dredging efforts around the Project's proposed dredging footprint in support of redeveloping and improving marine infrastructure for the SBMT; additional dredging performed by the U.S. Army Corps of Engineers (USACE) will deepen and widen the channel for general navigational purposes. This work will take place with or without the Project and is an example of the necessary infrastructure improvements that have already been identified in the area to improve the State's major ports and navigational channels.

Policy 4: Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities which have provided such areas with their unique maritime identity.

Response to Policy for EW 1:

Activities related to EW 1 are not applicable to Policy 4, because the Project is not located near or adjacent to a smaller harbor.

Policy 5: Encourage the location of development in areas where public services and facilities essential to such development are adequate.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. Empire prioritized POIs for the Project, which will allow for an optimal cable route and minimal necessary POI substation upgrades. Empire evaluated several POIs and associated landfalls and onshore and submarine export cable routes such that the onshore substation is in proximity to the existing POI.

Policy 6: Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.

Response to Policy for EW 1:

The proposed transmission facilities are consistent with this policy. The Project is subject to review under Article VII of the New York Public Service Law, which will ensure each agency's regulatory program and procedures are adhered to and implemented. Empire has also engaged in a comprehensive outreach program with state and local regulators and other stakeholders to ensure efficient review of permit applications.

C.3.1 New York State Coastal Policies: Fish and Wildlife Policies

Policy 7: Significant coastal fish and wildlife habitats will be protected, preserved, and where practical, restored so as to maintain their viability as habitats.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. The transmission facilities are not located within or near Significant Coastal Fish and Wildlife Habitat. The proposed transmission facilities were sited to avoid protected coastal, estuarine, and marine habitats, including Significant Coastal Fish and Wildlife Habitats.

Policy 8: Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sublethal or lethal effect on those resources.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. The avoidance, minimization, mitigation, and monitoring measures proposed by Empire include measures to effectively minimize possible contamination of and bio-accumulation in the State's coastal fish and wildlife resources at levels that cause mortality or create physiological and behavioral disorders. The Project will operate in accordance with federal, state, and local laws regulating the at-sea discharges of vessel-generated waste and management of accidental spills or release of oils or other hazardous wastes through an Oil Spill Response Plan (OSRP), Project Spill Prevention, Control, and Countermeasures (SPCC) Plan, and New York State

Department of Environmental Conservation (NYSDEC) Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State. As part of the Article VII process, Empire will develop an Environmental Management & Construction Plan (EM&CP) that will include contingency plans to address accidental spills and releases of potential pollutants.

Along the submarine export cable route, jet plowing will likely disturb areas of sediments as well as pre-sweeping for sandwave/megaripple removal and dredging at cable crossings and for cable installation at SBMT. Sediment core data were collected in 2018 and 2019 in accordance with Technical & Operations Guidance Series 5.1.9 guidance² and USACE requirements to support permitting efforts and to adequately characterize the sediments that will be removed, as well as exposed, as a result of dredging activities. In the submarine cable corridor near the boundary of state waters, vibracores consisted of greater than 90 percent sand. The data show contamination at multiple locations in the New York Harbor including dioxins/furans, total endosulfan, endosulfan sulfate, endrin, polychlorinated biphenyls, arsenic, cadmium, chromium, copper, lead, nickel, silver, zinc and mercury at concentrations that exceeded their respective Class C or Class B Screening Guidance Values. A Phase 2 sediment sampling program is planned for 2021 within specific areas requiring pre-sweeping/dredging activities along the submarine export cable corridor and will be informed by consultation with New York State agencies and USACE.

Empire will provide the agencies with the Phase 2 sampling results and will use the results to determine the appropriate handling and disposal methods in order to protect fish and wildlife resources. These handling and disposal methods will be outlined in Empire's Dredge Disposal and Management Plan. Final discharge volumes and rates will be provided following selection of both the supplier and equipment type and/or final design and location. Wastes will be managed in accordance with applicable regulations.

Based on the sediment chemistry results, specific construction measures will be developed to protect fish and wildlife resources and allow the NYSDEC and USACE to issue the necessary permits for the Project. During normal operation, the submarine export cables do not create the potential for the release of hazardous wastes or pollutants.

Policy 9: Expand recreational use of fish and wildlife resources in coastal areas by increasing access to existing resources, supplementing existing stocks, and developing new resources.

Response to Policy for EW 1:

This policy is not applicable since the Project design and operation do not provide opportunities to increase access, supplement stock, or develop new resources.

Policy 10: Further develop commercial finfish, shellfish, and crustacean resources in the coastal area by encouraging the construction of new, or improvement of existing on-shore commercial fishing facilities, increasing marketing of the State's seafood products, maintaining adequate stocks, and expanding aquaculture facilities.

Response to Policy for EW 1:

This policy is not applicable because the Project does not provide opportunities to further develop commercial finfish, shellfish, and crustacean resources.

² NYSDEC (New York State Department of Environmental Conservation). 2004. *Technical & Operations Guidance Series (TOGS) 5.1.9. In-water and Riparian Management of Sediment and Dredged Material*. Available online at: https://www.dec.ny.gov/docs/water_pdf/togs519.pdf.

C.3.2 New York State Coastal Policies: Flooding and Erosion Hazards Policies

Policy 11: Buildings and other structures will be sited in the coastal area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.

Response to Policy for EW 1:

The proposed transmission facilities will comply with this policy to the extent applicable. Project activities located within the flood zone have been designed to incorporate flood control measures to avoid or minimize damage to property and the endangering of human lives caused by flooding and erosion. These measures will follow the guidance outlined in the Stormwater Pollution Prevention Plan (SWPPP). The cables will be buried and have no effect on flooding or erosion once installed.

Policy 12: Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands and bluffs.

Response to Policy for EW 1:

This policy is not applicable. There are no natural protective features including beaches, dunes, barrier islands, and bluffs within the New York Coastal Area of the proposed transmission facilities.

Policy 13: The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least thirty years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.

Response to Policy for EW 1:

This policy is not applicable because the proposed transmission facilities do not require and do not include construction or reconstruction of erosion protection structures in the New York Coastal Area.

Policy 14: Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.

Response to Policy for EW 1:

This policy is not applicable because the proposed transmission facilities do not require and do not include construction or reconstruction of erosion protection structures in the New York Coastal Area.

Policy 15: Mining, excavation or dredging in coastal waters shall not significantly interfere with the natural coastal processes which supply beach materials to land adjacent to such waters and shall be undertaken in a manner which will not cause an increase in erosion of such land.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. Construction activities associated with installing the submarine export cables (e.g., plowing, jetting and trenching), will not significantly interfere with the natural coastal processes. These activities will result in a low displacement of sediments. Disturbed sediments will settle immediately and not disperse into the water column. Construction and operation of the onshore substation will not require excavation or dredging in coastal waters. The small amount of area to be dredged at the landfall location will be backfilled, as will any trench created for cable installation. This will

result in no net change in the seafloor elevations or associated hydrology, thereby avoiding interference with coastal processes.

There are several additional cable installation and burial methods being considered. Some activities will be performed before the installation of the cables, some during the installation of the cables, and some after the installation of the cables. Cable pre-lay activities may include pre-installation grapnel run, route clearance and boulder removal, pre-sweeping, dredging, and pre-trenching. These cable pre-lay activities, described below, will not affect erosion to shorelands due to their proximity to beaches.

In certain limited areas of the submarine export cable corridor, where underwater megaripples and sandwaves are present on the seafloor, pre-sweeping may be necessary prior to cable lay activities. The primary pre-sweeping method will involve using a suction hopper dredge vessel and/or mass flow excavator from a construction vessel to remove the excess sediment on the seafloor along the footprint of the cable lay; however, other types of dredging equipment may be used depending on environmental conditions and equipment availability. Where pre-sweeping is required, up to an approximately 140-foot (ft) (43-meter [m]) clearance width is anticipated; the length of clearance will vary along the submarine export cable route, ranging from approximately 197 ft (60 m) to 5,577.4 ft (1,700 m).

Pre-trenching activities may also be required in select locations along the submarine export cable route in areas where deeper burial depths may be required and/or seabed conditions are not suitable for traditional cable burial methods. Local dredging at locations where the submarine export cables are crossing other assets may also be needed in order to reduce the shoaling of the crossing design. Localized dredging using equipment may be required in order to minimize shoaling on the seabed before cable protection is installed. This crossing design will consist of the removal of approximately the top 4 ft (1.2 m) of seabed sediment within a 33-ft by 52.5-ft (10-m by 16-m) area at each crossing; utilizing a 3:1 side slope, the upper bounds of this area will be approximately 59 ft by 79 ft (18 m by 24 m). The final depth of the dredged area will be governed by the vertical distance between the natural seabed and the assets to be crossed, and will need to be approved by the asset owners through a crossing agreement.

In addition, mechanical dredging may be required to facilitate cable installation burial at the SBMT landfill. During dredging activities, the material will be collected in an appropriate manner for either re-use or disposal (depending on the nature of the material) and in accordance with applicable regulations. No backfilling is proposed for these activities. Empire will follow the guidelines set forth in a Dredge Disposal Management Plan for handling and disposing of the material at select landfills. Should a suction hopper dredge vessel, mass flow excavator, or similar equipment be used to complete these activities, Empire anticipates that dredged material generated from the Project may either be sidecasted near the site of installation or removed for beneficial reuse or proper disposal. The actual method of dredged material management will be based on sampling and consultation with regulatory agencies. Final discharge volumes and rates will be provided following selection of both the supplier and equipment type and/or final design and location. Wastes will be managed in accordance with applicable regulations. Dredging, excavation, and other sediment- and soil-disturbing activities will be completed in compliance with federal and state permits that will be issued to be protective of the environment.

The Project's construction, operation, and decommissioning activities will comply with federal, state, and local regulations associated with protecting the state's natural coastal processes and will work with the agencies to incorporate measures that help avoid or minimize potential impacts from dredging and fill activities.

Policy 16: Public funds shall only be used for erosion protective structures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard

area to be able to function, or existing development; and only where the public benefits outweigh the long term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features.

Response to Policy for EW 1:

This policy is not applicable because the proposed transmission facilities do not require public funds for construction or reconstruction of erosion protective structures, nor are erosion protective structures proposed as a component of the Project.

Policy 17: Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.

Response to Policy for EW 1:

Since the submarine export and onshore cables will be buried, they will not alter flooding or erosion and, therefore, do not require additional measures to minimize damage to natural resources and property. The onshore substation is sited in a previously disturbed paved parcel in an industrial environment. The onshore substation will occupy a very minor area of the coastal area where flooding may occur and will therefore, have a negligible effect on flooding and erosion. At this time, no specific damage minimizing measures are proposed. If necessary, specific mitigation strategies with regard to special flood hazard areas will be designed on a case-by-case basis during the state permitting process.

C.3.3 New York State Coastal Policies: General Policy

Policy 18: To safeguard the vital economic, social and environmental interests of the State and of its citizens, proposed major actions in the coastal area must give full consideration to those interests, and to the safeguards which the State has established to protect valuable coastal resource areas.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. The siting, design, construction, and operation activities for the transmission facilities have taken into account the safeguarding of vital economic, social, and environmental interests of the State and of its citizens. Impacts during construction will be temporary and limited to the immediate vicinity of construction activity. Siting of the transmission facilities in developed, industrialized areas and existing ROWs minimizes long-term impacts and helps safeguard vital economic, social and environmental interests during the life of the Project. Additionally, Empire's comprehensive outreach strategy, as evidenced by engagement with regulators, local officials and other stakeholders, has informed siting and design of Project components.

C.3.4 New York State Coastal Policies: Public Access Policies

Policy 19: Protect, maintain, and increase the level and types of access to public water related recreation resources and facilities.

Response to Policy for EW 1:

This policy is not applicable because the construction and operation of the proposed transmission facilities will not permanently impact recreational access to the waterfront. Construction at the proposed landfall site and the onshore cable route may temporarily affect public access to the shoreline at the landfall site. However, the proposed cable routes will not encourage, facilitate, or reduce water-dependent and water-enhanced recreation. No changes to navigation are expected along the submarine export cable route. The onshore substation will be

located within an existing developed site that has been cleared, previously disturbed, zoned for the proposed use, and is not currently used for recreation or tourism.

Policy 20: Access to the publicly-owned foreshore and to lands immediately adjacent to the foreshore or the water's edge that are publicly-owned shall be provided and it shall be provided in a manner compatible with adjoining uses.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. Once installed, the buried cables will not impede access to the publicly owned foreshore or other publicly owned lands. The onshore substation is on an existing industrial and previously developed site that does not provide access to publicly owned land.

C.3.5 New York State Coastal Policies: Recreational Policies

Policy 21: Water dependent and water enhanced recreation will be encouraged and facilitated, and will be given priority over non-water-related uses along the coast.

Response to Policy for EW 1:

The construction and operation of the proposed transmission facilities comply with this policy to the extent applicable. Construction activities may have short-term impacts to water-dependent recreation due to an increase in traffic and the staging of construction equipment, both onshore (vehicle) and offshore (vessel). Once installed, the buried cables will allow for the same level of recreation at any of the affected sites. The onshore substation site is on existing industrial land that does not support recreational activities. Therefore, there will be no effects on water-dependent or water-enhanced recreational uses due to the siting and operation of substations.

The proposed submarine export cables pass adjacent to recreational diving areas. Empire will notify the recreational mariners about proposed Project activities during construction, operation, and decommissioning in the Mariners Briefings that are submitted via the Empire website and email, and through Local Notices to Mariners (LNMs).

Policy 22: Development when located adjacent to the shore will provide for water-related recreation whenever such use is compatible with reasonably anticipated demand for such activities and is compatible with the primary purpose of the development.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. The onshore substation is on industrial land with an industrial shoreline that does not support water-related recreation. Once installed beneath the seabed, the submarine export cables will allow for water-related recreation, since other than deep sediment disturbance activity, water-related recreation over the cables will not be restricted.

C.3.6 New York State Coastal Policies: Historic and Scenic Resources Policies

Policy 23: Protect, enhance and restore structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture of the State, its communities, or the Nation.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. At this time, targets resembling potential submerged cultural resources have been identified within the submarine export cable

route; a buffer will be applied to these targets, and the submarine export cables will be routed to avoid potentially impacting these resources. Therefore, no impacts to submerged cultural resources are anticipated. Additional evaluation of appropriate measures regarding potential submerged cultural resources will be completed, with support from and engagement with regulatory authorities.

Construction, operations, and maintenance of the onshore substation will not require physical alteration or destruction of any New York State and National Register of Historic Places (NRHP)-eligible or listed buildings. Additionally, the onshore substation design building type and roof elevation will be commensurate with the existing local-built environment. Bush Terminal Historic District (NRHP-eligible district) and Storehouse #2 (NRHP-eligible property) are already located in a bustling, modern waterfront, so the introduction of an additional modern component to this setting will not adversely affect either resource because their significance does not derive from their historic maritime setting being preserved.

Installation of the submarine export cables in nearshore waters will introduce vessels relatively close to shore in the areas near landfall. While these vessels will be easily visible from shore, they will not remain in any area for more than several weeks. Because of the relatively short duration that they will be in any single location, they are not anticipated to adversely affect onshore historic resources.

Archeological surveys of the onshore cable routes and onshore substation conclude that both possess low archaeological sensitivity. Additionally, the findings of the site files reviews, background research, and pedestrian survey indicate the cable route has been subject to various episodes of significant ground disturbances or land-making that has resulted in low expectations of recovering significant and undocumented archaeological resources within the proposed area of potential effect. No further investigations are warranted. If unanticipated archeological resources are discovered during construction, Empire will follow the measures outlined in an Unanticipated Discoveries Plan, developed in accordance with State laws.

Additionally, Empire has completed a Visual Impact Assessment that was supported through engagement with the Bureau of Ocean Energy Management, U.S. National Park Service, the New York State Historic Preservation Office, and NYSDEC. Short-term visual effects will occur during construction of the onshore substation facilities and will result from visual evidence of construction activities and the presence of construction equipment and work crews. Long-term visual effects during operation of the onshore substation sites will result from the visibility of the aboveground components associated with the substation buildings, outside electrical equipment, static masts, and perimeter fence.

Policy 24: Prevent impairment of scenic resources of statewide significance.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. The Project components do not pass through areas identified as scenic resources of statewide significance.

Policy 25: Protect, restore or enhance natural and man-made resources which are not identified as being of statewide significance, but which contribute to the overall scenic quality of the coastal area.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. The cables will be located underground, and the onshore substation design building type and roof elevation will be commensurate with the existing local built environment. Therefore, these activities will not directly impact the natural and man-made resources that contribute to the overall scenic quality of the coastal area.

C.3.7 New York State Coastal Policies: Agricultural Lands Policy

Policy 26: Conserve and protect agricultural lands in the State’s coastal area.

Response to Policy for EW 1:

This policy is not applicable because the proposed transmission facilities are not located within protected agricultural lands in New York’s coastal areas.

C.3.8 New York State Coastal Policies: Energy and Ice Management Policies

Policy 27: Decisions on the siting and construction of major energy facilities in the coastal area will be based on public energy needs, compatibility of such facilities with the environment, and the facility’s need for a shorefront location.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. The purpose of the EW 1 Project is to generate renewable electricity from an offshore wind farm(s) located in the Lease Area. The Project addresses the need identified by New York for renewable energy and will help the State of New York Public Service Commission achieve their renewable energy goals. As part of the State’s plan, Governor Cuomo signed the Climate Leadership and Community Project Act in July 2019, which adopts a comprehensive climate and clean energy legislation and advances his mandate of 9 GW of offshore energy by 2035. On November 8, 2018, NYSERDA issued its first competitive solicitation for 800 MW or more of new offshore wind projects. On July 18, 2019, Governor Cuomo announced Empire and its 816-MW EW 1 Project as a winning bidder in the State’s competitive solicitation for Offshore Wind Renewable Energy Certificates. Given that the electricity is produced offshore and needs to be delivered to the existing electric grid on land, Project components do have to be sited, constructed and operated at a shorefront location, namely the submarine export cables in the ocean, a landfall location, and onshore cables. The onshore substation needs to be sited between the landfall location and the intended POI.

Policy 28: Ice management practices shall not interfere with the production of hydroelectric power, damage significant fish and wildlife and their habitats, or increase shoreline erosion or flooding.

Response to Policy for EW 1:

This policy does not apply because ice management practices are not a required feature of the Project.

Policy 29: The development of offshore uses and resources, including renewable energy resources, shall accommodate New York’s long-standing ocean and Great Lakes industries, such as commercial and recreational fishing and maritime commerce, and the ecological functions of habitats important to New York.

Response to Policy for EW 1:

The proposed construction, operation, and decommissioning activities associated with the Project comply with this policy to the extent applicable. The transmission facilities have been designed to include construction and operation activities and measures that avoid or minimize potential impacts to commercial and recreational fishing and maritime commerce, and the ecological functions of habitats important to New York. To ensure local mariners are aware of the construction activities, Empire will submit information to the U.S. Coast Guard (USCG) to issue an LNM and update the Project website. Empire has been consulting with and gathering feedback from fishermen from Massachusetts to New Jersey regarding turbine spacing and layout. Empire has also developed a Fisheries Mitigation Plan and an Environmental Mitigation Plan for use during pre-

construction, construction, and operation, which include measures to help minimize or avoid potential impacts to the fishing industry, wetlands, waterbodies, vegetation, and wildlife. Once installed beneath the seabed, the submarine export cables will have negligible effects on long-standing ocean industries.

The increased vessel traffic during construction, operation and decommissioning will be consistent with the existing uses and should be negligible. Since a portion of the submarine export cable route is located adjacent to a major federally managed channel, vessel use is consistent with the existing use in the area. As such, the increase in vessels during construction should not significantly impact the existing traffic patterns.

C.3.9 New York State Coastal Policies: Water and Air Resources Policies

Policy 30: Municipal, industrial, and commercial discharge of pollutants, including but not limited to, toxic and hazardous substances, into coastal waters will conform to State and National water quality standards.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. The avoidance, minimization, mitigation, and monitoring measures proposed by Empire include measures to effectively minimize possible contamination of and bio-accumulation in the State's coastal waters at levels that could cause harm to public health during pre-construction, construction, operation, and decommissioning activities. The Project will operate in accordance with all federal, state, and local laws regulating the at-sea discharges of vessel-generated waste and management of accidental spills or release of oils or other hazardous wastes through the OSRP, the Project SPCC Plan, and NYSDEC Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State. As part of the Article VII process, Empire will develop a Construction Contingency Plan and SWPPP as components of the EM&CP. Empire anticipates that dredged material generated from the Project may either be sidcasted near the site of installation or removed for beneficial reuse or proper disposal. The actual method of dredged material management will be based on sampling and consultation with regulatory agencies. Additionally, Empire will follow the guidelines set forth in a Dredge Disposal Management Plan for handling and disposing of the material at select landfills. Final discharge volumes and rates will be provided following selection of both the supplier and equipment type and/or final design and location. Wastes will be managed in accordance with applicable regulations. Dredging, excavation, and other sediment- and soil-disturbing activities will be completed in compliance with federal and state permits that will be issued to be protective of the environment.

Policy 31: State coastal area policies and management objectives of approved local Waterfront Revitalization Programs will be considered while reviewing coastal water classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint.

Response to Policy for EW 1:

The proposed transmission facilities are subject to the NYC WRP Federal Consistency Review. A consistency review of the Project with the NYC WRP is provided in Section 4.0.

Policy 32: Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.

Response to Policy for EW 1:

This policy is not applicable because the proposed transmission facilities do not require the use of alternative or innovative sanitary waste systems.

Policy 33: Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into coastal waters.

Response to Policy for EW 1:

The proposed transmission facilities comply to the extent applicable to this policy. Excavation, soil stockpile, and grading associated with installation of the onshore cables, and development of the onshore substation may have the potential to temporarily impact the water quality and quantity of stormwater runoff from the construction work areas. Impacts to water quality from erosion and run-off during construction are expected to be short-term and localized as onshore construction areas are generally flat and the soil types are not especially susceptible to erosion. Empire proposes to implement a soil erosion and sediment control plan satisfactory to the requirements detailed in the New York State Standards and Specifications for Erosion and Sediment Control (Blue Book). As part of the Article VII process, Empire will develop a Construction Contingency Plan.

Policy 34: Discharge of waste materials into coastal waters from vessels subject to State jurisdiction will be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. Empire will operate in accordance with laws regulating the at-sea discharges of vessel-generated waste and management of accidental spills or release of oils or other hazardous wastes through the OSRP, the Project SPCC Plan, and NYSDEC Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State. As part of the Article VII process, Empire will develop a Construction Contingency Plan and SWPPP as part of the EM&CP.

Policy 35: Dredging and filling in coastal waters and disposal of dredged material will be undertaken in a manner that meets existing State dredging permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. Construction activities associated with installing the submarine export cables (e.g., plowing, jetting, and trenching), will not significantly interfere with significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, or wetlands. Construction means and methods have been selected to minimize the volume of sediment displacement, which is anticipated to settle immediately and not disperse long distances into the water column.

At export cable landfall, open-cut trenching is proposed and will require dredging. The small amount of area to be dredged for any trench created for cable installation will be backfilled. Sediment located directly adjacent

to the bulkhead may be required to be excavated to facilitate cable landfall; this area will be backfilled to adjacent water depths following installation. This will result in no net change in the seafloor elevations or associated hydrology, thereby avoiding potential effects on significant fish and wildlife habitats, scenic resources, natural protective features, and tidal wetlands. Additionally, Empire's Horizontal Directional Drilling (HDD) Contingency Plan, which will be submitted for approval by the appropriate agencies prior to the start of HDD, if proposed, will specify response actions to be implemented should an accidental release of non-toxic drilling mud occur.

Along the submarine export cable route, there are installation and burial activities that will be performed before the installation of the cables, some during the installation of the cables, and some after the installation of the cables; several of the methods being considered may require dredging. Cable pre-lay activities may include pre-installation grapnel run, route clearance and boulder removal, pre-sweeping, dredging, and pre-trenching. These cable pre-lay activities, described below, will be undertaken in a manner that meets existing State dredging permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands.

In certain limited areas of the submarine export cable corridor, where underwater megaripples and sandwaves are present on the seafloor, pre-sweeping may be necessary prior to cable lay activities. The primary pre-sweeping method will involve using a suction hopper dredge vessel and/or mass flow excavator from a construction vessel to remove the excess sediment on the seafloor along the footprint of the cable lay; however, other types of dredging equipment may be used depending on environmental conditions and equipment availability.

Pre-trenching activities may also be required in select locations along the submarine export cable route in areas where deeper burial depths may be required and/or seabed conditions are not suitable for traditional cable burial methods.

Local dredging at areas where the submarine export cables are crossing other assets may also be needed in order to reduce the shoaling of the crossing design. Localized dredging using equipment may be required in order to minimize shoaling on the seabed before cable protection is installed. This crossing design will consist of the removal of approximately 4 ft (1.2 m) of sediment within a 33-ft by 52.5-ft (10-m by 16-m) area at each crossing utilizing a 3:1 side slope, the upper bounds of this area will be approximately 59 ft by 79 ft (18 m by 24 m). Approximately 679 cubic yards (519 cubic meters) of material is anticipated to be removed by suction hopper dredge at each crossing. The final depth of the dredged area will be governed by the vertical distance between the natural seabed and the assets to be crossed.

During dredging activities, the material will be collected in an appropriate manner for either re-use or disposal (depending on the nature of the material) and in accordance with applicable regulations. No backfilling is proposed for these activities if implemented for the purposes of cable installation. Empire will follow the guidelines set forth in a Dredge Disposal Management Plan for handling and disposing of the material at select landfills. Should a suction hopper dredge vessel, mass flow excavator, or similar equipment be used to complete these activities, Empire anticipates that dredged material generated from the Project may either be sidcasted near the site of installation or removed for beneficial reuse or proper disposal. The actual method of dredged material management will be based on sampling and consultation with regulatory agencies. Final discharge volumes and rates will be provided following selection of both the supplier and equipment type and/or final design and location. Wastes will be managed in accordance with applicable regulations. Dredging, excavation, and other sediment- and soil-disturbing activities will be completed in compliance with federal and state permits that will be issued to be protective of the environment.

The final cable burial method(s) will be selected prior to the EM&CP. The equipment selected will depend on seabed conditions, the required burial depths, and the results of various cable burial studies; more than one installation and burial method may be selected per route and has the potential to be used pre-installation, during installation, and/or post-installation. The Project's construction, operation, and decommissioning activities will comply with federal, state, and local regulations associated with protecting the State's significant fish and wildlife habitats, scenic resources, natural protective features, and wetlands, and will work with the agencies to incorporate measures that help avoid or minimize potential impacts from dredging and fill activities.

Policy 36: Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. During construction and operation, water quality has the potential to be impacted through the introduction of contaminants, including oil and fuel spills and releases. Project-related construction vessels also have the potential to release oil and fuels. Project-related vessels will be subject to USCG regulations regarding wastewater and discharges and will operate in compliance with oil spill prevention and response plans that meet USCG requirements. Specifically, Project vessels will comply with USCG standards in U.S. territorial waters to legally discharge uncontaminated ballast and bilge water, and standards regarding ballast water management. While inside of the 3 nm state-border/No-Discharge Zone, vessels will take normal vessel procedures to close off Marine Sanitation Device-effluent discharge piping and redirect it to onboard "Zero-Discharge Tanks" for the appropriate disposal either at dock or outside of an No-Discharge Zone. Additionally, vessels under 79 ft (24.1 m) in length will comply with the Small Vessel General Permit issued by U.S. Environmental Protection Agency (EPA) on September 10, 2014, for compliance with NPDES permitting. Therefore, the Project will operate in accordance with federal, state, and local laws regulating the at-sea discharges of vessel-generated waste and management of accidental spills or release of oils or other hazardous wastes through the OSRP, the Project SPCC Plan and NYSDEC Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State. As part of the Article VII process, Empire will develop a Construction Contingency Plan and SWPPP as part of the EM&CP.

Policy 37: Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics and eroded soils into coastal waters.

Response to Policy for EW 1:

Construction activities associated with the installation of the transmission facilities will comply with this policy to the extent applicable as part of the avoidance, minimization, mitigation, and monitoring measures proposed by Empire to mitigate water quality impacts and nonpoint source pollution. The Project will operate in accordance with NYSDEC Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State. Specific measures will be detailed in an approved EM&CP.

Policy 38: The quality and quantity of surface water and groundwater supplies, will be conserved and protected, particularly where such waters constitute the primary or sole source of water supply.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable as part of the avoidance, minimization, mitigation, and monitoring measures proposed by Empire. As part of the Article VII process,

Empire will develop a Construction Contingency Plan and SWPPP as part of the EM&CP to minimize potential impacts to surface water and groundwater supplies. Empire will determine through site-specific tests pits whether groundwater is expected to be encountered during construction activities. If dewatering is expected to occur, Empire will develop a site-specific dewatering plan to protect groundwater and nearby surface water resources in accordance with the agency-approved, project-specific SWPPP.

No impacts to groundwater and surface water are anticipated during operations because the transmission facilities will not require the use of these resources. Depending on groundwater depths along the cable trench or foundations at the onshore substation, groundwater may not be encountered.

Policy 39: The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. Vessel activities will adhere to applicable federal, state, and local regulations when transporting, storing, treating, and disposing wastes. Solid wastes generated on land will be properly handled, stored and disposed of, according to New York requirements, as detailed in the EM&CP.

Policy 40: Effluent discharged from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to state water quality standards.

Response to Policy for EW 1:

This policy is not applicable because the proposed Project is not a major steam electric generating or industrial facility.

Policy 41: Land use or development in the coastal area will not cause national or State air quality standards to be violated.

Response to Policy for EW 1:

The proposed transmission facilities comply to the extent applicable with this policy. Air quality may be temporarily impacted from emissions associated with onshore and marine vessel activities within the New York State coastal areas during construction and operation of the Project. Sources associated with the Project activities are expected to be subject to the air permitting requirements of the EPA and NYSDEC. Empire will obtain the required federal and state air permits to meet air quality standards for construction and operation activities.

Policy 42: Coastal management policies will be considered if the State reclassifies land areas pursuant to the prevention of significant deterioration regulations of the Federal Clean Air Act.

Response to Policy for EW 1:

This policy is not applicable, because activities associated with the construction, operation, and decommissioning of the Project will not change the prevention of significant deterioration land classifications in coastal regions or adjacent areas.

Policy 43: Land use or development in the coastal area must not cause the generation of significant amounts of acid rain precursors: nitrates and sulfates.*Response to Policy for EW 1:*

The proposed transmission facilities comply to the extent applicable with this policy. Sources associated with the Project activities are expected to be subject to the air permitting requirements of the EPA and NYSDEC. Air quality may temporarily be affected; however, onshore vehicles and marine vessel activities associated with construction and operation of the Project are not expected to generate significant amounts of nitrates and sulfates, in comparison to existing traffic densities.

C.3.10 New York State Coastal Policies: Wetlands Policy***Policy 44: Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.****Response to Policy for EW 1:*

The Project complies with this policy to the extent applicable. The onshore substation was sited to avoid or minimize siting within protected tidal and freshwater wetlands; therefore, construction activities will not directly impact tidal or freshwater wetlands. The submarine export cables are located within NYSDEC-mapped tidal wetlands. An open-cut alternative is proposed for landfall. The onshore cables and onshore substation sites are situated above the bank of the Upper Bay and do not cross any mapped wetlands or waterbodies.

C.4 NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM REVIEW

Since the transmission facilities are proposed to be located within the boundaries of the NYC WRP, construction of these facilities must demonstrate consistency with the enforceable policies of NYC WRP. The following narrative demonstrates how the proposed Project is in compliance, as detailed in Part II: The Policies, of the NYC WRP.³

Policy One: Support and Facilitate Commercial and Residential Redevelopment in Areas Well-Suited to Such Development.

1.1 Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.

Response to Policy for EW 1:

This policy is not applicable because the Project is part of an industrial development project. The proposed transmission facilities are sited within an M3 district. M3 districts are designated for areas with heavy industries that generate noise, traffic, or pollutants. M3 districts are usually located near the waterfront and buffered from residential areas. Typical uses include power plants, solid waste transfer facilities, recycling plants, and fuel supply depots.

1.2 Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.

Response to Policy for EW 1:

This policy is not applicable because the Project is sited in existing developed, industrialized areas, namely within an M3 district, where non-industrial, and increased public activity are not well-suited with this zoning designation.

1.3 Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.

Response to Policy for EW 1:

This policy is not applicable because the Project is located in an industrially zoned location and commercial and residential redevelopment is not appropriate, nor does the nature of the Project support opportunities for such redevelopment.

1.4 In areas adjacent to [Significant Maritime and Industrial Areas] SMIA, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.

Response to Policy for EW 1:

This policy is not applicable because the Project does not involve residential development.

³ New York City Department of City Planning Waterfront Revitalization Program Policies
(<https://www1.nyc.gov/assets/planning/download/pdf/applicants/wrp/wrp-2016/nyc-wrp-partII.pdf>)

1.5 Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.*Response to Policy for EW 1:*

This policy is not applicable because the Project does not involve residential or commercial development of the waterfront. Regardless, construction of the onshore substation will satisfy the design requirements governing the placement of the onshore substation within a mapped floodplain; including but not limited to, above-ground structures will be located at base flood elevation plus two feet or adequately protected through appropriate engineering design.

Policy Two: Support Water-Dependent and Industrial Uses in New York City Coastal Areas that are Well-Suited to Their Continued Operation.***2.1 Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.****Response to Policy for EW 1:*

The Project complies with this policy to the extent applicable and promotes industrial use in SMIA's. The proposed submarine export cables, to be located within the Sunset Park SMIA, are a water-dependent use that will be buried beneath the seabed to connect the onshore substation, which is an integral component to the transmission of electricity from the offshore wind farm to the existing grid. Construction and maintenance of the proposed cables will have limited potential to impede current and future water-dependent and industrial uses since the cable easement is very narrow and burial depths are considering existing and potential uses (e.g., draft requirements for certain port facilities). Additionally, the proposed interconnection cables from the new onshore substation to the existing POI will follow existing ROWs to the extent practicable.

2.2 Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.*Response to Policy for EW 1:*

This policy is not applicable because the Project is not located within an Ecologically Sensitive Maritime and Industrial area.

2.3 Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.*Response to Policy for EW 1:*

The Project complies with this policy to the extent applicable. The Project does not interfere with working waterfront uses at appropriate sites outside the SMIA's and is not located in an Ecologically Sensitive Maritime Industrial Area.

2.4 Provide infrastructure improvements necessary to support working waterfront uses.*Response to Policy for EW 1:*

The Project complies with this policy to the extent applicable. The Project will strengthen New York's energy grid by generating renewable electricity. Infrastructure improvements will be made in order to transfer the energy from the Lease Area offshore to the onshore substation and ultimately the grid. The Project helps address the need identified by New York State for renewable energy and will help to advance the State of New York Public Service Commission's renewable energy goals. Additionally, the transmission facilities are located within existing ROWs, and paved infrastructure sites which have been cleared, previously disturbed, and zoned

for the proposed use. Mitigation measures such as flooding and sea level rise resiliency will be implemented as part of the substation design, which could improve site conditions of the existing parcel along the waterfront. Pending the outcome of dredging analyses as well as dredging requirements for the Project, if required, beneficial uses will be evaluated for dredge soil, which could include the potential to support port redevelopment or improvement projects within the region.

Therefore, the activities associated with this Project and described above are consistent with Policy 2.4, ensuring necessary improvements to working waterfront uses take place.

2.5 Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.

Response to Policy for EW 1:

Construction of the onshore substation will satisfy the design requirements governing the placement of the onshore substation within a mapped floodplain; including but not limited to, above-ground structures will be located at base flood elevation plus two feet or adequately protected through appropriate engineering design. Specific mitigation strategies regarding special flood hazard areas and stormwater management will be designed on a case-by-case basis and during the regulatory process. Additionally, the proposed onshore substation will be designed according to New York City building codes to the extent practicable. Warning signals and procedures for evacuation of employees in case of an emergency will be developed and posted.

Policy Three: Promote Use Of New York City's Waterways for Commercial and Recreational Boating and Water-Dependent Transportation.

3.1 Support and encourage in-water recreational activities in suitable locations.

Response to Policy for EW 1:

This policy is not applicable since the Project does not create opportunities to support or encourage in-water recreational activities.

3.2 Support and encourage recreational, educational and commercial boating in New York City's maritime centers.

Response to Policy for EW 1:

This policy is not applicable since the Project does not include any opportunities to support and encourage recreational, educational, and commercial boating. Regardless, the Project will not discourage these activities other than temporarily during construction when access near the construction vessels will be limited, to ensure the safety of other boaters.

3.3 Minimize conflicts between recreational boating and commercial ship operations.

Response to Policy for EW 1:

The Project complies with this policy to the extent applicable. During construction, Empire will provide the necessary information to allow an LNM to be issued that include the location of the submarine export cable construction vessels and the exclusion zone around them. This will serve to support safe boat/vessel operations by recreational boaters and commercial vessel operators, who may travel in the area near Project construction activity. Empire has been and will continue to coordinate through construction with other relevant port authorities, harbor pilots, and mariner groups.

3.4 Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.*Response to Policy for EW 1:*

The Project complies with this policy to the extent applicable. The activities associated with installation and maintenance of the proposed submarine export cables will be temporary and localized. Therefore, it should not impact the opportunity to influence how other commercial or recreational boating occurs.

3.5 In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses*Response to Policy for EW 1:*

The proposed transmission facilities comply with this policy to the extent applicable. Construction and operation of the proposed transmission facilities will not impact ongoing maintenance of maritime infrastructure for water-dependent uses.

Policy Four: Protect and Restore the Quality and Function of Ecological Systems Within the New York City Coastal Area.***4.1 Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.****Response to Policy for EW 1:*

This policy is not applicable because the Project is not located within a Special Natural Waterfront Area.

4.2 Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.*Response to Policy for EW 1:*

This policy is not applicable because the Project is not located within an Ecologically Sensitive Maritime and Industrial Area.

4.3 Protect designated Significant Coastal Fish and Wildlife Habitats.*Response to Policy for EW 1:*

This policy is not applicable because the Project is not located within a Significant Coastal Fish and Wildlife Habitat. However, the proposed transmission facilities are sited to avoid protected coastal, estuarine, and marine habitats, including Significant Coastal Fish and Wildlife Habitats.

4.4 Identify, remediate and restore ecological functions within Recognized Ecological Complexes.*Response to Policy for EW 1:*

This policy is not applicable because the Project is not located within a Recognized Ecological Complex. However, the proposed transmission facilities are sited to avoid Recognized Ecological Complexes.

4.5 Protect and restore tidal and freshwater wetlands.*Response to Policy for EW 1:*

The Project complies with this policy to the extent applicable, because it was sited to avoid protected coastal, estuarine, and marine habitats, including tidal and freshwater wetlands, and therefore, construction activities

will not directly impact tidal or freshwater wetlands. The onshore substation and onshore cables to the existing POI are situated above the bank of the Upper Bay and do not cross any mapped wetlands or waterbodies.

4.6 In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.

Response to Policy for EW 1:

The Project is consistent with this policy to the extent applicable. Consistent with a variety of other environmental regulations, the Project has selected submarine export cable installation methods that minimize disturbance of the seafloor, and in particular, conversion of seafloor habitat types. Because of the minimal disturbance nature of the construction methods, active restoration is not a planned component of the Project associated with the submarine export cables. However, as the Project design is still preliminary and specific impacts are not known, detailed mitigation strategies will be developed as needed as part of the final design and conform to the requirements of state and federal permitting respective to wetlands and waterbody resources. The onshore substation is in an industrially zoned location and the development by Empire is consistent with the intended use and other policies supporting working waterfronts, not creating ecologically beneficial habitats.

4.7 Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.

Response to Policy for EW 1:

The Project complies with this policy to the extent applicable because it was sited to avoid vulnerable plant, fish, and wildlife species, and rare ecological communities. The onshore cables were sited in areas that are significantly disturbed and do not contain any vulnerable plant, fish, and wildlife species. However, the NYSDEC has documented a breeding area for the peregrine falcon, a New York State-listed endangered species, in the vicinity of the submarine export cable on the Verrazano-Narrows Bridge. The Atlantic sturgeon, a New York State-designated critically imperiled species, is located within the New York Harbor and therefore assumed to have the potential to occur along the submarine export cable route. To actively avoid or reduce interaction with vulnerable plant, fish, and wildlife species, Empire will consider the timing of construction activities; working with the fishing industry and fisheries agencies on sensitive spawning and fishing periods to actively avoid or reduce interaction with receptors, where feasible. Construction impacts will be temporary and localized, while the long-term presence and operation of the transmission facilities will have no impacts on these resources. The analysis of impacts supports the overall determination that the Project will not result in substantial adverse impacts on vulnerable plant, fish, and wildlife species. Impacts on fish and wildlife species will be short-term and not affect stocks or populations.

4.8 Maintain and protect living aquatic resources.

Response to Policy for EW 1:

The construction and operation of the Project complies with this policy to the extent applicable. Construction means and methods have been developed with a goal of minimizing adverse impacts to aquatic resources and avoiding impacts when possible. The effort to site facilities used existing and developed information to avoid sensitive coastal, estuarine, and marine habitats. A variety of Best Management Practices are incorporated into planning and Empire expects to continue agency and resource management agency consultations and coordination as the Project goes through the permitting process. It is anticipated that permits will be issued,

and the Project licensed, with a number of conditions intended to maintain and protect living aquatic resources. Empire and its contractors will have a number of personnel involved in managing compliance requirements.

Policy Five: Protect and Improve Water Quality in The New York City Coastal Area.

5.1 Manage direct or indirect discharges to waterbodies.

Response to Policy for EW 1:

The Project complies with this policy to the extent applicable. The Project will operate in accordance with laws regulating the at-sea discharges of vessel-generated waste and management of accidental spills or release of oils or other hazardous wastes through the OSRP, the Project SPCC Plan and NYSDEC Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State. As part of the Article VII process, Empire will develop a Construction Contingency Plan and SWPPP, along with other features of the EM&CP, that will serve to manage direct and indirect discharges to waterbodies.

5.2 Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.

Response to Policy for EW 1:

Construction activities associated with the Project will comply with this policy to the extent applicable as part of the avoidance, minimization, mitigation, and monitoring measures proposed by Empire to mitigate water quality impacts and nonpoint source pollution. The Project will operate in accordance with NYSDEC Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State. It is anticipated that the Project will require authorization under the State Pollutant Discharge Elimination System (SPDES) program for both construction and industrial stormwater discharges, and the Project will be undertaken in compliance with these authorizations.

5.3 Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.

Response to Policy for EW 1:

The proposed transmission facilities are consistent with this policy to the extent applicable. No marshes or vegetated wetlands occur along the transmission facilities. The anticipated primary means of installing the submarine export cables is jet plowing, which only creates a small, localized, and temporary increase in suspended sediments, and is therefore protective of water quality. Other forms of cable installation are anticipated, if at all, to be needed for shorter distances of the cable route. Placing fill will consist of locations where surface armoring is required, and this will consist of coarse material such as stone, or concrete mats and these methods are protective of water quality. There are several additional cable installation and burial methods being considered. Some activities will be performed before the installation of the cables, some during the installation of the cables, and some after the installation of the cables. Cable pre-lay activities may include pre-installation grapnel run, route clearance and boulder removal, pre-sweeping, dredging, and pre-trenching. These cable pre-lay activities, described below, will not affect erosion to shorelands due to their proximity to beaches.

In certain limited areas of the submarine export cable corridor, where underwater megaripples and sandwaves are present on the seafloor, pre-sweeping may be necessary prior to cable lay activities. The primary pre-sweeping method will involve using a suction hopper dredge vessel and/or mass flow excavator from a construction vessel to remove the excess sediment on the seafloor along the footprint of the cable lay; however, other types of dredging equipment may be used depending on environmental conditions and equipment availability. Where pre-sweeping is required, up to an approximately 163-ft (50-m) clearance width is anticipated;

the length of clearance will vary along the submarine export cable route, ranging from approximately 197 ft (60 m) to 5,577.4 ft (1,700 m).

Pre-trenching activities may also be required in select locations along the submarine export cable route in areas where deeper burial depths may be required and/or seabed conditions are not suitable for traditional cable burial methods. Local dredging at locations where the submarine export cables are crossing other assets may also be needed in order to reduce the shoaling of the crossing design. Localized dredging using equipment may be required in order to minimize shoaling on the seabed before cable protection is installed. This crossing design will consist of the removal of approximately the top 4 ft (1.2 m) of seabed sediment within a 33-ft by 52.5-ft (10-m by 16-m) area at each crossing; utilizing a 3:1 side slope, the upper bounds of this area will be approximately 59 ft by 79 ft (18 m by 24 m). The final depth of the dredged area will be governed by the vertical distance between the natural seabed and the assets to be crossed and will need to be approved by the asset owners through a crossing agreement.

In addition, mechanical dredging may be required to facilitate cable installation burial at the SBMT landfill. During dredging activities, the material will be collected in an appropriate manner for either re-use or disposal (depending on the nature of the material) and in accordance with applicable regulations. No backfilling is proposed for these activities. Empire will follow the guidelines set forth in a Dredge Disposal Management Plan for handling and disposing of the material at select landfills. Should a suction hopper dredge vessel, mass flow excavator or similar equipment be used to complete these activities, Empire anticipates that dredged material generated from the Project may either be sidecasted near the site of installation or removed for beneficial reuse or proper disposal. The actual method of dredged material management will be based on sampling and consultation with regulatory agencies. Final discharge volumes and rates will be provided following selection of both the supplier and equipment type and/or final design and location. Wastes will be managed in accordance with applicable regulations. Dredging, excavation and other sediment and soil disturbing activities will be completed in compliance with federal and state permits that will be issued to be protective of the environment.

Additionally, detailed mitigation strategies will be developed as part of the final design and conform to the requirements of all State and federal permitting respective to water quality. Empire will continue to consult with the agencies to adopt agreed upon mitigation practices.

5.4 Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.

Response to Policy for EW 1:

The Project complies with this policy to the extent applicable as part of the avoidance, minimization, mitigation, and monitoring measures proposed by Empire. The Project will operate in accordance with NYSDEC Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State. The Project does not include crossings of, or proximity to, streams and wetlands. The installation of the onshore cables will involve shallow trenching that is likely to avoid groundwater, or if encountered, will be managed in accordance with NYSDEC dewatering requirements.

5.5 Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.

Response to Policy for EW 1:

This policy is not applicable because the Project does not involve the production of grey water and avoids the need for grey infrastructure. Further, in-water activities are temporary and water quality will be protected

through the implementation of avoidance, minimization, and mitigation measures and permit conditions and requirements, thereby negating the need for in-water ecological strategies.

Policy Six: Minimize Loss of Life, Structures, Infrastructure, and Natural Resources Caused by Flooding and Erosion, and Increase Resilience to Future Conditions Created by Climate Change.

6.1 Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.

Response to Policy for EW 1:

The proposed transmission facilities will comply to the extent applicable with this policy. The proposed onshore substation will be constructed at a previously developed site with substantial existing impervious surfaces and is not expected to adversely affect adjacent shorelines or properties. Construction will satisfy the design requirements governing the placement of the onshore substation within a mapped floodplain; including but not limited to, above-ground structures will be located at base flood elevation plus two feet or adequately protected through appropriate engineering design. Specific mitigation strategies regarding special flood hazard areas will be designed on a case-by-case basis during the regulatory process.

6.2 Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms) into the planning and design of projects in the city's Coastal Zone.

Response to Policy for EW 1:

The construction of the Project complies to the extent applicable with this policy. Construction of the onshore substation will satisfy the design requirements governing the placement of the onshore substation within a mapped floodplain; including but not limited to, above-ground structures will be located at base flood elevation plus two feet or adequately protected through appropriate engineering design. Specific design elements will continue to be developed as the Project progresses towards final design and receipt of required permits and authorizations. During this period, Empire will continue to evaluate and develop the Project design relative to sea level rise design requirements.

6.3 Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.

Response to Policy for EW 1:

This policy is not applicable because the Project does not require public funds for flood prevention or erosion control measures.

6.4 Protect and preserve non-renewable sources of sand for beach nourishment.

Response to Policy for EW 1:

This policy is not applicable because the Project-related construction and installation activities are not located on or within close proximity to a beach, and the submarine export cables will occupy a very narrow area of the seafloor and will not create a measurable change in the available sources of sand for beach nourishment.

Policy Seven: Minimize Environmental Degradation and Negative Impacts on Public Health from Solid Waste, Toxic Pollutants, Hazardous Materials, and Industrial Materials That May Pose Risks to the Environment and Public Health and Safety.

7.1 Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.

Response to Policy for EW 1:

The construction of the Project complies to the extent applicable with this policy. The construction and operation of the Project will be performed in compliance with regulations regarding the handling, storage and disposal of solid wastes, toxic pollutants, hazardous materials, and industrial materials. Measures will be incorporated into construction and operation procedures to protect public health, control pollution, and prevent degradation of coastal ecosystems. The Project will operate in accordance with federal, state, and local laws regulating the at-sea discharges of vessel-generated waste and management of accidental spills or release of oils or other hazardous wastes through the OSRP, Project SPCC Plan and NYSDEC Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State. As part of the Article VII process, Empire will develop an EM&CP that will include contingency plans to address accidental spills and releases of potential pollutants. Empire will also operate the onshore substation under the requirements of a SPDES SWPPP approved by the NYSDEC. During construction and operations, Empire will manage all solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials in accordance with applicable regulations.

7.2 Prevent and remediate discharge of petroleum products.

Response to Policy for EW 1:

The construction and operation of the Project complies to the extent applicable with this policy. The Project will operate in accordance with federal, state, and local laws regulating the at-sea discharges of vessel-generated waste and management of accidental spills or release of oils or other hazardous wastes through the OSRP, Project SPCC Plan and NYSDEC Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State. As part of the Article VII process, Empire will develop an EM&CP that will include contingency plans to address accidental spills and releases of potential pollutants. Empire will also operate the onshore substation under the requirements of a SPDES SWPPP approved by the NYSDEC.

7.3 Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.

Response to Policy for EW 1:

The construction and operation of the Project complies to the extent applicable with this policy regarding the transport of solid and hazardous materials. Plans will be developed as part of the permitting process, and Empire will comply with permit requirements regarding the transport of solid waste and hazardous materials. The Project will operate in accordance with federal, state, and local laws regulating the at-sea discharges of vessel-generated waste and management of accidental spills or release of oils or other hazardous wastes through the OSRP, Project SPCC Plan and NYSDEC Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State. As part of the Article VII process, Empire will develop an EM&CP that will include contingency plans to address accidental spills and releases of potential pollutants. Empire will also operate the onshore substation under the requirements of a SPDES SWPPP approved by the NYSDEC. Any transport of solid waste or hazardous materials will be done so in accordance

with applicable regulations. The Project does not involve siting solid and hazardous waste facilities and so this component of the policy does not apply.

Policy Eight: Provide Public Access to, from, and Along New York City's Coastal Waters.

8.1 Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.

Response to Policy for EW 1:

This policy is not applicable because construction and operation of the Project will not permanently impact recreational access to the waterfront. Construction at the proposed landfall site for the submarine export cables occurs on privately owned land or existing port facilities, so public access is already limited, and will not change due to the Project. The proposed cable routes will not encourage, facilitate, or reduce water-dependent and water enhanced recreation. No changes to navigation are expected along the submarine export cable route. Installation of the onshore and near-shore components will occur, to the extent practicable, during the off-season to avoid impacts with the peak recreation and tourism season. The onshore substation will be located within an existing infrastructure site, which has been cleared, previously disturbed, zoned for the proposed use, and is not currently used for recreation or tourism.

8.2 Incorporate public access into new public and private development where compatible with proposed land use and coastal location.

Response to Policy for EW 1:

This policy is not applicable because Empire is siting facilities in locations not compatible with public access and does not propose to construct new public and private development along a waterfront that is compatible with public access.

8.3 Provide visual access to the waterfront where physically practical.

Response to Policy for EW 1:

The proposed onshore substation complies with this policy to the extent applicable. Any building type and roof elevation will be commensurate with the existing local built environment. Therefore, the location of the substation along the waterfront will not affect the visual quality of New York City's urban context and the historic and working waterfront. The cables will be buried and will have no effect on visual access to the waterfront.

8.4 Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.

Response to Policy for EW 1:

This policy is not applicable because Empire does not propose waterfront open space and recreation development on publicly owned land and the location of the onshore substation is not a suitable location for open space and recreation.

8.5 Preserve the public interest in and use of lands and waters held in public trust by the State and City.*Response to Policy for EW 1:*

The proposed transmission facilities comply with this policy to the extent applicable. The Project is seeking approval from the New York State Office of General Services for occupying the seafloor through a submerged lands lease, which will be for a narrow area of the seafloor that largely does not interfere with use of the water. Excavation in the location of the cables will be precluded in the future, but the buried nature of the cables allows other water uses, such as fishing or boating, to continue.

8.6 Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.*Response to Policy for EW 1:*

This policy is not applicable because Empire does not propose to design public spaces on the waterfront as part of the Project.

Policy Nine: Protect Scenic Resources that Contribute to the Visual Quality of the New York City Coastal Area.***9.1 Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.****Response to Policy for EW 1:*

The proposed transmission facilities comply to the extent applicable with this policy because construction activities are short-term, and the submarine export and onshore cables are buried. Any building type and roof elevation will be commensurate with the existing local built environment. Therefore, the transmission facilities will not affect the visual quality of New York City's urban context and the historic and working waterfront.

9.2 Protect and enhance scenic values associated with natural resources.*Response to Policy for EW 1:*

The proposed transmission facilities comply to the extent applicable with this policy because the submarine export and onshore cables are buried, and the proposed onshore substation design building type and roof elevation will be commensurate with the existing local built environment. Additionally, the Project was sited to avoid a Recognized Ecological Complex, Bush Terminal Piers Park, located along the waterfront within proximity to the POI. Therefore, the transmission facilities will not affect the scenic values associated with natural resources.

Policy Ten: Protect, Preserve, and Enhance Resources Significant to the Historical, Archaeological, Architectural, and Cultural Legacy of the New York City Coastal Area.***10.1 Retain and preserve historic resources and enhance resources significant to the coastal culture of New York City.****Response to Policy for EW 1:*

The submarine export and onshore cables comply with this policy to the extent applicable because the cables are buried and therefore do not impact historic and enhanced resources significant to the coastal culture.

The onshore substation complies with this policy to the extent applicable. Construction, operations and decommissioning will not require physical alteration or destruction of any New York State and NRHP-eligible or listed buildings. Empire has undertaken consultations with the state historic preservation office as well as performing studies and surveys to identify historic resources and analyze potential impacts to these resources. This consultation will continue as needed through the remainder of the permitting process. Additionally, the onshore substation design building type and roof elevation will be commensurate with the existing local built environment.

10.2 Protect and preserve archaeological resources and artifacts.

Response to Policy for EW 1:

The proposed transmission facilities comply with this policy to the extent applicable. At this time, targets resembling potential submerged cultural resources have been identified within the submarine export cable route; a buffer will be applied to these targets and the submarine export cables will be routed to avoid potentially impacting these resources. Therefore, no impacts to submerged cultural resources are anticipated. Additional evaluation of appropriate measures regarding potential submerged cultural resources will be completed, with support from and engagement with regulatory authorities.

Archeological surveys of the onshore cable routes and onshore substation conclude that both possess low archaeological sensitivity. Additionally, the findings of the site files reviews, background research, and pedestrian survey indicate that major portions of the cable routes have been subject to various episodes of significant ground disturbances or land-making that has resulted in low expectations of recovering significant and undocumented archaeological resources within the proposed area of potential effect. No further investigations are warranted.