

# **Sunrise Wind New York Cable Project**

## **Revised Appendix 4-F**

### **Preliminary Invasive Species Management Plan**

Prepared for:

**Sunrise  
Wind**

Powered by  
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Eversource

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**SUNRISE WIND LLC**  
**SUNRISE WIND NEW YORK CABLE PROJECT**

**REVISED APPENDIX 4-F**  
**PRELIMINARY INVASIVE SPECIES MANAGEMENT PLAN**

# Table of Contents

<b>1.0</b>	<b>INTRODUCTION.....</b>	<b>1</b>
<b>2.0</b>	<b>DEFINITION.....</b>	<b>2</b>
<b>3.0</b>	<b>EXISTING CONDITIONS.....</b>	<b>2</b>
<b>4.0</b>	<b>INVASIVE PLANT SPECIES.....</b>	<b>3</b>
4.1	TARGET SPECIES .....	3
4.2	CONSTRUCTION BEST MANAGEMENT PRACTICES .....	4
4.2.3	Training.....	4
4.2.4	Construction .....	4
<b>5.0</b>	<b>TERRESTRIAL INVASIVE INSECT SPECIES .....</b>	<b>5</b>
5.1	TARGET SPECIES .....	5
5.2	CONSTRUCTION BEST MANAGEMENT PRACTICES .....	5
5.2.3	Training.....	5
5.2.4	Construction .....	5
<b>6.0</b>	<b>AQUATIC INVASIVE SPECIES .....</b>	<b>6</b>
6.1	TARGET SPECIES .....	6
6.2	CONSTRUCTION BEST MANAGEMENT PRACTICES .....	6
6.2.3	Training.....	6
6.2.4	Construction .....	6
	REFERENCES.....	7

## Acronyms and Abbreviations

AC	alternating current
Applicant	Sunrise Wind LLC
BMP	best management practice
CFR	Code of Federal Regulations
DC	direct current
ECL	New York Environmental Conservation Law
EM&CP	Environmental Management and Construction Plan
ft	feet
HDD	horizontal directional drilling
ICW	intracoastal waterway
ISMP	Invasive Species Management Plan
km	kilometer(s)
kV	kilovolt(s)
LIPA	Long Island Power Authority
m	meter(s)
MHWL	mean high water line
mi	mile(s)
NOAA	National Oceanic and Atmospheric Administration
NWR	National Wildlife Refuge
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
NYS DAM	New York State Department of Agriculture and Markets
NYS DEC	New York State Department of Environmental Conservation
NYS ERDA	New York State Energy Research and Development Authority
NYS PSC	New York State Public Service Commission
OCS	Outer Continental Shelf

OnCS–DC	Onshore Converter Station–Direct Current
OREC	Offshore Wind Renewable Energy Certificate
Project	Sunrise Wind New York Cable Project
PSL	New York Public Service Law
ROW	right-of-way
SPB	Southern Pine Beetle
SRWEC	Sunrise Wind Export Cable
SRWEC–NYS	Sunrise Wind Export Cable–New York State
SRWF	Sunrise Wind Farm
TJB	transition joint bay
US	United States
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service

## 1.0 INTRODUCTION

Sunrise Wind LLC (Sunrise Wind or the Applicant), a 50/50 joint venture between Orsted North America Inc. (Orsted NA) and Eversource Investment LLC (Eversource), proposes to construct, operate, and maintain the Sunrise Wind New York Cable Project (the Project). Sunrise Wind executed a 25-year Offshore Wind Renewable Energy Certificate (OREC) contract related to the Sunrise Wind Farm (SRWF) and the Project with the New York State Energy Research and Development Authority (NYSERDA) in October 2019. The Project will deliver power from the SRWF, located in federal waters on the Outer Continental Shelf (OCS), to the existing electrical grid in New York (NYS). The Project includes offshore and onshore components within NYS that are subject to New York Public Service Law (PSL) Article VII review and will interconnect at the existing Holbrook Substation, which is owned and operated by the Long Island Power Authority (LIPA).

Specifically, power from the SRWF will be delivered to the existing mainland electric grid via distinct Project segments: the submarine segment of the export cable (SRWEC), which will be located in both federal and NYS waters (the NYS portion of the cable referred to as the SRWEC–NYS); the terrestrial underground segment of the transmission cable (Onshore Transmission Cable); the new Onshore Converter Station (OnCS–DC); and the underground segment of the interconnection cable (Onshore Interconnection Cable). The Onshore Transmission Cable, the OnCS–DC, and Onshore Interconnection Cable (collectively, the Onshore Facilities) are all located in the Town of Brookhaven, Suffolk County, New York.

The Project's components are generally defined into two categories:

- SRWEC–NYS
  - One direct current (DC) submarine export cable bundle (320 kilovolt [kV]) up to 6.2 miles (mi) (10.8 kilometers [km]) in length in NYS waters and up to 1,575 feet (ft) (480 meters [m]) located onshore (*i.e.*, above the Mean High Water Line [MHWL], as defined by the United States [US] Army Corps of Engineers [USACE] [33 Code of Federal Regulations (CFR) 329]) and underground, up to the transition joint bays (TJBs).
- Onshore Facilities
  - One DC underground transmission circuit (320 kV) (referred to as the Onshore Transmission Cable) up to 17.5 mi (28.2 km) in length within existing roadway right-of-way (ROW), TJBs, and concrete and/or direct buried joint bays and associated components;
  - One OnCS–DC that will transform the Project voltage to 138 kV alternating current (AC);

- Two AC underground circuits (138 kV) up to 1 mi (1.6 km) in length (referred to as the Onshore Interconnection Cable), which will connect the new OnCS–DC to the existing Holbrook Substation; and
- Fiber optic cables co-located with both the Onshore Transmission Cable and Onshore Interconnection Cable.

## 2.0 DEFINITION

The NYS Environmental Conservation Law (ECL) 9-1703 (10) defines invasive species as, “A species that is: (a) non-native to the ecosystem under consideration; and (b) whose introduction causes or is likely to cause economic or environmental harm or harm to human health. For the purposes of this paragraph, the harm must significantly outweigh the benefits”. Invasive species generally outcompete native species allowing them to colonize and in some cases dominate an area and change existing natural communities.

Title 6 of the New York Codes, Rules and Regulations (NYCRR) Part 575, Prohibited and Regulated Invasive Species (2014) lists 3 prohibited and 2 regulated algae and cyanobacteria species; 69 prohibited and 6 regulated plant species; 15 prohibited and 11 regulated fish species; 17 prohibited and 3 regulated aquatic invertebrate species; 13 prohibited terrestrial invertebrate species; 5 prohibited and 6 regulated terrestrial and aquatic vertebrate species; and, 4 prohibited fungi species (154 species total) for NYS. Prohibited species are species that cannot be sold, imported, purchased, transported, introduced or propagated in NYS. Regulated species can be possessed, sold, purchased, propagated and transported, but cannot be introduced into a free-living state.

## 3.0 EXISTING CONDITIONS

Land adjacent to the Onshore Transmission Cable, the Union Avenue Site, and Onshore Interconnection Cable largely consist of developed residential, commercial, utility or industrial land uses. Widespread occurrences of invasive plant species are present throughout the area given the Project’s association with developed residential and industrial areas and proliferation of invasive species throughout the greater Long Island region.

Over 100 non-native invasive plant species occurrences have been documented proximal to the Onshore Facilities based on a query of the NY iMapInvasives iMAP3 database<sup>1</sup>. Most of the occurrences are associated with the United States Fish and Wildlife (USFWS) Wertheim National Wildlife Refuge (NWR) which is located to the south of the Onshore Transmission Cable. Additional locations of invasive plants

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<sup>1</sup> iMapInvasives iMAP23. Accessed October 7, 2020. <https://www.nyimainvasives.org/public-map>.



have been documented proximal to the horizontal directional drilling (HDD) work areas at Smith Point County Park and Smith Point Marina. In addition, the March 2019 Final Design Report/Environmental Assessment for the replacement of the William Floyd Parkway (County Route 46) over Narrow Bay (NYSDOT 2019) notes a prevalence of invasive species such as Japanese honeysuckle, common reed, autumn olive (*Elaeagnus umbellata*), oriental bittersweet, and multiflora rose near Smith Point Bridge.

Preliminary baseline invasive species surveys were conducted along the previous Onshore Transmission Cable route in June and October 2020, and the methods were developed using the NYSDEC Invasive Species Management Plan Specifications Template provided by NYSDEC on May 5, 2020 (Stantec 2020). General locations and approximate relative density (low, medium, or high) were recorded on field datasheets and located with GPS. Observations made during field assessments for the Project indicate invasive species are ubiquitous throughout the Onshore Facilities and results were consistent with species and locations identified in the NY iMapInvasives query. Mugwort (*Artemisia vulgaris*) was the most prevalent species observed and commonly occurs along road shoulders throughout the Onshore Facilities. Large concentrations of common reed were observed along the backside of Fire Island and at Smith Point Marina at the Landfall/ICW Study Area. Additional commonly observed invasive species across the Onshore Facilities included Norway maple (*Acer platanoides*), rambler rose (*Rosa multiflora*), oriental bittersweet (*Celastrus orbiculatus*), autumn olive (*Elaeagnus umbellata*), Japanese honeysuckle (*Lonicera japonica*), black locust (*Robinia pseudoacacia*), garlic mustard (*Alliaria petiolata*), Japanese barberry (*Berberis thunbergii*), and common reed (*Phragmites australis*).

A baseline survey will be conducted along the updated Onshore Transmission Cable route, Onshore Interconnection Cable route and Union Avenue Site, and results of the survey will be included in the Invasive Species Management Plan (ISMP) as part of the Project Environmental Management and Construction Plan (EM&CP). The ISMP will also discuss Post-Construction Monitoring and Adaptive Management measures that will be undertaken by the Applicant.

## 4.0 INVASIVE PLANT SPECIES

### 4.1 TARGET SPECIES

Consultation with the New York State Department of Environmental Conservation (NYSDEC), New York State Department of Agriculture and Markets (NYSDAM), and New York State Public Service Commission (NYSPSC) will be conducted to determine the terrestrial invasive plant species listed in Part 575 which present an environmental or human health hazard. Best management practices (BMPs) and procedures to be implemented to manage and prevent dissemination of the invasive plant species found along the Project corridor are described in Section 4.2 below and will be further detailed within the Project EM&CP.

## 4.2 CONSTRUCTION BEST MANAGEMENT PRACTICES

### 4.2.3 Training

An Environmental Monitor will be retained to monitor all Project construction activities for compliance with the EM&CP. The qualifications and responsibilities of the Environmental Monitor will be detailed in the EM&CP, but with respect to invasive species the Environmental Monitor will be able to recognize all invasive plant species identified by NYS and be aware of any areas of infestation identified during the pre-construction baseline survey within the Project corridor, access roads, and work areas. The Construction Supervisor will be trained by the Environmental Monitor to recognize the most common expected invasive species within the Project corridor, access roads, and work areas. Training will include an overview of the site-specific BMPs for preventing or minimizing the transport of invasive plant parts as well as the methods for cleaning and/or decontaminating Project equipment.

### 4.2.4 Construction

Procedures to be implemented to minimize the spread of terrestrial invasive plant species during construction include, but may not be limited to, the following:

- a) To prevent the potential introduction of terrestrial invasive plant species from one Project area to another, vehicles, equipment, and materials (including equipment mats) will enter and exit all Project areas visibly clean and free of invasive species.
- b) Prior to leaving the Project area, vehicles, equipment, and materials will be inspected and visibly clean and free of invasive plant species to prevent the potential introduction of invasive species within the Project area to other areas.
- c) The cleaning method will include, as applicable, brushing, scraping, and/or the use of compressed air to remove the majority of visible soils and vegetation. Any matter cleaned from equipment and material will remain within the same Project area. The specific locations of cleaning stations will be coordinated between the Construction Supervisor and the Environmental Monitor and will be based on workspace arrangements and the location of invasive plant species.
- d) Install appropriate erosion and sediment controls at identified work sites to help prevent or control the potential transport of invasive plant species via soil erosion, as indicated in the Project EM&CP.
- e) To the extent practicable, avoid moving invasive plant-infested soils, gravel, rock, and other fill materials into relatively invasive plant-free locations. Soil, gravel, rock, and other fill material will come from invasive plant-free sources on the site, if such sources are available. Off-site fill materials also will come from sources visually free of invasive species.

- f) Ground disturbance and vegetation removal will be minimized as much as possible. The contractors and subcontractors will stay within access roads and work areas that are designated on the Plans and Profiles within the Project EM&CP.
- g) Stabilize and re-vegetate disturbed sites outside of roadway ROWs using an appropriate seed mix having a labeled weed content that does not exceed the weed content limitations for such seeds under Agriculture and Markets Law §138(A)(4) and as identified within the Project EM&CP.

## 5.0 TERRESTRIAL INVASIVE INSECT SPECIES

### 5.1 TARGET SPECIES

Consultation with the NYSDEC, NYSDAM, and NYSPSC will be conducted prior to construction to determine the terrestrial invasive insect species listed in Part 575 within the Project area, which present an environmental or human health hazard. Procedures to be implemented to manage and prevent dissemination of the invasive insect species found along the Project corridor are described in Section 5.2 below and will be further detailed within the Project EM&CP.

### 5.2 CONSTRUCTION BEST MANAGEMENT PRACTICES

#### 5.2.3 Training

Anyone who will be working in the Project corridor during construction will receive training to identify invasive insects that are identified by NYS. If evidence of the existence of these insects is found, the facts will be reported by the Environmental Monitor as soon as practicable to NYSPSC and the appropriate NYSDEC Region 1 forester.

#### 5.2.4 Construction

During clearing and construction, the Environmental Monitor and all crew members will be aware of the visual signs of invasive insect infestation. If any of signs are found, a radial survey will be conducted to determine the extent of the infestation.

Procedures to minimize the spread of invasive insect species include, but may not be limited to, the following:

- a) Coordinate with outside logging contractors for sale and use of the merchantable timber that will be cleared;
- b) Removal of any wood from the Project ROW will be done pursuant to the NYSDEC's firewood regulations found in 6 NYCRR Part 192 and any applicable NYSDEC quarantine orders or NYSDAM quarantine regulations.

## 6.0 AQUATIC INVASIVE SPECIES

### 6.1 TARGET SPECIES

Consultation with the National Oceanic Atmospheric Administration (NOAA), NYSDEC and NYSPSC will be conducted to determine the aquatic invasive species listed in Part 575 within the Project area.

Procedures to be implemented to manage and prevent dissemination of the aquatic invasive species found along the Project corridor are described in Section 6.2 below and will be further detailed within the Project EM&CP.

### 6.2 CONSTRUCTION BEST MANAGEMENT PRACTICES

#### 6.2.3 Training

Anyone who will be working on the Project during construction will receive training to identify aquatic invasive species. If evidence of the existence of these aquatic species is found, the incident will be reported as soon as practicable to NYSPSC and the appropriate NOAA and NYSDEC personnel.

#### 6.2.4 Construction

Procedures to minimize the spread of aquatic invasive species include, but may not be limited to, the following:

- a) Preventing the potential introduction of aquatic invasive species from other areas or regions to the Project area: vessels, equipment, and materials will be inspected and cleaned of visible soils, vegetation, aquatic hitchhikers, and debris before bringing them to the Project area.
- b) Prior to leaving the Project area, vehicles, equipment, and materials will be inspected and cleaned of visible soils, vegetation, aquatic hitchhikers, and debris within the same waterbody to prevent the potential introduction of aquatic invasive species outside the Project area.
- c) Vessels, equipment, or materials that are to be removed from a waterbody and used in a different waterbody will be inspected and cleaned of visible soils, vegetation, aquatic hitchhikers, and debris.
- d) Vessels utilizing ballast water will release and/or flush onboard water in deep waters pursuant to USCG standards, prior to entering NYS waters, to minimize the potential amount of aquatic invasive species onboard and decrease their survival rate.
- e) All vessels will comply with ballast water discharge standards, which will require the installation of ballast water treatment.
- f) Ships are to employ technology to meet ballast water discharge standards, which are even more protective of NYS's waters.

## REFERENCES

- iMapInvasives iMAP23. Accessed October 7, 2020. <https://www.nyimainvasives.org/public-map>.
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