
NORTH SENECA
SOLAR PROJECT

North Seneca Solar Project

ORES Permit Application No. 23-00036

1100-2.13 Exhibit 12

NYS Threatened and Endangered Species

REDACTED

Revision 1

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EXHIBIT 12 NYS THREATENED OR ENDANGERED SPECIES

(a) Wildlife Site Characterization Report

On behalf of North Seneca Solar Project, LLC (the Applicant), Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C (EDR) prepared a *Wildlife Site Characterization (WSC) Report* (Appendix 12-A), in accordance with Title 16 New York Codes, Rules and Regulations (NYCRR) Section 1100-1.3(g)(1), summarizing existing public information on bird, bat, and other wildlife species at the proposed North Seneca Solar Project (Facility) and surrounding area. The report also provides an analysis of the occurrence, and potential for occurrence, of New York State (NYS) listed endangered species, threatened species, and species of special concern (SSC) within the vicinity of the Facility. Information on the existing wildlife resources in the vicinity of the Facility was obtained from publicly available sources, agency correspondence, field reconnaissance, and the results of site-specific surveys conducted by the Applicant and EDR.

The Facility Site consists primarily of active agricultural land that is actively managed to produce row and field crops (i.e., corn, alfalfa hay, other hay, and soybeans). In addition, some deciduous forests, woody wetlands, and disturbed/developed land (primarily rural single-family houses, farms, and associated yards) are present. The information documented in the *Wildlife Site Characterization Report* suggests that wildlife reported within and around the Facility Site consists of relatively common species that are typically found in agricultural and forested habitats. Several state listed endangered species, threatened species, and SSC were identified in the report as having documented occurrences in the vicinity of the Facility Site over the last five years.

Exhibit 11 provides a more detailed discussion of the Facility's impact on wildlife habitats, including important landscape features. Descriptions of each landscape feature within the 5-mile Study Area, and the state listed species likely to utilize these resources, are provided in the *Wildlife Site Characterization Report*. The Applicant submitted the report and associated geographic information system (GIS) shapefiles and mapping to the Office of Renewable Energy Siting and Electric Transmission (ORES) and the NYS Department of Environmental Conservation (NYSDEC) on April 15, 2022, in accordance with 16 NYCRR Section 1100-1.3(g)(2). ORES responded with a final pre-application consultation letter on May 18, 2022 that included initial findings of occupied habitat for several state listed endangered species, threatened species, and SSC documented in the vicinity of the Facility Site, including the following species:

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In addition, a recent review of the United States Fish and Wildlife Service’s (USFWS) Information for Planning and Consultation (IPaC) system was performed for the Facility Site on December 5, 2023. The IPaC Official Species List is included in Appendix 12-B and identified the following federally listed species as potentially occurring in the vicinity of the Facility:

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(b) Pre-Application Wildlife Survey Reports

On behalf of the Applicant, EDR conducted a breeding bird study during the spring and early summer of 2022 and a winter raptor study during the 2022-2023 wintering season. The results of these surveys were intended to inform the Applicant in the development of the Facility and to assist ORES, in consultation with the NYSDEC, in their determination of whether occupied habitat for state listed endangered and/or threatened species exists within the Facility Site in accordance with the requirements of Article VIII. The breeding bird and winter raptor studies are addressed in the following sections.

Breeding Bird Surveys

EDR conducted breeding bird surveys to identify and document bird species that utilize habitat within the Facility Site during the spring and summer for breeding. This study focused primarily on open field areas that could potentially be used by grassland bird species (including state listed species).

The scope of the surveys was defined in a *Breeding Bird Survey Work Plan* that was developed in accordance with the NYSDEC 2022 *Survey Protocol for State-listed Breeding Grassland Bird Species* and in consideration of comments provided by the NYSDEC (Appendix 12-B). The *Breeding Bird Survey Work Plan* was submitted to ORES and the NYSDEC for review and comment on April 15, 2022. The surveys were conducted by EDR between May 19 and July 22, 2022. The primary method for surveying breeding birds consisted of 5-minute point count surveys. Point count surveys at 42 locations were conducted one or two days per week between first light (i.e., 30 minutes before sunrise) and approximately 10:30 a.m. as weather conditions permitted. In total, morning point count surveys were completed on 20 different days and included a total of 343 breeding bird point count surveys and 1,715 survey minutes. A total of 60 different species were

documented during point count surveys. Of the 60 species identified during point count surveys, none were confirmed as state listed threatened species. **BEGIN CONFIDENTIAL INFORMATION** < [REDACTED]

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Based on the results of the breeding bird surveys, EDR concluded that occupied breeding habitat for state listed endangered or threatened bird species does not appear to be present within the Facility Site, as no evidence of breeding behavior was observed for these species. In addition, ORES did not identify any currently mapped occupied breeding habitat for state listed species within the Facility Site in the pre-application WSC consultation meeting held on May 17, 2022. The *Breeding Bird Survey Report* and associated GIS shapefiles were provided to the NYSDEC and ORES for review on October 10, 2022. The 2022 *Breeding Bird Survey Report* is included with this Application as Appendix 12-C.

Winter Raptor Surveys

In the pre-application consultation letter dated May 18, 2022, ORES recommended the Applicant conduct winter raptor surveys at the Facility Site to document the presence and use of state listed grassland raptor species within the Facility Site during the winter season and to identify specific habitat areas (including roost sites and foraging areas) used by state listed grassland raptor species. EDR conducted winter raptor surveys during the 2022-2023 season in accordance with the August 2021 NYSDEC *Survey Protocol for State-listed Wintering Grassland Raptor Species*. Prior to conducting the winter raptor surveys, EDR submitted a *Winter Raptor Survey Work Plan* to ORES for review and comment on October 6, 2022. Based on consultations with the NYSDEC and ORES (Appendix 12-B), and the results of the WSC, the winter raptor study specifically targeted two grassland raptor species: **BEGIN CONFIDENTIAL INFORMATION** < [REDACTED]

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Winter raptor surveys were conducted by qualified biologists at the Facility Site, from November 14, 2022 until April 7, 2023. **BEGIN CONFIDENTIAL INFORMATION** < [REDACTED]

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[REDACTED] >END CONFIDENTIAL INFORMATION Based on these results, the Applicant continued consultations with ORES and the NYSDEC in order to arrive at a final determination regarding the extent of occupied habitat for wintering state listed threatened or endangered raptor species pursuant to the 16 NYCRR Section 1100-2.13 and 6 NYCRR Part 182 (NYS Threatened and Endangered Species Regulations) as further discussed in Section (c) of this Exhibit. The *Winter Raptor Survey Report* and associated GIS shapefiles were provided to the NYSDEC and ORES for review on June 7, 2023. The *Winter Raptor Survey Report* is included with this Application as Appendix 12-D.

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(c) Determination of Occupied Habitat at the Facility Site

The *Wildlife Site Characterization Report* (Appendix 12-A), *Breeding Bird Survey Report* (Appendix 12-C), *Winter Raptor Survey Report* (Appendix 12-D), and BEGIN CONFIDENTIAL INFORMATION < [REDACTED] >END CONFIDENTIAL INFORMATION were provided to ORES and the NYSDEC, along with associated GIS shapefiles to facilitate consultations and inform a determination of occupied habitat within the Facility Site. On July 21, 2023, the Applicant also provided an Estimated Occupied Habitat Memorandum detailing the Applicant’s estimate of the locations and extent of occupied habitat to ORES and the NYSDEC (Appendix 12-B). These materials included the Applicant’s initial estimate of potential impacts to occupied habitat. In accordance with 16 NYCRR Section 1100-1.3(g)(6), the Applicant then participated in a meeting with ORES and the NYSDEC on August 14, 2023, to discuss the results of the surveys, preliminary estimates of occupied habitat, the current Facility design, potential Facility-related impacts, and requirements for a Net Conservation Benefit Plan (NCBP).

Subsequent to these submittals and the occupied habitat meeting, ORES, in consultation with the NYSDEC, provided a Determination of Occupied Habitat, Incidental Take, and Net Conservation Benefit (Determination) on August 30, 2023, BEGIN CONFIDENTIAL INFORMATION < [REDACTED] >END CONFIDENTIAL INFORMATION In addition, the Determination indicated that state listed threatened or endangered grassland bird species occupied breeding habitat is not present within the Facility Site. The Determination also indicated that the Facility Site is not within 1.5 miles of a maternity roost site or 5 miles of a hibernaculum site for BEGIN CONFIDENTIAL INFORMATION < [REDACTED]

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In the summer of 2024, the Applicant made some minor adjustments to the Facility layout, which resulted in slight changes to the level of habitat modification and required mitigation. These layout adjustments, including shifts to the proposed collection and point of interconnection substation locations and associated components, as well as minor refinements to other Facility components (e.g., fencing, electrical collection lines), were made to address design constraints while continuing to minimize impacts to a variety of different resources. Given these updates to the Facility layout, the Applicant prepared a revised estimate of impact areas and mitigation requirements. This revised estimate and a request for a revised Determination were provided to ORES on October 7, 2024. BEGIN CONFIDENTIAL INFORMATION < [REDACTED]

[REDACTED] >END CONFIDENTIAL INFORMATION As of early November 2024, ORES was in the process of reviewing the current Facility layout and issuing a revised Determination.

(d) Avoidance, Minimization Measures, and Unavoidable Potential Impacts to NYS Threatened, Endangered, or Species of Special Concern

Upon review of the *Wildlife Site Characterization Report* and results of the pre-application wildlife surveys, ORES, in consultation with the NYSDEC, has determined that BEGIN CONFIDENTIAL INFORMATION < [REDACTED]

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Avoidance and Minimization Measures

The following efforts have been, or will be, implemented to avoid and minimize impacts to state listed bird species to the extent practicable, given the many other siting constraints inherent in the development of a solar energy generation facility:

- The Applicant consulted with ORES, the NYSDEC, and the USFWS on multiple occasions during the pre-application process regarding potential impacts to threatened or endangered bird species and appropriate studies to evaluate potential impacts to threatened or endangered bird species (refer to Appendix 12-B).
- Many Facility components were intentionally sited in areas primarily used for agricultural row crop (e.g., corn, soybean) production, which typically represent lower-quality habitat than grass-dominated areas. This represents impact minimization for state listed grassland bird species including **BEGIN CONFIDENTIAL INFORMATION** < [REDACTED] >END CONFIDENTIAL INFORMATION
- To the greatest extent practicable, the Applicant has adjusted the Facility layout to propose photovoltaic (PV) arrays in areas not containing occupied habitat for **BEGIN CONFIDENTIAL INFORMATION** < [REDACTED] >END CONFIDENTIAL INFORMATION
- Multiple parcels or portions of parcels that were initially considered for the Facility were removed from the Facility Site to avoid areas of **BEGIN CONFIDENTIAL INFORMATION** < [REDACTED] >END CONFIDENTIAL INFORMATION

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- Some Facility components were placed in open areas, which represents impact minimization for forest-associated SSC including BEGIN CONFIDENTIAL INFORMATION < [REDACTED] >END CONFIDENTIAL INFORMATION
- In the central portion of the Facility Site, minimization efforts also included limiting construction to the installation of an underground collection line within BEGIN CONFIDENTIAL INFORMATION < [REDACTED] >END CONFIDENTIAL INFORMATION
- Tree clearing as part of Facility construction will occur between November 1 and March 31 to the extent practicable to avoid potential impacts to bat species. This will also serve to avoid and/or minimize impacts to forest-associated bird SSC including BEGIN CONFIDENTIAL INFORMATION < [REDACTED] >END CONFIDENTIAL INFORMATION
- Facility electrical collection lines will be installed underground to minimize impacts to grassland bird occupied habitat. This represents impact minimization for state listed bird species including BEGIN CONFIDENTIAL INFORMATION < [REDACTED] >END CONFIDENTIAL INFORMATION
- Linear Facility components were co-located where possible to reduce impacts to grassland bird occupied habitat. This represents impact minimization for state listed grassland bird species including BEGIN CONFIDENTIAL INFORMATION < [REDACTED] >END CONFIDENTIAL INFORMATION
- Linear Facility components were also co-located where possible to reduce impacts to forestland. This represents impact minimization for forest-associated SSC including BEGIN CONFIDENTIAL INFORMATION < [REDACTED] >END CONFIDENTIAL INFORMATION
- The Facility will be constructed away from large waterbodies and known BEGIN CONFIDENTIAL INFORMATION < [REDACTED] >END CONFIDENTIAL INFORMATION
- The Facility will avoid or minimize ground disturbance and construction-related activities within occupied habitat during certain periods as follows:
 - In areas of grassland bird occupied wintering habitat, work will be conducted between April 1 and November 14 to the extent practicable.
- When ground disturbance and construction-related activities must occur within grassland bird occupied wintering habitat between November 15 and March 31, an environmental monitor or biologist will conduct weekly surveys for NYS threatened or endangered grassland bird species.

- The Applicant will hire an independent, third-party environmental monitor to oversee compliance with environmental commitments and siting permit requirements throughout construction of the Facility. This will support impact avoidance and minimization for multiple state listed species, along with other natural resources.
- All temporarily disturbed grassland vegetation communities will be re-graded to pre-construction contours and reseeded with a native or naturalized grassland seed mix (unless returning to agricultural use or otherwise specified by the landowner).

Unavoidable Potential Impacts

As stated previously, ORES has indicated that the Facility is estimated to adversely impact **BEGIN CONFIDENTIAL INFORMATION**<[REDACTED]>**END CONFIDENTIAL INFORMATION** (Appendix 12-F). Some of these same occupied habitat areas may also be used by SSC including **BEGIN CONFIDENTIAL INFORMATION**<[REDACTED]>**END CONFIDENTIAL INFORMATION** Adverse modification of occupied wintering habitat for **BEGIN CONFIDENTIAL INFORMATION**<[REDACTED]>**END CONFIDENTIAL INFORMATION** was calculated by ORES using the outer fence line of PV arrays and aboveground components within identified occupied wintering habitat areas. Generally, if more than 25 acres of open occupied habitat will remain in a given field following PV array or other aboveground component installation, then the remaining habitat would not be considered adversely modified. Conversely, if less than 25 acres of open occupied habitat will remain in a given field post-construction, then the remnant field area is typically considered to be adversely modified because it would no longer be of sufficient size to support this species. Refer to the NCBP included as Appendix 12-G for more information.

Although the Applicant has designed the Facility to avoid and minimize impacts to ORES-identified occupied habitat and state listed wildlife species, the remaining impacts will be unavoidable, largely due to the many other siting constraints associated with the development of a solar energy generation project. The parcels that comprise the Facility Site represent a community of landowners who are willing and interested in participating with the Facility, but only under specific circumstances that are compatible with landowner preferences. Parcels outside the Facility Site were typically not available for development; and therefore, it was not possible to shift PV arrays to other areas, even if they would otherwise be suitable for hosting Facility components or allow for further avoidance or minimization of impacts. Landowners agreeing to host Facility components typically have very specific requirements regarding where the solar infrastructure can and cannot be located on their land. Similarly, some landowners may be willing to host certain Facility components, but not others. Additionally, even if landowners are amenable to a shift in Facility components, such a change is often not possible given the setbacks and zoning requirements of the local municipalities, or other sensitive resource constraints, which reduce flexibility for Facility design shifts. As discussed in other Exhibits of this Application, the Applicant has shifted Facility components to avoid other sensitive resources existing on these parcels during Facility design, in addition to avoiding areas of grassland habitat, to the extent practicable. The alternative to fully avoid impacts to state listed species by not locating Facility components on a particular property at all would not be economically feasible for the

Facility. Moreover, such an alternative would not satisfy the goals outlined in the Climate Leadership and Community Protection Act (CLCPA, 2020).

NYS policy and laws—most notably the CLCPA—require the development of renewable energy facilities in order to significantly increase generating capacity from renewable sources, meet clean energy goals, and combat climate change (CLCPA, 2020). The Facility has been designed to avoid and minimize impacts to environmental resources to the extent practicable, while also making an important contribution to renewable energy generation in NYS and furthering well-established policy goals. As many policymakers, scientists, and developers are aware, climate change represents one of the most significant threats to a wide variety of wildlife species, potentially threatening two-thirds of North American bird species with extinction (National Audubon Society, 2019). Thus, any unavoidable impact to bird species and their habitats from development of renewable energy projects, such as the Facility, must be balanced against the environmental threats to those species and their habitats posed by a failure to act to address and mitigate climate change.

(e) Proof of *De Minimis* Impacts to NYS Threatened or Endangered Grassland Birds or their Habitat

The Determination issued by ORES on August 30, 2023, and the level of impact to state listed grassland birds and their habitat, are discussed in the previous sections.

(f) Net Conservation Benefit Plan

The Applicant has developed an NCBP for the Facility in accordance with the requirements of 16 NYCRR Section 1100-6.4(o). The NCBP is included as Appendix 12-G. As stated in 16 NYCRR Section 1100-6.4(o)(3)(ix), permittee-implemented habitat conservation (i.e., physical mitigation) may be proposed to mitigate for unavoidable impacts to occupied grassland bird habitat, with 0.2 acres of mitigation for every 1.0 acre of occupied grassland bird wintering habitat determined to be taken. As part of the NCBP, the Applicant proposes to preserve and manage the required number of acres of open land for a mitigation term of 30 years, which will provide a net conservation benefit to the affected species during the Facility’s operational life of at least 35 years. Based on pre-application consultations with ORES (including a meeting held on August 14, 2023), the Applicant has identified suitable land parcels to attain the required mitigation acreage, as discussed in the NCBP (Appendix 12-G), and is in the process of confirming the suitability of these areas with ORES. Alternatively, the Applicant may ultimately elect to pay a mitigation fee, should this option become available, commensurate with the actual acreage of occupied habitat taken into the Endangered and Threatened Species Mitigation Bank Fund. It is the Applicant’s understanding that this option is not currently available.

The NCBP includes the following information:

- (a) a demonstration that the NCBP results in a positive benefit on the affected species
- (b) a detailed explanation of the net conservation benefit to the affected species based on the location and type of measures to be taken

- (c) full source information supporting a determination as to the net conservation benefit for the affected species (i.e., the calculations of acreage necessary to mitigation potential effects of the Facility)
- (d) a consideration of minimization and mitigation measures for the affected species
- (e) a consideration of potential sites for mitigation measures for the affected species, including a discussion of suitability of habitat
- (f) an identification and detailed description of the mitigation actions that will be undertaken by the Applicant to achieve a net conservation benefit to the affected species
- (g) an indication of the Applicant's financial and technical capability and commitment to fund and execute management, maintenance, and monitoring efforts for the mitigation areas.

REFERENCES

Climate Leadership and Community Protection Act (CLCPA). 2020. *Climate Act Fact Sheet*. Available at: <https://climate.ny.gov/-/media/Project/Climate/Files/CLCPA-Fact-Sheet.ashx> (Accessed October 2024).

National Audubon Society. 2019. *Survival by Degrees: 389 Bird Species on the Brink*. Available at: <https://www.audubon.org/climate/survivalbydegrees> (Accessed October 2024).

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