Hoffman Falls Wind Project

Case No. 23-00038

900-2.13 Exhibit 12

NYS Threatened or Endangered Species

Revision 1

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EXHIBIT 12 NYS THREATENED OR ENDANGERED SPECIES

(a) Wildlife Site Characterization Report

On behalf of the Applicant, Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR) prepared a Wildlife Site Characterization (WSC) Report, in accordance with Title 19 New York Codes, Rules and Regulations (19 NYCRR) §900-1.3(g)(1), summarizing existing publicly available information on bird, bat, and other wildlife species at the proposed Facility Site and surrounding area (Appendix 12-A). The WSC 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 5 miles of the Facility. Information on the existing wildlife resources within 5 miles of the Facility was obtained from publicly available sources, agency correspondence, field reconnaissance, and the results of site-specific surveys conducted by EDR on behalf of the Applicant. Specific information regarding wildlife resources in the vicinity of the Facility and associated information sources are provided in Appendix 12-A.

A total of 12 state listed endangered, threatened, or special concern species have been documented in the vicinity of the Facility Site within the last five years, and a detailed evaluation of habitat suitability for these state listed species is presented in the WSC Report. As identified in the WSC Report, the Facility Site is unlikely to contain suitable breeding or wintering habitat for the following state listed bird species identified within 5 miles of the Facility: **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION** The Facility Site may contain suitable habitat for seven state listed bird species, including **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**

Additional state listed endangered, threatened, or special concern bird species identified during pre-application agency consultations as occurring within 10 miles of the Facility Site include **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION** State listed endangered, threatened, or special concern bat species identified during pre-application agency consultations as occurring within 40 miles of the Facility Site include **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION** In addition, the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system identifies **BEGIN CONFIDENTIAL INFORMATION<** [redacted]

[redacted]>**END CONFIDENTIAL INFORMATION** Additional information regarding impacts to aquatic species and resources is provided in Exhibit 13(e)(1).

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 WSC Report (Appendix 12-A). An initial WSC Report and the associated geographic information system (GIS) shapefiles and mapping were provided to the Office of Renewable Energy Siting (ORES) on May 5, 2021. In October 2022, the Applicant combined the previously proposed Blue Hill Wind Project (Town of Eaton, Madison County, New York) with the Facility, and an updated WSC Report was subsequently provided to ORES on February 16, 2023, in accordance with 19 NYCRR §900-1.3(g)(2). The Applicant and ORES held a pre-application consultation meeting on June 11, 2021, and the Applicant also received an initial pre-application WSC consultation letter from ORES. Following the submittal of the updated WSC report, ORES provided an updated WSC consultation letter on March 6, 2023. This letter provided initial findings regarding the presence of occupied habitat at and in the vicinity of the Facility Site and acknowledged field studies that were previously completed or that were underway (Appendix 12-B).

(b) Pre-Application Wildlife Survey Reports

On behalf of the Applicant, EDR conducted spring raptor migration surveys for the Facility in 2021 (Appendix 12-C). Breeding bird studies were conducted during the spring and early summer of 2021 and 2023 (Appendix 12-D). Fall raptor migration surveys were conducted during the fall of 2021 and 2022 (Appendix 12-C). Winter raptor studies were conducted during the 2021–2022 and 2022-2023 wintering seasons (Appendix 12-E) at the Facility Site. Marsh bird surveys (Appendix 12-F) and forest raptor surveys (Appendix 12-G) were conducted in 2023. Additionally, EDR is currently conducting eagle point count surveys for the Facility following federal guidance. The results of these wildlife surveys were intended to inform the Applicant in the development of the Facility and assist ORES, in consultation with the NYS Department of Environmental Conservation (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 Section 94-c. The pre-application avian studies are summarized in the following sections.

Spring Raptor Migration Surveys

EDR conducted spring raptor migration surveys in 2021 to identify and document raptor species that may pass by or through the Facility Site during the spring migration season. These studies were designed based on the 2016 NYSDEC *Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects* (NYSDEC, 2016), and surveys were conducted from stationary survey locations with representative views of the area including the Facility Site (Appendix 12-C).

Surveys in the western portion of the Facility Site were conducted by EDR between March 4 and May 26, 2021. Surveys were conducted once per week between 8:00 a.m. and until at least two hours prior to sunset, and a single survey location was visited 13 times throughout the season. A total of 476 raptors of 11 different species were recorded. **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**

EDR also conducted spring raptor migration surveys for the eastern portion of the Facility Site that corresponds with the previously proposed Blue Hill Wind Project between March 4 and May 7, 2021. Surveys were conducted once per week between 8:00 a.m. and until at least two hours prior to sunset, and a single survey location was visited 13 times throughout the season. A total of 129 raptors of eight different species were recorded. **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**

Both Spring Raptor Survey Reports and associated GIS shapefiles were provided to ORES for review on July 19, 2021. The Spring Raptor Survey Reports are included with this Application as Appendix 12-C.

Breeding Bird Surveys

EDR conducted breeding bird surveys in 2021 and 2023 to identify and document bird species that utilize habitat within the Facility Site during the spring and summer for breeding. The 2021 surveys included locations in both forested and non-forested habitats, while the 2023 surveys focused on open field areas that could potentially be used by grassland bird species, including state listed species (Appendix 12-D).

Initial breeding bird surveys were conducted by EDR between May 20 and July 20, 2021 based on the 2016 NYSDEC *Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects* (NYSDEC, 2016), the 2021 ORES *Draft Field Survey Protocol for State-listed Breeding Grassland Bird Species* (ORES, 2021), and feedback provided by NYSDEC and ORES. This study included 51 point count locations along 11 meander transects. Five-minute point count surveys were conducted along each transect over a period of 10 weeks, during which each point count location was surveyed at least four times. A total of 2,152 individuals of 65 different bird species were recorded within 100 meters of point count locations. **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**

EDR also conducted breeding bird surveys for the portion of the Facility Site that corresponds with the previously proposed Blue Hill Wind Project between May 20 and July 22, 2021 based on the 2016 NYSDEC *Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects* (NYSDEC, 2016), the 2021 ORES *Draft Field Survey Protocol for State-listed Breeding Grassland Bird Species* (ORES, 2021), and feedback provided by NYSDEC and ORES. This study included 24 point count locations along six meander transects. Five-minute point count surveys were conducted along each transect over a period of 10 weeks, during which each point count location was surveyed between seven and 10 times. A total of 1,698 individuals of 56 different species were recorded within 100 meters of point count locations. No state listed threatened or endangered species were observed during this study. **BEGIN CONFIDENTIAL**

INFORMATION< [redacted] **>END CONFIDENTIAL INFORMATION**

Additional breeding bird surveys were conducted by EDR between May 4 and July 20, 2023 based on the NYSDEC 2022 *Survey Protocol for State-listed Breeding Grassland Bird Species* (NYSDEC, 2022) and feedback provided by ORES. The 2023 study included 83 point count locations. Five-minute point count surveys were conducted over a period of 12 weeks, during which each point count location was surveyed between eight and 11 times. A total of 2,427 individuals of 70 different species were recorded within 100 meters of point count locations. **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**

The 2021 Breeding Bird Survey Reports were provided to the NYSDEC and ORES in September 2021. The 2023 Breeding Bird Survey Report was provided to the NYSDEC and ORES on October 4, 2023. The Breeding Bird Survey Reports are included with this Application as Appendix 12-D.

Fall Raptor Migration Surveys

EDR conducted fall raptor migration surveys to identify and document raptor species that may pass by or through the Facility Site during the fall migration season. These studies were designed based on the 2016 NYSDEC *Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects* (NYSDEC, 2016), and surveys were conducted from stationary survey locations with representative views of the area including the Facility Site (Appendix 12-C).

Surveys in the western and central portions of the Facility Site were conducted by EDR between August 16 and December 14, 2022. Surveys were conducted once per week between 8:00 a.m. and until at least two hours prior to sunset. Two survey locations were visited 18 times each during the season, totaling 36 surveys. A total of 2,617 raptors of 13 different species were recorded throughout the season. **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**

EDR also conducted fall raptor migration surveys for the eastern portion of the Facility Site that corresponds with the previously proposed Blue Hill Wind Project between August 17 and December 14, 2021. Surveys were conducted once per week between 8:00 a.m. and until at least two hours prior to sunset, and a single survey location was visited 18 times during the season. A total of 211 raptors of 10 different species were recorded throughout the season. **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**

The 2021 Fall Raptor Migration Survey Report was provided to the NYSDEC and ORES on January 25, 2022. The 2022 Fall Raptor Migration Survey Report was provided to ORES on February 17, 2023. The Fall Raptor Migration Survey Reports are included with this Application as Appendix 12-C.

Winter Raptor Surveys

EDR conducted winter raptor surveys to document the presence and use patterns of raptor species within the Facility Site during the winter season and to identify specific habitat areas used by state listed raptor species, including roost sites and foraging areas. These studies focused on open field areas that could potentially be used by wintering grassland bird species, including state listed raptor species (Appendix 12-E).

Winter raptor surveys were conducted by EDR between November 14, 2022, and April 6, 2023, and were designed based on the August 2021 NYSDEC *Survey Protocol for State-listed Wintering Grassland Raptor Species* (NYSDEC, 2021) and feedback from ORES. A total of 14 evening survey stations and 10 daytime driving stops were established for this effort. Over the course of the survey period, 265 evening stationary surveys were completed and a total of 20 surveys were conducted at each daytime survey stop. A total of 279 raptors of 11 different species were recorded throughout the season. **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**

EDR also conducted winter raptor surveys for the eastern portion of the Facility Site that corresponds with the previously proposed Blue Hill Wind Project between November 23, 2021, and March 30, 2022, following the August 2021 NYSDEC *Survey Protocol for State-listed Wintering Grassland Raptor Species* (NYSDEC, 2021) and feedback provided by ORES. A total of four evening survey stations and seven daytime driving stops were established for this effort. Over the course of the survey period, 75 evening stationary surveys were completed and a total of 118 surveys were conducted at daytime survey stops. A total of 47 raptors of seven different species were recorded throughout the season. **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**

The 2021-2022 Winter Raptor Survey Report was provided to the NYSDEC and ORES on May 13, 2022. The 2022-2023 Winter Raptor Survey Report was provided to ORES on June 27, 2023. The Winter Raptor Survey Reports are included with this Application as Appendix 12-E.

Marsh Bird Surveys

EDR conducted marsh bird surveys to document the presence, abundance, and use patterns of obligate and secretive wetland birds (including rails, bitterns, and grebes) within the Facility Site during the spring and summer of 2023. The study focused on wetland habitats that may represent suitable marsh bird habitat (Appendix 12-F).

The marsh bird study was conducted by EDR between May 18 and June 23, 2023, and was designed based on the NYSDEC 2013 *New York State Marsh Bird Monitoring Program Survey Instructions* (NYSDEC, 2013) and feedback from ORES. Surveys were conducted at 10 call-broadcast point count locations. Each point count location was surveyed three times over a period of six weeks. No state listed endangered, threatened, or special concern species were observed during the marsh bird surveys including **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**

The Marsh Bird Survey Report was provided to ORES on August 4, 2023, and is included with this Application as Appendix 12-F.

Forest Raptor Surveys

EDR conducted forest raptor surveys to document the presence or absence of forest raptor species and any observed patterns of use by these species within the Facility Site during the summer season. The study sampled core forest blocks overlapping the Facility Site where Facility-related tree clearing and/or ground disturbance activities are planned (Appendix 12-C).

The forest raptor study was conducted by EDR between July 5 and August 3, 2023, and was designed based on the U.S. Department of Agriculture and U.S. Forest Service *Multiple Species Inventory and Monitoring Technical Guide. Gen. Tech. Rep. WO-73* (Manley et al., 2006) and feedback from ORES. Surveys were conducted at nine different sampling hexagon locations. A total of nine diurnal broadcast surveys and 18 terrestrial visual encounter surveys were conducted over a period of five weeks. Each sampling hexagon was surveyed three times during the season. A total of 14 raptors were observed, representing eight different species. No threatened or endangered species were observed during the survey period. **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**.

The Forest Raptor Survey Report was provided to ORES on October 4, 2023, and is included with this Application as Appendix 12-G.

Eagle Point Count Surveys

EDR is currently conducting eagle point count surveys to investigate seasonal eagle activity throughout the Facility Site following federal guidance. Eagle point count surveys began on March 15, 2023, and will continue each month for up to two years in consultation with USFWS. The study was designed based on the USFWS *Eagle Conservation Plan Guidance, Module 1 – Land-based Wind Energy, Version 2* (USFWS, 2013) and comments provided by USFWS staff. Threatened and endangered species observation data recorded through October 10, 2023, have been provided to ORES, and additional study results will be provided to ORES once the study has concluded prior to Facility construction.

(c) Determination of Occupied Habitat at the Facility Site

The WSC Report (Appendix 12-A), Raptor Migration Survey Reports (Appendix 12-C), Breeding Bird Survey Reports (Appendix 12-D), Winter Raptor Survey Reports (Appendix 12-E), Marsh Bird Survey Report (Appendix 12-F), and Forest Raptor Survey Report (Appendix 12-G), as described previously in Sections (a) and (b), were provided to ORES and the NYSDEC along with associated GIS shapefiles to facilitate pre-application consultations and inform a Determination of Occupied Habitat, Incidental Take, and Net Conservation Benefit (Determination) for the Facility. In addition, the Applicant also provided an Estimated Occupied Habitat Memorandum detailing the Applicant's initial estimate of the locations and extent of occupied habitat to ORES and NYSDEC on October 27, 2023 (Appendix 12-B). The Estimated Occupied Habitat Memorandum also included the Applicant's initial estimate of potential impacts to NYS endangered and threatened species and associated occupied habitat. In accordance with 19 NYCRR §900-1.3(g)(6), the Applicant then participated in a meeting with ORES and NYSDEC staff on November 30, 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). Following the meeting, the Applicant provided additional information to ORES on December 13, 2023, in the form of a technical memorandum (Response to Draft Occupied Habitat Take Determination; refer to Appendix 12-B).

Subsequent to these submittals and the occupied habitat meeting, ORES, in consultation with the NYSDEC, provided a Determination for the Facility on January 5, 2024, **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION**

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 several wind turbine locations, access roads, and underground collection lines, were made to address setback requirements. 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 September 16, 2024.

On October 15, 2024, ORES issued a revised Determination, **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION** The revised Determination is provided in Appendix 12-H.

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

BEGIN CONFIDENTIAL INFORMATION<[redacted]>**END CONFIDENTIAL INFORMATION** In addition, ORES has determined that the operation of the Facility will result in the incidental take of **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION** Although some of the ORES-identified impacts to NYS threatened and endangered species are unavoidable, the Applicant has implemented (or will implement) a variety of avoidance and minimization measures and has developed an NCBP to provide a net conservation benefit to these affected species. To avoid and minimize impacts to NYS threatened and endangered species, the Facility will be required to adhere to applicable Uniform Standards and Conditions indicated in 19 NYCRR §900-6.4(o).

Avoidance and Minimization Measures

The following efforts have been (or will be) implemented during the Facility planning and design, construction and restoration, and operations and maintenance phases to avoid and minimize impacts to state listed bird species to the extent practicable, given the myriad of other siting constraints inherent in the development of a wind energy generation project:

Facility Planning and Design

- The Applicant consulted with ORES, NYSDEC, and 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).
- Some Facility components were sited in regularly disturbed 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**
- Some Facility wind turbines were placed near the edges of open field areas to minimize impacts to grassland bird occupied habitat. This represents impact minimization for state listed grassland bird species including **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION**
- Some Facility components were sited in wooded areas to minimize impacts to grassland bird occupied habitat. This represents impact minimization for state listed grassland bird species

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 grassland bird species including **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**
- Many access roads throughout the Facility Site were sited to follow existing farm roads to avoid or minimize 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 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**
- Some Facility components were placed in open areas, which represents impact minimization for forest-associated SSC including **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**
- Linear Facility components were 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 **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION** This represents impact minimization for these state listed species.
- Facility electrical collection lines will be installed underground, thereby minimizing possible collision and electrocution risk to raptors. This represents impact minimization for **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**
- Wherever possible, the Applicant sited Facility components to prioritize avoidance of wetlands and streams, which can represent higher-quality wildlife habitat. **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**

Construction and Restoration

- 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 breeding habitat, work will be conducted between August 16 and April 22 to the extent practicable.
    - 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 breeding habitat between April 23 and August 15 and 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.
- If an active nest is discovered within the Facility Site prior to or during construction and the Facility may result in adverse impacts to the nest, then the Facility will adjust the construction schedule to avoid work in that location until nesting has been completed.
- 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).
- The Facility will implement the measures indicated in 19 NYCRR §900-6.4(o)(6) to avoid and minimize impacts to the **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION** during the construction and restoration phase.

Operations and Maintenance

- In accordance with 19 NYCRR §900-6.4(o)(8)(i), if, during the life of the Facility, an active nest of a federal or NYS threatened or endangered bird species is discovered incidentally within the Facility Site, the Facility will notify the NYS Department of Public Service (NYSDPS) and ORES within 48 hours of discovery and prior to any further disturbance around the nest, roost, or area where the species were seen exhibiting any breeding or roosting behavior. An area at least 500 feet in radius around the active nest shall be posted and avoided until notice to continue maintenance activities is granted by ORES.
- The Facility will implement the measures indicated in 19 NYCRR §900-6.4(o)(6) to avoid and minimize impacts to the **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION** during the operations and maintenance phase.

The following efforts have been (or will be) implemented during the Facility planning and design, construction and restoration, and operations and maintenance phases to avoid and minimize impacts to state listed bat species to the extent practicable, given the myriad of other siting constraints inherent in the development of a wind energy generation project:

Facility Planning and Design

- As indicated in the ORES Determination, the Facility will not be sited or located within **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION** Because the Facility is not located within these distances relative to state listed bat species occurrences, the Applicant assumes that there will be no

impact to occupied habitat for **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION**, and that the restrictions for tree clearing activities indicated in 19 NYCRR §900-6.4(o)(4)(iii)(c) would not be applicable for the Facility. However, the Applicant will continue to consult with the appropriate agencies regarding requirements for listed bat species.

- Some Facility components were placed in open areas, which represents impact minimization for forest-associated bat species.
- Linear Facility components were co-located where possible to reduce impacts to forestland. This represents impact minimization for forest-associated bat species.
- Wherever possible, the Applicant sited Facility components to prioritize avoidance of wetlands and streams, which can represent higher-quality wildlife habitat. This represents impact minimization for bat species.

Construction and Restoration

- Erosion, sedimentation, and pollution controls will be developed and implemented during construction to protect water quality in wetlands and streams. This represents impact minimization for bat species.
- During the construction and restoration phase, if an active NYS threatened or endangered bat species maternity colony roost tree (or structure) is discovered within the Facility Site by construction staff, the NYSDPS and ORES will be notified within 48 hours of discovery and a 500-foot radius around the colony will be posted and avoided until notice to continue maintenance related activities is granted by the NYSDPS or ORES. Following an incidental discovery of a bat maternity colony by construction staff or their consultants, the Facility will submit a re-evaluation of the potential impacts of the Facility on listed bat species to the NYSDPS and ORES.

Operations and Maintenance

- Consistent with 19 NYCRR §900-6.4 (o)(4)(v)(a), the Facility will implement curtailment from July 1 through October 1 when wind speeds are at or below 5.5 meters per second (m/s) and temperatures are at or above 10° Celsius (50°Fahrenheit) from 30 minutes before sunset to 30 minutes after sunrise. Curtailment will be on an individual turbine basis and will be determined by weather conditions as measured by each individual weather station on the turbine nacelle. This represents impact minimization for **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION** and other bat species.
- During the operations and maintenance phase, if an active NYS threatened or endangered bat species maternity colony roost tree (or structure) is discovered within the Facility Site by operations staff, the NYSDPS and ORES will be notified within 48 hours of discovery and a 500-foot radius around the colony will be posted and avoided until notice to continue maintenance related activities is granted by the NYSDPS or ORES. Following an incidental discovery of a bat maternity colony by operations staff or their consultants, the Facility will submit a re-evaluation of the potential impacts of the Facility on listed bat species to the NYSDPS and ORES.

- Ultrasonic acoustic bat deterrent systems and/or other similar technologies may be employed at wind turbines during Facility operation.

Unavoidable Potential Impacts

As stated previously, ORES provided a revised Determination on October 15, 2024, which indicated that the Facility was estimated to adversely impact **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION** Some of these same occupied habitat areas may also be used by SSC including **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION** No direct take of these species is anticipated as a result of Facility construction or operation. Where Facility components are proposed in forested areas, there may also be unavoidable impacts to forest-associated SSC such as **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION** ORES has also indicated that the operation of the Facility will result in the incidental take of **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION**

Adverse modification of occupied habitat for **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION** was calculated by ORES by comparing the areas with proposed wind turbine locations and other Facility components, and associated indirect impact buffer areas established by the NYSDEC in other NYS wind energy generation project proceedings, to areas with identified occupied habitat (based on avian observation data collected at the Facility). Generally, if more than 25 acres of open occupied habitat will remain in a given field following wind turbine 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 ORES typically considers the remnant field area to be adversely modified because it would no longer be of sufficient size to support these species. **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION** Refer to the NCBP included as Appendix 12-I 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 wind energy generation project. The parcels that comprise the Facility Site represent a community of landowners who are willing and interested in hosting the Facility, but only under very specific circumstances that are compatible with their preferences. Parcels outside the Facility Site were typically not available for development; therefore, it was not possible to shift Facility components 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 detailed requirements regarding where infrastructure can and cannot be located on their land so that they can continue to utilize portions of their property for activities like farming. 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 and/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 during Facility design, in addition to avoiding areas of occupied habitat, to the extent practicable. Therefore, the only Facility layout alternative available to the Applicant is often to not locate Facility components on a particular property at all, which would undermine both the economic viability of the Facility and NYS's ability to meet the renewable energy and greenhouse gas emission reduction goals of the Climate Leadership and Community Protection Act (CLCPA, 2020).

NYS policy and laws—most notably the CLCPA—require the development of renewable energy projects 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 a meaningful 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 impacts to bird species and their habitats from development of renewable energy projects, such as the proposed Facility, must be balanced against the environmental threats to those species and their habitats posed by a failure address and mitigate climate change.

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

The revised Determination issued by ORES on October 15, 2024, 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 19 NYCRR §900-6.4(o). The NCBP is included as Appendix 12-I. As stated in 19 NYCRR §900-6.4(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, and 0.4 acres of mitigation for every 1.0 acre of occupied grassland bird breeding 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. The Applicant has identified a suitable land parcel to attain the required mitigation acreage (refer to Appendix 12-I). Alternatively, the Applicant may elect to pay a mitigation fee commensurate with the actual acreage of occupied habitat taken into the Endangered and Threatened Species Mitigation Bank Fund, although it is

the Applicant's understanding that this option is not currently available. **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION** Alternatively, the Applicant may elect to pay a mitigation fee commensurate with the anticipated number of individuals taken into the Endangered and Threatened Species Mitigation Bank Fund, although it is the Applicant's understanding that this option is not currently available. The NCBP includes: (1) detailed information regarding the avoidance and minimization measures taken by the Applicant to reduce impacts to state listed species covered by the NCBP; (2) the calculations of acreage or credits necessary to mitigate potential effects of the Facility on each covered species; (3) the areas or options proposed for mitigation; (4) the Applicant's proposed mitigation management and monitoring efforts; and (5) information regarding implementation and financing of the proposed mitigation measures. Implementation of the NCBP will provide a positive benefit to each of the affected species, as outlined in Appendix 12-I.

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