Net Conservation Benefit Plan

Hoffman Falls Wind Project

Towns of Fenner, Nelson, Eaton, and Smithfield

Madison County, New York

Prepared for:

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ACRONYMS AND ABBREVIATIONS

EDR	Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C.
IPaC	Information for Planning and Consultation
MW	megawatt
NCBP	Net Conservation Benefit Plan
NYCRR	New York Codes, Rules and Regulations
NYNHP	New York Natural Heritage Program
NYSDEC	New York State Department of Environmental Conservation
ORES	New York State Office of Renewable Energy Siting and Electric Transmission
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service

1.0 INTRODUCTION

On behalf of Hoffman Falls Wind LLC (Hoffman Falls Wind or the Permittee), a wholly owned subsidiary of Liberty Renewables Inc., Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR) prepared this Net Conservation Benefit Plan (NCBP) for the Hoffman Falls Wind Project, a proposed wind energy generation facility (the Facility) located in Madison County, New York. This NCBP covers the state listed endangered short-eared owl (*Asio flammeus*), state listed threatened northern harrier (*Circus hudsonius*; formerly *Circus cyaneus*), and state listed endangered northern long-eared bat (*Myotis septentrionalis*), and was prepared in compliance with the Siting Permit for a Major Renewable Energy Facility (Siting Permit) issued by the Office of Renewable Energy Siting and Electric Transmission (ORES or Office; formerly the Office of Renewable Energy Siting) for the Facility on December 22, 2025 (ORES, 2025), and in consideration of a revised ORES Determination of Occupied Habitat, Incidental Take and Net Conservation Benefit (Determination) dated April 6, 2026 (ORES, 2026). The Facility's Siting Permit included Site Specific Condition 5(j), which requires submittal of a final NCBP, developed in consultation with ORES (ORES, 2025).

Therefore, this NCBP has been prepared for ORES review and approval, in accordance with the Siting Permit and applicable regulations. This NCBP identifies: (1) the estimated potential take of the covered species; (2) avoidance and minimization measures that have been implemented, or will be implemented, to reduce potential Facility-related impacts; (3) mitigation measures that will be implemented by the Permittee to ensure that a net conservation benefit is provided for the potentially affected species; (4) a discussion of mitigation fund payments and financial assurance for the actions identified in the NCBP.

2.0 FACILITY LOCATION AND DESCRIPTION

The Permittee received a Siting Permit under Article VIII to construct the Facility within the Towns of Fenner, Nelson, Eaton, and Smithfield, Madison County, New York (Figure 1). The Facility will include 18 wind turbines, with nine located in the Town of Fenner, one in the Town of Nelson, seven in the Town of Eaton, and one in the Town of Smithfield. Associated support infrastructure will include an underground medium voltage collection system, gravel access roads, a permanent meteorological tower, an aircraft detection lighting system tower, temporary construction laydown areas, a temporary concrete batch plant, an operations and maintenance facility, a medium voltage-to-transmission voltage collection substation, a point of interconnection switchyard, and a short 115-kilovolt transmission line that will connect the Facility to the high voltage electrical grid. The Facility will be sited on privately-owned land within an approximately 3,841-acre Facility Site (Figure 2). The Facility will have a generating capacity of 109.8 megawatts (MW) and will contribute to New York State's renewable energy generation goals.[1]

[1] The Climate Leadership and Community Protection Act (CLCPA) of 2019 amended previous energy goals and mandates that 70% of the state's electricity come from renewable sources by 2030, and that 100% of the state's electrical supply must be emission-free by 2040.

3.0 OCCUPIED HABITAT AND ANTICIPATED IMPACTS

3.1 Existing Conditions

In developing an Application for a Major Renewable Energy Facility Siting Permit (Application) for the Facility, the Permittee gathered a large amount of information on existing ecological conditions within the Facility Site. A Wildlife Site Characterization Report was prepared and submitted to ORES on February 16, 2023 as part of the pre-application process (EDR, 2023a). In addition, spring raptor migration surveys, breeding bird surveys, fall raptor surveys, winter raptor surveys, marsh bird surveys, and forest raptor surveys were completed for the Facility between 2021 and 2023 (EDR, 2021a; 2021b; 2021c; 2022a; 2022b; 2023b; 2023c; 2023d; 2023e; 2023f; 2023g). Based on these assessments, the Facility Site is primarily composed of agricultural fields (row and field cropland), along with mixed forest, evergreen forest, woody wetlands, early successional communities, and developed land (primarily rural single-family houses, farms, and associated yards).

3.2 Summary of Agency Database Review, Consultation, and Field Survey Results

In addition to data collected on existing conditions with the Facility Site, the Permittee and EDR have engaged in consultations with federal and state agencies regarding the potential presence of threatened and endangered species within the vicinity of the Facility Site. These consultations included database review via the U.S. Fish and Wildlife Service (USFWS) online Information for Planning and Consultation (IPaC) system, as well as correspondence with the New York Natural Heritage Program (NYNHP), the New York State Department of Environmental Conservation (NYSDEC), and ORES. EDR performed a review of the IPaC system for the Facility on April 6, 2021, and again on November 4, 2022. The IPaC species list identified one federally listed threatened species, the Chittenango ovate amber snail (*Succinea chittenangoensis*), as occurring near the Facility. An updated IPaC species list generated on May 15, 2025, identified three additional listed species that may occur within the boundaries of the Facility Site and/or may be potentially affected by the proposed Facility: the federally proposed threatened and state threatened green floater (*Lasmigona subviridis*), the federally and state listed endangered northern long-eared bat, and the federally proposed threatened monarch butterfly (*Danaus plexippus*). A site-specific request for documented state listed species occurrences in the vicinity of the Facility was submitted to NYNHP on November 4, 2022, and a response was received on December 28, 2022. The response letter indicated that the NYNHP database contains records of several state-listed endangered or threatened bird species that have been documented within 10 miles of the Facility. These bird species included three raptors—the short-eared owl, bald eagle (*Haliaeetus leucocephalus*; threatened), and northern harrier—as well as the pied-billed grebe (*Podilymbus podiceps*; threatened) and the upland sandpiper (*Bartramia longicauda*; threatened).

Following receipt of this NYNHP response letter, EDR consulted with ORES and the NYSDEC to obtain occurrence records for any additional state listed species that may have been documented in the vicinity of the Facility Site. ORES provided a pre-application consultation letter dated March 6, 2023, which indicated that the Facility is not sited within areas of previously mapped occupied habitat for any state listed species. However, ORES recommended conducting on-site avian field surveys to evaluate state listed species presence and use patterns at the Facility Site.

Confirmed breeding behavior was observed for the northern harrier during on-site spring raptor migration surveys (EDR, 2021a). On May 26, 2021, an adult male northern harrier was observed carrying an object. The surveyor was unable to confirm if the object was food (e.g., a small mammal) or nesting material. Carrying nesting material and carrying food both represent confirmed breeding behaviors (eBird, 2024). Several repeat observations of male and female northern harriers were also recorded in the same general vicinity, potentially suggesting a breeding pair may have been occupying the area. Additionally, although no northern harrier observations were recorded during breeding bird surveys that were subsequently conducted in 2021 and 2023 (EDR, 2021b; 2021c; 2023e), ORES determined that available data support the presence of occupied breeding habitat in some areas (Section 3.4). No probable or confirmed breeding behaviors were documented for this species during other avian surveys conducted for the Facility (EDR, 2022a; 2022b; 2023b; 2023c; 2023d; 2023f; 2023g).

The results of the winter raptor surveys confirmed the presence of the northern harrier and the short-eared owl at the Facility Site (EDR, 2022b; 2023c). While presence alone is not sufficient to define occupied wintering habitat, EDR observed several instances of foraging behavior for both species in the same general area(s) consistently over the course of the season. Based on the study results, ORES determined that available data support the presence of occupied wintering habitat in some areas (Section 3.4). Descriptions and habitat requirements for these species are provided in Section 3.3.

Following the completion of pre-application avian field studies, EDR estimated where occupied habitat areas may be located within the Facility Site based on state listed endangered or threatened species documented during the on-site field surveys. An occupied habitat evaluation memorandum containing EDR's analysis was provided to ORES on October 27, 2023 (EDR, 2023g). As noted previously, ORES determined that northern long-eared bat take may potentially result during the Facility's operation phase. Therefore, the occupied habitat evaluation memorandum also included an estimate of potential take for this species.

On November 30, 2023, the Permittee and EDR met with ORES to discuss the results of on-site avian field surveys that were conducted between 2021 and 2023, occupied habitat boundaries, estimated Facility-related impacts to occupied habitat and northern long-eared bats, and requirements for the NCBP. Following this meeting, EDR provided a response to the draft occupied habitat take determination that ORES had initially prepared (EDR, 2023h). ORES originally issued a Determination for the Facility on January 5, 2024. In the summer of 2024, the Permittee 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 Permittee 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, and ORES issued a revised Determination on October 15, 2024 (ORES, 2024). Additional adjustments were made to the Facility layout in 2025, which resulted in a reduction of the level of anticipated impacts and required mitigation. These additional layout adjustments included removal of six wind turbines and shifts to access roads to address design constraints while continuing to minimize impacts to a variety of different resources. Given these updates to the Facility layout, ORES issued a second revised Determination on April 6, 2026 (ORES, 2026).

3.3 Covered Species Descriptions, Habitat Requirements, and Conservation Statuses

Short-eared Owl

The short-eared owl is a small-to medium-sized owl with bright yellow eyes that are rimmed in black and a pale facial disk. The back and upper wings are tawny brown to buff colored with some streaking. This species also exhibits bold vertical streaking on the breast, light streaking on a pale belly, and a pale underwing with a dark comma-shaped mark near the wrist. Short-eared owls usually roost on the ground in dense, herbaceous vegetation, but may also roost under low scrub vegetation, in conifer trees (in groves or rows, but not in woodlots or forests), or on other low, open perches. Short-eared owls typically forage for prey by coursing low to the ground over open areas but have occasionally been observed hunting from a perch. Their diet consists of small rodents (primarily voles) but can also include other small mammals and sometimes birds. The meadow vole (*Microtus pennsylvanicus*) is considered the primary winter food source for the short-eared owl (Clark, 1975; Cornell Lab, 2026a; NYNHP, 2026a; NYSDEC, 2026a).

In New York State, short-eared owl observations increase during the winter season, as northern populations migrate south in search of food. In the winter, this species prefers large, open grasslands, including hayfields, fallow farmland, and pastures. Wintering habitat use and site fidelity can be variable and often depend on prey abundance and snow cover. Freshwater and saltwater marshes are typically used during the breeding season, which normally runs from March to June, beginning with courtship and territorial defense. Females will usually make a simple nest in a small depression on the ground, which is then lined with grass, leaves, twigs, or feathers (Cornell Lab, 2026a; NYNHP, 2026a; NYSDEC, 2026a).

The short-eared owl is a state listed endangered species, due mainly to the loss of habitat as a result of reforestation, wetland loss, and changes in farming practices (e.g., conversion of hayfields to row crops, frequent mowing of hayfields). This species currently has a state conservation status rank of S2 (imperiled at the state level) and a global conservation status rank of G5 (secure globally; widespread and abundant, but may be rare in some parts of its range). Because the short-eared owl is a ground-nesting bird, its eggs and unfledged young are also at risk of predation by foxes, raccoons, skunks, and other predators. A limiting factor for short-eared owls is their dependency on small mammal populations (NYNHP, 2026a).

Northern Harrier

The northern harrier is a species of grassland raptor that relies on a variety of open habitats including hayfields, fallow farmland, pastureland, grasslands, lightly grazed meadows, open floodplains, emergent marshes, some types of peatlands, and successional old fields, among several other community types. This slender-bodied hawk has long wings and a long tail. Key identifying characteristics include a facial ruff that gives the species an owl-like appearance, white upper tail coverts, and specialized foraging behavior. Adult males are mostly gray, adult females are pale below with brown streaking, and immature harriers have a buffy/light brown belly. This species forages by coursing and gliding low over open habitats and hovering in flight before striking at prey (typically voles and other small mammals, although songbirds, rabbits, frogs, and snakes are sometimes taken). This species' winter range can be variable, and typically depends on remnant vegetation height and density, prey abundance, and snow cover. Wintering northern harriers

typically roost on the ground in fields or marshes (sometimes with short-eared owls), and wintering habitat usually includes open grasslands, some types of agricultural fields, prairies, successional old fields, and marshes. Both wet and dry habitats are suitable where there is adequate ground cover (Cornell Lab, 2026b; NYNHP, 2026b; NYSDEC, 2026b).

In New York State, northern harriers are confirmed breeders in the western Great Lakes plains, open habitats of the Adirondacks, the western Finger Lakes, Long Island, and within the Hudson, St. Lawrence, and Lake Champlain valleys. Breeding normally occurs between April and July, and males perform distinctive undulating courtship flights (Cornell Lab, 2026b; NYNHP, 2026b; NYSDEC, 2026b). Both native and planted grasslands can provide suitable breeding habitat. Northern harriers build platform nests on the ground, and typically select sites within relatively undisturbed wet (e.g., emergent wetland, wet meadow, swale) or dry (e.g., idle field or pasture, successional old field, hayfield) open areas that are dominated by tall (often more than 60 centimeters [cm]), dense vegetation that may include grasses, sedges (*Carex* spp.), alfalfa, cattails (*Typha* spp.), reeds, bulrushes (*Scirpus* spp.), goldenrods (*Solidago* spp.), willows, and/or certain low shrubs. Areas with a substantial amount (i.e., more than 40%) of residual cover are preferred, and it is thought that greater litter cover provides superior concealment and inhibits access by nest predators. While nesting, northern harriers will tolerate a moderate amount of shrub cover within wetlands or grasslands dominated by thick vegetation. This species has been known to avoid areas with substantial (i.e., more than 30%) woody cover during the breeding season (Shaffer et al., 2019; Smith et al., 2020).

The northern harrier is a state listed threatened species in New York State, due primarily to the loss of suitable habitat (NYNHP, 2026b). This species currently has a state conservation status rank of S3 (vulnerable at the state level, but not currently imperiled) and a global conservation status rank of G5 (secure globally; widespread and abundant but may be rare in some parts of its range) (NYNHP, 2025b). However, the NYSDEC's proposed revisions to the list of endangered, threatened, and special concern species, as detailed in an October 2019 pre-proposal, would change the northern harrier's status from threatened to special concern, presumably because the species is becoming more stable in New York (NYSDEC, 2019). As of early January 2026, this status change has not yet been formalized or adopted. The NYSDEC has indicated that the northern harrier and other species are currently being re-evaluated to include data from the Breeding Bird Atlas that was completed in 2024.

Northern Long-eared Bat

The northern long-eared bat is a medium-sized myotis bat with a typical body length of 3.0 to 3.7 inches and a wingspan of 9 to 10 inches that is distributed throughout much of Canada and the eastern/central U.S. This forest-dependent insectivorous species' defining morphological characteristics (compared to other members of the genius *Myotis*) include especially large ears and particularly long, narrow tragi (NYSDEC, 2026c; Reid, 2006; USFWS, 2026a). During the summer months, northern long-eared bats typically emerge at dusk and aerially forage for a wide variety of insect species along hillsides and ridges within temperate and boreal forest landscapes. This species typically prefers to feed near understory vegetation in upland forest habitats. When at rest during the daytime, male and female northern long-eared bats tend to roost separately in small colonies, often utilizing the cavities, crevices, and hollows of both live and dead (snag) trees with a diameter at breast height that is equal to or greater than 3 inches (Altringham, 1996; USFWS,

2014). In addition to trees, northern long-eared bats sometimes use human-built structures for roosting (Reid, 2006).

In the late summer and early fall, northern long-eared bats migrate across the landscape to winter hibernacula, which typically include caves and mines of varying sizes. Breeding activity for this species typically occurs in late summer and/or early fall, and females experience delayed fertilization until the spring. When hibernating either alone or in small groups (typically from November 1 to March 31), northern long-eared bats prefer small, tight crevices within hibernacula. After hibernation and a return to summer habitat areas, female bats typically form maternity colonies in the spring and early summer, and most pups are born from late May or early June to late July (NYSDEC, 2026d; Solari, 2018; USFWS, 2026b). Once common in forested landscapes throughout the northeastern U.S., the northern long-eared bat has experienced a pronounced (i.e., more than 98%) decline since 2006 due to the effects of white-nose syndrome, a fungal disease which compromises a bat's ability to survive the winter hibernation period (NYSDEC, 2026c). Though not as detrimental as white-nose syndrome, human intrusion and disturbance associated with recreational activities (e.g., cave exploration), less and/or degradation of hardwood forest habitat, and collision with vehicles and built structures represent additional sources of mortality for this species (USFWS, 2026b). The northern long-eared bat was listed as endangered under the federal Endangered Species Act and the New York Endangered Species Law on March 31, 2023.

3.4 Occupied Habitat Determination

Based on the habitat requirements of these species, the results of the avian studies completed for the proposed Facility**,** and consultations with ORES described previously, portions of the Facility Site represent occupied habitat for the northern harrier and the short-eared owl. ORES confirmed the presence of occupied habitat for these species in a revised Determination dated April 6, 2026 (ORES, 2026).

3.5 Adverse Modification of Occupied Habitat and Incidental Take

Within ORES-identified occupied habitat, the Facility's ground disturbance during construction and aboveground footprint as part of operations is considered to represent 'take' of such habitat. Because of the anticipated habitat loss and displacement impacts, the Permittee is required to identify avoidance and minimization actions, as well as mitigation strategies for unavoidable impacts that will satisfy the requirements of the Siting Permit and applicable regulations. ORES identified the extent of occupied habitat in a revised Determination dated October 15, 2024 (ORES, 2024). Specifically, ORES determined that The Facility will adversely impact 76.42 acres of occupied breeding habitat for the northern harrier, 157.30 acres of occupied wintering habitat for the northern harrier only, and 47.90 acres of wintering habitat for the northern harrier and the short-eared owl. As noted previously in Section 3.2, adjustments were made to the Facility layout since ORES issued the first revised Determination. Given these updates, ORES issued a second revised Determination on April 6, 2026 (ORES, 2026). Specifically, ORES determined that the Facility will adversely impact 7.63 acres of occupied breeding habitat for the northern harrier, 151.7 acres of occupied wintering habitat for the northern harrier only, and 41.39 acres of occupied wintering habitat for the northern harrier and the short-eared owl.

ORES originally indicated that direct take of up to 9.9 (rounded to 10) northern long-eared bats may also occur during Facility operation. However, this estimate was based on a Facility generating capacity of 100 MW. The Facility's generating capacity was updated to 109.8 MW following submittal of the Application; therefore, ORES determined that the Facility will result in direct take of up to 11 northern long-eared bats (ORES, 2026).

3.6 Population Jeopardy Assessment

Northern Harrier and Short-eared Owl

Although the Facility is expected to result in adverse modification of occupied habitat, the proposed activity is not anticipated to jeopardize the continued existence of the subject populations of the northern harrier or short-eared owl for several reasons. First, considerable acreage within known occupied habitat areas will remain unaffected following Facility construction. Moreover, numerous agricultural fields are currently present adjacent to and outside the Facility Site, and it is likely that many of these will continue to provide suitable wintering and/or breeding habitat for one or both of these species for the foreseeable future. Therefore, substantial areas of suitable habitat (primarily in the form of hayfields, pastureland, and row cropland) will remain for the subject populations despite Facility construction and operation. This finding is supported by a review of U.S. Department of Agriculture (USDA) cropland data in the vicinity of the Facility Site for recent years (USDA, 2024), as well as data from ORES and the NYSDEC, which identifies state listed grassland bird occupied habitat areas that extend beyond, or are entirely located outside of, the Facility Site.

Other areas of Madison County and in the broader central New York landscape comprise very similar ecological community and habitat types to those found at the Facility and, therefore, are expected to include large areas of suitable habitat for the species in question. The majority of the area within 5 miles of the Facility Site lies within the NYSDEC-defined Grassland Focus Area 4, which encompasses over 1 million acres in the Central Leatherstocking and Mohawk River Valley regions (EDR, 2023a; Morgan and Burger, 2008). Therefore, population-level effects to the northern harrier and short-eared owl are not anticipated as a result of construction or operation of the proposed Facility, especially given that the Permittee will offset potential impacts by providing a net conservation benefit to the species.

ORES and NYSDEC consider only populations of these species that overlap with New York State's political boundary; however, it is important to note (for broader context) that northern harrier and short-eared owl have current global conservation statuses of "Least Concern" (BirdLife International, 2021; 2025), and estimated total global populations of 820,000 and 2,300,000, respectively (Partners in Flight, 2026). The northern harrier ranges across virtually all of North America and Central America, while the short-eared owl is found across four different continents. Thus, these species' global populations are both large and well-distributed.

In New York State, the NYSDEC noted that Breeding Bird Atlas data from 1980-85 to 2000-05 showed no change in the percentage of occupied blocks in the state for the northern harrier, but shifts in occupancy were apparent (the northern harrier is a nomadic species that responds to changes in prey availability). Although the NYSDEC noted that Breeding Bird Survey data in New York and other northeastern states were too sparse for analysis, northern harrier data for both the Eastern region and North America for 2000-2010 showed a significant decline of -0.5% per year. Christmas Bird Count data for the northern harrier showed an increasing trend from 1950 to 2010 for New York's wintering population and for wintering populations in states adjacent to New York (NYSDEC, 2014). The NYNHP has assigned the northern harrier a state conservation status of S3B,S3N (Vulnerable in New York), which indicates that both breeding and nonbreeding populations are uncommon in New York. The NYNHP notes that northern harriers are "widespread in winter, but numbers are highly variable" (NYNHP, 2026).

Northern Long-eared Bat

Although ORES determined that the Facility may potentially result in the take of up to 11 northern long-eared bats, the proposed activity is not anticipated to jeopardize the continued existence of the subject populations of the northern long-eared bat for several reasons. First, the northern long-eared bat constitutes only a very small proportion of documented bat fatalities at operational wind energy facilities based on post-construction studies (Arnett and Baerwald, 2013; Gruver and Bishop-Boros, 2015). Second, the Facility is located outside of known occupied habitat for the northern long-eared bat (i.e., more than 1.5 miles from northern-long eared bat maternity roost sites and more than 5 miles from northern long-eared bat hibernaculum sites), so very few northern long-eared bats would be expected to be present at the Facility Site, and the timeframe of potential collision mortality would likely be limited to the late summer and early fall dispersal period (July 1 to October 1). In addition, the species' full range includes much of Canada and the eastern/central U.S. where suitable forested habitat free from development remains, particularly in the northern areas of the northern long-eared bat range (Solari, 2018). Finally, although the overall northern long-eared bat population is decreasing, the species is still widely distributed, and many areas of suitable habitat are located within protected areas (Solari, 2018). Therefore, population-level effects to the northern long-eared bat are not anticipated as a result of the proposed Facility, especially given the proposed minimization and mitigation measures that will be implemented to offset impacts.

4.0 AVOIDANCE AND MINIMIZATION

4.1 Avoidance and Minimization Measures

The Permittee has refined the Facility design multiple times in order to avoid and minimize impacts to a variety of sensitive resources. 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 the state listed bird and bat species covered by this NCBP to the extent practicable, given the many other siting constraints inherent in the development of a wind energy generation project:

Northern Harrier and Short-eared Owl

Facility Planning and Design

- The Permittee consulted with ORES, the NYSDEC, and the USFWS on multiple occasions during the pre-application process regarding potential impacts to endangered and threatened bird species and appropriate studies to evaluate potential impacts to such species.
- 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 the northern harrier and the short-eared owl.
- 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 the northern harrier and the short-eared owl.
- 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 the northern harrier and the short-eared owl.
- 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 the northern harrier and the short-eared owl.
- 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 the northern harrier and the short-eared owl.
- 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 the northern harrier and the short-eared owl.
- Facility electrical collection lines will be installed underground, thereby minimizing possible collision and electrocution risk to raptors. This represents impact minimization for the northern harrier and the short-eared owl.
- The Facility study design was revised in 2025 to remove several proposed wind turbines located within or adjacent to ORES-identified occupied breeding habitat for the northern harrier and occupied wintering habitat for the northern harrier and the short-eared owl.

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 state listed endangered and threatened grassland bird species.
- If an active nest of a federal or state listed endangered or threatened bird species 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).

Operations and Maintenance

- If, during the life of the Facility, an active nest of a federal or state listed endangered or threatened bird species is discovered incidentally within the Facility Site, the Facility will notify the New York State 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.

Northern Long-eared Bat

Facility Planning and Design

- As indicated in the ORES Determination, the Facility will not be sited or located within 150 feet of any known northern long-eared bat maternity roost, or within 0.25 miles of any known northern long-eared bat hibernaculum. Because the Facility is not located within these distances relative to state listed bat species occurrences, the Permittee assumes that there will be no impact to occupied habitat for this 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 Permittee 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 state listed endangered or threatened 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 Article VIII uniform standards and conditions, 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 the northern long-eared bat and other bat species. Multiple studies show that strategic seasonal turbine curtailment can reduce all bat fatalities by between 50% and 80% and potentially higher, depending on the cut-in speed used and the bat species that typically occur at a given site (Arnett et al., 2011; Baerwald et al., 2009; Martin et al., 2017). For northern long-eared bats specifically, curtailment is considered even more effective at reducing fatalities due to this species' size and already low proportion of documented bat fatalities at operational wind energy facilities (Denoncour and Herzog, 2019a, 2019b, 2019c; Gruver and Bishop-Boros, 2015). Implementation of this curtailment schedule is expected to reduce potential northern long-eared bat fatalities by at least 85%, and potentially by more than 90%. This is supported by post-construction surveys conducted at wind energy facilities in the northeast where turbine curtailment has been implemented, which have not reported northern long-eared bat fatalities (Gruver and Bishop-Boros, 2015), as well as Article 10 direct testimony previously provided by NYSDEC staff (Denoncour and Herzog, 2017).
- During the operations and maintenance phase, if an active state listed endangered or threatened 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.

Although the Permittee 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 land 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 the Facility's Application, the Permittee 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 Permittee was to not locate Facility components on a particular property at all, which would undermine both the economic viability of the Facility and New York State's ability to meet the renewable energy and greenhouse gas emission reduction goals of the Climate Leadership and Community Protection Act (CLCPA, 2021).

New York State 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, 2021). 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 New York State and furthering targets enshrined in New York State law as well as established policy goals. As many policymakers, scientists, and developers are aware, climate change represents one of the most significant threats to a 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 to address and mitigate climate change.

Post-Construction Avian and Bat Monitoring

The Permittee is in the process of coordinating with ORES and the USFWS regarding post-construction avian and bat monitoring surveys for the Facility. Post-construction avian and bat monitoring requirements are not fully described in the Article VIII regulations; therefore, the Permittee will review the NYSDEC's *Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects* (NYSDEC Guidelines; NYSDEC, 2016), the USFWS *Land-based Wind Energy Guidelines* (USFWS, 2012), and recommendations provided by the regulatory agencies to determine the scope for post-construction avian and bat monitoring. Based on discussions with ORES, the Permittee is planning to conduct two years of post-construction avian and bat monitoring surveys (i.e., ground searches) to document Facility-related avian and bat mortality, calculate fatality rates for the Facility during operation, and evaluate the effectiveness of bat minimization measures (e.g., curtailment). This level of post-construction monitoring is consistent with the standard minimum level described in the NYSDEC Guidelines (NYSDEC, 2016).

5.0 MITIGATION

5.1 Net Conservation Benefit and Mitigation Calculations

Because ORES has determined that adverse modification of occupied habitat and incidental take will result from the construction and operation of the proposed Facility, the Article VIII regulations require the Permittee to show that the proposed mitigation measures can achieve a net conservation benefit for the species concerned. Therefore, the Permittee will implement mitigation measures to not only offset these impacts, but to provide a net conservation benefit to the northern harrier, short-eared owl, and northern long-eared bat.

Northern Harrier and Short-eared Owl

ORES and the NYSDEC have indicated in other renewable energy facility proceedings that the most straightforward and most widely accepted method for providing a net conservation benefit for adverse modification of state listed grassland bird habitat is through the protection and management of suitable state listed grassland bird species habitat within a facility site. However, if suitable land is unavailable within a facility site, creation of suitable habitat within a facility site, or protection and management of suitable habitat within the vicinity of a facility site or within the broader region could also be undertaken to provide a net conservation benefit to the species. Article VIII uniform standards and conditions allow for a permittee to pay a mitigation fee into the Endangered and Threatened Species Mitigation Bank Fund commensurate with the actual acreage of occupied habitat taken. Alternatively, permittee-implemented grassland bird habitat conservation (i.e., physical mitigation) may be proposed, 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.

Based on these mitigation ratios, ORES calculated the anticipated total mitigation acreage needed for the Facility. These calculations are summarized in Table 1.

Table 1. Grassland Bird Mitigation Calculations

Species and Occupied Habitat Type(s)	ORES-Identified Adversely Modified Habitat (acres)[1]	Mitigation to Impact Ratio	ORES-Identified Required Mitigation (acres)
Northern Harrier Breeding	7.63	0.4:1	3.05
Northern Harrier and Short-eared Owl Wintering	41.39	0.2:1	8.28
Northern Harrier Wintering	151.70	0.2:1	30.34

[1] Based on an analysis conducted by EDR; refer to Figure 3.

Based on these calculations, and in consideration of the wintering and breeding habitat requirements of these species, the total estimated habitat take can be offset by protecting and managing at least 41.67 acres of grassland habitat for a mitigation term of 30 years, or by paying a mitigation fee into the Endangered and Threatened Species Mitigation Bank Fund. Proposed mitigation actions for grassland bird species are discussed further in Sections 5.2.

Northern Long-eared Bat

On November 27, 2023, ORES provided an estimate of potential northern long-eared bat take and associated mitigation requirements in advance of the occupied habitat take determination meeting for the Facility. ORES calculated the estimated northern long-eared bat take for the Facility by first determining the northern long-eared bat fatality rate. This rate was determined by multiplying an assumed annual bat fatality rate for operational wind facilities in New York State of (7.2 bats per MW per year) by the proportion of northern-long eared bats relative to the overall annual bat fatality rate (0.0030). ORES then multiplied the northern long-eared bat fatality rate (0.022 northern long-eared bats per MW per) by the Facility's 100-MW generating capacity, by 30 years (the assumed operational life of the Facility), and then again by a minimization factor (0.15) that accounts for an expected 85% reduction in potential northern long-eared bat fatalities with the curtailment schedule implemented. These calculations resulted in an estimated take of 9.9 (rounded to 10) northern long-eared bats over the operating life of the Facility.

ORES previously determined that based on the estimated take of up to 10 northern long-eared bats, the Permittee would be required to provide mitigation for the take of 11 northern long-eared bats to achieve a net conservation benefit for this species . ORES also identified several preferred mitigation method options to achieve net conservation benefit for the northern long-eared bat. These options include: (1) gating of known northern long-eared bat hibernacula; (2) preservation of land around and/or including known northern long-eared bat maternity roost trees and/or hibernacula; (3) mist-netting and radiotelemetry surveys to identify new northern long-eared bat maternity roost trees and/or hibernacula; and (4) paying a mitigation fee into the Endangered and Threatened Species Mitigation Bank Fund.

During the occupied habitat consultation meeting held on November 30, 2023, ORES noted that each northern long-eared bat maternity roost tree discovered during mist-netting and radio telemetry surveys would offset the take of at least five northern long-eared bats. In addition, for any new northern long-eared bat maternity roost trees that are identified, emergence surveys may also be conducted to determine the number of bats associated with the maternity roost trees. Any additional northern long-eared bats documented would be counted toward the net conservation benefit.

As noted previously, the generating capacity for the Facility increased to 109.8 MW following submittal of the Application. Therefore, ORES issued a revised Determination on April 6, 2026, indicating that the Facility will result in a take of 11 northern long-eared bats over the operating life of the Facility (i.e., 0.022 northern long-eared bats per MW per multiplied by the Facility's 109.8-MW generating capacity, 30 years, and a minimization factor of 0.15 that accounts for an expected 85% reduction in potential northern long-eared bat fatalities with the curtailment schedule implemented). ORES further determined that mitigation equivalent to 12 northern long-eats will be required for the Facility (ORES, 2026). Proposed mitigation actions for the northern long-eared bat are discussed further in Section 5.4.

5.2 Grassland Bird Mitigation

Mitigation of impacts to occupied habitat for listed grassland bird species including the northern harrier and the short-eared owl can be accomplished by leasing or purchasing suitable land, preferably in close proximity to a facility, establishing protective land agreements (e.g., deed restriction, conservation easement), and implementing a management regime that maintains the mitigation area as suitable grassland habitat for use by the affected species. Based on ORES and NYSDEC recommendations, mitigation areas for permittee-implemented grassland bird habitat conservation need to open, contiguous, and at least 25 acres in size. As an alternative to permittee-implemented physical mitigation, the Article VIII uniform standards and conditions allow the Permittee to pay a mitigation fee into the Endangered and Threatened Species Mitigation Bank Fund, which funds off-site mitigation projects implemented by the NYSDEC (NYSDEC, 2026d).

The Permittee initially conducted a search of the Facility Site and adjacent lands to identify potential mitigation areas. This search included outreach to participating landowners. The Permittee previously identified a parcel within the vicinity of the Facility Site as a potential mitigation area. ORES later determined that this parcel was not considered suitable for grassland bird habitat mitigation. Therefore, the Permittee plans to meet its obligation to achieve a net conservation benefit by paying a fee into the Endangered and Threatened Species Mitigation Bank Fund sufficient to implement the required mitigation. The fee amount will be based on the cost per unit of mitigation set by the NYSDEC at the time of payment, and the level of required mitigation determined by ORES. As noted in Sections 3.4, 3.5, and 5.1, ORES determined that the Facility will impact 7.63 acres of occupied breeding habitat for the northern harrier, 151.70 acres of occupied wintering habitat for the northern harrier, and 41.39 acres of occupied wintering habitat for both the northern harrier and the short-eared owl, which equates to a total of 41.67. acres of required mitigation. The funds will be used by the NYSDEC to implement off-site mitigation projects benefiting northern harriers and short-eared owls.

5.3 Northern Long-eared Bat Mitigation

As noted previously, ORES has identified several preferred mitigation method options to achieve net conservation benefit for the northern long-eared bat. These options include: (1) gating of known northern long-eared bat hibernacula; (2) preservation of land around and/or including known northern long-eared bat maternity roost trees and/or hibernacula; (3) mist-netting and radiotelemetry surveys to identify new northern long-eared bat maternity roost trees and/or hibernacula; and (4) paying a mitigation fee into the Endangered and Threatened Species Mitigation Bank Fund. The Permittee plans to meet its obligation to achieve a net conservation benefit by paying a fee into the Endangered and Threatened Species Mitigation Bank Fund sufficient to implement the required mitigation. The fee amount will be based on the cost per unit of mitigation set by the NYSDEC at the time of payment, and the level of required mitigation determined by ORES. As noted in Sections 3.4, 3.5, and 5.1, ORES previously determined on October 15, 2024, that the Permittee would be required to mitigate for 11 northern long-eared bats in order to provide a net conservation benefit for the species (i.e., one additional bat beyond the estimated take of 10 bats). However, because the Facility's generating capacity has since increased, the Permittee will now be required to mitigate for 12 northern long-eared bats to provide a net conservation benefit for the species (i.e., one additional bat beyond the revised estimated take of 11 bats).The funds will be used by the NYSDEC to implement off-site mitigation projects benefiting northern long-eared bats.

5.4 Mitigation Fee Payments and Financial Assurance

As discussed in the previous section, the Permittee will pay a fee into the Endangered and Threatened Species Mitigation Bank Fund to provide a net conservation benefit to the covered species. ORES has indicated that the total mitigation bank fund fee dollar amount will be calculated at the time of payment. The Permittee will coordinate with ORES to confirm the fee amount and will then provide documentation to ORES once the mitigation fee has been paid.

The Permittee, a subsidiary of Liberty Renewables Inc., is well positioned to finance the implementation of this NCBP. Liberty Renewables Inc. is held by Copenhagen Infrastructure Partners (CIP), a global fund management company that has successfully raised significant capital for investments in renewable energy and associated infrastructure. In addition, the Permittee possesses the project development experience, technical expertise, financial resources, and commitment to deliver the planned Facility and its associated mitigation requirements. This supports the finding that the implementation of the NCBP will be economically feasible and financially viable. Therefore, ORES should find that the Permittee has the financial wherewithal to carry out the mitigation obligations under Article VIII relating to endangered and threatened species, and as presented in this NCBP.

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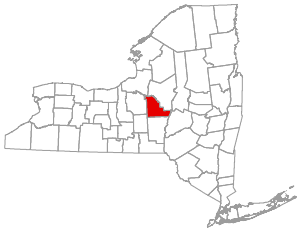
FIGURES

Figure 1. Regional Facility Location

Hoffman Falls Wind Project

Towns of Eaton, Fenner, Nelson, and
Smithfield, Madison County, New York

Net Conservation Benefit Plan



0 2.5 5 10
Miles

Prepared January 6, 2026
Basemap: Esri "World Street Map" map service

EDR

Figure 2. Facility Site

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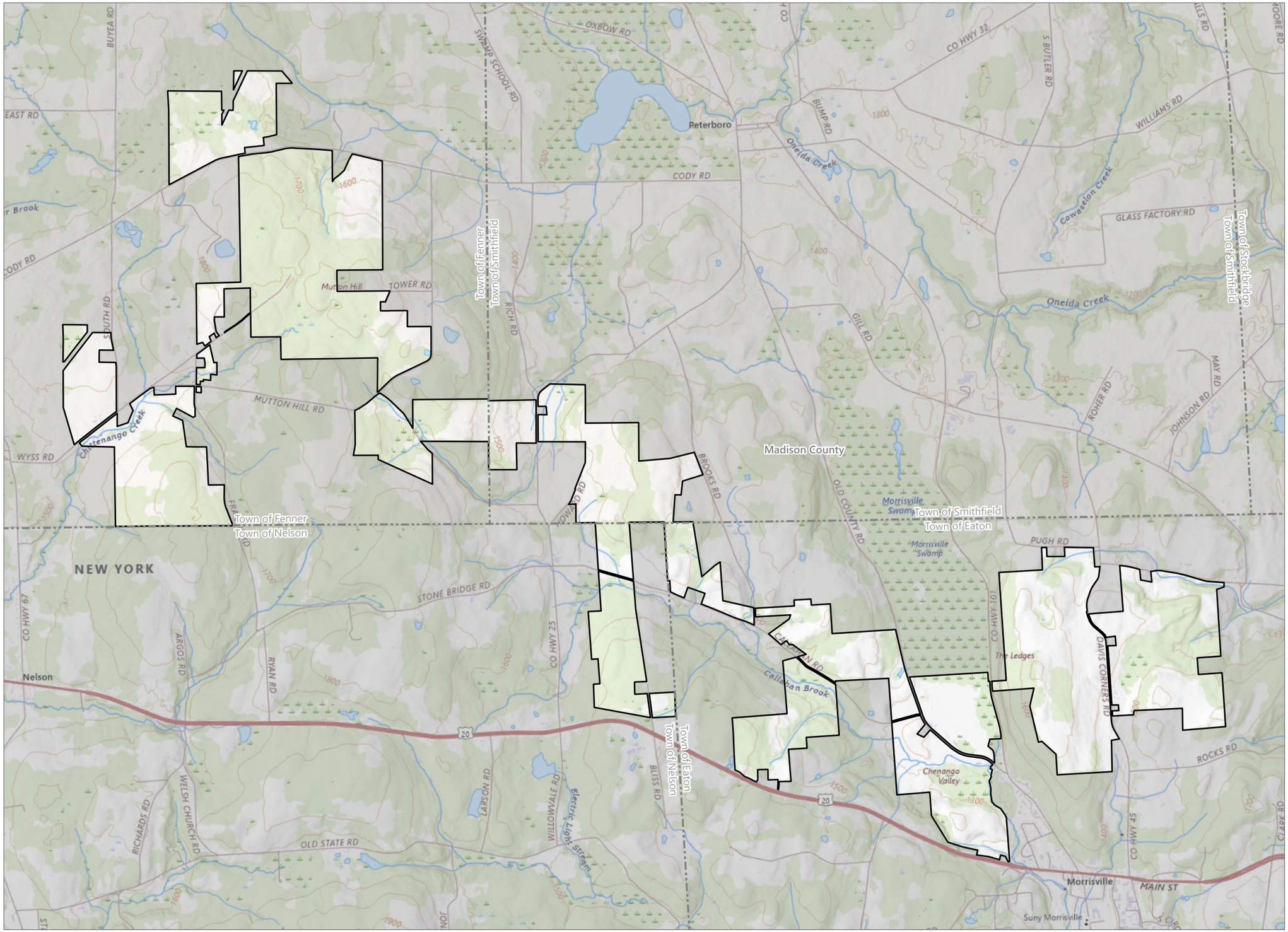

Hoffman Falls Wind Project

Towns of Eaton, Fenner, Nelson, and Smithfield, Madison County, New York

Net Conservation Benefit Plan

Facility Site

0 0.25 0.5 1
Miles

Prepared January 6, 2026
Basemap: Esri "USGS Topo" map service

EDR