

Section 32. BEST PRACTICAL MITIGATION

Maine law requires a wind energy project to submit information on best practical mitigation for all aspects of construction and operation of the generating facilities. Best practical mitigation means methods or technologies used during construction or operation of the project that control or reduce to the lowest feasible level impacts to scenic or wildlife resources.³⁴ The following discussion addresses the key means by which the Project has minimized impacts to scenic resources and wildlife.

32.1. POTENTIAL IMPACTS TO WILDLIFE AND NATURAL RESOURCES

Project impacts have been avoided and minimized, where possible, through responsible siting of facilities. Over the development phase of the Project, the design and layout of facilities has been refined, with many turbine locations shifting from open blueberry fields to other areas, including wooded uplands, abandoned and early successional fields, and the margins of active fields. This creates net benefits for upland sandpiper, whimbrel and nocturnal migrating songbirds who frequent active blueberry fields for nesting, courtship, and/or foraging. Removal of more than twenty turbines from in and around active blueberry operations creates compatibility with existing land uses and promotes healthy habitat while minimizing collision risks. Observations of wildlife prevalence and patterns and steps to minimize impacts through siting are contained within the exhibits to Section 7, along with a detailed mitigation proposal which includes proposed minimization measures to protect bats, measures to protect species during construction, and detailed monitoring and reporting plans to ensure minimal impact to wildlife during operations. Project design and impact avoidance and reduction has been undertaken by a team of professional engineers and scientists with extensive experience of both Maine ecosystems and wind project development working in consultation with various Maine state agencies. Team experience and credentials are summarized in Section 4.

The Project also makes every effort to avoid and minimize impacts to wetlands, vernal pools, and streams. Routing of roads and collection lines has sought to avoid resource impacts and directional drilling will be used, where applicable, to pass collection lines beneath wetlands, streams, and known populations of rare plants. Additionally, nearly one half of the linear distance of access roads and crane paths represent upgrades and improvements to existing roads, and some associated wetland impacts have been deliberately designed to lessen existing impacts. Collection lines are co-located with one another so as to limit the overall extent of disturbance and collection corridors are also co-located wherever possible with Project roads to further minimize clearing and potential impact to blueberry crop and farming operations. Turbine pads have been individually designed and sited to avoid unnecessary impacts to surrounding resources. Where impacts cannot be entirely avoided the Project will mitigate through the payment of in lieu fees at the prescribed rate for Washington County of \$4.25 per square foot. Exhibits to Section 7 contain wetland and vernal pool reports and impacts to known and potential rare plant populations are detailed in Section 9. Efforts to avoid these areas are reflected in the civil design plans provided as Exhibit 1-1. In lieu fee calculations can be found in Section 13 of the Applicant's NRPA permit application.

In addition to careful siting, the Project will employ a number of construction methods to minimize impacts to wildlife and natural resources. For example, during construction, effective erosion and sedimentation planning, detailed in Section 14, along with managing stormwater, Section 12, will

³⁴ 35-A M.R.S. § 3451.1-A.

minimize adverse impacts from construction of the project and clearing and grading operations, and building and upgrading of roads. There will be limited disturbance in buffers around key resources areas such as wetlands and streams, including more stringent requirements for Salmon stream buffers (Section 10). Much of the Project area is within the Pleasant River watershed, which is a recognized Atlantic salmon habitat. As such, all stream crossings have been designed to ensure that stream hydrology is either unchanged or enhanced and habitat and passage for salmon and other species is measurably improved (Section 7.5). Additionally, there will be no in-stream work in a direct tributary to the Pleasant River between October 1 and July 14 (Section 7.5). To protect bat species, tree clearing will occur outside of the pup rearing season of June 1 – July 31 (Section 7.5.3).

During Project operation a number of protective measures will be employed to protect wildlife and natural resources. For example, management of vegetation within buffers, collections corridors, and alongside new and existing roadways (Exhibit 10-1) will be protective of wetland and river ecosystems and the wildlife that depends upon them. Project lighting has been designed to minimize impacts to avian species. Specifically, nighttime lighting will not be used on nacelles or on tower doors. Motion activated lighting will likely be installed on tower doors, the substation and the O&M facility. (Exhibit 7-12). Turbine operations will be curtailed to reduce impacts to protected bat species. In addition, the Project is proposing to conduct a “smart” curtailment study and continue to use the best available technology for bat minimization as part of an adaptive management strategy to determine the most effective and efficient strategy to reduce Project risk to bats (Exhibit 7-12).

Finally, the Project also proposes to conserve a 977-acre parcel featuring a diversity of habitats and adjacent to the already-protected Great Heath (Exhibit 7-12). Protection of this parcel will benefit birds and other species and will ensure a net benefit to avian species potentially impacted by the Project.

32.2. POTENTIAL IMPACTS TO SCENIC RESOURCES

Impacts to scenic resources have been largely avoided through careful siting and design of Project facilities and incorporation of input from landowners and users. As detailed in the visual impact analysis provided in Section 30, the project will have only minimal, and quite distant, visibility from two Scenic Resources of State or National Significance (SRSNS): Mopang Lake and Gallison Memorial Library. Furthermore, the Project intends to make use of motion-activated lighting at substation, O&M, and turbine locations to minimize the effects (both on human visibility and attraction of wildlife) of continuous lighting. Pending FAA approval, the Project will also install radar-activated lighting atop the 30 wind turbine towers, further reducing continuous and flashing lighting during operation of the Project.

An architectural study has been done in and around the Project area to determine the likelihood of impacts to cultural resources. This work has been designed and conducted in consultation with Maine Historic Preservation Commission (MHPC) and is detailed in Section 8 and attending exhibits. The architectural study found nine (9) listed or eligible to be listed resources within an eight-mile radius of the project area. Only five (5) of those were within the Project Area and all five were markers associated with the Epping Base Line—several of which, while catalogued, are no longer extant. The Project is deemed to have no direct impact on the Epping Base Line, with indirect impacts relating only to visibility of turbines from the resource. MHPC has therefore concluded that the Project represents No Adverse Effect on existing listed or eligible National Registry resources.