

Section 1 Project Description

1.0 Project Description

The Rollins Wind Project is a 60-megawatt (MW) wind project with approximately 8.8 miles of associated 115-kilovolt (kV) transmission line located in Penobscot County, east and south of Lincoln (Appendix A). The project also includes permanent meteorological towers, an electrical interconnection facility in Mattawamkeag, an electrical substation in Lee, and an operations and maintenance facility in Lincoln.

The turbine portion of the project consists of 40 General Electric 1.5-MW turbines located in two clusters, Rollins North and Rollins South. Each turbine is 262 feet to the center of the hub, and a total of 389 feet to the tip of a fully extended blade. The project involves permitting 41 potential turbine locations to allow for flexibility in final location; only 40 turbines will be constructed. There will be four permanent 80-meter meteorological towers, as well as temporary 80-meter meteorological towers at certain turbine locations during initial testing. The majority of the land utilized for turbine sites is presently used for commercial forestry operations and contains developed logging roads that will be upgraded and used, where appropriate, to minimize clearing and wetland impacts.

Turbines are planned to be located in the towns of Winn, Lee, Lincoln, and Burlington. Rollins North is expected to include 18 turbines located east of Lincoln, and will include the operations and maintenance building. Rollins South, located primarily in Lincoln and Burlington, is expected to include 22 turbines. Power from the 40 turbines will be collected in an overhead 34.5-kV collector line and delivered to an on-site substation on Rollins North. At the substation, the power will be converted to 115-kV for transmission to an interconnection point on Line 56 near Mattawamkeag.

The second major component of the project is the electrical lines: an 8.8-mile 115-kV transmission line that will deliver electrical power from the proposed substation in Lee to the Line 56 transmission line (currently under construction) in Mattawamkeag, and a 5.4-mile 34.5-kV connector line between Rollins North and Rollins South. The 115-kV transmission line will travel through Winn and Mattawamkeag and will consist primarily of two pole, H-frame structures, with triple pole structures as necessary at critical points. The 34.5-kV connector line will be primarily single pole structures, and is located in Lincoln.

Conceptually, the project can be considered in four sections:

1. the 115-kV transmission line from Rollins North to the interconnect at Line 56;
2. Rollins North, the turbines and 34.5-kV collector line on the northern summits;
3. the 34.5-kV connector line between Rollins North and Rollins South; and
4. Rollins South, the turbines and 34.5-kV collector line on the southern summits.

Included with this application are environmental studies completed before filing include two seasons of avian and bat surveys; wetland delineations of the affected areas; "in season" vernal pool surveys; and a deer wintering area assessment (Appendix B). Historical reports and surveys include an analysis of historic architecture; Euro-American and Pre-Contact archaeology. These reports have been provided to the Maine Historic Preservation Commission (MHPC) for review; correspondence to date with MHPC is included in Appendix G. Project engineering design plans are located in Volume III of the October 2008 Maine Department of Environment Protection Site Location of Development and Natural Resources Protection Act. That Volume is incorporated herein by reference.