

The turbines will have a maximum height of approximately 395.5 feet from the tip of the rotor blade at the uppermost position to ground level, and the rotor diameter would be 269 feet. There is one temporary meteorological tower with guy wires currently on the site that will be removed when Project construction is complete. There will be up to three permanent meteorological towers located on site, the location of which will be determined after a final construction layout is completed. Existing roads will be used to the extent feasible to bring equipment and material to the site (see Section 3.4).

The proposed location and spacing of the wind turbines and support facilities were determined using results of a wind resource assessment, selection of a turbine model, a review of the site's land use constraints (see Section 3.5, Land Use and Zoning), landowner preferences, and the locations of currently existing sensitive environmental and cultural resources.

The Project will also require two substations: a collector substation, located on Swamp (Wilson) Road approximately 0.1 miles south of its intersection with Favret Road, for low-voltage step-up to transmission voltage; and a transmission owner interconnection facility, located south of the Chaumont River and north of County Route 179, opposite the National Grid Lyme Substation in the Town of Lyme. The collector substation will consolidate power from the 1500-kW wind turbine generators, and increase the voltage level from 34.5 kV to 115 kV. The collector system substation will receive power from feeders, through the underground collector system connected to the 53 wind turbine generators. The collector substation will be connected to the transmission owner interconnection substation by an approximately 9-mile 115 kV transmission line. The main function of the interconnection substation is to mechanically connect the Project to the utility grid and to provide fault protection.

2.5.1 Wind Turbines

Turbines used for the Project will be 1.5 MW Acciona AW-82/1500 turbines manufactured by Acciona Windpower, S.A. Each turbine will consist of a 262-foot (80-meter) conical, tubular steel tower; a 269-foot (82-meter) rotor consisting of three composite blades; and a nacelle, which houses the generator, gearbox, and power train as shown in Exhibit 2.5.1. The towers are slightly tapered, with diameter of approximately 20 feet at ground level. A service platform at the top of each section allows for access to the nacelle for routine inspection. The nacelle houses the main mechanical

