

APPLICATION FOR PERMIT TO TOWN OF FREEDOM

A. Owner's Name, Address, Phone Number

Maine Energy Aggregation Company, LLC (MEAC)
148 Middle Street
Suite 506
Portland, ME 04101

Phone: (207) 772-6190

Fax: (207) 772-6320

Contact Person: Andrew Price
Managing Member

MEAC has executed a Ground Lease with the owners of the property, C. Ronald Price and Susan M. Price. This Ground Lease provides MEAC with the right to develop, construct, own and operate wind turbines on the property for a period of up to 40 years.

The property is owned by:

C. Ronald Price and Susan M. Price
55 Knox Ridge South
Knox, ME 04986

Phone – (207) 382-6322

B. Location and Size of Lot

The lot is the parcel of land currently owned by Ronald Price located in the Town of Freedom and shown on the Town's Tax Map #6 as lot 1-1. It is approximately 76 acres in size and is located on Beaver Ridge – the uppermost fields beyond the end of Sibley Road.

C. Description of Proposed Activity

Maine Energy Aggregation Company, LLC ("MEAC") and its affiliates propose to construct three (3) wind turbines for the purpose of generating electricity for sale to retail customers in Maine and throughout New England. The proposed locations of the three (3) turbines are shown on the Plot Plan provided herein.

Each of the turbines will consist of the following components:

1. A “tower” – which is approximately 260 feet (80 meters) in height, and tapers from 15 feet (4.6 meters) in diameter at its base to 10 feet (3 meters) at its top. The tower will be anchored to a base foundation of slightly more than 15 feet in diameter. This foundation will be approximately 30 feet deep to provide the required support for the tower. Concrete depth and mass may be reduced by the use of rock anchors if site conditions warrant. The tower will be free-standing without any guy wires or other types of support.
2. A “nacelle” - which is the unit that contains the turbine generator. The nacelle will be secured at the top of the tower. The dimensions of the nacelle are approximately 12 feet (H) x 12 feet (W) x 27 feet (L). The nacelle is designed to rotate to orient the blades into the direction of the wind to ensure maximum electric output.
3. The “blades” – there are three blades, each of which is approximately 130 feet (40 meters) in length. The blades are mounted to one end of the nacelle and rotate between 10 and 18 revolutions per minute depending on wind speed.
4. An “electric interconnection” – which is a pad mounted structure immediately adjacent to the base of the tower. This structure houses the electric switchgear and related controls, including a transformer that provide for the interconnection of the generator to the electric grid. The size of each structure is approximately 6 feet (H) x 4 feet (W) x 6 feet (L), and is mounted on a concrete pad that is approximately 12 inches thick. The electrical interconnection between the generator and the pad mounted structure will be underground and installed according to code.

In addition to these components, MEAC will:

- Upgrade the current private road on the site to permit construction of the wind turbines. This upgrade will be according to road construction standards for this type of road, including provisions for stormwater runoff and other environmental protections. The upgraded road will remain a private road.
- Install an electric grid underground that will connect each of the turbines and with the Central Maine Power Company electric grid. This grid will be at the same voltage as three-phase street power (approximately 12.5 kV) and will conform to CMP interconnection requirements. This interconnection will require that a portion of the CMP distribution grid that is currently single-phase be upgraded to three-phase power.

Appendix A of this Application contains additional information on the structures that are being proposed and technical information related to the wind turbines. At the present time, MEAC anticipates using the GE xle turbines shown in this Appendix A; however, depending on availability of these turbines, MEAC reserves the right to substitute turbines manufactured by a different company. These turbines will be comparable in terms of size, construction standards and physical appearance.

D. Plot Plan

A survey of the parcel is provided in Appendix B. This survey shows the parcel of land owned by C. Ronald Price and Susan M. Price and includes a plot plan of the specific structures, utilities and access road upgrade being proposed. There are three (3) towers shown on the plot plan, each accompanied by a pad mounted electrical interconnection structure and transformer. In addition, the “sweep” of the blades is shown on the plot plan as the lightly shaded circle around each of the towers.

E. Setbacks

Two measurements of the setbacks from the property line are provided. The first is in reference to the base of the towers. The minimum setback from the property line across each of the three towers and pad mounted electrical interconnection structures is approximately 360 feet.

The second setback is in reference to the sweep of the blades. This setback is measured between the property line and the “footprint” on the ground of the maximum 360 degree sweep of the blades. The minimum setback using this standard of measurement is approximately 235 feet.

F. Estimated Cost of Construction

The estimated total cost of construction is \$10 million.

G. Copy of the Plumbing Permit

Not Applicable – there will be no plumbing installed in any of the structures or anywhere else in the project.

H. Additional Information

1. FAA Lighting Details:

Each of the Towers will have an FAA light per FAA regulations. (See Appendix A for additional specifications.)

APPENDIX A

Information Related to the Wind Turbines

MEAC anticipates that it will use the GE 1.5 xle wind turbine. This is a new addition to GE's 1.5-Megawatt series of wind turbines and is optimized for low-wind speed areas such as Beaver Ridge. Detailed specifications for the xle are not yet available but will be almost identical in most respects to the other turbines in the 1.5 MW series.

Attached is a brochure with general information about the entire GE 1.5 series of wind turbines, including the new xle model. Also included is a more detailed technical description and specifications document for the similar GE 1.5s wind turbine. The main difference between the GE 1.5s and the GE 1.5xle is the rotor diameter; 70.5 meters for the 1.5s and 82.5 meters for the 1.5xle. The longer blade length is crucial for a relatively low wind class III site such as Beaver Ridge.

According to GE "a few mechanical adjustments were required to accommodate the larger rotor diameter [of the 1.5 xle]. The pitch bearing, pitch system, rotor hub and blades, gears and towers were enhanced to meet the higher demands...The new machine's LM 40 rotor blade has been specifically adapted to meet the operational requirements, and also underwent extreme-load and fatigue testing."

The technical description and specification of the GE 1.5 series turbine-generator is attached.

APPENDIX B

Plot Plan of the Property