# APPLICATION FOR PERMIT TO TOWN OF FREEDOM

## A. Owner's Name, Address, Phone Number

Beaver Ridge Wind, LLC % Competitive Energy Services, LLC 148 Middle Street Suite 506 Portland, ME 04101

Phone: (207) 772-6190 Fax: (207) 772-6320

Contact Person: Andrew Price

Managing Member

Beaver Ridge Wind, LLC has executed a Ground Lease with the owners of the property, C. Ronald Price and Susan M. Price. This Ground Lease provides Beaver Ridge Wind, LLC 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 PO Box 101 Freedom, ME 04941 Phone – (207) 382-6322

#### B. Location and Size of Lot

The lot is the parcel of land currently owned by C. Ronald Price and Susan M. 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.

## C. Description of Proposed Activity

Beaver Ridge Wind, LLC proposes 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 approximately 15 feet (4.6 meters) in diameter at its base to 10 feet (3 meters) at its

- top. The tower will be made of steel and will be anchored to a concrete base foundation of slightly more than 15 feet in diameter. This foundation will be either a spread, rock anchor or cylindrical ring design as determined by the turbine manufacturer, construction engineers and geotechnical engineers to be most appropriate for the Beaver Ridge site. The depth and mass of the foundation 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. The nacelle will have fire suppression installed as described in our application of September 2006, and attached to this application.
- 3. The "blades" there are three blades, each of which is approximately 130 feet (40 meters) in length. The blades are mounted to the hub on one end of the nacelle and rotate between approximately 10 and 25 revolutions per minute depending on wind speed and turbine make and model.
- 4. An "electric interconnection" which may include a pad mounted transformer immediately adjacent to the base of each tower and electric cables running in underground conduit from each transformer to the first electric pole owned by Central Maine Power Company (CMP). The size of each pad mounted transformer 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. These transformers need no protective fencing and are identical to those found outside most commercial buildings around the state. Certain turbine makes and models incorporate the transformers into the base of the tower in which case no pad or external transformation equipment is required. All electrical work will be installed in accordance with the National Electric Code and CMP interconnection requirements and will be performed by licensed and qualified personnel.

In addition to these components, Beaver Ridge Wind, LLC will:

- Upgrade the current dirt portion of Sibley Road as well as the private farm 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 on site 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 conform to CMP interconnection requirements as well as the National Electric Code. This

interconnection will require that a portion of the CMP distribution grid that is currently 12.5 kV single-phase be upgraded to 34.5 kV three-phase.

## D. Plot Plan

A survey of the parcel is provided in Appendix A. 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. In addition, the "sweep" of the blades is shown on the plot plan as the lightly shaded circle around each of the towers. The project site will not include permanent parking areas, residences or outbuildings.

#### E. Setbacks

The setback from the property line to each of the three towers and pad mounted electrical interconnection structures is 360 feet. This is far in excess of the 20 feet required to a property line in the Town of Freedom Building Ordinance. The GPS coordinates and setbacks of each tower are shown on the survey map included with this application.

The closest structure is Phil Bloomstein's residence at 98 Deer Hill Road. This residence is over 1,000 feet away from the northeast tower.

As can be clearly seen on the Plat Plan, each tower is well in excess of 50 feet from Sibley Road, the closest public way, as required by the Town of Freedom Building Ordinance.

#### F. Estimated Cost of Construction & Contractor

The estimated total cost of construction is \$12 million. Although a contractor has not been selected we have met with Reed & Reed of Woolwich Maine and Cianbro of Pittsfield Maine. Reed & Reed constructed the wind project located in Mars Hill Maine. Both Reed & Reed and Cianbro of Pittsfield Maine have expressed their desire to construct our project.

# G. Copy of the Plumbing or Other Required Permits

Not Applicable – there will be no plumbing installed in any of the structures or anywhere else in the project. There will be no subsurface or surface wastewater disposal systems installed at the project. FAA approval is required and has been received as noted in H.6. below. The Beaver Ridge Wind Project does not require any other permits or approvals from any agency of the State of Maine or US Government to proceed. See H.7 below.

## H. Additional Information

## 1. Supplemental Material

Supplemental material has been submitted along with this application. The Supplemental material contains additional information on the structures that are being proposed and technical information related to the wind turbines. The supplemental material is not required by the Town of Freedom Building Ordinance. It does contain additional information about our project, however, that we wish to provide to the town.

#### 2. Turbines

At the present time, Beaver Ridge Wind, LLC anticipates using either the GE 1.5xle turbine or the Vestas V82 turbine. Additional specifications are shown for both of these turbines in the supplemental information. However, depending on availability of these turbines, Beaver Ridge Wind, LLC reserves the right to substitute turbines manufactured by a different company. These turbines will be comparable in terms of size, construction standards, operating characteristics and physical appearance.

#### 3. General Practices & Construction Standards

All building materials used and construction practices will adhere to best practices as recognized by generally accepted industry standards. The project will have no chimney or roof and so these sections of the Town of Freedom Building Ordinance do not apply. The exterior surface treatments of the turbines will minimize reflections and dirt accumulation. Tarred or asphalt paper, felt or building paper will not be used. Construction debris will be removed and disposed of off site.

#### 4. Schedule

The project will be substantially commenced within 6 months of the date of issuance of a permit. Anticipated completion date is Fall of 2008 or Summer of 2009 depending on turbine availability. The project will be substantially completed within 2 years of the issuance of a permit as required by the Building Ordinance.

# 5. Turbine Diagram and Technical Specifications

See the Supplemental Material Exhibit – Item 28 (WIND) for wind turbine diagrams, technical specifications and foundation drawings. This information is not required by the Town of Freedom Building Ordinance and so has been provided in the Supplemental Information for informational purposes only.

## 6. FAA Lighting Details

See the Supplemental Material for approval letters from the FAA for each of the 3 proposed towers as well as Exhibit – Item 28 (WIND) – Lighting for technical information regarding the type of lighting that is required by the FAA. We applied for and received approval from the FAA for our project. We requested that the FAA consider requiring lighting for only 2 of the 3 towers that we proposed. The FAA granted this request. The two end Towers (the one farthest to the Southwest and the one farthest to the Northeast) will have FAA lights per FAA regulations while the

middle tower will have no lighting. There will be no other lighting required at the project. This information is not required by the Town of Freedom Building Ordinance and so has been provided in the Supplemental Information for informational purposes only.

## 7. State of Maine Agencies

The Beaver Ridge Wind Project does not require any approvals from any agency of the State of Maine. Nevertheless, we contacted the following Agencies of the State of Maine and asked them to confirm in writing that they require no further input on our proposed project: Department of Environmental Protection, Department of Conservation, Inland Fisheries and Wildlife and the State Historical Preservation Commission. See the Supplemental Material for letters from each of these agencies. This information is not required by the Town of Freedom Building Ordinance and so has been provided in the Supplemental Information for informational purposes only.

## 8. Hazardous Materials

There will be no flammable or hazardous materials stored on site. Regular maintenance of the turbines will involve the handling of oil products. Each turbine will contain between 200 liters and 500 liters (53 and 130 gallons) of petroleum products, including crank case oil, grease and hydraulic fluids. All such material will be removed from the site for appropriate disposal as required. This information is not required by the Town of Freedom Building Ordinance and so has been provided in the Supplemental Information for informational purposes only.

# APPENDIX A

**Plot Plan of the Property**