Section XXXVI. Small Wind Turbine Projects

(Adopted October 9, 2012 by Resolution 2012-88, effective November 8, 2012)

36.01 General Requirements

Wind Turbine Projects of 5 MW or more shall be required to submit an application with the Ohio Power Siting Board (OSBP) at the Public Utilities Commission of Ohio (PUCO) and are required to meet OPSB regulations. Any proposed construction, erection or siting of a Wind Turbine Project of less than 5 MW consisting of a wind turbine, a tower and associated control or conversion electronics shall be a Permitted Use in all Painesville Township Zoning Districts if the following conditions are met (both as Permitted and Conditional Use).

A. Height: So long as the total extended height meets sound and set-back requirements, there shall be no specific height limitation, except as imposed by Federal Aviation Administration regulations.

B. Setbacks: Any turbine erected on a parcel of land shall be setback 1.1 times the height of the tower or established "clear fall zone" from all neighboring property lines, from all road right-of-way lines, overhead utility lines or wires including, but not limited to, high tension electrical wires, cables and telephone lines, as well as any inhabited structures on the parcel.

C. Maintenance: Wind turbines must be maintained in good working order. Manufacturer's records for preventive maintenance will apply and shall be available to Painesville Township officials on request. The owner shall provide written notice of abandonment to the Zoning Inspector within 30 days of permanently ceasing operation of a wind turbine. An unused wind turbine or small wind turbine may stand no longer than nine (9) months following abandonment. All costs associated with the demolition of the wind turbine tower and associated equipment shall be borne by the owner. A wind turbine is considered abandoned when it ceases transmission for thirty (30) consecutive days. Wind turbines that become inoperable for more than nine (9) months must be removed by the owner within thirty (30) days of issuance of a zoning violation. Removal includes removal of all apparatuses, supports, and or other hardware associated with the existing wind turbine.

D. Noise Level: The noise level of the wind turbine shall not exceed sixty (60) decibels (i.e. a person talking in a normal tone of voice) at the nearest neighboring property line except during short-term events such as severe wind storms and utility outages. This information shall be included in the in the permit application and shall be obtained from the manufacturer of the wind turbine. Those turbines not meeting this requirement will be issued a zoning violation and be required to shut down immediately until the required decibel levels are met.

E. Aesthetics: The color of wind energy systems shall be the factory default color from the manufacturer. Logos or other identification markers, other than those of the manufacturer shall not be permitted anywhere on the turbine.

F. Design: All towers will be constructed as a monopole. The tower and its instruments shall be designed and constructed so as to not cause radio and/or television interference to adjacent properties. To prevent unauthorized access to the tower, all climbing rungs within twelve (12) feet of the ground must be removed.

G. Wiring and Electrical Apparatuses: All wires and electrical apparatuses associated with the operation of a wind turbine shall be located underground and meet all local, state and federal regulations.

H. Warning Signs: Appropriate warning signs to address voltage such as "Danger-High Voltage" or "Caution-Electrical Shock Hazard" shall be posted to the sides of the tower.

36.02 Permits:

A. Projects to install wind turbines are subject to approval of a Site Plan Review prior to the application for a permit. Any lighting plan submitted will be considered based upon its appropriateness within safety guidelines, compliance with FAA requirements and appropriate demonstration that any such lighting will not constitute a light nuisance across property lines.

B. A zoning permit shall be required before construction may commence.

C. As part of the permit process, the applicant shall demonstrate compliance with any federal, state and local restrictions applicable to wind energy apparatus and any towers associated with such apparatus.

D. The applicant shall then provide the Zoning Inspector with the following items or information when applying for a permit.

1) Location and elevation of public and private airports in relation to the location and elevation of the wind turbine.

2) A signed and sealed engineering report that shows:

- The total size and height of the unit.

- If applicable the total size and depth of the unit's foundation structure as well as soil and bedrock data that meet minimum standards as specified by the manufacturer's and local engineering standards.

- A list and or depiction of all safety measures that will be on the unit including anti-climb devices, grounding devices, lightning protection, braking systems, and anchors.

- Data specifying the kilowatt size and generating capacity in kilowatts of the unit.

- The maximum decibel level of the turbine unit as obtained from the manufacturer.

- Hazardous material containment and disposal plan.

- A site drawing showing the location of the unit in relation to existing structures on the property, roads and other public right-of-ways, and neighboring property lines.

- Evidence of an established setbacks of 1.1 times the height of the wind turbine and "clear fall zone" shall be shown on the site drawings.

- Color of the unit as well as location and size of the manufacturer's identifying logos shall be included in the report.

- A maintenance schedule as well as a dismantling plan that outlines how the unit will be dismantled shall be required as part of the permit.

TO BE ADDED TO SECTION V

Definitions:

- ANEMOMETER:
An instrument that measures the force and direction of the wind.

- CLEAR FALL ZONE:

An area surrounding the wind turbine unit into which the turbine and/or it's components might fall due to inclement weather, poor maintenance, faulty construction or any other condition.

- DECIBEL:
A unit of relative loudness equal to ten times the common logarithm of the ratio of two readings. For sound, the decibel scale runs from zero for the least perceptible sound to 130 for sound that causes pain.

- MEGAWATT(MW):
A unit of power, equal to one million watts.

- MONOPOLE:
A single piece tower placed on a concrete pad according to manufacturer's recommendations.

- SMALL WIND PROJECT:
Any wind project less than 5MW which includes the wind turbine generator and anemometer.