ORDINANCE NO. 636

VILLAGE OF BELLEVUE, ILLINOIS

AN ORDINANCE PERTAINING TO WIND ENERGY CONVERSION SYSTEMS

WHEREAS, the Village of Bellevue ("Village") Board of Trustees has determined that health, safety and welfare of the citizens of the Village will be served by adopting a comprehensive wind energy conversion systems ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BELLEVUE, PEORIA COUNTY, ILLINOIS, AS FOLLOWS:

A. **Purpose.**

It is the purpose of this ordinance to regulate the siting and installation of wind energy conversion systems. The promotion of safe, effective and efficient use of wind energy systems will be balanced against the need to preserve and protect public health and safety.

B. **Definitions.**

Applicant: the person or entity filing an application under this ordinance.

Commercial Wind Energy System: a wind energy conversion system (WECS) or combination of wind energy conversion systems is any system that is designed to sell electricity to a utility company.

End User Wind Energy System (non-commercial): a wind energy conversion system is intended to primarily reduce on-site consumption of utility power and is not used to sell electricity to a utility company.

FAA: Federal Aviation Administration.

Owner: the individual or entity that intends to own and operate the wind energy system in accordance with this ordinance.

Tower: the monopole, freestanding, or guyed structure that supports a wind generator.

Total Height: the vertical distance from ground level to the tip of a wind generator blade when the tip is at its highest point.

C. **Standards**

1. Commercial wind energy conversion systems.

   a. Minimum conditions for **special use permit**.

(1.) ***Design Safety Certification*** - The safety of the design of all WECS towers shall be certified by a licensed Professional Engineer. The standard for certification shall be good engineering practices and shall conform to all of Bellevue's officially adopted codes and ordinances.

(2.) ***Controls and Brakes*** - All WECS projects shall be equipped with Manual and Automatic Controls and mechanical brakes to limit rotation of blades to a speed below the designed limits of a WECS. For purposes of this section, "Manual and Automatic Controls" are defined as controls which give protection to power grids and limit rotation of a WECS' blades to below the designed limits of the conversion system. The Professional Engineer or Authorized Factory Representative must certify that the rotor and overspeed control design and fabrication conform to good engineering practices. No changes or alterations from certified design shall be permitted unless accompanied by a Professional Engineer's or the Authorized Factory Representative's statement of certification.

(3.) ***Color*** - Towers and blades shall be painted a non-reflective, unobtrusive color that blends into the surrounding landscape to the greatest extent possible.

(4.) ***Lighting*** - Lighting for the towers shall be constructed only in accordance with the minimum requirements and standards allowed through the FAA or other regulatory authority in an effort to minimize the visual impact of the structures.

(5.) ***Compliance with FAA*** - It shall be the responsibility of the person in charge of the WECS project to complete the proper FAA applications and obtain the proper permits for the WECS project. It shall also be the responsibility of the person in charge of the WECS project to obtain a determination of no significant impact to air navigation from the FAA.

(6.) ***Warnings*** -A visible warning sign of "High Voltage" must be placed at the base of all WECS projects. The sign must have at a minimum six (6) inch letters. Such signs shall be located a maximum of three hundred (300) feet apart and at all points of site ingress and egress.

(7.) ***Climb Prevention*** - All WECS project towers or poles must be unclimbable by design or protected by anti- climbing devices such as:

(a) Fences with locking portals at least six (6) feet high;

(b) Anti-climbing devices twelve (12) feet from base of pole;

or

(c) Anchor points for guy wires supporting the tower shall be enclosed by a six (6) foot high fence or shall be located within the confines of a yard that is completely fenced.

(8.) ***Compliance with additional Regulations*** - it shall be the responsibility of the person in charge of the WECS project to contact the FCC and FAA regarding additional permits necessary or any other applicable Federal, State or County regulations for the installation of a WECS project prior to the public hearing before the **Zoning Board of Appeals**.

(9.) ***Height*** - wind generator machine height must comply with all FAA regulations.

(10.) ***Installation Certification*** - A licensed Professional Engineer shall certify that the construction and installation of the WECS project meets or exceeds the manufacturer's construction and installation standards.

(11.) ***Migratory Birds*** - An avian study shall be conducted by a qualified third-party professional, such as an ornithologist or wildlife biologist, to determine if there is any potential impact the WECS project may present to migratory birds. The study must provide assurances that the WECS project does not negatively impact the path of migratory birds. The results of the study shall be made available at the hearing before the **Zoning Board of Appeals**.

(12.) ***Roads*** - any proposed access roads that will be used for construction purposes shall be identified and approved by Bellevue prior to the hearing before the **Zoning Board of Appeals**.

Any road damage caused by the transport of the facility's equipment, the installation, or the removal, must be completely repaired to the satisfaction of Bellevue.

(13.) ***Setbacks*** –

(a) Setbacks from public roads and property lines shall be established in the underlying zoning district.

(b) All WECS Towers shall be at least 750 feet from any adjoining property's dwelling unit, and no less than 1.25 times the total height from the applying property owner's dwelling unit.

(c) All WECS Towers shall be set back a distance of at least 1.25 times the WECS total height from the third party transmission lines and telecommunications carrier facilities.

(d) Any variance of the applicable setbacks requirements, whether required in this Article or elsewhere in these regulations, shall be recorded with the Peoria County Recorder of Deeds.

(14.) Building Permit - All wind energy conversion systems require a building permit prior to the initiation of construction. Owners must comply with all applicable building codes adopted by Bellevue. A set of drawings and engineering analysis that conforms to manufacturer's standards, which has been certified by a licensed Professional Engineer, shall be submitted with the building permit application.

2. End User Wind Energy System (non-commercial).

a. ***Installation*** - all non-commercial wind energy systems shall be installed per the manufacturer's standards. The standards must include compliance with all of Bellevue's officially adopted codes and ordinances.

b. ***Height*** - The total height of an end user wind energy system shall be in compliance with the setback formula set forth in Section 2(c) below. The maximum height must be compliant with FAA standards.

c. ***Setbacks*** - All parts of the end user wind energy system shall be subject to setback requirements, including those outlined in the underlying zoning district and this section of the ordinance.

(1.) All parts of the structure shall be setback a distance equal to the setback formula of 1.1 times the total height of all adjacent property lines, road right-of-way, railroad right-of-way and right-of-way for overhead electrical transmission or distribution lines.

(2.) Setbacks are measured from the property lines, road right-of-way, railroad right-of-way and right-of-way for overhead electrical transmission or distribution lines to any part of the tower structure.

d. ***Minimum Lot Size*** – Any lot size or shape is eligible for a permit for an end user wind energy system as long as the lot size is larger enough to ensure compliance with the setback requirements set forth in Section 2(c) above.

e. ***Building Permit*** - All end user wind energy systems require a building permit prior to the initiation of construction. Owners must comply with all applicable building codes and ordinances adopted by Bellevue. A set of drawings and engineering analysis that conforms to manufacturer's

standards, which has been certified by a licensed Professional Engineer, shall be submitted with the building permit application. In order for an existing concrete foundation to be reused, a licensed Professional Engineer must submit specifications stating that the existing base is sufficient to accommodate the new loads that will be applied to the foundation.

f. ***Lighting*** - Lighting for towers shall be constructed only in accordance with the minimum requirements and standards allowed through the FAA or other regulatory authority in an effort to minimize the visual impact of the structures.

g. ***Color*** - Towers and blades shall be painted a non-reflective, unobtrusive color that blends into the surrounding landscape to the greatest extent possible.

h. ***Warnings*** - A visible warning sign of "High Voltage" must be placed at the base of all WECS projects. All signs, other than the manufacturer's or installer's identification, appropriate warning signs, or owner identification on a wind generator, tower, building, or other structure associated with a small wind energy system, visible from any public road shall be prohibited.

i. ***Fencing*** – The tower shall be enclosed with a fence of at least eight (8) feet in height or the base of the tower shall not be climbable for a distance of twelve (12) feet measured from the ground.

j. ***Required Safety Features*** – The system shall have an automatic overspeed control to render the system inoperable when winds are blowing in excess of the speeds for which the system is designed and a manually operable method to render the system inoperable in the event of a structural or mechanical failure of any part of the system.

D. **Maintenance and Operation**

1. ***Annual Inspection*** - Every commercial WECS project must be inspected annually by an Authorized Factory Representative to certify that it is in good working condition and not a hazard to the public. A copy of the annual inspection must be filed with Bellevue within fifteen (15) days after the inspection report is received by the WECS project owner/manager.

2. ***Interference*** - If the Authorized Factory Representative determines that the commercial WECS project causes severe interference with microwave transmissions, residential television interference or radio reception, the commercial WECS owner must take commercially reasonable steps to correct the problem. Evidence that the Authorized Factory Representative has determined that no such interference will occur or that interference has been corrected must be presented at the public hearing before the **Zoning Board of Appeals**. A small wind energy conversion system must submit to Bellevue information from the manufacturer that certifies that the system will not interfere

with microwave transmissions, residential television or radio reception.

3. ***Fire Risk*** - All WECS projects must adhere to all applicable electrical codes and standards and must remove fuel sources, such as vegetation, from the immediate vicinity of electrical gear and connections. Every WECS project must utilize twistable cables on turbines.

E. **Noise Levels**

Noise levels shall be regulated by the Illinois Pollution Control Agency rules and regulations and the applicant shall certify that applicant's facility is in compliance with the same. Applicant shall provide certification from the manufacturer that the noise level will not exceed 60 decibels as measured at the nearest property line.

F. **Liability Insurance**

The WECS project owner shall maintain a current insurance policy to cover installation and operation of the WECS project. The amount of the policy shall be established as a condition of permit approval. The liability insurance shall be for an amount of $500,000 or greater.

G. **Removal Upon End of Useful Life**

1. **Commercial Wind Energy Conversion Systems**: The WECS project must contain a Decommissioning Plan to ensure it is properly decommissioned upon the end of the project life or facility abandonment. For purposes of this section, "facility abandonment" shall mean a consecutive period of time of not less than one year. Decommissioning shall include: removal of all structures (including transmission equipment and fencing) and debris to a depth of four (4) feet, restoration of the soil, and restoration of vegetation within six (6) months of the end of project life or facility abandonment. The decommissioning plan shall state how the facility will be decommissioned, the Professional Engineer's estimated cost of decommissioning, the financial resources to be used to accomplish decommissioning, and the escrow agent with which the resources shall be deposited. The decommissioning plan shall also include an agreement between the applicant and Bellevue which states:

    a. The financial resources for decommissioning which shall be in the form of a surety bond, or shall be deposited in an escrow account with an escrow agent acceptable to Bellevue.

    b. If the applicant chooses an escrow agreement:

        (1.) A written escrow agreement will be prepared, establishing upon what conditions the funds will be disbursed; and

        (2.) Bellevue shall have access to the escrow account funds for the expressed purpose of completing decommissioning if decommissioning is not completed by the applicant within six (6) months of the end of project life or facility

abandonment.

c. Bellevue is granted the right of entry onto the site, pursuant to reasonable notice, to effect or complete decommissioning.

d. Bellevue is granted the right to seek injunctive relief to effect/complete decommissioning, as well as Bellevue's right to seek reimbursement from applicant or applicant's successor for decommissioning costs in excess of the amount deposited in escrow and to file a lien against real property owned by applicant or applicant's successor, or in which they have an interest, for the amount of the excess, and to take all steps allowed by law to enforce the lien.

Financial provisions shall not be so onerous as to make WECS projects unfeasible.

2. **End User Wind Energy Systems (non-commercial)**: When a system reaches the end of its useful life and can longer function, the owner of the system shall remove the system within 120 days of the day on which the system last functioned. The owner is solely responsible for removal of the system and all costs, financial or otherwise, of system removal.

Passed and Approved this ___ day of May 2009

AYES: 5

NAYES: 0

ABSENT: 0

VILLAGE OF BELLEVUE

Larry D Merriman

Larry Merriman, President

Attest: Carol S. Howard

Carol S. Howard, Clerk