ORDINANCE NO. 09-____
PORTER COUNTY BOARD OF COMMISSIONERS

UNIFIED DEVELOPMENT ORDINANCE

WHEREAS, the Porter County Board of Commissioners adopted the Porter County Unified Development Ordinance; Ordinance No. 07-05 on Tuesday, May 1, 2007; and

WHEREAS, the Porter County Board of Commissioners has deemed it necessary to amend Chapter 5, Zoning District Development Standards with the addition Section Titled, Wind Energy Conversion Systems: On-Site Service Wind Energy Systems (WE-02);

INTENT: That it is in the interest to promote and regulate the safe use of On-Site Wind Energy Systems.

NOW, THEREFORE, BE IT AND IT IS HEREBY ORDAINED THAT:

Chapter 5, Zoning District Development Standards; Wind Energy Conversion Systems: On-Site Service Wind Energy Systems (WE-02); shall be an addition within the Porter County Unified Development Ordinance, said section shall be added as follows:

WE-02: Wind Energy Conversion Systems: On-Site Service Wind Energy Systems

This On-Site Service Wind Energy Conversion System section applies to the following zoning districts:

General Agriculture (A-1), Prime Agriculture (A-2), Rural Residential (RR), Low Density Single-family Residential (R-1), Parks and Recreation (P1) and Parks and Recreation (P2).

Permits required: On-Site Service WECS shall not be constructed, erected, placed, modified or altered until an Improvement Location Permit has been obtained.

A. Definitions:

1. Wind Energy Conversion System (WECS): Shall mean a combination of:
   a. A surface area (typically a blade, rotor, or similar device), either variable or fixed, for utilizing the wind for electrical power; and
   b. A shaft, gearing, belt, or coupling utilized to convert the rotation of the surface area into a form suitable for driving a generator, alternator, or other electricity-producing device; and
   c. The generator, alternator, or other device to convert the mechanical energy of the surface area into electrical energy, generally housed in a nacelle; and
   d. The tower, pylon, building mount or other structure upon which any, all, or some combination of the above are mounted.
e. Other components not listed above but associated with the normal construction, operation, and maintenance of a WECS.

A WECS may have a horizontal axis, with a rotor that spins perpendicular to the ground, or a vertical axis, with a rotor that spins parallel to the ground.

2. **WECS Height:** The distance measured between the ground (at normal grade) and the highest point of a WECS (for a horizontal axis WECS, the measurement shall be to the tip of the rotor blade when the blade is in the full vertical position).

3. **On-site Service WECS:** A single WECS placed upon a lot or parcel with the primary intent to service the energy needs of only the structures and uses on the same lot or parcel.

B. **On-Site Requirement:** Only On-site Service WECS shall be allowed under this Section. A WECS with the primary purpose of providing power to the utility grid or any other use not on the same site is regulated under 5.78 WE-01: Wind Energy Conversion Systems: Large Wind Energy Systems.

C. **General Requirements:** On-site Service WECS General Requirements:

1. **Minimum Lot Area:** The minimum lot area for installation of a WECS shall be 2.50 acres. Parcels 20,000 square feet up to 2.49 acres shall require a Special Exception approval from the Board of Zoning Appeals prior to permitting for a WECS.

2. **Review Requirements:**
   a. For a WECS that does not exceed thirty-five (35) feet in height, review shall be according to the Development Plan Review requirements of Section 10.09.
   b. For any WECS exceeding thirty-five (35) feet in height, a Special Exception must be approved by the Board of Zoning Appeal, according to Section 10.22.

3. **Power Rating:** Power rating of the WECS turbine shall not be greater than 25 kW.

4. **On-Site Nature:** The WECS shall provide energy only to the structures and uses on the same property upon which the tower is located and must be owned or leased by the owner of the same property; however, this does not prevent the distribution to the local utility company of any power that is generated beyond the needs of the structures or uses on the property. Except for the local utility company, power generated by the WECS may not be provided to any other property or entity.
5. **Noise**: No sound attributed to the WECS in excess of 55 dB(A) shall be discernible at the property line.

6. **Signs**: There shall be no signs on the WECS other than the name of the manufacturer, which may only be affixed to the base of the tower or to the nacelle. No sign shall exceed three (3) square feet in area.

7. **Lighting**: There shall be no lighting on or directed to the WECS.

8. **Color**: The WECS shall be painted in a neutral matte color, such as white, gray or light blue, to blend into the background. A building mounted WECS may be painted in similar colors to those on the building.

9. **Braking and Shut-Off**: A WECS shall have an automatic braking, governing, or feathering system to prevent uncontrolled rotation or over speeding. Emergency shut-off information shall be posted on the tower in an easily viewable location.

10. **Anti-Climbing**: A WECS shall employ an anti-climbing device or be designed to prevent climbing and other unauthorized access.

11. **Proximity to Telecommunications**: A WECS shall not be installed in any location where its proximity to existing fixed broadcast, re-transmission or reception antenna for radio, television or wireless phone or personal communication systems would produce electromagnetic interference with signal transmission or reception.

12. **Compliance**: The applicant shall provide written evidence that the WECS complies with all applicable federal, state and county requirements.


14. **Abandonment**: A WECS shall be removed when the device or equipment is no longer operating or when it has been abandoned. A WECS shall be deemed abandoned when it has not produced electrical energy for twelve (12) consecutive months.

15. **Maintenance and Repair**: An existing and approved WECS may be repaired and maintained; however, a WECS may only be replaced with a new WECS upon approval of the Executive Director, provided that the new WECS is of the same height, rotor diameter, setback, etc. as the WECS it replaces. For the purposes of this paragraph, a “new or replacement WECS” shall mean all of the WECS, excluding the tower or support structure.

**D. Ground-Mounted On-Site Service WECS**

1. **Location on Site**: The WECS shall be located on the property so that it is set back from all property lines a distance equal to the WECS height. The setback shall be measured from the property line (considered as a plane extending from the ground to the highest point of the WECS) to the closest extension of the rotor relative to the property line (see graphic). No part of a single WECS (including guy wire anchors) shall be located within or above any required setback.
2. **Height:** The WECS height shall be limited by available setbacks as required in paragraph D)(1) above; however, no WECS height shall exceed fifty (50) feet on a property at least 15,000 square feet but less than one (1) acre in area; or seventy-five (75) feet on a property one (1) acre in area or greater. Any WECS over thirty-five (35) feet high is subject to Special Exception review according to Section 10.22, regardless of lot size.

3. **Clearance From Grade:** The minimum rotor blade tip clearance from grade shall be twenty (20) feet.

4. **Clearance From Structure:** The minimum rotor blade tip clearance from any structure shall be twenty (20) feet.

5. **Rotor Diameter:** The diameter of the rotor shall be dependent upon maximum WECS height and rotor blade tip clearance, but in no case shall it exceed fifty (50) feet.

6. **Anchoring:** The tower used to support a WECS shall be adequately anchored meeting applicable standards, as certified by a professional engineer. Guyed wires shall be identified with visible and reflective objects, such as plastic sleeves, to a height of eight (8) feet above grade.

E. **Building Mounted On-Site Service WECS**

1. **Rotor Diameter:** The diameter of the rotor shall not exceed twenty (20) feet.

2. **Height:** The WECS height shall not exceed the maximum permitted height for principal buildings in the district, plus fifteen (15) feet.
3. **Setbacks:** The WECS shall be mounted so that it is set back from adjoining property lines a distance equal to the combined height of the WECS and the height of the portion of the building on which it is mounted. The setback shall be measured from the property line (considered as a plane extending from the ground to the highest point of the WECS) to the closest extension of the rotor relative to the property line (see graphic).

4. **Mount Location:** A building mounted WECS shall not be mounted to the vertical face of a gable end or dormer that is visible from the street. To the greatest degree possible, the WECS shall be mounted to the building in the least visible location.

5. **Mounting:** The mount and the structure used to support a building mounted WECS shall meet applicable standards, as certified by a professional engineer.

F. **Discretionary Conditions:** The Plan Commission, or in the case of a Special Exception, the Board of Zoning Appeals, may impose other terms and conditions regulating the construction, installation, use, maintenance, repair and removal of any WECS. Such other terms and conditions may include, but are not limited to, the following:

1. **Tree preservation:** The preservation of existing trees and other existing vegetation not required to be removed for installation of a WECS.
2. **Tree replacement:** The reasonable replacement of trees or other vegetation removed or destroyed during the construction or installation of a WECS.
3. **Impacts on Neighboring Properties:** Altering the location of the WECS to prevent impacts on neighboring properties, provided that all other requirements of this Section are met.
4. **Performance Bonds:** Requiring a performance bond or letter of credit, in favor of the County, and conditioned upon the timely and faithful performance of all
required conditions of the special land use, including but not limited to the timely
and complete removal of a WECS, regulated under the terms of the section, when
required. Such performance bond or letter of credit shall remain in effect during
and after the operation of a WECS until its operations have ceased and it has been
removed.

This ordinance passed and adopted this ____ day of _______________, 2009.

PORTER COUNTY BOARD OF COMMISSIONERS

__________________________________
Robert P. Harper, President

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John A. Evans

__________________________________
Carole M. Knoblock

Attest: __________________________
James Kopp, Auditor

I affirm, under the penalties for perjury, that I have taken reasonable care to redact each social
security number in this document, unless required by law.

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Robert W. Thompson, Jr., AICP
Executive Director/County Planner