Standards for Large Wind Energy Systems in Rural Areas

This section includes examples of rural communities with special overlay districts or use standards for large wind energy systems or wind farms. Again, large may refer to the size of the tower or the combined electrical output of the turbines.

** Designates communities featured as case studies in PAS Report 566,* Planning for Wind Energy

- Benton (Washington), County of. 2011. *County Code.* Title 11, Zoning; Chapter 18, Growth Management Act Agricultural District; Section 11.18.050, Allowable Uses. Section 11.18.070, Uses Requiring Permits – Conditional Use Permit Required.

- *Cascade (Montana), County of. 2009. *Zoning Regulations.* Section 2, Definitions. Section 7.1.1.2, RR-5 District Use Regulations - Permitted Accessory Uses Located on the Same Lot with the Principal Use. Sections 7.2.1.15 and 7.2.1.16, Agricultural Districts – Permitted Principal Uses. Section 7.2.3.13, Uses Permitted Upon Issuance of a Special Permit as Provided in Section 8. Also, Cascade County Wind Power Map.

- Clarkson (New York), Town of. 2011. *Town Code*. Chapter 136, Wind Energy Conversion Systems. Rochester, N.Y.: General Code.

- *Fenner (New York), Town of. 2000 and 2001. *Local Law No. 2000-1; Local Law No. 2001-1*.

- *Gratiot (Michigan), County of. 2009. "Adopted Wind Ordinance."

- Huron (Michigan), County of. 2010. *Zoning Ordinance.* Article X, Huron County Wind Energy Conversion Facility Overlay Zoning Ordinance.

- Hyde (North Carolina), County of. 2008. *Code of Ordinances.* Chapter 16, Environment; Article III, Wind Energy Facilities. Tallahassee, Fla.: Municipal Code Corporation.

Cont'd

- Jefferson (Idaho), County of. 2008. *Ordinance No. 08-09: Wind Energy Ordinance.*

- *Kern (California), County of. 2011. *Kern County Zoning Ordinance.* Chapter 19.04, Definitions. Chapter 19.08, Interpretations and General Standards; Section 19.08.160, Height of Structures. Section 19.08.415, Small Wind Energy System. Chapter 19.64, Wind Energy (WE) Combining District.

- *Kittitas (Washington), County of. 2011. *Zoning Ordinance*. Chapter 17.61A, Wind Farm Resource Overlay Zone. Chapter 17.61B, Small Wind Energy Systems. Also, "Wind Farm Siting Application."

- LaPorte (Indiana), County of. 2011. *Code of Ordinances.* Title XV, Land Usage; Chapter 157, Zoning; Section 157.138, Wind Energy Conversion Systems. Cincinnati: American Legal Publishing Corporation.

- *McLean (Illinois), County of. 2010. *Zoning Ordinance.* Article 3, Rules and Definitions; Section 303, Definitions. Article 6, Use Regulations; Section 602.41, Use Standards—Utility, Major. Section 602.50, Use Standards—Small Wind Energy System.

- Navajo (Arizona), County of. 2010. *Ordinance No. 06-10: Wind Energy Generation Facilities*.

- *Rockingham (Virginia), County of. 2011. *Code of Ordinances*. Chapter 17, Zoning; Article XII, Wind Energy Conversion Systems. Tallahassee, Fla.: Municipal Code Corporation.

- Saline (Kansas), County of. 2010. *Code of Ordinances*. Appendix A, Zoning and Master Plan Resolution; Part 1, Zoning Resolution; Article XII, General Provisions; Section 12.12, Private Wind Energy Conversion Systems. Section 12.13, Commercial Wind Energy Conversion Systems. Tallahassee, Fla.: Municipal Code Corporation.

- *Washoe (Nevada), County of. 2011. *Development Code*. Division 3, Regulation of Uses; Article 326, Wind Machines.

CHAPTER 11.18

GROWTH MANAGEMENT ACT
AGRICULTURAL DISTRICT (GMAAD)

SECTIONS:

11.18.010 APPLICABILITY. This chapter shall apply to lands and activities located in unincorporated Benton County and designated in the Zoning Map of Benton County as in the GMA Agricultural District, unless otherwise specifically provided. [Ord. 265 (1995) 1; Ord. 445 (2007) § 1]

11.18.020 PURPOSE. The purpose of this chapter is to meet the minimum requirements of the State Growth Management Act (Chapter 36.70A RCW) that mandates the designation and protection of agricultural lands of long term commercial significance. The chapter protects the GMA Agricultural District (GMAAD) and the activities therein by limiting non-agricultural uses in the district to those compatible with agriculture and by establishing minimum lot sizes in areas where soils, water, and climate are

suitable for agricultural purposes. The chapter encourages the siting of allowable residential density into clustered enclaves to afford land owners economic value from non-farm residential development. This chapter is intended to work in conjunction with Chapter 14.05 BCC entitled "Right to Farm" which protects normal agricultural activities from nuisance complaints.

The authorization of new fully contained communities as provided for under RCW 36.70A.350 is not prevented by this chapter.
[Ord. 265 (1995) 2; Ord. 445 (2007) § 2]

11.18.030 GMA Agricultural District. The GMA Agricultural District shall include those areas identified in the official Zoning Map of Benton County and in the Benton County Comprehensive Plan as having Critical Agricultural Resources (soils, climate, and water). The minimum parcel size shall be twenty (20) acres, with exceptions as provided by this chapter. Commercial agricultural activities are most appropriately conducted on large parcels of land with significant separation between uses that conflict with agricultural practices.
[Ord. 265 (1995) 3; Ord. 445 (2007) § 3]

11.18.040 MAPS. The location and boundaries of the GMA Agricultural District are hereby established as set forth on the official Zoning Map of Benton County. The original of the official Zoning Map, signed by the chairman and the clerk of the Board of County Commissioners, shall be maintained in the records of the Planning Department.
[Ord. 265 (1995) 4; Ord. 445 (2007) § 4]

11.18.050 ALLOWABLE USES. Except as set forth in BCC 11.18.060 and BCC 11.18.070, only the following uses are determined consistent with the purpose of the chapter and are allowable uses in the GMA Agricultural District.

The following are allowable uses:

(21) Kennels, both commercial and private.

(22) Communication facilities described in BCC 11.65.030(b), BCC 11.65.030(c), BCC 11.65.030(d), or BCC 11.65.030(e).

(23) Any accessory equipment structure ancillary to a legal communication facility.

(24) Accessory buildings commonly appurtenant to site built homes, manufactured homes, or factory assembled structures.

(25) No more than one (1) wind turbine and related support structures and other improvements per parcel for private use; provided, the wind turbine height must be less than sixty (60) feet and the wind turbine must be set back from all property lines a distance equal to one (1) foot for every foot in height of the wind turbine.

(26) One (1) wind turbine with a wind turbine height of sixty (60) feet or more or a wind turbine farm and related support structures and other improvements under the following conditions:

(i) the lowest point on all rotor blades must be at least thirty (30) feet above ground level;

(ii) no wind turbine(s) height exceeds three hundred and fifty (350) feet;

(iii) all wind turbine tower bases must be set back from all dwellings not located on the same parcel at least one thousand (1,000) feet;

(iv) all wind turbine tower bases must be set back from all property lines a distance equal to the associated wind turbine height, except that, where contiguous properties are leased for an identical duration for development of a wind farm, the tower bases set back from the property lines common with such leased properties may be eliminated so long as no part of any wind turbine

extends past any such interior property lines and the above-required setbacks are maintained from the property lines comprising the exterior boundaries of the wind farm;

(v) all wind turbine tower bases must be set back from the closest edge of a state, county, or city road right-of-way a distance equal to the wind turbine height;

(vi) all wind turbine tower bases must be set back a distance equal to the wind turbine height from all borders of the GMA Agricultural District, except for GMA Agricultural District borders adjacent to the Hanford Reservation owned by the Department of Energy or adjacent to another zoning district adopted by another county that contains a general minimum parcel size of at least twenty (20) acres per parcel;

(vii) for wind turbine(s) proposed to be located within four (4) miles of the nearest point of the nearest runway of the nearest airport available for public use, the applicant for a building permit must comply with all the requirements imposed by the Federal Aviation Administration (FAA) and provide a written statement from the FAA that sets forth the FAA's comments and requirements, if any, for the proposal;

(viii) all wind turbine(s) must comply with the Federal Aviation Regulations Part 77, *Objects Affecting Navigable Airspace,* including but not limited to, providing such notices to the FAA as required thereunder and compliance with all requirements or prohibitions imposed by the FAA on the applicant's proposal;

(ix) All wind turbine tower bases shall be located at least forty (40) feet for every one (1) foot of tower height or one mile, whichever is greater, from the ends of and at least five thousand (5,000) feet from the sides of all runways which

are available solely for private use and identified on the most current edition of the *Sectional Aeronautical Charts* produced by the National Aeronautical Charting Office (NACO);

(x) If the use of any wind turbine or wind turbine farm is discontinued for a period of one (1) year or more, the owner of such facility shall remove the facility within ninety (90) days of written notification by the Planning Department. If such facility is not removed within said ninety (90) days, the County may refer the issue to the code enforcement officer for appropriate action pursuant to Chapter 11.54 BCC; and

(xi) The wind turbine(s) and all associated service roads may not displace more than five (5) percent of the area of that parcel(s) on which they are located.

(27) Meteorological towers used to gather data to assess wind energy potential; provided, that the towers

(i) shall be located at least forty (40) feet for every one (1) foot of tower height or one mile, whichever is greater, from the ends of and at least five thousand (5,000) feet from the sides of all runways which are available solely for private use and identified on the most current edition of the *Sectional Aeronautical Charts* produced by the National Aeronautical Charting Office (NACO); and

(ii) must comply with the Federal Aviation Regulations Part 77, *Objects Affecting Navigable Airspace,* including but not limited to, providing such notices to the FAA as required thereunder and compliance with all requirements or prohibitions imposed by the FAA on the applicant's proposal.

(28) Solar power generators.

[Ord. 265 (1995) 5; Ord. 341 (1998) 1; Ord. 371 (2001) § 4; Ord. 373 (2001) § 3; Ord. 380 (2002) § 3; Ord. 381 (2002) § 1; Ord. 435 (2006) § 1; Ord. 445 (2007) § 5; Ord. 469 (2009) § 1]

11.18.070 USES REQUIRING PERMITS--CONDITIONAL USE PERMIT REQUIRED. Upon issuance of a conditional use permit by the Board of Adjustment, the following uses shall be permitted within the GMA Agricultural District; provided that they are located in a manner that minimizes adverse impacts to agricultural productivity on adjacent lands:

(1) Slaughterhouses, commercial meat-packing plants, animal feedlots; provided, that they are not located in the floodway and floodplain as shown on the FEMA maps, or within two hundred (200) feet of a naturally occurring body of water, or a well used for domestic or municipal purposes and shall be designed to prevent infiltration or other movement of livestock wastes into the aquifer, or directly into surface waters.

(2) Commercial dairy, hog, poultry, and rabbit operations, propagation of fur bearing species for commercial purposes, or livestock auction yard; provided, that at least the following setbacks are met as well as all other conditions imposed in connection with the issuance of the conditional use permit: one hundred (100) foot setbacks from any lot line to any animal enclosure, except for fenced pasture; and a five hundred (500) foot setback from any existing residential structure on adjacent property not under applicant's ownership.

(3) Commercial establishments for the transportation of agricultural products other than those produced on the premises, or agricultural supplies or equipment, together with the maintenance, storage, repair and servicing of the necessary trucks and equipment.

(4) The following agriculturally based recreational and sales facilities: covered arenas, rodeo events, livestock sales rings, and working animal events. The following accessory uses may be permitted during one or more of the above events: veterinary service, food concessions, R.V. parking area, and event related novelty/accessory sales.

(17) The commercial maintenance, repair, servicing, and storage of agricultural machinery, implements, and equipment for use off the premises.

(18) Commercial establishments for the storage, sale and off-site application of agricultural chemicals, including but not limited to herbicides, fertilizers, insecticides, and pesticides.

(19) Underground natural gas storage facilities.

(20) One (1) wind turbine or a wind turbine farm with turbine heights of more than three hundred and fifty (350) feet and related support structures and other improvements meeting the conditions set forth in BCC 11.18.050(27)(i) and BCC 11.18.050(27)(iii) through BCC 11.18.050(27)(x) and all other conditions that may be imposed by the Board of Adjustment.

(21) Non-agricultural accessory uses that promote or sustain the continuation of the agricultural uses of a parcel if the accessory uses meet the following criteria as well as any other conditions required by the Board of Adjustment:

(a) The non-agricultural accessory use shall be located, designed, and operated so as to not interfere with, and to support the continuation of, the overall agricultural use of the parcel;

(b) The non-agricultural accessory use must be consistent with the size, scale, and intensity of the existing agricultural use of the parcel and the existing buildings thereon;

(c) The parcel on which the non-agricultural accessory use is located meets one of the following:

SECTION 2. DEFINITIONS

GENERAL

For the purpose of these regulations, certain terms or words herein shall be interpreted or defined as follows. Unless specifically defined in this section, words or phrases used in this regulation shall be interpreted so as to give them the meaning they have in common usage and to give this regulation its most reasonable application. Words used in the present tense include the future and the plural includes the singular. The word lot includes the words plat, tract or parcel. The word building includes the word structure. The word shall and must is intended to be mandatory. Occupied or used shall be considered as though followed by the words "or intended", "arranged", or "designed to be used or occupied".

ABANDONED BUILDING

Any vacant building which is frequented by persons who are not lawful occupants of such structure; or any vacant building which by reason of lack of maintenance or by reason of the boarding up of its doors and windows, or other reasons, has a substantial adverse effect on the value of property in the immediate neighborhood.

ABANDONED ITEM

Any item which has ceased to be used for its designed and intended purpose. The factors used in determining whether or not an item has been abandoned, include but are not limited to the following: (1) Present operability and functional utility of the item; (2) the date of last effective use of the item; (3) the condition of disrepair or damage; (4) the last time an effort was made to repair or rehabilitate the item; (5) the status of registration or licensing of the item; (6) the age and degree of obsolescence; (7) the cost of rehabilitation or repair of the item when compared to its market value; or (8) the nature of the area and location of the item

ACCESSORY BUILDING/STRUCTURE

A building or structure that is clearly incidental and subordinate to and customarily found with a principal use (includes accessory dwelling units in residential districts).

ACCESSORY DWELLING UNIT

A separate, complete housekeeping unit with a separate entrance, kitchen, sleeping area, and full bathroom facilities, which is an attached or detached extension to an existing single-family structure or accessory structure.

ACCESSORY USE

A use that is incidental and subordinate to the principal use or building and located on the same lot with such principal use or building (includes accessory dwelling units).

WAY

A street or alley or other thoroughfare or easement permanently established for passage of persons or vehicles.

WIND ENERGY CONVERSION SYSTEM (WECS) COMMERCIAL

Any device or assemblage which directly converts wind energy into usable thermal mechanical, or electrical energy for the primary purpose of resale or off-site use. WECS includes such devises as windmills and wind turbines, towers and supporting structures and such directly connected facilities as generators, alternators, inverters, batteries and associated control equipment.

WIND ENERGY CONVERSION SYSTEM (WECS) NONCOMMERCIAL

A wind driven machine that convertswind energy into electrical power for the primary purpose of on-site use and not for resale.

WIND TURBINE

An alternate energy device which converts wind energy by means of a rotor to mechanical or electrical energy. A wind generator may also be deemed a windmill.

WORSHIP FACILITY

A place and/or building, or portion thereof, that has tax-exempt status and that is used or is intended as a place where people can regularly assemble for religious worship and associated activities; the term includes sanctuaries, chapels, cathedrals, churches, synagogues, and temples and other onsite accessory buildings such as parsonages, friaries, convents, fellowship halls, Sunday schools, and rectories; the term does not include day care centers, community recreation facilities, dormitories, private educational facilities, emergency shelters, health care facilities, and the like.

YARD

The area on the same lot with a building, that is unoccupied and unobstructed from the ground upward, except by trees or shrubbery or as otherwise provided herein.

YARD, FRONT

An open and unoccupied space on the same lot with the main building extending the full width of the lot, situated between the street line and the front line of the building, projected to the side lines of the lot. The depth of the front yard shall be measured between the front line of the building and the street property line.

YARD, REAR

A yard that extends across the rear of a lot between the side lot lines from the rear line of the building (excluding the front steps) to the rear lot line.

7.1.0.6 Off-Street parking as required in Section 9.5.

7.1.0.7 Required Streamside Setback

There is a fifty (50) foot setback from any perennial-flowing stream or river to the outer wall of any structure. The established 50 foot setback distance is measured from the ordinary high water mark of the stream or river to the structure.

7.1.1 RR-5 District Use Regulations - Rural Residential Districts (minimum lot area is 5 acres)

The following regulations shall apply to lots in RR-5 Districts

7.1.1.1 Permitted principal uses

(1) A one family dwelling per tract of land.

(2) Public and private elementary school, high school, college, university, public park and playground, and public swimming pool, where off-street parking is provided for the users of such facilities.

(3) Agricultural uses of land and usual agricultural buildings and structures in unplatted areas.

(4) Fire Department station house.

(5) Church where off-street parking is provided as set forth in Section 9.5.

(6) Limited Agricultural uses in platted areas.

The keeping of livestock animals, except buffalo, by a resident of the parcel requires that the parcel must be a minimum of one (1) acre in area.

Large hoofed grazing livestock animals, except buffalo, are allowed on a permanent basis at a ratio of two (2) animals per acre. Small hoofed grazing livestock animals are allowed on a permanent basis at a ratio of four (4) per acre.

Any stable, barn, shed, coop or other such structure to house animals shall be a distance of at least twenty-five (25) feet from the property line of an adjacent owner and at least fifty (50) feet from any dwelling other than that of owner.

(7) Family Day Care Home, Group Day Care Home, Day Care Center

(8) Community Residential Facility-Provided eight occupants or less

(9) Retirement Home, Nursing Home

(10) Private nursery school.

(11) Philanthropic or eleemosynary institution.

(12) Parish house, religious education building, convent or monastery.

(13) Bed and Breakfast

7.1.1.2 Permitted accessory uses located on the same lot with the principal use

(1) Other customary accessory use and building, such as a carport, bath house, greenhouse, gardening shed, recreation room and similar structure which is customarily used in conjunction with and incidental to a permitted principal use or structure.

(2) Professional office in a residence

(3) Customary home occupation (see Definition of Home Occupation)

(4) Amateur Radio Station and/or Antenna (conditions (g), (h), and (i) below do not apply to an amateur radio station and/or antenna), Meteorological Towers, Residential Wind Turbine and/or small wind energy system not to exceed 50 kW providing they meet the following conditions:

a) setback to property boundaries must be the height of the tower plus twenty (20) feet, plus the blade length for a wind turbine. (example: a 100 foot tall radio tower must be 120 feet from all property boundaries.)

b) must meet all state, federal, and local regulations regarding the uses.

c) must not have any advertising signage attached to them.

d) must not be for commercial use

e) must not interfere with any electrical components of neighboring properties.

f) must be fenced or protected to prohibit unauthorized access.

g) must be located at least 1000 feet from any use listed in 7.1.1.1 (2).

h) **Height** of the structure is as measured from finished grade to the top of the tower system, which includes the generating unit and the highest vertical extent of any blades or rotors).

i) **Turbine Noise Limitations** (8:00 p.m. to 8:00 a,m,) Measured from property lines.

Residential Districts	50 db(A)
Commercial Districts	60 db(A)
Industrial Districts	75 db(A)

j) **Color.** Tower colors should have a matted or non-reflective finish and be of neutral subdued tones such as

earth tones of green or brown. Flat white and gray, including naturally darkening galvanized gray, are also acceptable. Towers shall not be finished in bright or vivid colors intended to draw attention to the structure or property.

k) **Signs.** The system tower shall not be used for signs and advertising of any kind. One sign, limited to four square feet, shall be posted at the base of the tower. The sign shall include a notice of no trespassing, a warning of high voltage, and the telephone number of the property owner/operator to call in case of emergency.

l) **Lighting.** No lights shall be installed on the system, unless required to meet Federal Aviation Administration regulations.

m) **Climbing Apparatus.** All climbing apparatus shall be located at least 12 feet above the ground and the system tower must be designed to prevent climbing within the first 12 feet above the ground.

n) **Removal.** Tower systems (including meteorological towers) that remain nonfunctional or inoperative for a continuous period of one year shall be deemed to be abandoned, shall constitute a public nuisance and shall be removed by the owner/operator.

(5) Private garage

(6) Barn

7.1.1.3 Uses permitted upon issuance of a Special Permit (See Section 8)

(1) A second dwelling, including accessory dwelling units.

(2) Recreation building or area operated by membership clubs for the benefit of members and not for gain.

(3) Utility Installation

(4) Private Garage – residential use only; no commercial use allowed.

(5) The excavation of sand and gravel.

7.1.1.4 Area, height, yard, lot coverage, and parking requirements per Section 7.1.0.

7.1.2 SR-1 and SR-2 District Use Regulations - Suburban Residential District (minimum lot area is 1 acre in SR-1 and 2 acres in SR-2)

The following regulations shall apply to lots in SR-1 and SR-2 Districts

SR-1 and SR-2 District regulations may be used in UR Districts.

(2) Bed and Breakfast

7.1.3.4 Area, height, yard, lot coverage, and parking requirements as per Section 7.1.0.

7.2 AGRICULTURAL (A) DISTRICTS

The following regulations shall apply in A Agricultural Districts

7.2.1 Permitted Principal Uses

7.2.1.1 Agricultural uses of land; usual agricultural buildings and structures.

7.2.1.2 Church and/or parish house.

7.2.1.3 School and/or college for academic instruction.

7.2.1.4 Publicly owned and operated building and facility.

7.2.1.5 Public park and playground, community center, private, non-commercial recreation area and center including country club, swimming pool, and tennis court, public and private forest and wildlife preserve and similar conservation areas.

7.2.1.6 Commercial dairy if on a parcel greater than 20 acres.

7.2.1.7 Riding and roping arena, excluding commercial rodeo grounds, commercial stables, animal therapeutic facilities, providing such use shall be at least two hundred (200) feet from any lot in any other District. Participants must number less than twenty-five (25) total for all events or a special use permit is required. Parcel must be greater than 20 acres.

7.2.1.8 A one or two family dwelling(s) on a parcel of 20 acres or more. (example: 1 single family home or 1 duplex for two families or two single family homes). If a parcel is less than 20 acres, a second dwelling is allowed with an approved Special Use Permit.

7.2.1.9 Golf course, including directly associated incidental and accessory facilities including a pro shop, lounge and restaurant catering only to users of the golf course; but not including commercially operated pitch and putt course or miniature golf course.

7.2.1.10 Golf driving range if located on a tract of five (5) acres or larger.

7.2.1.11 Campground, Recreational Vehicle Park

7.2.1.12 Day Care Center, Group Day Care Home, Family Day Care Center, Community Residential Facility

7.2.1.13 Nursing Home, Retirement Home

7.2.1.14 Bed and Breakfast

7.2.1.15 Tower and studio facility related to radio, television broadcasting stations, telecommunications, amateur radio station and/or antenna (conditions 6, 7, and 8 below do not apply to an amateur radio station and/or antenna), meteorological towers, residential wind turbines not to exceed 50 kW, Amateur Radio operations~~.~~ providing they meet the following conditions:

1. setback to property boundaries for wind turbines must be the height of the tower, plus the blade length, plus twenty (20) feet; the setback to property boundaries for all other tower/antenna structures must be the height of the tower plus twenty (20) feet (example: a 100 foot tall tower must be 120 feet from all property boundaries.).
2. must meet all state, federal, and local regulations regarding the uses.
3. must not have any advertising signage attached to them.
4. must not interfere with any electrical components of neighboring properties.
5. must be fenced or protected to prohibit unauthorized access.
6. must be located at least 1000 feet from any use listed in 7.1.1.1 (2).
7. **Height** of the structure is as measured from finished grade to the top of the tower system, which includes the generating unit and the highest vertical extent of any blades or rotors).
8. **Turbine Noise Limitations** (8:00 p.m. to 8:00 a,m,)

Measured from property lines.

Residential Districts	50 db(A)
Commercial Districts	60 db(A)
Industrial Districts	75 db(A)

9. **Color.** Tower colors should have a matted or non-reflective finish and be of neutral subdued tones such as earth tones of green or brown. Flat white and gray, including naturally darkening galvanized gray, are also acceptable. Towers shall not be finished in bright or vivid colors intended to draw attention to the structure or property.
10. **Signs.** The system tower shall not be used for signs and advertising of any kind. One sign, limited to four square feet, shall be posted at the base of the tower. The sign shall include a notice of no trespassing, a warning of high voltage, and the telephone number of the property owner/operator to call in case of emergency.
11. **Climbing Apparatus.** All climbing apparatus shall be located at least 12 feet above the ground and the system tower must be designed to prevent climbing within the first 12 feet above the ground.
12. **Removal.** Tower systems (including meteorological towers) that remain nonfunctional or inoperative for a continuous period of one year shall be deemed to be abandoned, shall constitute a public nuisance and shall be removed by the owner/operator.

7.2.1.16 Commercial Wind / Solar Generation Facilities and meteorological towers subject to the following conditions:

1. facility may not exceed one (1) megawatt of total generating capacity.
2. must meet all state, federal, and local regulations regarding the uses.
3. must not have any advertising signage attached to them.
4. must not interfere with any electrical components of neighboring properties.
5. must be fenced or protected to prohibit unauthorized access.
6. must be located at least 1000 feet from any use listed in 7.1.1.1 (2).
7. **Height** of the structure is as measured from finished grade to the top of the tower system, which includes the generating unit and the highest vertical extent of any blades or rotors).
8. **Turbine Noise Limitations** (8:00 p.m. to 8:00 a,m,)

Measured from property lines.

Residential Districts	50 db(A)
Commercial Districts	60 db(A)
Industrial Districts	75 db(A

9. **Color.** Tower colors should have a matted or non-reflective finish and be of neutral subdued tones such as earth tones of green or brown. Flat white and gray, including naturally darkening galvanized gray, are also acceptable. Towers shall not be finished in bright or vivid colors intended to draw attention to the structure or property.
10. **Signs.** The system tower shall not be used for signs and advertising of any kind. One sign, limited to four square feet, shall be posted at the base of the tower. The sign shall include a notice of no trespassing, a warning of high voltage, and the telephone number of the property owner/operator to call in case of emergency.
11. **Climbing Apparatus.** All climbing apparatus shall be located at least 12 feet above the ground and the system tower must be designed to prevent climbing within the first 12 feet above the ground.
12. **Removal.** Tower systems (including meteorological towers) that remain nonfunctional or inoperative for a continuous period of one year shall be deemed to be abandoned, shall constitute a public nuisance and shall be removed by the owner/operator.

7.2.2 Permitted Accessory Uses located on the same lot with the permitted Principal Use

Accessory buildings and uses customarily incidental to any of the above A District uses

7.2.2.1 On tracts of land 160 acres or larger, a dwelling or dwellings of owner or lessee of the land. These may be occupied by employees of the owner or lessee of the land. They may be occupied by any person or persons the owner or lessee of the land desires so long as the dwelling or dwellings are not rented, leased, or used for any commercial or industrial uses. (Acceptable uses include a ranch manager house on the ranch owner's property, a Hutterite colony, a farmer who allows his

relatives to live in a house that he owns on his property, etc.)

7.2.2.2 Roadside stands offering for sale only local agricultural products or other products produced on the premises.

7.2.3 Uses Permitted Upon Issuance of a Special Permit as Provided in Section 8

7.2.3.1 Cemetery, including mausoleum and crematorium provided that any mausoleum or crematorium shall be a distance of at least two hundred (200) feet from any adjacent property or street and highway lines and provided, further, that any new cemetery shall contain an area of twenty (20) acres or more.

7.2.3.2 Commercial building for raising, breeding and boarding dogs or other small animals provided that such building, including dog runs, shall be at least one hundred (100) feet from all property lines and shall comply with the standards listed in section 9.2 .

7.2.3.3 Quarry (including cutting, breaking, shaping, and finishing of quarried rock) , sand and gravel pit, top soil stripping, providing that any building housing power or power producing machines shall be a distance of at least two hundred (200) feet from all adjacent property or street and highway lines. Operational hours shall be limited from 7:00 am until 7:00 pm.

7.2.3.4 Hospital and sanitarium, charitable institution for the treatment of disease.

7.2.3.5 Public or privately owned airport, landing field, or helipad. Site must be a minimum of 20 acres and 1000 feet from schools.

7.2.3.6 Public or privately owned solid waste disposal sites licensed and operated in accordance with the Montana Solid Waste Management Act and approved by the County Zoning Board of Adjustment following a public hearing to consider, in conjunction with the standards enumerated in Section 8 hereof, the possible detrimental effect on adjacent residential property. The detrimental effects of vehicles traveling the access route(s) to the disposal site shall also be considered. Prior to any public hearing, a notice must be published in the newspaper at least one week prior to the hearing and a copy of the notice must be mailed to all owners of the property contiguous to the proposed disposal site.

7.2.3.7 Utility Sub-station.

7.2.3.8 Storage of building materials and equipment and temporary building(s) utilized in conjunction with the construction of a development on the same or adjacent tract of land. Such storage or building(s) shall not

exceed the duration of such construction or a time as may be stipulated by the Board of Adjustment.

7.2.3.9 Animal hospital provided that the structure and use are not less than two hundred (200) feet from any residential district.

7.2.3.10 Commercial propagation, boarding, grazing or butchering of small animals and fowl provided that the animals may not be stabled or processed within two hundred (200) feet from any property line and the operation is not considered a wholesale feed lot or meat packing use.

7.2.3.11 Commercially operated feedlots or concentrated animal feeding facilities if located on a tract of land 40 acres minimum in size and no adjacent residences are within one (1) mile at the time of application.

7.2.3.12 Mobile Home Park or Recreational Vehicle Park providing that the use is in compliance with all other Federal, State and County regulations.

7.2.3.13 Commercial Wind Farms greater than one (1) megawatt and/or Electrical Generation Facilities providing they meet the following conditions:

1. must meet all state, federal, and local regulations regarding the uses.
2. must not have any advertising signage attached to them.
3. must not interfere with any electrical components of neighboring properties.
4. must be fenced or protected to prohibit unauthorized access.
5. must be located at least 1000 feet from any use listed in 7.1.1.1 (2).
6. **Height** of the structure is as measured from finished grade to the top of the tower system, which includes the generating unit and the highest vertical extent of any blades or rotors).
7. **Turbine Noise Limitations** (8:00 p.m. to 8:00 a,m,)
   Measured from property lines.

Residential Districts	50 db(A)
Commercial Districts	60 db(A)
Industrial Districts	75 db(A)

8. **Color.** Tower colors should have a matted or non-reflective finish and be of neutral subdued tones such as earth tones of green or brown. Flat white and gray, including naturally darkening galvanized gray, are also acceptable. Towers shall not be finished in bright or vivid colors intended to draw attention to the structure or property.
9. **Signs.** The system tower shall not be used for signs and advertising of any kind. One sign, limited to four square feet, shall be posted at the base of the tower. The sign shall include a notice of no trespassing, a warning of high voltage, and the telephone number of the property owner/operator to call in case of emergency.
10. **Climbing Apparatus.** All climbing apparatus shall be located at least 12 feet above the ground and the system tower must be designed to prevent climbing within the first 12 feet above the ground.
11. **Removal.** Tower systems (including meteorological towers) that remain

nonfunctional or inoperative for a continuous period of one year shall be deemed to be abandoned, shall constitute a public nuisance and shall be removed by the owner/operator.

7.2.3.14 Mini-warehousing where indoor storage space is provided for rent or lease and subject to the following conditions:

(a) principal use of a rented or leased space shall be restricted to storage and shall not include processing, refining, transfer or distribution of any commercial material or product; and

(b) storage of flammable or explosive liquids, solids, or gases shall not be permitted.

(c) Landscaping requirements shall be in accordance with Section 7.8.

(e) All material must be stored inside units. Storage of licensed, operable, vehicles including but not limited to Recreational Vehicles, Cars, Trucks, Vans, Trailers, Boats, Motorcycles, and All Terrain Vehicles, may be outside provided that proper screening, approved by the Planning Director, as to shield these units will occur.

7.2.3.15 Motor Sports Complexes provided that no residences are located within 1 mile of the proposed use, at the time of application.

7.2.3.16 General Sales, including Agricultural Sales, Auction Sales, Convenience Sales, Shopping Center, Specialty Sales.

7.2.3.17 Small and Heavy Equipment Rental and General Repair

7.2.3.18 Health Care Centers and Facilities, provided parcel size is twenty (20) acres or greater.

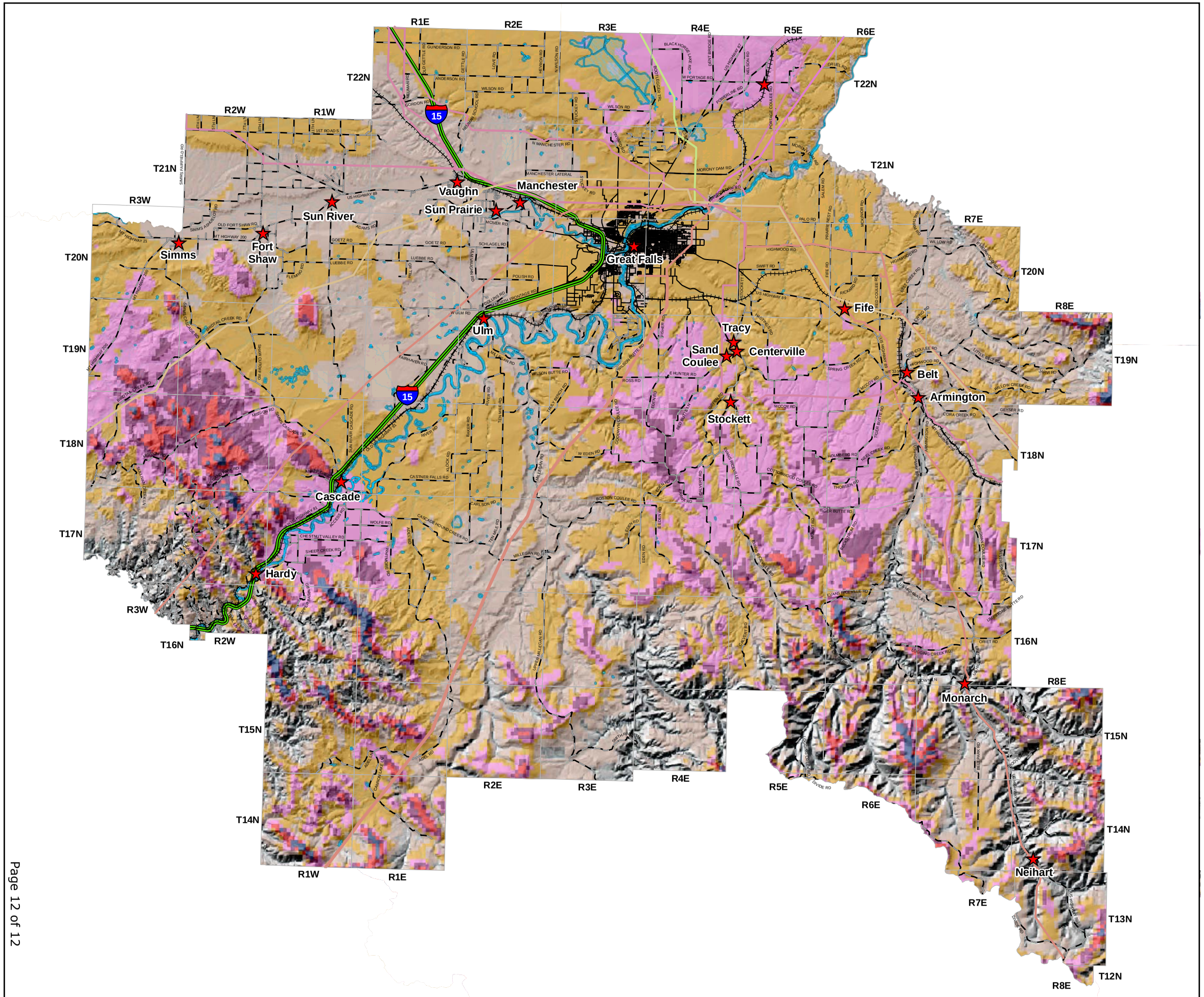
7.2.3.19 Educational facilities including K-12, higher education, instructional and commercial education facilities, provided parcel size is twenty (20) acres or greater.

7.2.3.20 Solid Waste, Recycling and Composting Facilities, provided parcel size is twenty (20) acres or greater.

7.2.3.21 Utilities both minor and major

7.2.3.22 Transportation Facilities, including Airport, Bus Transit Terminal, Freight Terminal, Heli-Pad, and Railroad Yards, provided parcel size is twenty (20) acres or greater.

Wind Power Cascade County, Montana



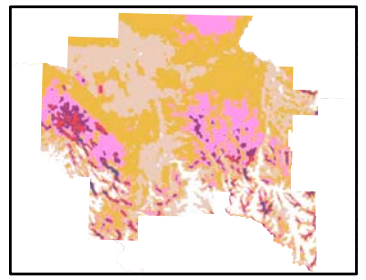
Wind Power Classification

Wind Power Class	Resource Potential	Wind Power Density at 50 m W/m²	Wind Speed* at 50 m m/s	Wind Speed* at 50 m mph
Class 1	Poor	0-200	0-5.6	0-12.5
Class 2	Marginal	200-300	5.6-6.4	12.5-14.3
Class 3	Fair	300-400	6.4-7.0	14.3-15.7
Class 4	Good	400-500	7.0-7.5	15.7-16.8
Class 5	Excellent	500-600	7.5-8.0	16.8-17.9
Class 6	Outstanding	600-800	8.0-8.8	17.9-19.7
Class 7	Superb	Over 800	Over 8.8	Over 19.7

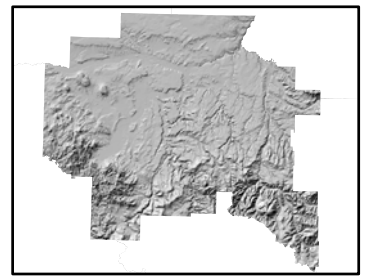
*Wind speeds are approximate and based on a Weibull k value of 2.0

Transmission Lines
KV
- 100
- 115
- 161
- 230
- 69
- City of Great Falls GPS Roads
- Cascade County GPS Roads
- Railroads
- Hydrology
- Interstate
- Ramps

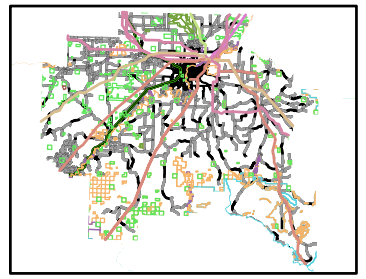
Data Used for Wind Power Maps



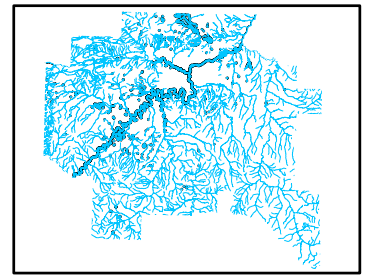
Wind Power Data



Digital Elevation Model



Roads and Transmission Lines and Land Ownership



Rivers and Streams

0 3.5 7 14 Miles

Cascade County
911 Jurisdiction and
Cascade County
GIS Department
Aug 30, 2005

Wind power is estimated for an elevation 50 meters above the ground. The estimates were produced by TrueWind Solutions using their Mesomap system and historical weather data. This data has been validated with available surface data by the National Renewable Energy Laboratory and wind energy meteorological consultants.

This map is available at:
http://gis.co.cascade.mt.us/Website/WindPower.htm

Cascade County, Montana

Chapter 136. WIND ENERGY CONVERSION SYSTEMS

[HISTORY: Adopted by the Clarkson Town Board 5-11-2010 by L.L. No. 1-2010. Amendments noted where applicable.]

§ 136-1. Title.

This chapter may be cited as "Local Law No. 1-2010" or "Wind Energy Facilities Law of the Town of Clarkson."

§ 136-2. Findings.

Based on the recommendations of the Wind Generator Committee, a committee created by Local Law No. 1-2009, as revised by Local Law No. 3-2009, the Town Board finds that:

A. Wind energy is an abundant, renewable, and nonpolluting energy resource of the Town of Clarkson and its conversion to electricity may reduce dependence on nonrenewable energy sources and decrease the air and water pollution that results from the use of conventional energy sources.

B. The generation of electricity from properly sited wind turbines has the potential to tie into existing power distribution systems, allowing for the transmission of electricity from wind generation stations to utilities or other users, or alternatively may be used to reduce or eliminate on-site consumption of energy.

C. Regulation of the siting and installation of wind turbines is necessary for the purpose of protecting the health, safety, and welfare of neighboring property owners, the environment, and the general public. Wind energy conversion systems need to be consistent with the Town of Clarkson Zoning Code *Editor's Note: See Ch. 140, Zoning.* and the Town of Clarkson Comprehensive Plan.

D. Wind energy conversion systems may represent significant potential issues because of their size, environmental impacts, and safety effects, such as lighting/shadow effects, risks to avian species, blade and ice throw, tower toppling, or communications. The installation of wind energy conversion systems may change the landscape and appearance of the Town of Clarkson.

E. Wind energy conversion systems may present risks to the property values of adjoining property owners.

§ 136-3. Purpose.

The purpose of this chapter is to promote the effective and efficient use of the Town's wind energy resources through wind energy conversion systems (WECS), and to regulate the construction, placement, operation and decommissioning of such systems so that the public health, safety, and welfare will not be jeopardized.

§ 136-4. Authority.

The Town Board of the Town of Clarkson adopts this chapter under the authority granted by:

A. Article IX of the New York State Constitution, § 2(c)(6) and (10).

B. New York Statute of Local Governments, § 10, Subdivisions 1, 6, and 7.

C. New York Municipal Home Rule Law, § 10, Subdivision 1(i) and (ii) and § 10, Subdivision 1(a)(6), (11), (12), and (14).

D. The supersession authority of New York Municipal Home Rule Law, § 10, Subdivision 2(d)(3).

E. New York Town Law, Article 16 (Land Use).

F. New York Town Law § 130, Subdivisions 1 (Building code), 3 (Electrical code), 5 (Fire prevention), 7 (Use of streets and highways), 7-a (Location of driveways), 11 (Peace, good order and safety), 15 (Promotion of public welfare), 15-a (Excavated lands), 16 (Unsafe buildings), 19 (Trespass), and 25 (Building lines).

G. New York Town Law § 64, Subdivisions 17-a (Protection of aesthetic interests) and 23 (General powers).

§ 136-5. Definitions; word usage; interpretation.

A. The following rules of construction of language shall apply to the text of this chapter:

(1) Words used in the present tense include the future tense.

(2) Words used in the singular include the plural, and words used in the plural include the singular.

(3) The word "person" includes an individual, firm or corporation.

(4) The word "shall" is always mandatory; the word "may" is always permissive.

B. Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application.

C. In cases where words or phrases are not defined in this chapter but are defined elsewhere in the Clarkson Code, the words or phrases shall have the meaning set forth elsewhere in the Code.

D. In the event of a conflict, the definitions in this chapter shall control.

E. When used in this chapter the following terms shall have the respective meanings set forth herein, except where the context shows otherwise:

ALTERNATIVE ENERGY SYSTEMS
Structures, equipment, devices or construction techniques used for the production of heat, light, cooling, or electricity or other forms of energy on-site and which may be attached to or separate from the principal structure. Current examples include windmills, solar collectors and solar green houses, heat pumps or other related devices.

APPLICANT, DEVELOPER, OPERATOR or OWNER
As used in this chapter, the terms "applicant," "developer," "operator" and "owner" may, where appropriate, be interchangeable and will be interpreted to give the most reasonable and logical application to the provision(s) containing one or more of these terms.

AS-BUILT
When construction conditions require changes to contract drawings, they are so noted and described on final drawings of record.

DEVELOPER
See "applicant, developer, operator or owner" above.

ELECTRONIC AND ELECTRONIC MAGNETIC INTERFERENCE
Interference to satellite towers, microwave transmissions, cell communication towers and "ghosting" of television reception caused by electronic reflections of electrical generating facilities.

ESSENTIAL SERVICES AND PUBLIC UTILITIES

Erection, construction, operation, or maintenance by municipal agencies or public utilities of telephone dial equipment centers, electrical or gas substations, water treatment or storage facilities, pumping stations and similar facilities, but shall not include telecommunication facilities as defined herein, and shall not include wind energy facilities (including infrastructure supporting wind energy facilities), landfills, waste transfer stations or other facilities with the primary purpose of handling or disposing of household or industrial waste.

FALL ZONE (FOR WIND ENERGY SYSTEMS)

A distance of one-and-a-half times the height of the wind energy conversion system as measured as a vertical distance from the preconstruction or post-construction grade, whichever is lower, at the tower base to the highest point (apex) of the rotor blade.

GLOBAL POSITIONING SATELLITE (GPS)

Satellite placed or monitored by governments, to accurately reference, electronically, instrument locations on the earth's surface.

GROUND CLEARANCE

The minimum distance between the lowest point of the rotor blade rotation and ground at the base of a tower.

HUB HEIGHT

Center of rotational axis of rotor blades and gearbox (nacelle).

INDUSTRIAL, WIND ENERGY FACILITY

Shall be considered to be the same as large WECS and regulated as such.

LICENSED

Unless provided otherwise, any reference to a licensed engineer, licensed surveyor, licensed architect or licensed landscape architect shall mean that the person is currently licensed for his or her profession by the State of New York.

METEOROLOGICAL TOWERS (MET TOWERS)

Any commercial equipment and tower used to collect atmospheric data such as temperature and wind speed and direction.

NACELLE

Large enclosure placed at the top of the supporting tower, housing equipment such as the generator, gearbox, drive train, rotor blades and hub and braking system.

NET-METERING

An exchange of excess electricity between the owner of the generating facility and the utility company. The utility company may accept over-generation beyond the owner's needs and allow the metering system to reverse spin, thereby crediting the producer, under an interconnection agreement.

OFF-GRID

Wind system not connected to the power grid.

OPERATOR

See "applicant," "developer," "operator" or "owner" above.

ON-GRID

Wind system connected to the power grid.

OVERLAY DISTRICT

A district that encompasses one or more underlying districts and that imposes additional requirements above that required by the underlying district.

OWNER

See "applicant," "developer," "operator" or "owner" above.

PILOT PROGRAM (PAYMENT IN LIEU OF TAXES)

A program implemented as replacement of revenue lost to towns by the State of New York Tax Exemption Law for renewable energy systems (Real Property Tax Law § 487).

SHADOW FLICKER

Effect of sunrays passing the rotating blades of a wind energy generating system, similar to the effect of strobe lighting.

SOUND PRESSURE LEVEL OR SOUND LEVEL (dBA)

A logarithmic measurement of sound pressure (sound level) fluctuation produced by a particular source of sound as compared to a reference (background) sound pressure level. Sound pressure shall be expressed in decibels, using A-frequency weighting (dBA), which is the most commonly used standard in the United States for the measurement of environmental noise. With human hearing, low- and high-frequency sounds appear to be less loud. A-weighting (A-frequency weighting) reduces the level of low- and high-frequencies to

produce a reading that corresponds approximately to what humans hear. The measurement of sound pressure levels shall be performed in accordance with the latest revision of International Standards for acoustic noise measurement techniques for wind turbine generator systems (IEC 61400-11) or other industry-accepted procedures.

SPECIAL USE PERMIT

Sometimes referred to elsewhere in the Clarkson Code as a "special permit."

STANDARD INTERCONNECTION AGREEMENT

Agreement between the local producer and the utility company.

TOTAL HEIGHT OR TIP HEIGHT OR MAXIMUM OVERALL HEIGHT

The vertical distance from the preconstruction or post-construction grade, whichever is lower, at the tower base to the highest point (apex) of the rotor blade.

TOWER

The support structure, including guyed, monopole and lattice types, upon which a wind turbine, nacelle, generator and other mechanical and electrical devices are mounted.

TOWER HEIGHT

The vertical distance from the preconstruction or post-construction grade, whichever is lower, at the tower base to the center of the horizontal axis of the rotor blade.

TRANSFORMER

An electrical device used to change voltages.

TRANSMISSION LINES

Conductive lines required in delivering derived power to the electrical grid.

VERTICAL AXIS WIND TURBINE (VAWT)

One or more mechanical devices, such as wind turbines, with multiple caged blades which are designed and used to convert the kinetic energy of wind into a usable form of energy. The turbine rotates on a vertical axis. The VAWT includes all parts of the system except the tower and transmission equipment.

WIND ENERGY CONVERSION SYSTEM (WECS)

The equipment that converts and then stores or transfers energy from the wind into usable forms of energy and includes any base, blade, foundation or support, generator, infrastructure, nacelle, rotor, tower, transformer, turbine, vane, wire, substation, or control facilities or other components used in the system. The turbine or windmill may be on a horizontal or vertical axis. A wind energy conversion system may consist of one or more wind turbines.

(1) **LARGE WIND ENERGY CONVERSION SYSTEM (LARGE WECS)** — A wind energy conversion system (WECS) consisting of one wind turbine, one tower, and associated control or conversion electronics and delivery system which has a total height of greater than 100 feet but no greater than 400 feet.

(2) **MEDIUM WIND ENERGY CONVERSION SYSTEM (MEDIUM WECS)** — A wind energy conversion system (WECS) consisting of one wind turbine, one tower, and associated control or conversion electronics and delivery system which has a total height of greater than 35 feet but no greater than 100 feet.

(3) **SMALL WIND ENERGY CONVERSION SYSTEM (SMALL WECS)** — A wind energy conversion system consisting of one wind turbine, one tower, and associated control or conversion electronics, which has a total height not to exceed 35 feet.

Size, Classification and Zoning Allowability Matrix

WEC Size	Neighborhood Res. RS-10 Blue	Suburban Residential RS-20 Blue	Agriculture Preservation RS-20 Green (Proposed)	HD Res. Hamlets (all) Comm. Light Indust. Rec. Conserv. General Indus. All others Historical
Small	Yes	Yes	Yes	Yes

Size, Classification and Zoning Allowability Matrix

WEC Size	Neighborhood Res. RS-10 Blue	Suburban Residential RS-20 Blue	Agriculture Preservation RS-20 Green (Proposed)	HD Res. Hamlets (all) Comm. Light Indust. Rec. Conserv. General Indus. All others Historical
Up to 35 feet				
Medium Greater than 35 feet up to 100 feet	No	Yes	Yes	No
Large Greater than 100 feet up to 400 feet	No	Yes	Yes	No

WIND ENERGY FACILITY

Any wind energy conversion system, including large systems, medium systems, small systems or meteorological towers (MET towers), including all related infrastructure, electrical lines and substations, access roads, and accessory structures.

WIND ENERGY OVERLAY DISTRICT

A zoning overlay district which encompasses part or parts of one or more underlying districts and establishes requirements limited to large wind energy conversion systems.

WIND SITE ASSESSMENT

(1) MET towers. When prior to construction of a WECS or applying for a Wind Energy Overlay District, an assessment of local wind speeds and the feasibility of using particular sites is desired, installation of MET towers shall be permitted upon the Planning Board issuing a special permit. The standards for the special permit shall be those set forth in Article VI of the Clarkson Zoning Code. *Editor's Note: See Ch. 140, Zoning, Art. VI, Administration; Penalties; Amendments.*

(2) Applications. An application for a special permit for a MET tower shall include:

(a) Name, address and telephone number of the applicant. If the applicant is represented by an agent, the application shall include the name, address, and telephone number of the agent as well as an original signature of the applicant authorizing the representation.

(b) Name, address and telephone number of the property owner. If the property owner is not the applicant, the application shall include a letter or other written permission signed by the property owner:

[1] Confirming that the property owner is familiar with the proposed applications.

[2] Authorizing the submission of the application.

(c) Address of each proposed tower site, including Tax Map section, block, and lot number.

(d) A site plan.

(e) A decommissioning plan shall include a cash deposit or letter of credit for removal.

(3) Standards.

(a) Maximum height shall be 200 feet. Should a taller MET tower be desired, an application to the Zoning Board of Appeals for an area variance will be required.

(b) The distance between a wind measurement tower and the property line shall be at least 1.5 times the total height of the tower. Sites can include more than one parcel and the requirement shall apply to the combined properties. Exceptions for neighboring property are also allowed with the consent of those property owners.

(c) Special use permits for wind measurement towers may be issued for a period of up to 24 months. Permits may be renewed if the facility is in compliance with the conditions of the special use permit.

(d) Anchor points for any guy wires for a wind measurement tower shall be located within the property that the system is located on and not on or across above-ground electric transmission or distribution lines. The point of attachment for the guy wires shall be sheathed in bright orange or yellow covering for three feet to eight feet above the ground.

(4) Application review process.

(a) Applicants may request a preapplication meeting with the Town Planning Board, or with any consultants retained by the Planning Board for application review.

(b) Twelve copies of the application shall be submitted to the Planning Board. Payment of all application fees shall be made at the time of application submission. If any variances are requested, variance application fees shall be paid at the time of the receipt of the application.

(c) Town staff or Town-designated consultants shall, within 30 days of receipt, or within such longer time as agreed to by the applicant, determine if all information required under this chapter is included in the application. Unless the Planning Board waives any application requirement, no application shall be considered until deemed complete.

(d) If the application is deemed incomplete, the Planning Board or its designated reviewer shall provide the applicant with a written statement listing the missing information. No refund of application fees shall be made, but no additional fees shall be required upon submittal of the additional information unless the number of wind measurement towers proposed is increased.

(e) Upon submission of a complete application, including the grant of any application waiver by the Planning Board, the Planning Board shall hold at least one public hearing on the application.

(f) SEQRA review. Applications for MET towers are hereby declared to be unlisted projects under SEQRA. The Planning Board may conduct its SEQRA review in conjunction with other agencies, in which case the records of review by said communities shall be part of the record of the Planning Board's proceedings. The Planning Board may require an escrow agreement for the engineering and legal review of the applications and any environmental impact statements before commencing its review.

(g) Upon receipt of the report of the recommendation of the County Planning Board (where applicable), the holding of the public hearing, and the completion of the SEQRA process, the Planning Board may approve, approve with conditions, or deny the applications, in accordance with the standards in this article and Article VI of the Clarkson Zoning Code.
Editor's Note: See Ch. 140, Zoning, Art. VI, Administration; Penalties; Amendments.

§ 136-6. Wind Energy Overlay District.

A. Creation. The Town Board of the Town of Clarkson hereby adopts the rules and procedures for creating Wind Energy Overlay Districts to allow consideration of use of the Town's wind energy

resource through large wind energy conversion systems (large WECS) and to regulate or prohibit the placement of such systems so that the public health, safety, and welfare will not be jeopardized.

B. Wind Energy Overlay District.

(1) Wind Energy Overlay Districts are permitted only (RS-20), and Agricultural Preservation and Suburban Residential (SR) proposed by Comprehensive Plan.

(2) No Wind Energy Overlay District may be initially created without specific requests for a WECS.

(3) Once a Wind Energy Overlay District has been created, new wind energy conversion systems, accessory structures, or facilities may be added in that district by the granting of a special use permit as set forth herein.

C. Creation of Wind Energy Overlay Districts.

(1) The process to be followed shall be the same as for the rezoning of land as set forth elsewhere in the Clarkson Code and in Article 16 of the New York State Town Law.

(2) If approved, the creation of the overlay district shall be deemed null and void after two years if no construction takes place within the two years. For the purpose of this provision the term "construction" shall not refer to grading, excavating and other general site improvements, but to the commencement of the construction of the towers and ancillary equipment including the providing of the financial security therefore.

§ 136-7. Large wind energy conversion systems.

A. General.

(1) No large wind energy conversion system shall be constructed, reconstructed, modified, or operated in the Town of Clarkson except in compliance with this section.

(2) No large wind energy conversion system shall be constructed, reconstructed, modified, or operated in the Town of Clarkson, except in a Wind Energy Overlay District.

(3) The placement, construction, and major modification of all large wind energy conversion systems (large WECS) within the boundaries of the Town of Clarkson shall be permitted only by special use permit issued by the Planning Board.

(4) Large wind energy conversion systems are permitted only in RS-20 (Proposed Agricultural Preservation [AP], Suburban Residential [RS]) Districts proposed by the Comprehensive Plan.

(5) The applicant shall pay all costs associated with the Town of Clarkson's review and processing of each application. The applicant shall submit a deposit with the application in the amount determined by resolution by the Town Board. The Town of Clarkson may require the applicant to enter into an escrow agreement to cover the anticipated engineering and legal costs of reviewing and processing all applications. This agreement will include the cost of the review required by SEQRA, creation of an overlay district, conducting of public hearings and modification to the Town of Clarkson Comprehensive Plan.

(6) Prior to the creation of a Wind Energy Overlay District, the Town Board has the ability to negotiate a payment in lieu of taxes and/or host community agreement with any applicant to compensate the Town for expenses or impacts on the community.

(7) The Town of Clarkson, as permitted by New York State Real Property Tax Law (RPTL) § 487, Subdivision 8, elects to eliminate any exemption granted to any wind farm or WECS system constructed after the effective date of this chapter.

(8) Prior to the issuance of a building permit, the applicant shall provide the Town of Clarkson with proof of insurance in a sufficient dollar amount to cover potential personal and property damage associated with the construction and operation thereof.

(9) Prior to the receipt of a building permit the applicant and the utility shall have a standard interconnection agreement (SIA).

(10) The applicant is responsible for remediation of dedicated roads damaged by the construction and maintenance of a wind energy conversion system. A public improvement bond or other financial security, the amount thereof to be approved by the Town Board and the bond approved by the Town Attorney as to form, sufficiency and manner of execution, shall be posted.

(11) The Town of Clarkson shall be named as an additional insured under the general liability policy of the applicant, with an amount no less than an amount to be determined by the Town Board given the nature and scope of the project.

(12) MET tower data is used to evaluate the feasibility of installing large wind energy conversion systems (large WECS).

B. Application.

(1) Applicants shall request a preapplication meeting(s) with the Planning Board, Building Department, Town Attorney, Town Engineer, and with any consultants retained by the Town for preliminary application review.

(2) Upon submittal of an application, the Planning Board shall, within 30 days of receipt, or such longer time if agreed to by the applicant, determine if all information required under this application is included in the application. No application shall be acted on by the Planning Board until the application is deemed complete by the Planning Board.

(3) An application for a large wind energy conversion system (large WECS) shall include the following:

(a) Name, address, and telephone number of the applicant. If the applicant is represented by an agent, the application shall include the name, address and telephone number of the agent as well as an original signature of the applicant authorizing the representation. The application shall include a certified list of individual and corporate officers of the applicant and their responsibilities to this project.

(b) Name, address, and telephone number of the property owner. If the property owner is not the applicant, the application shall include a letter or other written permission signed by the property owner confirming that:

[1] The property owner is familiar with the proposed application.

[2] The property owner authorizes the submission of the application.

(c) Proof of ownership of involved properties or long-term leases, legally executed and filed with the Monroe County Clerk.

(d) Address or other property identification of each proposed tower location, including Tax Map section, block and lot number with global positioning satellite (GPS) location of each proposed wind tower and related structure.

(e) A plot plan with a minimum scale of one inch equals 400 feet, prepared by licensed professional engineer, stamped and dated to include:

[1] Sufficient copies of the drawing package as determined at the preapplication meeting.

[2] North arrow, bar scale and location map.

[3] Property lines and physical dimensions of the site provided by a licensed land surveyor.

[4] Topography by one-foot contours.

[5] The applicant shall include an existing site plan and proposed site plan to include all roadways, fields, ponds, lakes, water courses, wetlands, residences, buildings, structures, historical sites, cemeteries, bridges or culverts, water wells, sewage systems, crop land and woodland by lot, block and tax identification number.

[6] Location of public roads, adjoining properties, schools, hospitals, and public buildings within 2,500 feet of the boundaries of the proposed large WECS Site.

[7] Each large WECS clearly referenced including location and elevation.

[8] To demonstrate compliance with fall zone and set back requirements, circles are to be drawn around each proposed tower location equal to:

[a] One-and-a-half times the tower height as measured from the apex of the rotor blade to the base of the tower.

[b] Circles with a radius of 1,500 feet.

(f) A construction plan sequential by site designation, estimated dates and duration of construction, displaying access/egress roads for delivery of construction equipment, staging areas, parking areas for receiving and off-loading of materials and structural components. No parking on public roads or streets shall be permitted.

(g) Documentation of existing road and culvert infrastructure. A preconstruction survey is to be performed for the purpose of determining damage and is to be supplied to the Planning Board and Town of Clarkson Highway Department.

(h) Vertical drawing of the large WECS showing total height, turbine dimensions, tower and turbine colors, ladders, distance between the ground and the lowest point of any rotor blade, location of climbing pegs and access doors. One drawing may be submitted for each large WECS of the same type and total height.

(i) Landscaping plan depicting existing vegetation and describing any areas to be cleared and all specimens to be added, identified by species and species size at installation with their location.

(j) Lighting plan: The applicant shall submit a lighting plan that describes all lighting. Such plan shall include, but is not limited to, the planned number and location of lights, lighting that may be required by the FAA, including a copy of the FAA lighting determination, types of light, whether any such lights will be flashing, and mitigation measures planned to control the light so not to spill over onto neighboring properties.

(k) Adjacent property owners: A list of all adjacent property owners of land within 2,500 feet, as measured from the tower base to nonparticipating property lines, shall be provided to the Planning Board for review and record retention. The list shall contain the names, property addresses, mailing address and tax map numbers of the property owners.

(l) Decommissioning plan: The applicant shall submit a decommissioning plan which shall include:

[1] The anticipated life of the large WECS.

[2] The estimated decommissioning cost in current dollars.

[3] How said estimate was determined, including the amount the cost is offset with salvage value.

[4] A letter of credit or cash deposit will be the required method for ensuring that the funds will be available for decommissioning and restoration.

[5] The method, such as annual reestimate by an independent licensed professional engineer or qualified estimator approved by the Town, by which the decommissioning cost will be kept current.

[6] The manner in which the large WECS will be decommissioned and the site restored, which shall include the following:

[a] Removal of wind turbines and associated ancillary equipment.

[b] Removal of substations and associated ancillary equipment.

[7] Removal of the concrete base of the wind turbine to a depth of not less than five feet and restoration of affected land to preconstruction grade.

[8] Removal of buried cables if less than five feet in depth.

[9] A predecommissioning survey, to be performed by an independent third party, of roads, culverts and bridges and affected land. The survey shall include photo and/or video documentation.

[10] Removal of access roads and restoration of affected land.

[11] Widening of roadways if necessary for heavy equipment and final restoration of all roadways used during removal.

[12] Restoration of vegetation (consistent and compatible with surrounding vegetation) less any fencing or minor improvements requested by the landowner.

(m) The application shall include information relating to the construction, installation and repair of the wind energy facility as follows:

[1] Construction schedule describing anticipated commencement completion dates.

[2] Hours of operation.

[3] Designation of heavy haul routes.

[4] A list of materials, equipment and loads to be transported

[5] Identification of temporary facilities intended to be constructed, and representatives in the field with name and phone number(s).

[6] Specific turbine information on the type, size, height, rotor material, rated power output, performance, safety, and noise characteristics of each wind turbine model, tower, and electrical transmission equipment.

[7] Method of delivery, both short- and long-term storage, and the method of removal from the site of large components for repairs which may become necessary in the normal course of operation of the WECS over its operational life.

[8] The amount of farm land removed from use during the construction period and after completion of the wind energy conversion facility.

(n) SEQRA Review:

[1] Applications for large WECS are deemed Type 1 projects under SEQRA. The Town may conduct its SEQRA Review in conjunction with other agencies, in which case the records of review by said agencies shall be part of the record of the Town of

Clarkson's proceedings. The SEQRA shall also include a Visual EAF Addendum (from SEQRA Part 617.20, Appendix B).

[2] At the completion of the SEQRA Review process, if a positive declaration of environmental significance has been issued and an environmental impact statement prepared, the Town of Clarkson shall issue a statement of findings. The statement of findings may also serve as the Town's decision on the application.

(o) Agricultural data statement: If required by Section 283-a of New York Town Law or Section 305-a of New York Agriculture and Markets Law, the applicant shall submit an agricultural data statement.

(4) Wind energy studies: The reviewing board may require some or all of the following studies. Where applicable these studies shall comply with NYSDEC visual and noise assessment and mitigation guidelines.

(a) Meteorological data.

(b) Shadow flicker.

(c) Visual impact.

(d) Property value analysis.

(e) Fire protection.

(f) Noise analysis.

(g) A geological report.

(h) Ice throw calculations.

(i) Blade-throw calculations.

(j) Catastrophic tower failure.

(k) A complaint resolution process.

C. Standards for large WECS.

(1) Construction and traffic routes.

(a) Construction of a large WECS poses potential risks because of the large size of construction vehicles and their impact on traffic safety and their physical impact on local roads. Construction and delivery vehicles for WECS and/or associated facilities shall use traffic routes established as part of the application review process. Factors in establishing such routes shall include:

[1] Minimization of traffic impacts from construction and delivery vehicles.

[2] Minimization of WECS-related traffic during times of school bus activity.

[3] Minimization of wear and tear on local roads.

[4] Minimization of impacts on local business operations.

(b) Permit conditions may require remediation during construction, limit WECS-related traffic to specified routes, and include a plan for disseminating traffic route information to the public and all applicable state, county and municipal highway authorities and superintendents whose roads are included in the WECS traffic route plan. Notification to all applicable highway authorities and superintendents will include the number and type

of vehicles and their size, their maximum gross weight, the number of round trips, and the dates and time periods of expected use of designated traffic routes.

(c) The WECS owner is responsible for remediation of damaged roads during construction and upon completion of the installation, periods of maintenance, and decommissioning/restoration of a wind energy facility.

(d) Stormwater runoff and erosion control shall be managed in a manner consistent with all applicable state and federal laws and regulations.

(e) Geological soil testing shall be done at each proposed tower foundation. Should testing suggest any interference with existing water aquifers, the site will be disqualified.

(f) Access roads required for construction shall be adequate to support weight of trucks, erection cranes, facility sections and heavy construction equipment. Temporary roads are to be returned to preconstruction condition, leaving only private driveways used for routine maintenance by facility and utility crews. Overnight parking of vehicles will be permitted only during the established construction period or during periods requiring additional personnel or equipment for maintenance and repair of a WECS. Parking is prohibited on public roads at all times.

(g) Excavation shall be as required for only foundation; overexcavation shall be repaired as per New York State Building Codes. Excess materials shall not be used to raise existing grade at the tower base. These materials may be used elsewhere on the proposed site by permission of the owner and Town of Clarkson Code Enforcement Officer. Excess materials may not be removed from the Town of Clarkson without permission from the Town Planning Board.

(h) All underground work shall be clearly marked "As-Built," documented during construction, plotted upon completed project drawings, and filed with the Town of Clarkson with "Dig Safely New York (1-800-962-7962)" or its successor.

(i) Redesign of utility poles must consider impact of access for large farming machinery.

(j) The Town of Clarkson will employ an independent engineering inspection service to monitor all construction/erection activities. The facility developer shall assume all costs of this service.

(k) All solid waste, hazardous waste and construction debris shall be removed from the site and managed in a manner consistent with all appropriate rules and regulations as set forth by the appropriate agencies.

(l) Any construction, ground disturbance or restoration involving agricultural land or land located in agricultural districts shall be done according to the New York State Department of Agriculture and Markets publication titled "Guidelines for Agricultural Mitigation for Windpower Projects."

(2) Certification. The wind energy facility developer shall employ an independent and Town-of-Clarkson-approved engineering service to certify to the Town that the facility is built as designed and is qualified for service before final permit is issued by the Planning Board. The applicant shall provide the following certifications:

(a) All structural components, including the foundation, tower and compatibility of the tower with the rotor and rotor-related equipment, shall be certified in writing by an independent licensed professional engineer. The engineer shall certify compliance with all applicable local, state, and federal codes and regulations.

(b) After completion of the WECS, the applicant shall provide a post-construction certification from an independent licensed professional engineer stating that the project complies with applicable codes and industry practices and has been completed according to the design plans.

(c) The electrical system shall be certified annually in writing by an independent licensed professional engineer. The engineer shall certify compliance with good engineering practices and with the appropriate provisions of IEEE standards and any other explicit technical standards required in New York State.

(d) The rotor overspeed control system shall be certified in writing by an independent licensed professional engineer. The engineer shall certify compliance with applicable design and operational codes.

(e) Certification of project completion must be supplied by the applicant and approved by the Town of Clarkson Code Enforcement Officer.

(3) Color, finish and visual impact.

(a) All wind energy facility developers shall use measures to reduce the visual impact of WECS to the greatest extent possible. All structures shall be finished in a single, nonreflective matte finish color or a camouflage scheme and shall include a maintenance schedule and plan to maintain the finished color and appearance of the WECS.

(b) Individual WECS within a Wind Energy Overlay District shall be constructed using wind turbines whose design and appearance shall exhibit uniformity to each other in all respects to height, color, size, geometry, and rotational speed.

(c) No lettering, company insignia, advertising, or graphics shall be on any part of the tower, hub, or blades.

(d) No television, radio, or other communication antennas may be affixed or otherwise made part of any WECS, except pursuant to the telecommunications provisions of the Town of Clarkson Zoning Code. *Editor's Note: See Ch. 140, Zoning.*

(4) Compliance with regulatory agencies. The applicant is required to obtain all necessary regulatory approvals and permits from all federal, state, county, and local agencies having jurisdiction and approval related to the completion of the WECS.

(5) Electrical standards.

(a) All interconnecting lines and wires from generators to ground ancillary structures and the utility transmission grid will be installed underground to the maximum extent practicable. The Planning Board shall have the authority to waive this requirement only if the Planning Board has sufficient engineering data submitted by the applicant to demonstrate that underground transmission lines are unfeasible.

(b) Underground high voltage lines shall have cover to existing grade, per National Electrical Code (NEC) burial guidelines.

(c) All precautions shall be applied to prevent stray voltage leakage; should such occur, immediate remedial correction must be taken. A report of complaint and remediation must be given to the Town of Clarkson Code Enforcement Officer for immediate analysis and remedial action.

(6) Electromagnetic interference.

(a) No large WECS shall be installed in any location where its proximity with existing fixed broadcast, retransmission, or reception antenna for radio, television, or wireless phone or other personal communication systems would produce electromagnetic interference with signal transmission or reception.

(b) No large WECS shall be installed in any location along the major axis of an existing microwave communication link where its operation is likely to produce electromagnetic interference in the link's operation.

(c) If it is determined that a large WECS is causing electromagnetic interference, the operator shall take necessary corrective action to eliminate this interference, including relocation or removal of the facilities, or resolution of the issue with the impacted parties.

(d) Failure to remedy electromagnetic interference is grounds for revocation of the special use permit for any specific WECS causing the interference.

(7) Fire prevention.

(a) All WECS shall have an automatic fire suppression system within the nacelle.

(b) All WECS shall be designed and constructed in compliance with the applicable requirements of the New York State Uniform Fire Prevention Code, as currently in effect and as hereafter amended.

(8) Height restrictions.

(a) The total height of any large WECS shall be 400 feet. The total height shall be measured from the ground elevation from the preconstruction or post-construction grade, whichever is lower, to the top of the tip of the blade at the apex of rotation.

(b) The blade tip of any wind turbine shall, at its lowest point, have a ground clearance of not less than 50 feet.

(9) Landscaping. Upon completion of the installation, the site shall be returned as close as possible to its natural state, including, but not limited to, restoring the subsoil and topsoil to preconstruction condition and reforestation of any woodlands that have been cleared for site preparation. Vegetation shall be planted in a natural pattern on the site to screen as much of the facility as possible without restricting air flow. Existing vegetation may be used to supplement new plantings.

(10) Lighting. Towers and turbines shall not be artificially lighted or marked beyond the requirements of the Federal Aviation Administration (FAA). Minimum security or safety lighting may be allowed as approved on the site plan. Any lighting systems shall be designed to minimize light pollution and shall include the use of light hoods or low-glare fixtures or directing lights at the ground. Lighting shall not shine onto adjacent properties.

(11) Maintenance and replacement.

(a) A permitted facility may be maintained and repaired at any time, which becomes necessary in the normal course of operation of the wind energy facility, without a special permit or building permit, provided the maintenance does not involve the following:

[1] An increase in the number of towers.

[2] An increase in the number of wind turbines.

[3] An increase in the tower height.

[4] A change in the tower location.

[5] A change in the type of wind turbine, nacelle or tower used.

[6] A change in the number or size of accessory structures.

[7] A change that increases the sound pressure level or shadow-flicker produced by the facility.

[8] The transportation of heavy equipment, cranes and large spare parts that are oversize loads and require public road use, the widening of access roads, or pose potential damage to the infrastructure of the Town of Clarkson or surrounding communities.

(b) Replacement in kind of a wind energy facility may occur with Town Board approval when there will be:

[1] No increase in total height.

[2] No change in location of the WECS.

[3] No additional lighting or facility color change.

[4] No increase in noise or shadow-flicker produced by the WECS.

(c) Overnight parking of vehicles will be permitted only during periods requiring additional personnel or equipment, or extended periods of time necessary for the maintenance and repair of a wind energy system. That will be no parking on public roads.

(d) Any damaged or unused parts shall be removed from the site within 30 days or stored in a locked on-site storage building. All maintenance equipment, spare parts, oil or chemicals shall also be stored in said on-site locked storage building.

(12) Safety and security requirements.

(a) Large WECS shall have lightning arresting systems.

(b) Wind turbines shall be equipped with electromagnetic (automatic) and mechanical (manual) braking systems to prevent over-rotation, reducing stress on the tower and rotor blades. No wind turbine shall be permitted that lacks an automatic braking, governing, or feathering system to prevent uncontrolled rotation, overspeeding, and excessive pressure on the tower structure, rotor blades, and turbine components.

(c) Security signs for public safety and warnings shall be required. At least one sign shall be posted at the base of the tower warning of electrical shock or high voltage. A sign shall be posted on the entry area of the fence around each tower or group of towers and any building (or on the tower or building if there is no fence), containing emergency contact information, including a local telephone number with twenty-four-hour, seven-day-per-week coverage. The Planning Board may require additional signs as approved on the site plan.

(d) A security plan shall be required and on file at the Town Hall. The training of first responders and any associated cost shall be the responsibility of the wind energy facility owner/operator. An emergency personnel contact, including appropriate emergency responders including the Clarkson Town Clerk, shall be posted at the site.

(e) Vehicle access points shall be guarded by physical structure, fencing or bollards to block nonpermitted access to driveways.

(13) Noise standards.

(a) The statistical sound pressure level generated by a WECS shall not exceed 50 dBA measured at the off-site property line.

(b) A large WECS shall not operate so at an impulsive sound below 20 Hz at the off-site boundary line.

(14) Large WECS setback.

(a) Each large WECS shall be set back from site boundaries as measured from the center of the large WECS:

[1] One thousand five hundred feet from:

[a] Any Hamlet district boundary line.

[b] The property line of any school.

[c] Places of worship.

[d] Any public facility.

[e] Any public road and highway (centerline).

[f] The nearest off-site residence existing at the time of the application.

[2] One hundred feet plus the fall zone radius from state and federally identified wetlands. This distance may be adjusted to be greater distance at the discretion of the Planning Board, based on topography, land cover, land uses, state or federal requirements, and other factors such as the influence that a large WECS has on any endangered species or the flight patterns of resident birds.

(b) One hundred feet plus the fall zone radius from:

[1] The nearest farm building.

[2] Utility lines.

(c) Two hundred feet plus the fall zone radius from on-site occupied structures (human and farm animal), and any historical site.

(d) Six hundred feet from the nearest site boundary line or tax property boundary (nonresidential).

(e) The Planning Board may impose a setback that exceeds the other setbacks set out in this section if it deems that such greater setbacks are necessary to protect the public health, safety and welfare of the community.

(15) Tower structures.

(a) The fall zones of WECS shall not overlap one another.

(b) Multiple towers may be sited on a contiguous property and on legally leased adjacent parcels.

(c) Towers will only be of a mono-tubular free standing design with interior stairs accessed by a security door within the tower column. The use of guy wires is prohibited.

(d) Nacelle will be of the latest upwind design accessed via interior stair only.

(e) Wind turbine towers shall not have external ladders or climbing devices, fire suppression systems or extinguishers.

(16) Wildlife species and habitat.

(a) Development and operation of a large WECS shall not have a significant adverse impact on endangered or threatened fish, wildlife, or plant species or their critical habitats or other significant habitats identified in the Town of Clarkson. Studies, plans and guidelines will be used to demonstrate criteria established by federal or state regulatory agencies.

(b) Design and layout of the facility shall not create artificial habitats which draw rodents or prey and entice raptors to frequent the site leading to increased bird strikes.

D. Transfer of ownership. No transfer of any wind energy facility or special use permit, nor sale of the entity owning such facility including the sale of more than 30% of the stock of such entity (not counting sales of shares on a public exchange), will occur without prior approval of the Town Board, which approval shall be granted upon written acceptance of the transferee of the obligations of the transferor under this section, and the transferee's demonstration, in the sole

discretion of the Town Board, that it can meet the technical and financial obligations of the transferor. No transfer shall eliminate the liability of the transferor, nor of any other party, under this section unless the entire interest of the transferor in all facilities in the Town is transferred and there are no outstanding obligations or violations.

§ 136-8. Small wind energy conversion systems.

A. General.

(1) The placement, construction, and major modification of all small wind energy conversion systems (small WECS) within the boundaries of the Town of Clarkson shall be permitted only by special use permit.

(2) Small wind energy conversion systems shall require a site plan review and approval by the Planning Board, a special permit issued by the Planning Board and a building permit issued by the Code Enforcement Officer per Article VI of the Town of Clarkson Zoning Code. *Editor's Note: See Ch. 140, Zoning, Art. VI, Administration; Penalties; Amendments.*

(3) The special use permit shall be valid initially for five years. Renewal shall be in accordance with Subsection D below.

(4) The applicant shall pay all costs associated with the Town of Clarkson's review and processing of the application. The applicant shall submit a deposit with the application in the amount determined by resolution by the Town Board. The Town of Clarkson may require the applicant to enter into an escrow agreement to cover the engineering and legal costs of reviewing and processing the application. This agreement will include the cost of the review required by SEQRA.

(5) If required by New York State Municipal Law, the application will be referred to the Monroe County Planning Department for review.

(6) Small WECS are permitted in any zoning district.

(7) The applicant is required to conform to all requirements of the Town of Clarkson Historical District.

(8) The small WECS shall be primarily used to reduce the on-site consumption of electricity of the residence and shall not exceed 110% of estimated annual consumption. At no time shall electricity be distributed across property lines except to tie into the electrical grid system. Small WECS shall be placed or located behind the front setback of the residence or 100 feet from the right-of-way, whichever is less.

B. Application.

(1) Applicants may request a preapplication meeting(s) with the Planning Board, Code Enforcement Officer and with any consultants retained by the Planning Board for review.

(2) Upon submittal of an application, the Planning Board shall, within 30 days of receipt, or within such longer time if agreed to by the applicant, determine if all information required under this application is included in the application. No application shall be acted on by the Planning Board until the application is deemed complete by the Planning Board.

(3) An application for a small WECS shall include the following:

(a) Name, address, and telephone number of the applicant. If the applicant is represented by an agent, the application shall include the name, address and telephone number of the agent as well as an original signature of the applicant authorizing the representation.

(b) Name, address and telephone number of the property owner. If the property owner is not the applicant, the application shall include a letter or other written permission signed by the property owner confirming that:

[1] The property owner is familiar with the proposed application.

[2] The property owner authorizes the submission of the application.

(c) A comprehensive description of the small WECS, including location, total height of the tower, maximum rated capacity of the wind turbine and the utilities required.

(d) The Planning Board may require an instrument survey showing the location of the small WECS.

(e) The applicant shall include scaled engineering drawings (prepared by a licensed professional engineer, licensed land surveyor or landscape architect) which show details and dimensions of the following:

[1] Tower.

[2] Tower guy wire and anchor details, if any.

[3] Turbine.

[4] Foundation.

[5] Distance between ground and the lowest point of any rotor blade.

[6] Height and location of climbing pegs and ladders.

[7] Fencing and the color and finish of each major component.

[8] Details and dimensions of all proposed equipment, accessory structures, access roads and driveways.

(f) Applications shall include product information from the manufacturer of the proposed wind turbine or rotor blade, tower, supporting foundations, anchorage, inverter, structures and transmission lines as a composite.

(g) The application shall include a full SEQR environmental assessment form (EAF) with Part 1 prepared by the applicant, which shall also include a visual EAF addendum (from SEQRA Part 617.20, Appendix B).

(h) If required by Section 283-a of New York Town Law or Section 305-a of New York Agriculture and Markets Law, the applicant shall submit an Agricultural Data Statement.

(i) The application shall include a written agreement in which the applicant agrees to pay for reasonable legal fees and consultant fees incurred by the Planning Board should they choose to employ a consultant to review the drawings, analyses, studies, reports and certifications submitted by the applicant. The applicant must also agree to pay for reasonable consultant fees incurred by the Planning Board should they choose to employ a consultant to assist with the SEQRA process. Any such agreement shall be subject to the review and approval of the Town Attorney or the attorney advising the Planning Board.

(j) Applications shall include a written agreement in which the applicant agrees to provide and pay for a reasonable amount of preconstruction ambient-noise-level testing and post-construction sound-pressure-level testing and/or shadow-flicker analysis when requested by the Planning Board. Testing may be requested at any time during the term of a special permit to ensure compliance or to resolve noise or visual complaints received from nearby property owners. Any such agreement shall be subject to the review and approval of the Town Attorney or the attorney advising the Planning Board.

C. Standards for small WECS.

(1) The tower design must be certified by a licensed professional engineer.

(2) The tower height shall be no more than 35 feet.

(3) Ground clearance of horizontal axis rotor blades shall not be less than 15 feet.

(4) The use of guy wires is prohibited without a variance from the ZBA. In making a determination, the Zoning Board of Appeals will apply the standards used for an area variance.

(5) The proposed site shall include a fall zone radius of no less than 150% of tower height excluding the structure, if any, to which it is attached. The fall zone must be contained entirely inside the property line.

(6) The system's tower, nacelle, and blades shall be painted a non reflective, unobtrusive color that blends the system and its components into the surrounding landscape to the greatest extent possible and incorporates nonreflective surfaces to minimize any visual disruption.

(7) All WECS shall be equipped with brake controls to limit the rotational speed of the rotor blade so it does not exceed the design limits of the rotor.

(8) All on-site electrical wires associated with the system shall be installed underground. This standard may be modified by the Planning Board if the project terrain is determined to be unsuitable due to reasons of excessive grading, biological impacts, or similar factors.

(9) The statistical sound pressure level generated by a WECS shall not exceed 50 dBA measured at the nearest residence property line located off the site. Sites can include more than one piece of property and the requirement shall apply to the combined properties.

(10) No brand names, logo, antennas, or advertising shall be allowed on any part of the facility or placed or painted on the tower, rotor, generator or tail vane where it would be visible from the ground, except that a system or tower's manufacturer's logo may be displayed on the system generator housing in an unobtrusive manner. However, permanent identification of manufacturer and responsible contact information in case of failure or malfunction will be mounted on the tower base.

(11) The applicant is required to obtain all necessary regulatory approvals and permits from all federal, state, county, and local agencies having jurisdiction and approval related to the completion of the WECS.

D. Renewal of special use permits for small WECS. Three copies of the following information must be submitted to the Planning Board, and shall constitute a complete application for special permit renewal.

(1) Special use permit application form. The application shall be marked "Renewal" by the applicant.

(2) Special use permit renewal fee. The applicant shall pay a nonrefundable renewal fee as established by the Town of Clarkson Town Board.

(3) Renewal shall be every three years.

(4) At the request of the Planning Board the applicant/owner shall make available (subject to a nondisclosure agreement) to the Town all reports to and from the purchaser of energy from individual WECS as necessary to prove the WECS is functioning. Requested reports may be edited as necessary to protect proprietary information.

(5) Structural integrity certification. If the facility has been installed for longer than the manufacturer's warranty period, the renewal application shall include a certification that the facility was inspected for structural and mechanical integrity by a person certified by the manufacturer, a licensed professional engineer.

§ 136-9. Medium wind energy conversion systems.

A. General.

(1) Medium WECS shall require a site plan review and approval by the Planning Board and a building permit issued by the Code Enforcement Officer per Article VI of the Town of Clarkson Zoning Code. *Editor's Note: See Ch. 140, Zoning, Art. VI, Administration; Penalties; Amendments.*

(2) The applicant shall pay all costs associated with the Town of Clarkson's review and processing of the application. The applicant shall submit a deposit with the application in the amount determined by resolution by the Town Board. The Town of Clarkson may require the applicant to enter into an escrow agreement to cover the engineering and legal costs of reviewing and processing the application. This agreement will include the cost of the review required by SEQRA.

(3) If required by New York State Municipal Law, the application will be referred to the Monroe County Planning Department for review.

(4) Medium WECS are permitted in the RS-20 (proposed Residential Agricultural [RA], Suburban Residential [RS]).

(5) The minimum lot size shall be no less than seven acres in area.

B. Application.

(1) Applicants may request a preapplication meeting(s) with the Planning Board, Code Enforcement Officer and with any consultants retained by the Planning Board for concept review.

(2) Upon submittal of an application, the Planning Board shall, within 30 days of receipt, or within such longer time if agreed to by the applicant, determine if all information required under this application is included in the application. No application shall be acted on by the Planning Board until the application is deemed complete by the Planning Board.

(3) An application for a medium WECS shall include the following:

(a) Name, address, and telephone number of the applicant. If the applicant is represented by an agent, the application shall include the name, address and telephone number of the agent as well as an original signature of the applicant authorizing the representation.

(b) Name, address, telephone number of the property owner. If the property owner is not the applicant, the application shall include a letter or other written permission signed by the property owner confirming that:

[1] The property owner is familiar with the proposed application.

[2] The property owner authorizes the submission of the application.

(c) Address or other property identification of each proposed tower location, including Tax Map section, block and lot number.

(d) A comprehensive description of the medium WECS, including location, total height of the tower, maximum rated capacity of the wind turbine and the utilities required.

(e) The Planning Board may require additional information, if necessary to complete its review.

[1] Title block showing the drawing title, date of reparation, name and address of applicant, name and address of a the person or firm preparing the drawing, and the signature and seal of a licensed professional engineer and licensed land surveyor.

[2] Site location map, including North arrow and bar scale.

[3] Boundaries and physical dimensions of the site in sufficient scale to verify setbacks.

[4] Existing watercourses and bodies of water, including any state and federal wetlands.

[5] Public and private roads within 100 feet of the site boundaries.

[6] Existing residential and non residential structures and driveways located on-site.

[7] Existing residential and nonresidential structures located off-site and within 500 feet of the site boundaries.

[8] Location of the proposed tower, equipment, foundations, guy points, substations, accessory structures, fences and any other amenities.

[9] Existing and proposed above-ground and underground utilities located on the site.

[10] Construction plan detailing access routes, on-site disturbance of landscape, trees, soils and restoration thereof at the completion of the facility erection period.

[11] A circle drawn to scale around the tower which includes the fall zone equal to 150% of rotor blade height at apex.

(f) The applicant shall include scaled engineering drawings certified by a licensed professional engineer which show details and dimensions of the following:

[1] Tower.

[2] Turbine.

[3] Foundation.

[4] Distance between ground and the lowest point of any rotor blade.

[5] Height and location of climbing pegs and ladders.

[6] Fencing and the color and finish of each major component.

[7] Details and dimensions of all proposed equipment, accessory structures, access roads and driveways.

(g) Applications shall include product information from the manufacturer of the proposed wind turbine or rotor blade, tower, supporting foundations, anchorage, inverter, structures and transmission lines as a composite.

(h) The application shall include a full SEQR environmental assessment form (EAF) with Part 1 prepared by the applicant and also a visual EAF Addendum (from SEQRA Part 617.20, Appendix B).

(i) If required by Section 283-a of New York Town Law or Section 305-a of New York Agriculture and Markets Law, the applicant shall submit an Agricultural Data Statement.

(j) Proposed written agreement.

[1] Applications shall include a proposed written agreement between the developer and the Town in which the applicant agrees to remove the facility and to restore the site when the facility reaches the end of its design life, if the facility ceases to operate for more than six consecutive months, or if directed by the Town of Clarkson due to noncompliance. The agreement must include the following:

[a] All work will be arranged and paid for by the applicant.

[b] A description of how the facility will be removed.

[c] A description of how the site will be restored.

[d] The estimated cost for removal and restoration.

[e] The source and/or method of funding that will be available for removal and restoration.

[2] Any such agreement shall be subject to the review and approval of the Town Attorney or the attorney advising the Planning Board and approved by resolution of the Town Board.

(k) The application shall include a written agreement in which the applicant agrees to pay for reasonable consultant and legal fees incurred by the Planning Board should they choose to employ a consultant to review the drawings, analyses, studies, reports and certifications submitted by the applicant. The applicant must also agree to pay for reasonable consultant fees incurred by the Planning Board should they choose to employ a consultant to assist with the SEQRA process. Any such agreement shall be subject to the review and approval of the Town Attorney or the attorney advising the Planning Board.

(4) Applications shall include a written agreement in which the applicant agrees to provide and pay for a reasonable amount of sound-pressure-level testing and/or shadow-flicker analysis when requested by the Planning Board. Testing may be requested at any time during the term of a special permit to ensure compliance or to resolve noise or visual complaints received from nearby property owners. Any such agreement shall be subject to the review and approval of the Town Attorney or the attorney advising the Planning Board.

C. Standards for medium wind energy conversion systems.

(1) The tower design must be certified by a licensed professional engineer.

(2) The tower height shall comply with all applicable Federal Aviation Administration requirements.

(3) Ground clearance of the horizontal axis rotor blades shall not be less than 25 feet.

(4) Rooftop and tower systems supported in part or in whole by a nonresidential structure shall be evaluated for the stress and loads developed by a medium WECS and certified by a licensed professional engineer.

(5) Wind turbine towers and any guy wire systems shall not be climbable for the first 12 feet above ground level.

(6) The proposed site shall include a fall zone radius of no less than 150% of total tower height. The fall zone shall not:

(a) Include public or private roads.

(b) Be closer than 50 feet from the site property line.

(c) Be located on or across any above ground electrical transmission or distribution lines.

(7) No tower shall be lit except to comply with FAA requirements. Minimum security lighting for ground level facilities shall be allowed as approved on the site plan. Security lighting shall be designed to minimize light pollution, including the use of light hoods or low-glare fixtures and Erecting lights at the ground.

(8) The system's tower, nacelle, and blades shall be painted a non reflective, unobtrusive color that blends the system and its components into the surrounding landscape to the greatest extent possible and incorporates nonreflective surfaces to minimize any visual disruption.

(9) All horizontal-axis WECS shall be equip ped with electromagnetic and manual brake controls to limit the rotational speed of the rotor blade so it does not exceed the design limits of the rotor and over-stress the tower and components. Vertical-axis wind turbines shall be controlled to prevent overspeed and exceeding the design l imits of the rotor, support structure, and other components.

(10) All on-site electrical wires associated with the system shall be installed underground, whether net-metered or a stand alone system, except for tie-ins to a public utility company and public utility company transmission poles, towers and lines. This standard may be modified by the Planning Board if the project te rrain is determined to be unsuitable due to reasons of excessive grading, biologi cal impacts, or similar factors.

(11) The statistical sound pressure level generated by a WE CS shall not exceed 50 dBA measured at the off-site property line and a me dium WECS shall not ope rate at an impulsive sound below 20 Hz at the off-site boundary line.

(12) If it is determined that a medium WECS is causing electromagnetic interference, the operator shall take necessary corrective action to eliminate this interference, including relocation or removal of the facilities or resolution of the issue with the impacted parties.

(13) No brand names, logo, antennas, or advertising shall be allowed on any part of the facilit y or placed or painted on the tower, rotor, genera tor or tail vane where it would be visible from the ground, except that a system or tower' s manufacturer's logo may be displayed on the system generator housing in an unobtrusive ma nner. However, permanent identification of manufacturer and responsible contact information in case of failure or malfunction will be mounted on the tower base.

(14) Access roads required for c onstruction shall be adequate to support weight of trucks, erection cranes, facility sections and heavy construction equipment. The applicant is responsible for remediation of damaged roads during construction and upon comple tion of the installation or maintenance of a WECS.

(15) The applicant is required t o obtain all necessary regulatory approvals and permits from all federal, state, county, and lo cal agencies having jurisdiction and approval related to the completion of the WECS.

§ 136-10. Enforcement; penalties for offenses; abatement; limitations; bonds; funds and remedies.

A. Enforcement. In addition to the Code Enforcem ent Officer, the Town Board may, by resolution, appoint such town staff or outside consultant s as it sees fit to enfo rce this chapter.

B. Penalties.

(1) Any person owning, controlling, or managi ng any building, structure, or land who shall construct, operate or m aintain a wind energy co nversion facility in violation of this chapter or in noncompliance with the terms and conditions of any permit issued pursuant to this chapter, or any order of the Code Enfo rcement Officer, and any person who shall assist in so doin g, shall be guilty of an of fense and subjected to:

(a) For a first offense, a fine of not more th an $350 or imprisonment for a period of not more than 15 days, or both such fine and imprisonment.

(b) For a second offense (both within a period of five years), a fine of not less than $350 nor more than $700 or imprisonment for a period not to exceed six months, or both such fine and imprisonment.

(c) For a third offense (all within a period of five years), a fine of not less than $700 nor more than $1,000 or imprisonment not to exceed six months, or both such fine and imprisonment.

(2) Every such person shall be deemed guilty of a separate offense for each week such violation shall continue. The Town may institute a civil proceeding to collect civil penalties in the amount set forth herein for each violation and each week said violation continues shall be deemed a separate violation.

(3) If multiple units in one facility have the same or similar violations, each shall be considered as a separate and distinct violation.

(4) In case of any violation or threatened violation of any of the provisions of this chapter, including the terms and conditions imposed by any permit issued pursuant to this section, in addition to other remedies and penalties herein provided, the Town of Clarkson may institute any appropriate action or proceeding to prevent such unlawful erection, structural alteration, reconstruction, moving, and/or use, and to restrain, correct, or abate such violation, to prevent the illegal act.

C. Abatement.

(1) Public nuisance. Every unsafe, incomplete, abandoned, or inoperable wind energy facility is hereby declared a public nuisance which shall be subjected to abatement by repair, rehabilitation, demolition, or removal.

(2) Inoperable WECS.

(a) Nonfunction or lack of operation may be proven by reports to the Public Service Commission, New York State Energy Research and Development Authority (NYSERDA), by lack of income generation or physical damage. The applicant/owner shall make available (subject to a nondisclosure agreement) to the Town all reports to and from the purchaser of energy from individual WECS, if requested as necessary to prove the WECS is functioning. Requested reports may be edited as necessary to protect proprietary information.

(b) Safety issues deemed to be of an imminent threat to the health, safety and/or welfare of any person affected by a WECS as determined by the Code Enforcement Officer shall require the immediate shutdown of the WECS; an immediate corrective action shall be taken and the imminent threat fully mitigated.

(3) If any WECS remains nonfunctional or inoperative for a continuous period of six months, the applicant agrees that, without any further action by the Town Board, it shall remove said system and return the land to preexisting conditions at its own expense. Removal of the system shall include but not be limited to:

(a) Removal of all above-ground structures, including support buildings, transmission equipment, and fencing, from the property.

(b) Removal of the concrete base of a wind turbine to a depth of not less than five feet below grade elevation.

(c) All agricultural areas shall be restored to as close to preconstruction conditions as possible and shall be in compliance with New York State Department of Agriculture and Markets guidelines. A remediation plan shall be put in place to identify and correct any remaining or recurring impacts derived from a WECS.

(4) This provision may be waived at the discretion of the Town Board if the applicant demonstrates to the Town that it has been making good faith efforts to restore the WECS to an operable condition, but nothing in this provision shall limit the Town's ability to order a remedial action plan after a public hearing.

(5) Notwithstanding any other abatement provisions, if the WECS is not repaired, made operational, or brought into permit compliance after said notice, and after a public meeting at which time the operator or owner shall be given opportunity to be heard and present evidence, including a plan to come into compliance, the Town may either:

(a) Order remedial action within a particular timeframe.

(b) Order revocation of the special use permit for the WECS and order removal of the WECS within 90 days. If the WECS is not removed, the Town Board shall have the right to use the security posted as part of the decommissioning plan to remove the WECS.

D. Limitations on approvals; easements on Town property.

(1) Nothing in this chapter shall be deemed to give any applicant the right to cut down surrounding trees and vegetation on the site or any other property to reduce turbulence and increase wind flow to the WECS. Nothing in this chapter shall be deemed a guarantee against any future construction or Town approvals of future construction that may in any way impact the wind flow to any WECS. It shall be the sole responsibility of the WECS operator or owner to acquire any necessary wind flow or turbulence easements, or rights to remove vegetation.

(2) Pursuant to the powers granted to the Town to manage its own property, the Town may enter into noise, setback, or wind flow easements on such terms as the Town Board deems appropriate, as long as said agreements are not otherwise prohibited by state law.

E. Decommissioning bond or fund.

(1) The applicant, developer, successors, property owner, heirs, or assigns, private or court-appointed and of record shall continuously maintain a fund or bond payable to the Town of Clarkson for the removal of non-functioning towers, accessory facilities, and land restoration in an amount and frequency of review to be determined by the Town Board for the period of the life of the facility. This fund may consist of a letter of credit from a financial institution. The provisions and adequacy of such bond, fund or letter of credit shall be approved by the Town Board after review and approval of the Town Attorney or attorney representing the Town Board. All cost of the financial security shall be borne by the applicant, developer, successors, property owner, heirs, or assigns, private or court-appointed and of record.

(2) Any cost incurred by the Town that exceeds the amount of such financial surety or that is not covered by said surety shall be the complete and sole responsibility of the applicant. If the applicant is insolvent and such costs cannot be practicably collected from said applicant, then such costs shall become a lien upon the property in which the costs were incurred. The lien shall thereafter be assessed on the next succeeding year's tax bill for such parcel and shall be collected in accordance with normal tax foreclosure proceedings if such tax bill remains unpaid thereafter.

(3) Upon completion of all such removal activities by the Town, any remaining portion of the posted surety shall be returned to the applicant.

F. Testing fund. A special use permit shall contain a requirement that the applicant fund periodic noise and/or shadow-flicker testing by a qualified independent third-party measurement consultant, which may be required as often as every two years, or more frequently upon request of the Town in response to complaints by neighbors. The scope of the testing shall be to demonstrate compliance with the terms and conditions of the special use permit or site plan and shall also include an evaluation of any complaints received by the Town. The applicant shall have 90 days after written notice from the Town Board to cure any deficiency. An extension of the ninety-day period may be considered by the Town Board, but the total period may not exceed 180 days.

G. Severability. If any part or provision of this chapter or the application thereof to any person or circumstance be adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part, provision or application directly involved in the controversy in which such judgment shall have been rendered and shall not affect or impair the validity of the remainder of this article or the application thereof to other persons or circumstances and the Town Board hereby declares that it would have enacted this chapter or the remainder thereof had the invalidity of such provision or application thereof been apparent.

LOCAL LAW NO. **2000-1**
OF THE TOWN OF FENNER

A LOCAL LAW TO AMEND
THE TOWN OF FENNER
LAND USE LOCAL LAW NO. 1997-1

Section I.

The purpose and intent of this local law is to provide for the establishment of a new zoning district under the Town of Fenner Land Use Local Law, as previously amended and enacted as Town of Fenner Local Law 1997-1 (hereinafter referred to a "Local Law 1997-1"), to define an area of the Town where commercial wind-powered electricity generation facilities may be developed in a manner hereby deemed to be compatible with, and in furtherance of the general health, welfare and safety of the residents of the Town of Fenner.

Section II.

Section 201, subsection "B" of Local Law 1997-1 is hereby amended to read as follows:

B. DISTRICT B. (SECTION 302)

District B shall consist of all lands within the Town of Fenner which are not contained in District A or in District C.

Section III.

Section 201 of Local Law 1997-1 is hereby further amended to add a new subsection "C" to read as follows:

C. DISTRICT C. (SECTION 303)

District C shall consist of all the lands within the following tax map parcels as said parcels are configured as of the date of adoption of this local law.

Tax Map Numbers:	Owners:
78.-l-38.1	Lloyd and Susan Lovely
78.-l-37.1	Robert Toole & William Larkin
78.-1-37.2	Philip H. Gott, Jr.
78.-1-29	Town of Fenner
78.-1-28.1	Town of Fenner
78.-1-28.2	Richard K. Foringer
78.-1-28.3	Richard K. Foringer
78.-1-28.23	Anthony Seitz
78.-1-28.22	Charles Seager
78.-1-28.21	Robert Butler
78-1-27	Kenneth Wilkinson
69.-1-16	Beryl Pratt
69.-1-36	Harold Geiger
69.-1-36.1	Harold Geiger, Jr.
69.-1-37	Robert Toole & William Larkin
69.-1-41	Alice Ross
69.-1-42	Joseph Balenski
70.-1-1	Russell Stone
70.-1-3	Russell Stone
70.-1-21	Russell Stone
70-.1-22	Scott & Donna Griffin
70.-1-23.11	Scott & Donna Griffin
70.-1-23.12	Scott & Donna Griffin
70.-1-27	Russell Stone

Section IV.

The “Land Use Map” referred to in Section 202 of Local Law 1997-1 and attached to Local Law l997-1 as “Appendix B” is hereby amended to designate the lands described in Section III of this local law as “District C”

Section V.

The “Land Use Schedule” referred to in Section 203 of Local Law 1997-1 and included in Local Law 1997-1 as “Table 1” and the “Notes for Table 1” are hereby amended to read as follows:

TABLE 1

LAND USE SCHEDULE
Minimum Dimensions

		Lot		Yards*			Maximum	Notes
		Frontage*** Ft.	Depth Ft.	Front Ft.	Side Ft.	Rear Ft.	Structure Height Ft.	(See Page)
	Lot Area							
"DISTRICT "A"								
Single-family unit	1 acre**	200	200	50	40	50	35	a, b
Two-family unit	1.5 acre	200	200	50	40	50	35	b
Multi-family	1.5 acre + 10,000 sq ft/unit	200	200	50	40	50	45	d, e
Farm	5 acres	200	200	50	40	50	None	c, g
DISTRICT "B"								
All "A" as above								
Mobile dwelling	1 acre	200	200	50	40	50	35	b
Mobile dwelling park*	5 acres	200	300	50	30	50		b, d, e, f
Individual Park Site	@ 10,000 sq. ft/unit	70	120	30	20	20	35	f
Business, professional, or Industrial, on separate lots	1 acre	200	200	50	40	50	35	b, d, e
DISTRICT "C"								
All "B", as above								

*Corner lots are considered to have two front yards along the two roadways and two side yards.
**Acre = 43,560 sq. ft.
***Requirement of actual frontage along public highway, or if applicable, private access easement
All non-farm accessory buildings shall conform to front and side yard requirements of the district in which they are located

Notes for Table 1

a. Measured from the road right-of-way. Applies to each side of a lot that adjoins a public road.

   An alternative front yard minimum dimension measurement is permissible from the center of road-ways where neither road right-of-way bounds nor surveys are available: (1) on three rod roads (generally, but not necessarily, Town roads) set buildings back at least 75 feet from the centerline of the road; and (2) on four rod roads (Generally, but not necessarily, County roads) set buildings back at least 83 feet from the centerline of the road.

b. Where community water supply and sewer are used, one-half lot area and smaller bordering yards are permitted. Lot: 100 feet front x 150 feet depth. Yards: 30 feet front x 20 feet sides x 50 feet rear.

c. Accessory farm buildings (silos, barns, etc.) are exempt from height limits.

d. Requires a special use permit issued by the Planning Board.

e. A landscaped screening zone at least 15 feet wide shall be maintained by the owner of those sides of his lot that adjoin any residential property owned by another party.

f. Each mobile dwelling site shall connect to an access road within the mobile dwelling park, and the front yard of each lot shall be measured from the edge of this access road.

g. Upon the issuance of a special permit by the Planning Board, not more than two units of supplementary housing for relatives or hired hands employed by the farm; each unit must be provided with an adequate sewage disposal system, does not require separate lots.

h. The minimum setback distance between each production line commercial wind power electricity generation unit (wind turbine tower) and: all surrounding property lines, overhead utility lines, any dwellings, and any other generation units, above-ground transmission facilities, and separate meteorological facilities, shall be equal to no less than 1.5 times the proposed structure height plus the rotor radius. No experimental, home-built, or prototype wind turbines shall be allowed without documentation by the applicant of their maximum probably blade throw distance in the event of failure and determination by the Planning Board of appropriate setback distances on the basis of that documentation.

Section VI.

Local Law 1997-1 is hereby amended to add a new Section 3030 to read as follows:

Section 303 - DISTRICT C

The purpose of this district is to foster the development of the Town's windpower resource while preserving the farmlands and adjoining settlements as compatible adjoining uses.

Section 303.l - PRINCIPAL USES PERMITTED

A. One and two-family dwellings built on a foundation, including modular dwellings.

B. Farms and farm buildings for related agricultural activities

C. Mobile dwellings on individual lots.

Section 303.2 - ACCESSORY USES PERMITTED

A. Same as Section 301.2
B. Home businesses conducted by the residents
C. Accessory buildings necessary to the principal use and which do not include any activity commonly conducted as a separate business.

Section 303.3 - USES REQUIRING A SPECIAL PERMIT

A. Same as Section 301.3
B. Mobile dwelling parks.
C. All retail sales, eating, service and professional establishments
D. Day camps, guest or vacations homes for pay, private clubs and seasonal camps
E. Commercial outdoor recreation such as ski runs, snowmobiles parks, miniature golf courses, driving ranges, race tracks and hunting and fishing preserves.
F. More than one residence structure on a lot for a farm (See note (g) to Table 1).
G. Wind power electricity generation and transmission facilities. (See not (h) to Table 1). -

Section 303.4 - USES PROHIBITED

All other uses prohibited in this district.

Section VII.

Local Law 1997-1 is herby amended to add a new Section 606.31 to read as follows:

Section 606.31- ADDITIONAL STANDARDS FOR GRANTING SPECIAL USE PERMITS FOR WIND POWER ELECTRICITY GENERATION AND TRANSMISSION FACILITIES

No special use permit shall be granted for commercial wind power electricity Generation and/or transmission facilities unless it is determined by the Planning Board that the proposed use meets all of the following criteria, in addition to those general criteria listed in Section 606.3:

A. No individual tower facility shall be installed in any location along the major axis of an existing microwave communications link where its operation is likely to produce electromagnetic interference in the link's operation.

B. No individual tower facility shall be installed in any location where its proximity with existing fixed broadcast, retransmission, or reception antenna (including residential reception antenna) for radio, television, or wireless phone or interference with signal transmission or reception.

C. Use of nighttime, and overcast daytime condition, stroboscopic lighting to satisfy tower facility lighting requirements for the Federal Aviation Administration shall be subject to on-site field testing before the Planning Board as a prerequisite to that Board's approval with specific respect to Section 606.3(D) as it applies to existing residential uses within 2000" of each tower for which such strobe lighting is proposed.

D. No individual tower facility shall be installed in any location that would substantially detract from or block view of a portion of a recognized scenic viewshed, as viewed from any public road right-of-way or publicly owned land within the Town of Fenner, that extends beyond the border of the Town of Fenner.

E. Individual wind turbine towers shall be located with relation to property lines so that the level of noise produced during wind turbine operation shall not exceed 50 dbA, measured at the boundaries of all the closest parcels that are owned by non-site owners and that abut either the site parcel(s) or any other parcels adjacent to the site parcel held in common by the owner of the site parcel as those boundaries exist at the time of special use permit application.

F. No wind turbines shall be permitted that lack an automatic braking, governing, or feathering system to prevent uncontrolled rotation, overspeeding, and excessive pressure on the tower structure, rotor blades, and turbine components.

G. The minimum distance between the ground and any part of the rotor blade system shall be thirty (30) feet.

H. All power transmission lines from the wind generation electricity generation facilities to on-site substations shall be underground.

I. Procedures acceptable to the Planning Board for emergency shutdown of power generation units shall be established and posted prominently and permanently on at least one location on the road frontage of each individual unit site.

J. Prior to issuance of a Building Permit, the applicant shall provide the Town proof, in the form of a duplicate insurance policy or a certificate issued by an insurance company, of liability insurance, of a level to be determined by the Town Board in consultation with the Town's insurer, t cover damage or injury which might result from the failure of tower or towers or any other part(s) of the generation an transmission facility.

Section VIII.

Local Law 1997-1 is hereby amended to add a new Section 606.41 to read as follows:

Section 406.41 SUBMISSION OF ADDITION SUPPORTING DATA FOR SITE PLAN OF WIND POWER ELECTRICITY GENERATION AND TRANSMISSION FACILITIES

In addition to the site plan material listed in Section 606.4, the following material shall be submitted to the Planning Board for commercial wind power electricity generation and/or transmission facilities:

A. Digital elevation model-based project visibility map showing the impact of topography upon visibility of the project from other locations, to a distance radius of three miles from the center of the project. Scale used shall depict 3-mile radius as not smaller than 2.7 inches, and the base map shall be a published topographic map showing cultural features.

B. No fewer than four and no more than the number of proposed individual wind turbines plus three color photos, no smaller than 3”x5” taken from locations with a 3-mile radius from it an to be selected by the Planning Board, and computer-enhanced to simulate the appearance of the as-built above ground site facilities as they would appear from these locations.

Section IX

This local law shall take effect immediately upon filing with the Secretary of State.

LOCAL LAW NO. **2001-1**
OF THE TOWN OF FENNER

A LOCAL LAW TO AMEND
THE TOWN OF FENNER
LAND USE LOCAL LAW NO. 1997-1

Section I.

Section 201, subsection "C", of Local Law 1997-1, as previously amended, is hereby amended to read as follows:

C. DISTRICT C. (SECTION 303)

District C shall consist of all the lands within the following tax map parcels, exclusive of any lands within the "A" zone as defined in subsection "A" of this Section 201, as said parcels are configured as of the date of adoption of this local law.

Tax Map Numbers:	Owners:
78.-l-38.1	Lloyd and Susan Lovely
78.-l-37.1	Robert Toole & William Larkin
78.-1-37.2	Philip H. Gott, Jr.
78.-1-29	Town of Fenner
78.-1-28.1	Town of Fenner
78.-1-28.2	Richard K. Foringer
78.-1-28.3	Richard K. Foringer
78.-1-28.23	Anthony Seitz
78.-1-28.22	Charles Seager
78.-1-28.21	Robert Butler
78-1-27	Kenneth Wilkinson
69.-1-16	Beryl Pratt
69.-1-36	Harold Geiger
69.-1-36.1	Harold Geiger, Jr.
69.-1-37	Robert Toole & William Larkin
69.-1-41	Alice Ross
69.-1-42	Joseph Balenski
70.-1-1	Russell Stone
70.-1-3	Russell Stone
70.-1-21	Russell Stone
70-.1-22	Scott & Donna Griffin
70.-1-23.11	Scott & Donna Griffin
70.-1-23.12	Scott & Donna Griffin
70.-1-27	Russell Stone
69.00-1-35	Braun (east of Nelson Road only)
69.00-1-40.11	Toole
70.00-1-24.22	Jacek
70.00-1-24.211	Kutzuba
70.00-1-24.212	Kutzuba
70.00-1-26.1	Griffin
70.00-1-33	Mugglin
70.00-1-34.5	Griffin
70.00-1-34.6	Jones
70.00-1-35.2	Roberts
70.00-1-47.1	Parker
79.00-1-1	Cole
79.00-1-1.2	Cole
79.00-1-1.3	Cole
79.00-1-1-2	Cole
79.00-1-12.1	Roberts
79.00-1-17	Brown
79.00-1-18.11	Brown

Section II.

The "Land Use Map" referred to in Section 202 of Local Law 1997-1 and attached to Local Law 1997-1 as "Appendix B" is herby amended to designate the lands described in Section I of the local law as within "District C".

Section III

The "Land Use Schedule" referred to in Section 203 of Local Law 1997-1 and included in Local Law l997-1 as "Table 1" and the "Notes for Table 1" are hereby amended by amending note "h" of said "Notes for Table 1" to read a follows:

h. The minimum setback distance between each production line commercial wind power electricity generation unit (wind turbine tower) and: all surrounding property lines, overhead utility line, any dwelling, and any other generation units, above-ground transmission facilities, and separate meteorological facilities, shall be equal to no less than l.5 times the proposed structure height plus the rotor radius. The property line setback requirement may be reduced by the Planning Board a an incident of special permit review when the Planning Board finds that the following circumstances apply: the property line in questions a) separates two properties that are both in the "C" District, and b) either , i) both properties on each side of the boundary line in question will have electricity generation or transmission facilities constructed on them as part of the project under review, or ii) the owner of the property for which the reduced setback is sought executes and presents for recording a development easement satisfactory to the Town in which the reduced setback is consented to, and construction within, and use of the easement area is appropriately restricted.

   No experimental, homebuilt, or prototype wind turbines shall be allowed without documentation by the applicant of their maximum probably blade throw distance in the event of failure and determination by the Planning Board of appropriate setback distances on the basis of that documentation.

Section IV.

This local law shall take effect immediately upon filing with the Secretary of State.

Chapter 1

SECTION 1.25 WIND ENERGY FACILITY SPECIAL USE DEFINITIONS

Alternative Energy – Renewable energy sources, such as wind, flowing water, solar energy and biomass, which create less environmental damage and pollution than fossil fuels, and offer an alternative to nonrenewable resources.

Ambient – Ambient is defined as the sound pressure level exceeded 90% of the time or L90.

ANSI – American National Standards Institute.

County Commissioners – The Gratiot County Board of Commissioners, Gratiot County Michigan.

County Zoned Townships – Shall mean Elba, Hamilton, Lafayette, Newark, North Star & Sumner.

db(A) – The sound pressure level in decibels. Refers to the "a" weighted scale defined by ANSI. A method for weighting the frequency spectrum to mimic the human ear.

Decibel – The unit of measure used to express the magnitude of sound pressure and sound intensity.

FAA – The Federal Aviation Administration.

Hub Height – When referring to a Wind Energy System, the distance measured from ground level to the center of the turbine hub.

Hub height is defined as the height from the Ground Level (GL) at which the hub of the windmill or the hub of the propeller blades of the wind energy generator is situated.

IEC – International Electro Technical Commission. The IEC is the leading global organization that prepares and publishes international standards for all electrical, electronic and related technologies.

ISO – International Organization for Standardization. ISO is a network of the national standards institutes of 156 countries.

Met Tower – A meteorological tower used for the measurement of wind speed.

Michigan Tall Structure Act (M.C.L. 259.481 and following) – Governs the height of structures in proximity to airport related uses and is included as a standard in the Article by reference.

Habitable Structure – Any structure usable for living or business purposes, which includes but is not limited to working, sleeping, eating, cooking, recreation, office, office storage, or any combination thereof. An area used only for storage incidental to a residential use, is not included in this definition.

Non-Participating Parcel – Any parcel of property in the County not within the Wind Energy Overlay District.

On Site Use Wind Energy Systems – This system is intended to primarily serve the needs of the consumer, and is considered an accessory building.

Planning Commission – The Gratiot County Planning Commission.

Rotor – An element of a wind energy system that acts as a multi-bladed airfoil assembly, thereby extracting through rotation, kinetic energy directly from the wind.

SCADA Tower – A freestanding tower containing instrumentation such as anemometers that is designed to provide present moment wind data for use by the supervisory control and data acquisition (SCADA) system.

Shadow Flicker – Alternating changes in light intensity caused by the moving blade of a wind energy system casting shadows on the ground and stationary objects, such as a window in a dwelling.

Sound Pressure – Average rate at which sound energy is transmitted through a unit area in a specified direction. The pressure of the sound measured at a receiver.

Sound Pressure Level – The sound pressure mapped to a logarithmic scale and reported in decibels (dB).

Tip Height – When referring to a Wind Energy System, the distance measured from ground level to the furthest vertical extension of the rotor.

Utility Grid Wind Energy Systems – This system is designed and built to provide electricity to the electric utility grid.

Wind Energy Conversion Facility, (WECF) or Wind Energy Facility – An electricity generating facility consisting of one or more wind turbines under common ownership or operation control, and includes substations, MET Towers, cables/wires and other buildings accessory to such facility, whose main purpose is to supply electricity to off-site customers.

Wind Energy Facility Site Permit – A permit issued upon compliance with the standards enunciated in this Section

Wind Energy Overlay District – Districts created by the Gratiot County Board of Commissioners upon receiving a recommendation from the Planning Commission, by identifying specific areas within the County best situated for development of wind energy facilities. This District will be defined by the Gratiot County Wind Energy Overlay District Map, as approved by the Gratiot County Planning Commission.

Wind Energy Overlay District Map – This will be a Map showing the areas that are considered to be acceptable siting locations for Wind Energy Facilities. This overlay Map will be created and approved by the Gratiot County Planning Commission. This Map will also include exclusionary zones that are considered to be unsuitable for location of these facilities.

Wind Energy System – A wind energy conversion system which converts wind energy into electricity through the use of a wind turbine generator and includes the turbine, blades, and tower as well as related electrical equipment. This does not include wiring to connect the wind energy system to the grid.

Wind Site Assessment – An assessment to determine the wind speeds at a specific site and the feasibility of using that site for construction of a wind energy syste*m.*

Chapter 14

SECTION 14.4 SITE PLAN REVIEW

D. Wind Energy Facility Special Use Site Plan Review Required

1. Wind Energy Conversion Facilities shall not be located, constructed, erected, altered, or used without first obtaining a Wind Energy Facilities Permit pursuant to this Section. The wind Energy Facilities Site Plan must be reviewed and approved by the Planning Commission pursuant to standards contained herein. An applicant proposing a Wind Energy Facility must submit the following site plan materials:

a. Company contact information (telephone numbers and e-mail addresses), including name of company, name of project, key company contacts with titles, EIN (Employer Identification Number)

b. A narrative describing the proposed Wind Energy Facility, including an overview of the project

c. Site plan (GIS shape file overlay, electronic file and paper copy) of the property showing existing and proposed features such as buildings, structures, roads (right of ways), applicable utility easements, county drains, land use, zoning district, ownership of property, location of proposed turbine towers (with required setbacks, exclusion zones and non-participating properties), underground and overhead wiring (including depth underground), access roads (including width), substations and accessory structures

d. Details or drawings shall show features in the design of a typical tower and its base, that upon removal of said tower will allow restoration of the soil at the site to a depth of 4 feet pursuant to Chapter 16 Section 7.

e. Anticipated construction date and anticipated completion date

f. The lessor must acknowledge the fact in writing that the decommissioning process poses some risk of the concrete bases remaining in place, if the responsible party (lessee) was unable to properly remove the bases as required in this ordinance. This acknowledgement is to be submitted with the application package and can be in the form of the actual lease language that has been signed by the lessor or an "Acknowledgement Letter" that documents this understanding and has been signed by the lessor.

g. The applicant shall post a performance bond or equivalent financial instrument for decommissioning. The bond shall be in favor of Gratiot County and may be provided jointly as a single instrument for multiple Townships within a single wind farm, provided that any such single instrument shall be an amount of at least $1 million and shall contain a replenishment obligation.

2. Application Material. The following shall be included and/or be utilized as standards when preparing, submitting and reviewing an application for a Wind Energy Facility.

a. Applicant shall show evidence of compliance with applicable statutes and County ordinances including, but not limited to:

i. Part 31 Water Resources Protection (M.C.L.324.3101 et seq.),
ii. Part 91 Soil Erosion and Sedimentation Control (M.C.L. 324.9101 et seq.), and the corresponding County ordinance.
iii. Part 301 Inland Lakes and Streams (M.C.L. 324.30101 et seq.),
iv. Part 303 Wetlands (M.C.L. 324.30301 et seq.),
v. All other applicable laws and rules in force at the time of Application

b. *Visual Appearance, Lighting, Power lines*. The applicant shall use measures to reduce the visual impact of wind turbines to the extent possible, utilizing the following:

i. Wind turbines shall be mounted on tubular towers, painted a non-reflective, non-obtrusive color. The appearance of turbines, towers and buildings shall be maintained throughout the life of the wind energy facility (i.e., condition of paint, signs, landscaping, etc).

ii. Wind turbines and meteorological towers shall not be artificially lighted, except to the extent required by the FAA or other applicable authority, or otherwise necessary for the reasonable safety and security thereof.

iii. Wind turbines shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the Wind Energy Facility.

iv. The electrical collection system shall be placed underground at a depth designed to accommodate the existing agricultural land use to the maximum extent practicable. The collection system may be placed

overhead from substations to points of interconnection to the electric grid or in other areas as necessary.

3. Setbacks, Separation and Security. The following setbacks and separation requirements shall apply to all wind turbines within a Wind Energy Facility.

a. Occupied Buildings: Each wind turbine shall be set back from the nearest residence, school, hospital, church or public library, or any other occupied buildings a distance no less than the greater of (a) two (2) times its Hub Height, or (b) one thousand (1,000) feet.

b. Shadow flicker minimization: Wind turbines shall be placed such that shadow flicker to any occupied buildings occurs no more than 30 hours per year.

c. Property line setbacks: Except a set forth in this section, wind turbins shall not be subject to a property line setback. Wind turbines and access roads shall be located so as to minimize the disruption to agricultural activity and, therefore, the location of towers and access routes is encouraged along internal property lines. Wind turbines shall not be located within 1.5 times Hub Height of the property line of a Non-Participating Parcel.

d. Boundaries with non participating parcels: Wind turbins shall not be located within 1.5 times Hub Height of the property line of a non-participating parcel.

e. Public roads: Each wind turbine shall be set back from the nearest public road a distance no less than 400 feet or 1.5 times its Hub Height, whichever is greater, determined at the nearest boundary of the underlying right-of-way for such public road.

f. Railroads & “Rails to Trails”: Each wind turbine shall be set back from the nearest Railroad or “Rails to Trails” a distance no less than 400 feet or 1.5 times its Hub Height, whichever is greater, determined at the nearest boundary of the underlying right-of-way for such Railroad & Rails to Trails”.

4. Compliance with Wind Energy Site Permit: Following the completion of constructions, the applicant shall certify that all construction is completed pursuant to the Wind Energy Site Permit. (GIS overlay)

5. Wind Turbine/Tower Height: The applicant shall demonstrate compliance with the Michigan Tall Structure Act (MCL 259.481 and following), FAA guidelines, and local airport zoning as part of the approval process.

6. Noise: Wind Energy Facilities shall not exceed 55 db(A) at the habitable structure closest to the wind energy system. This sound pressure level may be exceeded during short-term events such as utility outages and/or severe wind storms. If the ambient sound pressure level exceeds 55 dB(A), the standard shall be ambient dB(A) plus 5 dB(A).

7. Minimum Ground Clearance: The blade tip of any Wind turbine shall, at its lowest point, have ground clearance of not less than seventy five (75) feet.

8. Signal Interference: No large scale Wind Energy Facility shall be installed in any location where its proximity with existing fixed broadcast, retransmission, or reception antennas for television, radio, or wireless phone or other personal communication systems would produce electromagnetic interference with signal transmission or reception.

9. Safety

a. All collection system wiring shall comply with all applicable safety and stray voltage standards.

b. Wind turbine towers shall not be climbable on the exterior.

c. All access doors to wind turbine towers and electrical equipment shall be lockable.

d. Appropriate warning signs shall be placed on wind turbine towers, electrical equipment, and Wind Energy Facility entrances.

e. Appropriate signage for emergency contact information shall be located at the wind turbine tower.

10. Transportation: Submit a copy of a proposed transportation plan to be used by construction and delivery vehicles. Approval of appropriate authorities required prior to construction;

2.1 Application Fee. An applicant for a Wind Energy Facility shall remit a fee in the amount specified in the approved schedule adopted by resolution of the County Board of Commissioners. This schedule shall be based on the cost to the County of the review, which may be adjusted from time to time.

Chapter 16

SECTION 16.7 SPECIFIC LAND USE STANDARDS

QQ. Wind Energy Facility

1. Wind Energy Facility Special Use Purpose and Intent

The purpose of this Article is to provide a regulatory scheme for the designation of properties suitable for the location, construction and operation of Wind Energy Conversion Facilities (Wind Energy Facilities) in Gratiot County, in an effort to protect the health, welfare, safety, and quality of life of the general public, and to ensure compatible land uses in the vicinity of the areas affected by wind energy facilities. A Wind Energy Facility Overlay District shall be considered a map amendment, wherein lands so classified shall become pre-qualified for a Wind Energy Facility with construction of such facility approved pursuant to Chapter 14 Wind Energy Facility Site Plan review portion of the Gratiot County Zoning Ordinance. It is further recognized that a Wind Energy Facility Overlay District is intended as an agricultural preservation measure. This shall be applicable for wind turbines with a total height greater than 200 feet.

2. Regulatory Framework

2.1 Zoning

A Wind Energy Facility may be constructed on land that is within a Wind Energy Facility Overlay District on the official zoning map for the County, subject to provisions and standards of the Zoning Ordinance, Wind Energy Facility Site Plan Review and other appropriate Approvals.

2.2 Principal or Accessory Use

A Wind Energy Facility and related accessory uses may be considered either principal or accessory uses. A different existing use or an existing structure on the same parcel shall not preclude the installation of a Wind Energy Facility or a part of such facility on such parcel. Wind Energy Facilities that are constructed and installed in accordance with the provisions of this Section shall not be

deemed to constitute the expansion of a non-conforming use or structure. Wind Energy Facilities shall be reviewed and approved pursuant to the Zoning Ordinance.

2.3 Overlay District

After designation as a Wind Energy Overlay District, new uses within the "overlay" area shall be limited to those uses identified within the applicable zoning district and Wind Energy Facilities, subject to any additional standards of this Section.

3. APPLICABILITY

The requirements in this ordinance shall apply to all Wind Energy Conversion Facilities, which shall be permitted as a special use in a Wind Energy Facility's Overlay District. Wind Energy Facilities Site Plan Review standards shall be used when reviewing any application for a wind energy facility.

4. CERTIFICATION

Any approval for Wind Energy Facilities shall require the applicant to provide a post-construction certification that the project complies with applicable codes and industry practices. Applicant shall provide as-built GIS shape file, electronic file, and paper site plan.

5. INSPECTIONS

The applicant's maintenance and inspection records shall be generated annually and are subject to audit by the County. Inspection Reports shall contain current contact information and be updated whenever the contact information changes.

6. DECOMMISSIONING

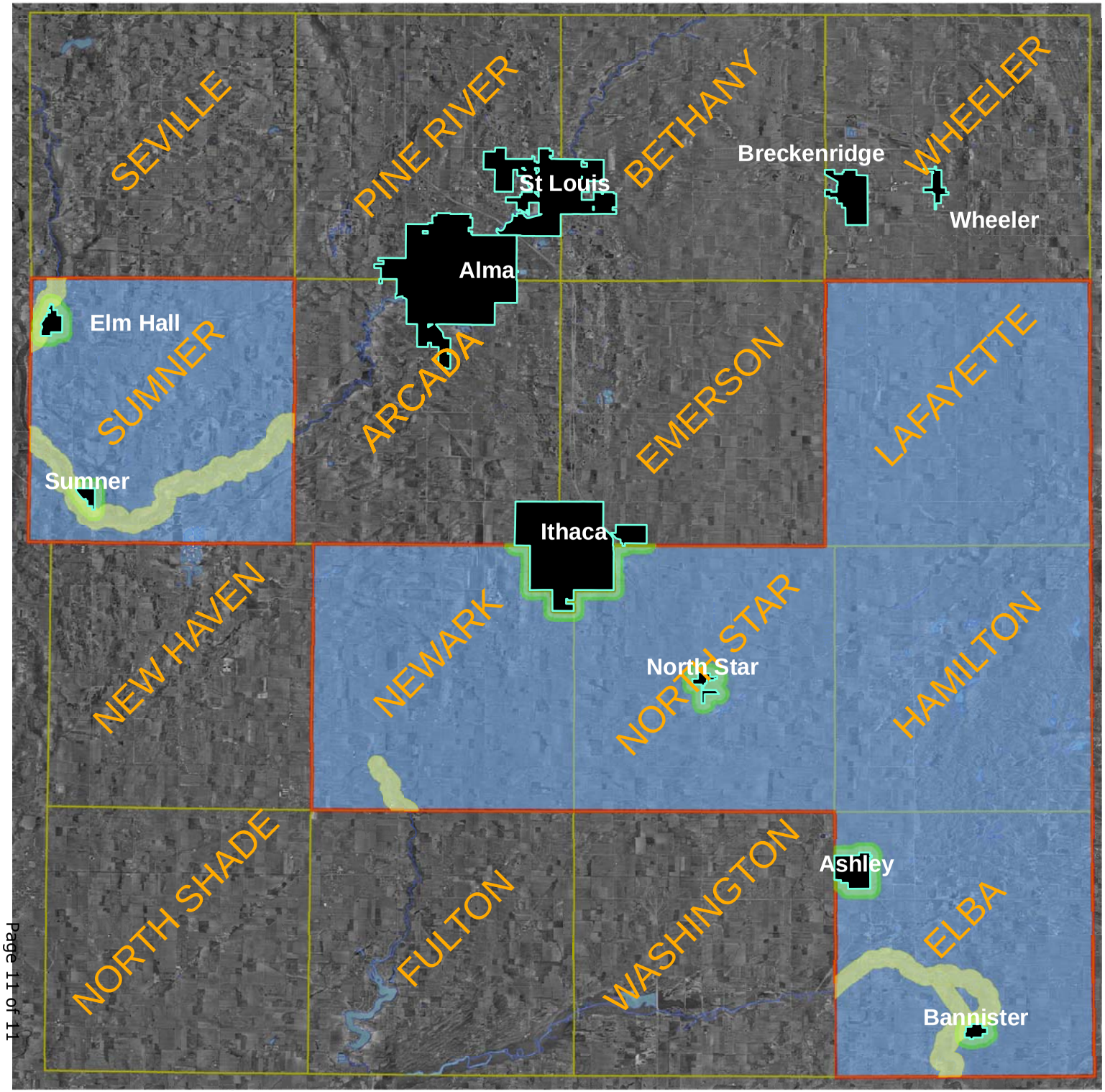
The applicant shall post a performance bond or equivalent financial instrument for decommissioning. The bond shall be in favor of Gratiot County and may be provided jointly as a single instrument for multiple Townships within a single wind farm, provided that any such single instrument shall be in an amount of at least $1 million and shall contain a replenishment obligation

The applicant shall submit a plan describing the intended disposition of the alternative energy project at the end of its useful life and shall describe any agreement with the landowner regarding equipment removal upon termination of the lease. Within 12 months of any tower or turbine not operating, the applicant/owner must submit a plan to the Township concerning the status of the wind power project and steps that shall be taken to either decommission the tower or turbine, or to achieve renewed Commercial Operation. Any tower/turbine left unused or inoperable for over 24 months would be

deemed to be disposed of by developer/applicant. The land must be returned to its original state. Concrete bases will be removed four feet below ground level with appropriate drainage and filled with like soil that was removed.

Gratiot County Wind Energy Overlay District Map

FINAL DRAFT



Legend

- Population Centers
- 1000' River Exclusion Zone
- 1000' Pop. Center Exclusion Zone
- Wind Energy Overlay District

Gratiot County, Michigan

N

(o) All storage shall be in the rear yard and shall be completely screened with an obscuring wall or fence, not less than five (5) feet high, or with a chain link type fence and protective screening (plantings) (see Section 14.09 of this Ordinance) so as to obscure all view from any adjacent residential or business district or from a public street or road.

(p) In any R district, the required front yard setback may be reduced in established subdivisions (or a group of lots of record) so as to be in balance with existing residential structures within 500 feet.

ARTICLE X.
HURON COUNTY WIND ENERGY CONVERSION FACILITY OVERLAY ZONING ORDINANCE

Revised

ADOPTED BY HURON COUNTY BOARD OF COMMISSIONERS, TUESDAY, MAY 11, 2010
RESOLUTION IN ORDINANCE FORM NO. 96C, ZA 2010 - 01 WITH EFF. DATE JUNE 1, 2010

SECTION 1. PURPOSE AND INTENT

The purpose of this Article is to provide a regulatory scheme for the designation of properties suitable for the location, construction and operation of Wind Energy Conversion Facilities (Wind Energy Facilities) in Huron County, to protect the health, welfare, safety, and quality of life of the general public, and to ensure compatible land uses in the vicinity of the areas affected by wind energy facilities. A Wind Energy Facility Overlay District shall be considered a map amendment, wherein lands so classified shall become pre-qualified for a Wind Energy Facility with construction of such facility approved pursuant to Section 5 Wind Energy Facility Site Plan Review, of this Article. It is further recognized that a Wind Energy Facility Overlay District is intended as an agricultural preservation measure.

SECTION 2. DEFINITIONS

As used in this Article, the following terms shall have the meaning indicated:

Board of Commissioners shall mean the Huron County Board of Commissioners.

Commission shall mean the Huron County Planning Commission.

County (Township) shall mean the County of Huron.

FAA shall mean the Federal Aviation Administration.

Hub Height shall mean, when referring to a Wind Turbine, the distance measured from ground level to the center of the turbine hub.

MET Tower shall mean a meteorological tower used for the measurement of wind speed.

Michigan Tall Structure Act (Act 259 of 1959) shall govern the height of structures in proximity to airport related uses and is included as a standard in this Article by reference.

Non-participating parcel MEANS A PARCEL OF REAL PROPERTY WHICH IS NOT UNDER LEASE OR OTHER PROPERTY AGREEMENT WITH A WIND ENERGY CONVERSION FACILITY (WECF) OWNER/OPERATOR.

Participating parcel means a parcel of real property which is under lease or other property agreement with a Wind Energy Conversion Facility (WECF) owner/operator.

Wind Energy Conversion Facility (WECF) or Wind Energy Facility shall mean an electricity generating facility consisting of one or more wind turbines under common ownership or operation control, and includes substations, MET Towers, cables/wires and other buildings accessory to such facility, located on private land which is under lease or other property agreement with a WECF owner/operator, whose main purpose is to supply electricity to off-site customers(s). It includes substations, MET towers, cables and wires and other buildings accessory to such facility.
1
Wind Energy Facility Site Permit is a permit issued upon compliance with standards of this Article.

Wind Energy Facility Site Plan Review is the process used to review a proposed Wind energy Facility.

Wind Energy Overlay Districts are districts created by the Huron County Board of Commissioners, upon receiving a recommendation of the Planning Commission, by identifying specific areas within the Agricultural District best situated for development of wind energy facilities and adopting specific provisions that apply in that area in addition to other provisions of the zoning ordinance.

Wind Turbine shall mean a wind energy conversion system which converts wind energy into electricity through the use of a wind turbine generator, and includes the turbine, blade, tower, base and pad transformer, if any; provided that such a system shall only be a wind turbine for purposes of this Article if it both has a total height greater than 150 feet and nameplate capacity of greater than 100 kilowatts.

SECTION 3. REGULATORY FRAMEWORK

3.1 Zoning

A Wind Energy Facility may be constructed on land that is zoned Agricultural and within an area designated as a Wind Energy Facility Overlay District on the official zoning map for the County, subject to provisions and standards of Section 5 Wind Energy Facility Site Plan Review of this Article.

3.2 Principal or Accessory Use

A Wind Energy Facility and related accessory uses may be considered either principal or accessory uses. A different existing use or an existing structure on the same parcel shall not preclude the installation of a Wind Energy Facility or a part of such facility on such parcel. Wind Energy Facilities that are constructed and installed in accordance with the provisions of this Article shall not be deemed to constitute the expansion of a nonconforming use or structure. Wind Energy Facilities shall be reviewed and approved pursuant to Section 5 of this Article.

After designation as a Wind Energy Overlay District, new structures and uses within the "overlay" area shall be limited to those uses identified within Article IV. Agricultural District and wind energy facilities, subject to any additional standards of this Article.

SECTION 4. 0 APPLICABILITY

A Wind Energy Conversion Facility (WECF) or Wind Energy Facility (WEF) shall be permitted in Agricultural Districts with a Wind Energy Facility Overlay District Classification. Wind Energy Facility Site Plan Review standards shall be used when reviewing an application for wind energy facility permit.

SECTION 5.0 WIND ENERGY FACILITIES SITE PLAN REVIEW PROCEDURE

The following process shall be utilized when reviewing an application for a Wind Energy Facility Permit: Within an Agricultural District, a Wind Energy Facility Overlay District shall be created based on "attributes" and "limitations" identified in the Huron County MasterPlan. A "Wind Energy Overlay District" classification is a prerequisite to developing a Wind Energy Facility. It is the intent of this "overlay district" to identify agricultural land eligible for commercial, large-scale wind energy conversion facilities and, at the same time, provide for maximizing and preserving agricultural activity.

5.1 Site Plan Review Required. Wind Energy Conversion Facilities shall not be located, constructed, erected, altered, or used without first obtaining a Wind Energy Facilities Permit pursuant to this Article. The Wind Energy Facilities Site Plan must be reviewed and approved by the Huron County Planning Commission pursuant to standards contained herein. A site plan which does not fully comply with the standards of this Article shall be submitted to the Board of Commissioners for further review and possible approval. Modifications of development standards shall be based on a recommendation by the Planning Commission that said modification is in the best interest of the County and the applicant. Where modification of a standard is requested, the Board of Commissioners shall hold a public hearing prior to consideration of a modified site plan. An applicant proposing a Wind Energy Facility must submit the following site plan materials:

1. Survey of the property showing existing features such as contours, large trees, buildings, structures, roads (rights-of-way), utility easements, land use, zoning district, ownership of

property, and vehicular access;

2. Plan(s) showing the location of proposed turbine towers, underground and overhead wiring (including depth underground wiring), access roads (including width), substations and accessory structures;

3. A description of the routes to be used by construction and delivery vehicles and of any road improvements that will be necessary in the County to accommodate construction vehicles, equipment or other deliveries, and an agreement or bond which guarantees the repair of damage to public roads and other areas caused by construction of the Wind Energy Facility;

4. Engineering data concerning construction of the tower and its base or foundation, which must be engineered and constructed in such a manner that upon removal of said tower, the soil will be restored to its original condition to a depth of 3 feet;

5. Anticipated construction schedule; and

6. Description of operations, including anticipated regular and unscheduled maintenance.

5.2 Application Fee : An applicant for a Wind Energy Facility shall remit an application fee to the County in the amount specified in the fee schedule adopted by resolution of the Huron County Board of Commissioners. This schedule shall be based on the cost to the county of the review which may be adjusted from time to time.

5.3 - Application Material. The following shall be included and/or be utilized as standards when preparing, submitting and reviewing an application for a Wind Energy Facility. A site plan which differs from these standards can be approved only upon the review of the Planning Commission and approval of the Board of Commissioners that the modification is in the best interest of the County and applicant.

A. Avian Analysis. The applicant shall submit an avian study to assess the potential impact of proposed Wind Energy Facilities upon bird and bat species. The avian study shall at a minimum report on a literature survey for threatened and endangered species, and any information on critical flyways. The applicant must identify any plans for post-construction monitoring or studies. The analysis should also include an explanation of potential impacts and propose a mitigation plan, if necessary.

B. Visual Appearance; Lighting; Powerlines . The applicant shall use measures to reduce the visual impact of wind turbines to the extent possible, utilizing the following:

1) Wind turbines shall be mounted on tubular towers, painted a non-reflective, non-obtrusive color. The appearance of turbines, towers and buildings shall be maintained throughout the life of the wind energy facility pursuant to industry standards (i.e., condition of exterior paint, signs, landscaping, etc). A certified registered engineer and authorized factory representative shall

certify that the construction and installation of the wind energy conversion system meets or exceeds the manufacturer's construction and installation standards.

2) The design of the Wind Energy Facility's buildings and related structures shall, to the extent reasonably possible, use materials, colors, textures, screening and landscaping that will blend facility components with the natural setting and then existing environment.

3) Wind Energy Facilities shall not be artificially lighted, except to the extent required by the FAA or other applicable authority, or otherwise necessary for the reasonable safety and security thereof.

4) Wind turbines shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the Wind Energy Facility.

5) The electrical collection system shall be placed underground within the interior of each parcel at a depth designed to accommodate the existing agricultural land use to the maximum extent practicable. The collection system may be placed overhead adjacent to County roadways, near substations or points of interconnection to the electric grid or in other areas as necessary.

C. Setbacks, Separation and Security. The following setbacks and separation requirements shall apply to all wind turbines within a Wind Energy Facility; provided, however, that pursuant to Section 5.1 of this Article a reduction to the standard setbacks and separation requirements may be permitted if the intent of this Article would be better served thereby.

1) Inhabited structures: On a participating parcel, each wind turbine shall be set back from the nearest inhabited structure a distance of no less than 1000 feet. Where a wind energy facility is proposed in the vicinity of a non-participating parcel, each wind turbine shall be set back from the nearest residence, school, hospital, church or public library on a non-participating parcel a distance no less than 1320 feet. A lesser setback may be approved pursuant to Section 5.1 of this Article if the intent of this Article would be better served thereby. A reduced setback shall be considered only with written approval from the owner of the inhabited structure. Where a turbine within a Wind Energy Facility is located in the vicinity of a city or village, a setback of 1320 feet from the city/village limits shall be required.

2) Property line setbacks: Excepting locations of public roads (see below), drain rights-of-way and parcels with inhabited structures, wind turbines shall not be subject to a property line setback. Along the border of the Wind Energy Facility Overlay District, there shall be a setback distance equal to two (2) times the Hub Height of the wind turbine. Wind turbines and access roads shall be located so as to minimize the disruption to agricultural activity and, therefore, the location of towers and access routes is encouraged along internal property lines. Where a turbine location is proposed nearer to an internal property line than one and one-half (1.5) times the Hub Height of the wind turbine, an easement shall be established on the abutting parcel(s).

3) Public Roads: Each wind turbine shall be set back from the nearest public road a distance no

less than 400 feet or 1.5 times its Hub Height, whichever is greater, determined at the nearest boundary of the underlying right-of-way for such public road.

4) Communication and electrical lines: Each wind turbine shall be set back from the nearest above-ground public electric power line or telephone line a distance no less than 400 feet or 1.5 times its Hub Height, whichever is greater, determined from the existing power line or telephone line.

5) Tower separation: Turbine/tower separation shall be based on 1) industry standards, 2) manufacturer recommendation, and 3) the characteristics [prevailing wind, topography, etc.] of the particular site location. At a minimum, there shall be a separation between towers of not less than 3 times the turbine (rotor) diameter; and, the Wind Energy Facility shall be designed to minimize disruption to farmland activity. Documents shall be submitted by the developer/manufacturer confirming specifications for turbine/tower separation.

6) Following the completion of construction, the applicant shall certify that all construction is completed pursuant to the Wind Energy Site Permit and, in addition, that appropriate security will be in place to restrict unauthorized access to Wind Energy Facilities.

D. Wind Turbine/Tower Height (Total Height): The total height of a wind turbine shall be the distance to the center of the hub of the wind turbine plus the distance to the tip of the turbine blade at its height point. Generally, the Hub Height shall be limited to 330 feet from existing grade unless modification of this maximum height is approved pursuant to Section 5.1 of this Article. The applicant shall demonstrate compliance with the Michigan Tall Structure Act (Act 259 of 1959, as amended) and FAA guidelines as part of the approval process.

E. Noise

1) On participating parcels, audible noise or the sound pressure level from the operation of a WEF shall not exceed 50 dBA or the ambient sound pressure level plus five (5) dBA, whichever is greater, for more than ten percent (10%) of any hour, measured at any residence. On any non-participating parcel, audible noise or the sound pressure level from the operation of the Wind Energy Facility (WEF) shall not exceed 45 dBA, or the ambient sound pressure level plus five (5) dBA, whichever is greater, for more than ten percent (10%) of any hour, measured at any residence, school, hospital, church or public library existing on the date of approval of any WEF Site Permit. The applicant shall be able to provide sound pressure level measurements from a reasonable number of sampled locations at the perimeter and in the interior of the Wind Energy Facility to demonstrate compliance with this standard.

2) In the event audible noise from the operation of the Wind Energy Facility contains a steady pure tone, the standards for audible noise set forth in subparagraph 1) of this subsection shall be reduced by five (5) dBA. A pure tone is defined to exist if the one-third (1/3) octave band sound pressure level in the band, including the tone, exceeds the arithmetic average of the sound pressure levels of the two (2) contiguous one-third (1/3) octave bands by five (5) dBA for center

frequencies of five hundred (500) Hz and above, by eight (8) dBA for center frequencies between one hundred and sixty (160) Hz and four hundred (400) Hz, or by fifteen (15) dBA for center frequencies less than or equal to one hundred and twenty-five (125) Hz.

3) The ambient noise level absent any and all turbine noise shall be expressed in terms of the highest whole number sound pressure level in dBA, which is exceeded for more than five (5) minutes per hour. Ambient noise levels shall be measured at a building's exterior of potentially affected existing residences, schools, hospitals, churches and public libraries. Ambient noise level measurement techniques shall employ all practical means of reducing the effect of wind-generated noise at the microphone. Ambient noise level measurements shall be performed when wind velocities at the proposed project site are sufficient to allow wind turbine operations, provided that the wind velocity does not exceed thirty (30) mph at the ambient noise measurement location.

4) Any noise level falling between two whole decibels shall be the lower of the two.

5) In the event the noise levels resulting from the Wind Energy Facility exceed the criteria listed above, a waiver to said levels may be approved provided that the following has been accomplished:

a. Written consent from the affected property owner(s) has been obtained stating that they are aware of the Wind Energy Facility and the noise limitations imposed by this Article, and that consent is granted to allow noise levels to exceed the maximum limits otherwise allowed; and

b. If the applicant wishes the waiver to apply to succeeding owners of the property, a permanent noise impact easement must recorded in the Huron County Register of Deeds office which describes the benefitted and burdened properties and which advises all subsequent owners of the burdened property that noise levels in excess of those otherwise permitted by the ordinance may exist on or at the burdened property.

G. Minimum Ground Clearance

The blade tip of any Wind Turbine shall, at its lowest point, have ground clearance of not less than seventy-five (75) feet.

H. Signal Interference

No Wind Energy Facility shall be installed in any location where its proximity with existing fixed broadcast, retransmission, or reception antennas for radio, television, or wireless phone or other personal communication systems would produce electromagnetic interference with signal transmission or reception. NoWind Energy Facility shall be installed in any location along the major axis of an existing microwave communications link where its operation is likely to produce electromagnetic interference in the link's operation.

I. Safety

1) All collection system wiring shall comply with all applicable safety and stray voltage standards.
2) Wind Turbine towers shall not be climbable on the exterior.

3) All access doors to wind turbine towers and electrical equipment shall be lockable.

4) Appropriate warning signs shall be placed on wind turbine towers, electrical equipment, and Wind Energy Facility entrances.

SECTION 6.0 CERTIFICATION. Operation of a wind energy facility shall require certification of compliance; a certification report from the wind facility's owner/operator is required within twelve (12) months of the facility's initial operation (start-up) date. The post-construction certification report shall confirm the project's compliance with provisions of this code as well as all other all applicable laws and conformity with wind industry practices.

SECTION 7.0 INSPECTIONS. The applicant (owner/operator) shall submit annual reports to the Planning Commission or its designated officer confirming continued compliance with applicable county codes or ordinances. This requirements shall not preclude the county from undertaking a separate compliance report, where confirmation of data provided by the facility's operator is desired. The cost of a county-sponsored report shall be reimbursed to the county by the facility's owner/operator through an escrow fund established pursuant to the 'schedule of fees for wind energy facilities', adopted from time-to-time by the Board of Commissioners.

SECTION 7.01 COMPLAINT RESOLUTION. The Michigan Zoning Enabling Act allows a local unit of government to enact through ordinance regulations to achieve specific land management objectives and avert or solve specific land use problems; see MCL 125.3201(3). The Thumb area has been designated as a primary wind zone area and as a result it is anticipated that Huron County will experience substantial growth in wind energy facilities. In light of the foregoing, the County has developed a process for the resolution of complaints unique to wind energy systems. A descripti**on** of a complaint resolution process shall be established by an applicant of a wind energy facility permit as part of its initial application for zoning approval. The process is intended to facilitate resolution of complaints concerning the construction or operation of the wind energy facility from nearby residents and/or property owners. The process may use an independent mediator or arbitrator and shall include a time limit for acting on a complaint. A complaint resolution process approved through a wind energy facility permit shall be prepared utilizing, at a minimum, guidelines which are established by resolution of the Board of Commissioners after recommendation by the Planning Commission; and, said process shall not preclude the county from pursuing any and all appropriate legal action on a complaint.

SECTION 8.0 DECOMMISSIONING. The applicant shall submit a plan describing the intended disposition of the Wind Energy Facilities at the end of their useful life, and shall describe any agreement with the landowner regarding equipment removal upon termination of the lease. A

performance bond or equivalent financial instrument shall be posted in an amount determined by the County (to be utilized in the event the decommissioning plan needs to be enforced with respect to tower removal, site restoration, etc.). The bond shall be in favor of Huron County, and may be provided jointly as a single instrument for multiple townships within a single wind farm, provided that any such single instrument shall be in an amount of at least $1 million and shall contain a replenishment obligation.

ARTICLE XI. P.U.D. PLANNED UNIT DEVELOPMENT (RESIDENTIAL).

Section 11.01 Intent. The intent of this chapter is to provide an optional method for residential land development, which allows for flexibility in the application of the standards governing the type of residential structures permitted and their placement on the property. A planned Unit Development will provide for the development of residential land as an integral unit which incorporates within a single plan the location and arrangement of all buildings, drives, parking areas, utilities, landscaping, and any other improvements or changes within the site. Deviation from the specific site development standards of this Zoning Ordinance may be allowed, so long as the general purposes for the standards are achieved and the general provision of the Zoning Regulations observed. A Planned Unit Development shall be designed to achieve compatibility with the surrounding area, and shall also be designed to encourage innovation and variety in the design, layout, and type of residential development; to achieve economy and efficiency in the use of land, natural resources, and energy; to provide for efficiencies and economies in providing public services and utilities and to encourage the development of more useful open space.

Section 11.02 Definitions. For the purpose of this section the terms and words herein are defined as follows:

Planned Unit Development: A residential development, planned and developed as a unit, under unified control, developed according to comprehensive and detailed plans, including a program providing for the continual maintenance and operation of such improvements, facilities, and services which will be for the common use of the occupants of the Planned Unit Development.

Common Open Space: Lands within the Planned Unit Development, under the common ownership of all residents in the Planned Unit Development, to be used for park, recreation, or environmental amenity. These lands shall not include public or private streets, driveways, or parking areas. Within these lands only facilities and structures for recreational purposes may be constructed, with the total impervious area of roofs and paving constituting not more than ten (10) percent of the total open space.

Attached Single Family Dwelling: A single family dwelling unit attached to one or more other single family dwelling units by means of a common party wall or by a connecting wall or similar architectural feature such as a garage or carport, and with such dwelling having its own private entrance.

Home Owners Association: An association of all owners of a project organized for the purpose of financing, administering, managing and maintaining the common open space and common property and fa-

ARTICLE III. WIND ENERGY FACILITIES

Sec. 16-43. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Applicant means the person or entity filing an application under this article.

Days means calendar days.

Environmental assessment means a detailed examination of the applicant's proposal and its local environmental context with an emphasis on avoiding, minimizing and mitigating adverse impacts.

Facility operator means the entity responsible for the day-to-day operation and maintenance of the wind energy facility.

Facility owner means the entity having controlling or majority equity interest in the wind energy facility, including its respective successors and assigns.

Nonparticipating landowner means any landowner not under agreement with the facility owner or operator.

Occupied building means a residence, school, hospital, church, public library or other building used for public gatherings that is occupied or in use when the permit application is submitted.

Participating landowner means a landowner under lease or other property agreements with the facility owner or operator pertaining to the wind energy facility.

Public road means an easement or right-of-way dedicated to the public or for private use for vehicular traffic.

Shadow flicker means the visible flicker effect when rotating turbine blades cast shadows on the ground and nearby structures causing the repeating pattern of light and shadow.

Wind energy facility.

(1) The term "wind energy facility" means an electric generating facility, whose main purpose is to supply electricity, consisting of one or more wind turbines and accessory structures and buildings including, but not limited to:

a. Substations;

b. Meteorological towers;

c. Electrical infrastructure;

d. Transmission lines; and

e. Other appurtenant structures and facilities.

(2) The term "wind energy facility" does not apply to roof-mounted or building integrated roof-mounting systems where the overall height of the structure as measured from pre-development grade to the highest point (including the wind energy facility) does not exceed 35 feet and the wind energy facility does not exceed more than ten percent of the total assessed value of the structure at the time of installation.

(3) *Accessory structure* means a structure, which is located on the same parcel of property as the principle structure and the use of which is incidental to the use of the principle structure.

(4) *Wind energy facility, small,* means a single system designed to supplement other electricity sources as an accessory use to existing buildings or facilities, wherein the power generated is used primarily for on-site consumption. A small wind energy conversion system consists of a single wind turbine, a tower and associated control or conversion electronics, which has a total rated capacity of 20 kW or less.

(5) *Wind energy facility, medium,* means a wind energy conversion system consisting of one or more wind turbines, a tower and associated control or conversion electronics, which has a total rated capacity of more than 20 kW, but not greater than 100 kW.

(6) *Wind energy facility, large,* means a wind energy conversion system consisting of one or more wind turbines, a tower and associated control or conversion electronics, which has a total rated capacity of more than 100 kW.

Wind power means the conversion of wind energy into another form of energy.

Wind turbine or *windmill* means a wind energy conversion system that converts wind energy into electricity through the use of a wind turbine generator, and may include a:

(1) Nacelle;

(2) Rotor;

(3) Tower;

(4) Guy wires; and

(5) Pad transformer.

Wind turbine height means the distance measured from the pre-development grade at the center of the tower to the highest point of the turbine rotor or tip of the turbine blade when it reaches its highest elevation.

(Ord. No. 2008-10-01, art. 3, 11-3-2008)

Sec. 16-44. Penalty.

(a) Violations of the provisions of this article or failure to comply with any of its requirements, including violations of any conditions and safeguards established in connection with grants of variances, shall constitute a misdemeanor, punishable by a fine of up to $500.00.

(b) Any act constituting a violation of the provisions of this article or a failure to comply with any of its requirements, including violations of any conditions and safeguards established in connection with the grants of variances, shall also subject the offender to a civil penalty of $100.00 for each day the violation continues up to a maximum of $10,000.00. If the offender fails to pay this penalty within ten days after being cited for a violation, the penalty may be recovered by the county in a civil action in the nature of debt. A civil penalty may not be appealed to the board of commissioners if the offender was sent a final notice of violation and did not take an appeal to the board of commissioners within the prescribed time. Each day that any violation continues after notification by the county manager or by his designee that such a violation exists shall be considered a separate offense for the purpose of the penalties and remedies specified in this section.

(c) This article may also be enforced by any appropriate equitable action, including an injunction or order of abatement.

(d) Any one, all, or any combination of the foregoing penalties and remedies may be used to enforce this article.

(Ord. No. 2008-10-01, art. 11, 11-3-2008)

Sec. 16-45. Title.

This article shall be known as the "Wind Energy Facility Ordinance for Hyde County."

(Ord. No. 2008-10-01, art. 1, 11-3-2008)

Sec. 16-46. Purpose.

The purpose of the article is to provide for the regulation of the construction and operation of wind energy facilities in the county, subject to reasonable conditions that will protect the environment, public health, safety and welfare.

(Ord. No. 2008-10-01, art. 2, 11-3-2008)

Sec. 16-47. Permit.

(a) *Required.*

(1) No wind energy facility, or addition of a wind turbine to an existing wind energy facility, shall be constructed in any location within the county including, but not limited to, waters within the boundaries of the county, unless a permit has been issued to the facility owner or operator approving construction of the facility under this article. Permit application of the expansion shall be based on the total rated capacity, including existing facility, but excluding like-kind replacements.

(2) Any physical modification to an existing and permitted wind energy facility that materially alters the size and type of wind turbines by more or other equipment shall require a permit modification under this article. Like-kind replacements made within 90 days of the part of the wind energy facility needing replacement shall not require a permit modification. For the purpose of this subsection, the term "materially alter" means an alteration visible by a person of normal vision from a property line or a public road or an alteration having a cost greater than or equal to five percent of the assessed value of the wind energy facility.

(3) Unless otherwise specified in this article, a permit for a wind energy permit shall be approved by the county manager or his designee.

(b) *Application.*

(1) The permit application shall contain the following:

a. A narrative describing the proposed wind energy facility, including an overview of the project;

b. The proposed total rated capacity of the wind energy facility;

c. The proposed number, representative types and height or range of heights of wind turbines to be constructed; including their generating capacity, dimensions, respective manufacturers and a description of ancillary facilities;

d. Identification and location of the properties on which the proposed wind energy facility will be located;

e. A site plan showing the planned location of all wind turbines, property lines, setback lines, access roads and turnout locations, substations, electrical cabling from the wind energy facility to the substations, ancillary equipment, buildings, transmission and distribution lines. The site plan must also include the location of all structures and properties, demonstrating compliance of the setbacks;

f. Certification of compliance with applicable local, state and federal regulations, such as FAA and FCC regulations;

g. An environmental assessment for large wind energy facilities, which shall be provided for review by the applicant to the agency point of contact and to the state clearinghouse for distribution. The applicant must also present a certification of distribution of the environmental assessment;

h. Other relevant information as may be reasonably requested by the county to ensure compliance with the requirements of this article;

i. Decommissioning plans that describe the anticipated life of the wind power project, the estimated decommissioning costs in current dollars, the method for ensuring that funds will be available for decommissioning and restoration and the anticipated manner in which the wind power project will be decommissioned and the site restored;

j. Documentation of the agreement between the participating landowner and the facility owner/operator of the wind energy facility; and

k. The applicant's signature.

(2) Throughout the permit process, the applicant shall promptly notify the county of any proposed changes to the information contained in the permit application that would alter the impact of the project.

(3) Changes to the approved application that do not materially alter the initial site plan may be adopted administratively.

(c) *Revocation.*

(1) A permit may be revoked by the permit issuing authority (in accordance with the provisions of this section) if the permit recipient fails to develop or maintain the property in accordance with the plans submitted, the requirements of this article or any additional requirements lawfully imposed by the permit issuing board.

(2) Before a variance permit may be revoked all of the notice and hearing and other requirements shall be complied with. The notice shall inform the permit recipient of the alleged grounds for the revocation. The burden of presenting evidence sufficient to authorize the permit issuing authority to conclude that a permit should be revoked for any of the reasons set forth in this section shall be upon the party advocating that position. The burden of persuasion shall also be upon that party. A motion to revoke a permit shall include, insofar as practicable, a statement of the specific reasons or the findings of fact that support the motion.

(3) Before a permit (not including a variance permit) may be revoked, the county manager or his designee shall give the permit recipient ten days' notice of the intent to revoke the permit and shall inform the recipient of the alleged reasons for the revocation and of his right to obtain an informal hearing on the allegations. If the permit is revoked, the county manager or his designee shall provide to the permittee a written statement of the decision and the reasons therefor.

(4) No person may continue to make use of land or buildings in the manner authorized by any permit after such permit has been revoked in accordance with this section.

(Ord. No. 2008-10-01, arts. 4, 5, 12, 11-3-2008)

Sec. 16-48. Setbacks

(a) Minimum setback requirements table.

Hyde County, North Carolina
Minimum Setback Requirements

TABLE INSET:

Wind Energy Facility Type	Occupied Buildings on Participating Landowner Property	Occupied Buildings on Non-Participating Landowner Property	Property Lines on Participating Landowner Property	Public Roads
Small	0.0	1.5	1.1	1.5
Medium	1.1	2.0	1.5	1.5
Large	1.1	2.5	1.5	1.5

(b) The setback is calculated by multiplying the required setback number by the wind turbine height and measured from the center of the wind turbine base to the property line, public road or nearest point on the foundation of an occupied building. Setback provisions may be waived if the following conditions are met:

(1) Property owners may waive the setback requirements for property lines and occupied buildings on the participating landowner property or nonparticipating landowner property by signing a waiver that sets forth the applicable setback provisions and the proposed changes;

(2) The written waiver shall:

a. Notify applicable property owners of the setback required by this article;

b. Describe how the wind energy facility is not in compliance; and

c. State that consent is granted for the wind energy facility to waive the setback as required by this article; and

(3) Any such waiver shall be signed by the applicant, the participating landowners or nonparticipating landowners, and recorded in the deeds office where the property is located.

(Ord. No. 2008-10-01, art. 6, 11-3-2008)

Sec. 16-49. Noise and shadow flicker.

This section shall only apply to large wind energy facilities. Noise and shadow flicker issues for small and medium wind energy facilities are addressed by setbacks, or will be addressed by an existing noise ordinance.

(1) Audible sound from a large wind energy facility shall not exceed 55 dBA, as measured at any occupied building of a nonparticipating landowner.

(2) Shadow flicker at any occupied building on a nonparticipating landowner's property caused by a large wind energy facility located within 2,500 feet of the occupied building shall not exceed 30 hours per year.

(3) Noise and shadow flicker provisions may be waived if the following conditions are met:

a. Property owners may waive the noise and shadow flicker provisions of this article by signing a waiver of their rights;

b. The written waiver shall:

1. Notify the applicable property owners of the noise and flicker limits required by this article;

2. Describe how the wind energy facility is not in compliance;

3. State that consent is granted for the wind energy facility to waive the noise and flicker limits as required by this article; and

c. Any such waiver shall be signed by the applicant and the nonparticipating landowners and recorded in the deeds office where the property is located.

(Ord. No. 2008-10-01, art. 7, 11-3-2008)

Sec. 16-50. Installation and design.

(a) The installation and design of the wind energy facility shall conform to applicable industry standards, including those of the American National Standards Institute and shall conform to floodplain and wind zone requirements, plus take into consideration local conditions.

(b) The wind energy facility shall conform to relevant and applicable local, state and national building codes and county ordinances.

(c) Any on-site collector system shall, to the maximum extent possible (as approved by the county), be placed underground.

(d) The visual appearance of wind energy facilities shall at a minimum:

(1) Be a nonobtrusive color such as white, off-white or gray;

(2) Not be artificially lighted, except to the extent required by the Federal Aviation Administration or other applicable authority that regulates air safety; and

(3) Not display advertising (including flags, streamers or decorative items), except for the identification of the turbine manufacturer, facility owner and operator. Such advertising shall not cover more than one-half percent of the visible area of the wind

energy facility. Advertising on or utilizing the blades shall be kept to no more than ten percent of the advertising allowed under this subsection.

(Ord. No. 2008-10-01, art. 8, 11-3-2008)

Sec. 16-51. Decommissioning.

(a) The wind energy facility owner shall have six months to complete the decommissioning of the facility if no electricity is generated for a continuous period of 12 months. The operator of the wind energy facility shall, at the request of the county, provide sworn statements showing the amount of energy generated over a period as specified by the county.

(b) Decommissioning shall include the removal of:

(1) Wind turbines;

(2) Buildings;

(3) Cabling;

(4) Electrical components;

(5) Roads; and

(6) Any other associated facilities down to 36 inches belowgrade.

(c) Disturbed earth shall be graded and reseeded. If the landowner is not the owner or operator of the wind energy facility or does not have an equity interest in the wind energy facility, then the landowner may request in writing that the access roads or other land surface areas not be restored.

(Ord. No. 2008-10-01, art. 9, 11-3-2008)

Sec. 16-52. Fees.

The applicant shall pay a nonrefundable fee upon submission of an application for approval under this article. Such fee shall be established periodically by resolution of the board of commissioners. Additionally, the applicant shall reimburse the county all advertising and other direct expenses prior to final approval of the application by the county.

(Ord. No. 2008-10-01, art. 10, 11-3-2008)

ORDINANCE NUMBER 08-09

Adopted December 8, 2008

WIND ENERGY ORDINANCE

BE IT ORDAINED BY THE BOARD OF JEFFERSON COUNTY COMMISSIONERS OF JEFFERSON COUNTY, IDAHO:

Section 1 Title.

This ordinance may be referred to as the Wind Energy System Ordinance.

Section 2 Authority.

This ordinance is adopted pursuant to authority granted to Jefferson County by Title 67, Chapter 65 of Idaho Code and Article 12, Section 2 of the Idaho Constitution.

Section 3 Purpose.

The purpose of this ordinance is to:

1. Oversee the permitting of wind energy systems.
2. Preserve and protect public health and safety without significantly increasing the cost or decreasing the efficiency of a wind energy system.
3. Ensure that the important environmental features of Jefferson County are protected.

Section 4 Definitions.

In this ordinance:

1. "Administrator" means the Jefferson County Planning and Zoning Administrator.
2. "Board" means the Jefferson County Board of Commissioners.
3. "Building Official" means the Jefferson County Building Official.
4. "Large wind energy system" means a wind energy system that:
   (a) Is used to generate electricity for one or multiple off site customer(s);
   (b) Has a tower height of more than one hundred feet (100').

5. "Meteorological tower" (met tower) is defined to include the tower, base plate, anchors, guy cables and hardware, anemometers (wind indicators), wind direction vanes, booms to hold equipment anemometer and vanes, data logger, instrument wiring, and any telemetry devices that are used to monitor or transmit wind speed and wind flow characteristics over a period of time for either instantaneous wind information or to characterize the wind resource at a given location.

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

7. "Rotor diameter" means the cross section dimension of the circle swept by the rotating blades.

8. "Small wind energy system" means a wind energy system that:

   (a) Is used to generate electricity for private use;

   (b) Has a maximum tower height of one hundred feet (100').

9. "Total height" means the vertical distance from ground level to the tip of a wind generator blade when the tip is at its highest point.

10. "Tower" means the monopole, freestanding, or guyed structure that supports a wind generator.

11. "Wind energy facilities" is defined as an electricity-generating facility consisting of one or more large energy systems under common ownership or operating control that includes substations, met towers, cable/wires and other building accessories to such facility, whose main purpose is to supply electricity to off-site customer(s).

12. "Wind generator" means blades and associated mechanical and electrical conversion components mounted on top of the towers.

Section 5 Standards

A. **Large Wind Energy System** or **Wind Energy Facilities** shall be permitted in an Agricultural Forty Zone (Ag-40) on parcels of land that contain forty (40) acres or more subject to the following requirements:

1. Approval of a Conditional Use Permit.

   (a) The following issues may be considered for a Wind Energy System or Wind Energy Facility:

   The environment.

   The floodplain.

   Wildlife, wildlife corridors, bird migration patterns, and bats.

Endangered species of animals and vegetation.

2. Setbacks. The tower shall be set back a minimum distance equal to its total height from :

(a) Any public road right of way.

(b) Any overhead utility lines.

(c) All property lines.

3. Access

(a) All ground mounted electrical and control equipment shall be labeled or secured to prevent unauthorized access.

(b) The tower shall be designed and installed so as to not provide step bolts or a ladder readily accessible to the public for a minimum height of eight feet (8') above the ground.

4. Electrical Wires. All electrical wires associated with Large Wind Energy Systems , other than wires necessary to connect the wind generator to the tower wiring, the tower to the disconnect junction box, and the grounding wires shall be located underground.

5. Lighting. A Large Wind Energy System shall be artificially light.

6. Appearance, Color, and Finish. The wind generator and tower shall remain painted or finished the color or finish that was originally applied by the manufacturer.

7. Signs. 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 wind energy system visible from any public road shall be prohibited.

8. Code Compliance. A large wind energy system including the tower shall comply with all applicable local construction codes and state / National electrical codes.

9. Utility notification and interconnection. Large Wind Energy Systems that connect to the electric utility shall comply with rules for interconnecting distribution generation facilities. No Wind Energy System shall be installed without a written statement with signature and date from the utility company indicating they have been informed of the customer's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.

10. Met towers shall be permitted under the same standards, permit requirements, restoration requirements, and permit procedures as a Large Wind Energy System.

B. Small Wind Energy Systems shall be a permitted use in all zoning districts with parcels containing one-half (1/2) acre or larger subject to the following:

1. One Small wind energy system may be installed for the first half (1/2) acre and one for each additional two (2) acres per parcel.

2. Setbacks. The tower shall be set back a distance equal to its total height (see Section 4 "Definitions", 7) from:

   (a) Any public road right of ways.

   (b) Any overhead utility lines.

   (c) All property lines.

3. Access.

   (a) All ground mounted electrical and control equipment shall be labeled or secured to prevent unauthorized access.

   (b) The tower shall be designed and installed so as not to provide step bolts of a ladder readily accessible to the public for a minimum height of eight feet (8') above the ground.

4. Electrical Wires. All electrical wires associated with a small wind energy system, other than wires necessary to connect wind generator to the tower wiring, the tower wiring to the disconnect junction box, and the grounding wires shall be located underground.

5. Lighting. A wind tower and generator shall not be artificially lighted unless such lighting is required by the Federal Aviation Administration.

6. Appearance, Color, and Finish. The wind generator and tower shall remain painted or finished the color or finish that was originally applied by the manufacturer, unless other colors or finishes (Colors that blend with the natural landscape or background) approved by the Jefferson County Planning and Zoning Administrator.

7. Signs. All signs, other than the manufacturer's or installer's identification, appropriate with a small wind energy system visible from any public road shall be prohibited.

8. Code Compliance. A small wind energy system including the tower shall comply with all applicable local construction codes and state / National electrical codes.

9. Utility notification and interconnection. Small Wind Energy Systems that connect to the electric utility shall comply with rules for interconnecting distribution generation facilities. No Wind Energy System shall be installed without a written statement with signature and date from the utility company indicating they have been informed of the customer's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.

10. Met towers shall be permitted under the same standards, permit requirements, restoration requirements, and permit procedures as a Small Wind Energy System.

11. Sound. Residential wind energy systems shall not exceed 60 DBA, as measured at the property line. The level, however, may be exceeded during short-term events such as utility outages and/or severe wind storms.

Section 6 Permit Requirements

A. Building Permit. A building permit shall be required for the installation for the installation of a Wind Energy System.

Documentation to be submitted for a building permit.

1. Two Plot Plans which include the following:

   (a) Property lines and dimensions of the property.

   (b) Location, dimensions, and types of existing structures on the property.

   (c) Location of the proposed wind system tower.

   (d) Public roads contiguous with the property.

   (e) Any overhead utility lines.

   (f) Septic, well, drain field, and replacement area.

2. Engineered wind system specifications, including manufacturer and model, rotor diameter, tower height, tower type (freestanding or guyed).

3. Two sets of engineered foundation blueprints or drawings (cross section).

4. Two sets of engineered Tower blueprints or drawings.

5. Recorded warranty deed showing ownership of property (or a letter of approval / lease agreement from the property owner if different than the applicant).

6. Fees. The application for a building permit for a Large or Small Wind Energy System must be accompanied by the proper fees.

7. Expiration. A permit issued pursuant to this ordinance shall expire if:

   (a) The wind energy system is not installed and functioning within 24-months from the date the permit is issued; or,

   (b) The wind energy system is out of service or otherwise unused for a continuous 12-month period.

Section 7 Building Permit Procedure

1. An owner or applicant shall submit the required documentation to the Building Official when applying for a wind energy system.

2. The Building Official shall approve and issue the permit within ten (10) business days of the date the application was submitted to the building department unless additional information is requested by the Building Official to complete the plan review process; and the wind energy system materials meet the requirements of this ordinance.

3. When the building permit is issued the Building Official will return a copy of the stamped / signed sets of the plot plan, and engineered foundation and tower drawings.

4. The owner / applicant shall conspicuously post the building permit number on the premises so as to be visible to the public at all times until construction or installation or the wind energy system is complete and the final building inspection has been approved.

Section 8 Abandonment

1. A wind energy system that is out of service for a continuous 12-month period will be deemed to have been abandoned. The administrator may issue a notice of abandonment to the owner of the wind energy system that is deemed to have been abandoned. The owner shall have the right to respond to the notice of abandonment within 30 days from the notice date. The administrator shall withdraw the notice of abandonment and notify the owner that the notice of abandonment has been withdrawn if the owner provides information that demonstrates the wind energy system has not been abandoned.

2. If the wind energy system is determined to be abandoned, the owner shall remove the wind energy system at the owner's sole expense within three (3) months of the notice date of the notice of abandonment. If the owner fails to remove the wind energy system, the administrator may pursue a legal action to the wind energy system removed at the owner's expense.

Section 9 Violations

It is unlawful for any person to construct, install, or operate a wind energy system or wind energy facility that is not in compliance with:

1. This ordinance.

2. Other County Ordinances / Building Codes, or State and Federal requirements.

3. Any condition contained in a building permit issued pursuant to this ordinance.

4. Wind energy systems installed prior to the adoption of this ordinance are exempt from the requirements of this ordinance, except for the provisions of Section 8 of this ordinance regarding abandonment.

Section 10 Administration and Enforcement

1. This ordinance shall be administered by the Administrator, Building Official, or designee.
2. The Administrator, Building Official or designee may enter any property for which a building permit has been issued under this ordinance to conduct inspections to determine whether the conditions stated in the permit or this ordinance have been met.
3. The Administrator or Building Official may issue orders to abate any violation of this ordinance.
4. The Administrator or Building Official may issue a citation for any violation of this ordinance, other County Ordinances or Building Codes.
5. The Administrator or Building Official may refer any violation of this ordinance to legal counsel for enforcement.

Section 11 Penalties and Severability

1. Any person who fails to comply with any provision of this ordinance or a building permit issued pursuant to this ordinance shall be subject to enforcement and penalties as stipulated in 3.16.2 or the Jefferson County Zoning Ordinance.
2. Nothing in this section shall be construed to prevent the Jefferson County Board of Commissioners from using any other lawful means to enforce this ordinance.
3. The provisions of this ordinance are severable, and the invalidity of any section or other part of this ordinance shall not affect the validity or effectiveness of the remainder of this ordinance.

19.04.452 METEOROLOGICAL (MET) TOWER

"Meteorological (MET) tower" means a structure consisting of a tower and instruments measuring wind speed and ambient weather conditions.

19.04.453 MINERAL EXPLORATION

"Mineral exploration" means exploration by scientific means, in a manner similar to the exploration for petroleum products, for the purpose of determining the existence and extent of commercial mineral deposits.

19.04.456 MINIMUM DISTANCE BETWEEN BUILDINGS

"Minimum distance between buildings" means the distance between the walls of buildings, measured at the nearest point to an adjacent building.

19.04.459 MINISTERIAL DECISION

"Ministerial decision" means a decision requiring the application of the statutes, ordinances, or regulations to the facts as prescribed and involving little or no personal judgment by the public official or decision-making body as to the wisdom or manner of carrying out a project.

19.04.462 MINI-WAREHOUSE

"Mini-warehouse" means a structure containing separate storage spaces of varying sizes leased or rented on an individual basis.

19.04.465 MINOR PLAN MODIFICATION

"Minor plan modification" means a minor change or modification of an approved development plan which is not in conflict with the intent, policy, or expectations of original project approvals.

19.04.468 MOBILEHOME

"Mobilehome" means a structure transportable in one (1) or more sections, designed and equipped to contain not more than two (2) dwelling units to be used with or without a foundation system. "Mobilehome" does not include a recreational vehicle, commercial coach, or factory built housing.

19.04.471 MOBILEHOME ACCESSORY STRUCTURE

"Mobilehome accessory structure" means any awning, cabana, ramada, storage cabinet, storage building, private garage, carport, fence, windbreak, or porch or any residential building or structure established for the use of the occupant of a mobilehome on a lot.

19.04.474 MOBILEHOME PARK

"Mobilehome park" means an area or tract of land where two (2) or more lots are rented or leased or held out for rent or lease to accommodate mobilehomes for human occupancy.

19.04.774 SMALL FOWL

"Small fowl" means birds raised or grown for hobby purposes, show, or racing, normally no larger than a small chicken (e.g., pigeon, parrot, or cockatiel).

19.04.775 SMALL WIND ENERGY SYSTEM

"Small wind energy system" means a wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity that does not exceed the allowable rated capacity under the Emerging Renewables Fund of the Renewables Investment Plan administered by the California Energy Commission and which will be used primarily to reduce on-site consumption of utility power.

19.04.777 SOFFIT

"Soffit" means the horizontal underside of an eave.

19.04.780 SOLID WASTE

"Solid waste" means all putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes.

19.04.783 SPECIFIC PLAN LINE

"Specific plan line" means the designated centerline of any road or highway as adopted by resolution of the Board of Supervisors from which the ultimate right-of-way is determined in accordance with the Circulation Element of the General Plan.

19.04.786 START OF CONSTRUCTION

"Start of construction" means the first placement of permanent construction on a site, such as the pouring of slabs or footings, or any site preparation work, including, but not limited to, leveling and grading.

19.04.789 STOCKYARD

"Stockyard" means an enclosed area where livestock are temporarily confined and fed concentrated food while waiting for shipping to market, slaughter, or resale.

19.04.792 STORY

"Story" means that portion of a building included between the surface of any floor and the surface of the floor next above it, or if there be no floor above it, then the space between such floor and the ceiling next above it.

19.04.891 WATER SYSTEM, SMALL

"Small water system" means a domestic water well and ancillary equipment providing water to ten (10) dwelling units or less.

19.04.894 WATER TREATMENT PLANT

"Water treatment plant" means a plant or facility for treatment or purification of water to make it usable.

19.04.896 WHOLESALE NURSERY

"Wholesale nursery" is a plant nursery where the majority of plants are grown on site and sold in bulk form for the purposes of retail re-sale or for bulk purchase by landscape contractors and commercial landscaping installers, and which is not engaged in selling goods or merchandise to the general public for personal or household consumption.

19.04.897 WILD ANIMAL KEEPING

"Wild animal keeping" means keeping or maintaining any dangerous, wild, carnivorous, or exotic animal that is wild by nature and not customarily domesticated by man so as to live and breed in a tame condition.

19.04.900 WIND-DRIVEN ELECTRICAL GENERATORS, EXPERIMENTAL

"Experimental wind-driven electrical generators" means wind systems that are the first of their kind, and their use constitutes a testing of a new concept or design.

19.04.903 WIND-DRIVEN ELECTRICAL GENERATORS, PRODUCTION

"Production wind-driven electrical generators" means electrical generators that have progressed beyond the prototype stage, and the construction of a significant number on a continuing basis has occurred.

19.04.906 WIND-DRIVEN ELECTRICAL GENERATORS, PROTOTYPE

"Prototype wind-driven electrical generators" means electrical generators that have progressed beyond the experimental stage, and construction of a limited number to test operations in field conditions has occurred.

19.04.907 WINERY, ROUGH

"Rough winery" is a grape crushing and fermentation facility designed to produce rough wine for bulk transport, which does not include heat treatment, filtration, or bottling and which is not open to the general public.

19.08.120 FRONT-YARD SETBACK EXCEPTION

Notwithstanding any of the minimum front-yard setbacks required in all of the E, R-1, R-2, and R-3 Districts, the front-yard minimum setback specified in these districts may be reduced where lots comprising forty percent (40%) or more of the frontage on one (1) side of a street between intersecting streets are developed with buildings having an average front yard with a variation of not more than ten (10) feet. In such cases, no building newly erected or structurally altered may project beyond the average front yard line established by the existing buildings. In making this determination, buildings located more than thirty-five (35) feet from the front property line or buildings facing a side street on a corner lot shall not be counted. In no case shall any building or structure be located within any planned future right-of-way.

19.08.130 LESS RESTRICTIVE USES PROHIBITED

The express enumeration and authorization in this title of a particular class of building, structure, premises, or use in a designated zoning district shall be deemed a prohibition of such building, structure, premises, or use in all zoning districts of more restrictive classification, except as otherwise specified.

19.08.140 LOCATION OF DWELLINGS

Except where otherwise provided for in this title, every dwelling shall face or have frontage upon a street or permanent means of access to a street by way of a public or private easement or passageway other than the alley.

19.08.150 HEIGHT OF BUILDINGS

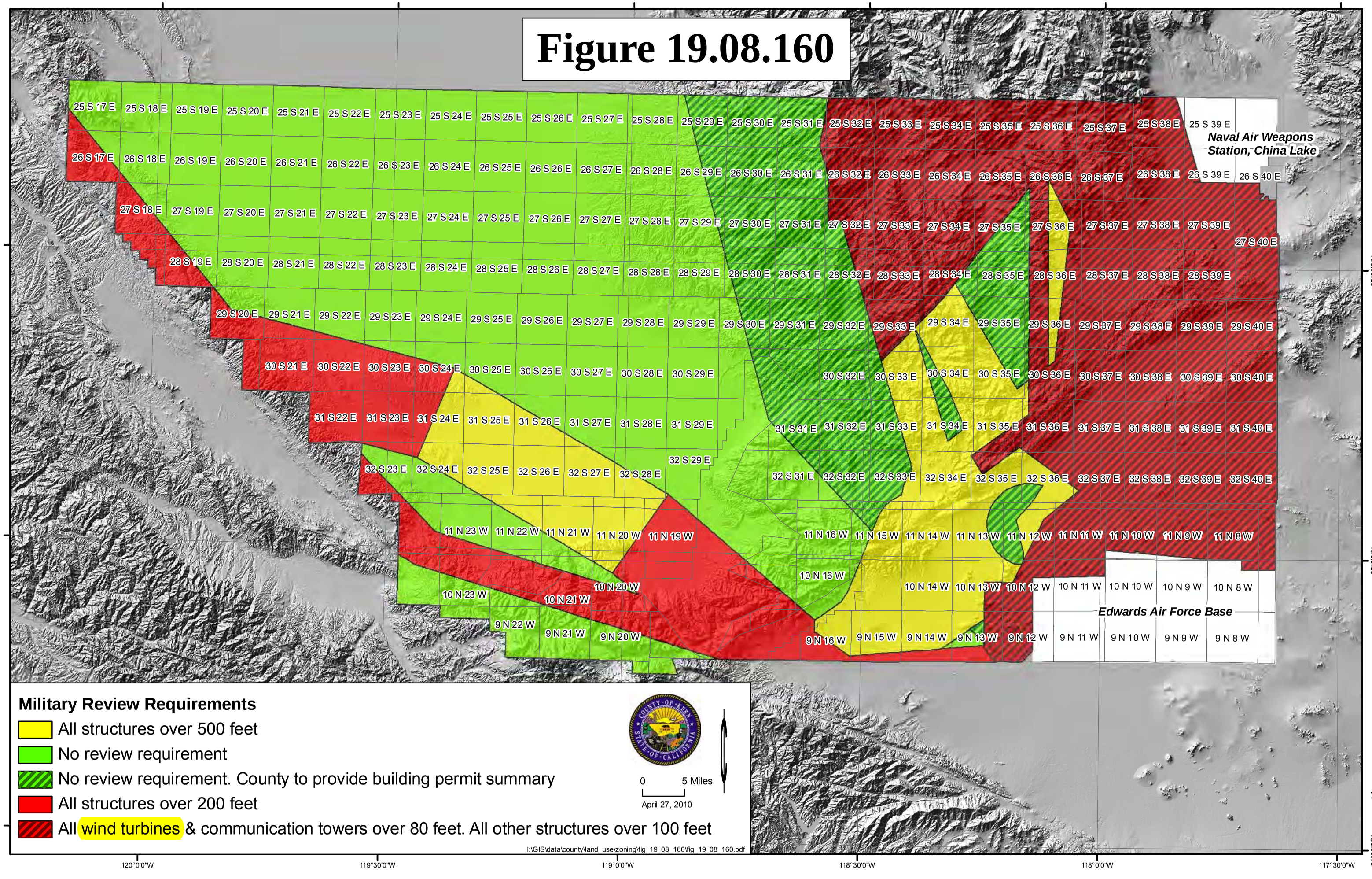
No penthouse or roof structures for the housing of elevators, stairways, tanks, ventilating fans or similar equipment, towers, steeples, roof signs, or other structures shall exceed the height limit provided in this title.

19.08.160 HEIGHT OF STRUCTURES

A. Notwithstanding any other provisions in this title, within the area depicted in Figure 19.08.160, no zone modification or zone variance may be approved, and no building permit may be issued where a zone modification or zone variance is not required, for any structure or building that exceeds the maximum permitted heights shown in Figure 19.08.160 unless the military authority responsible for operations in that flight area first provides the Planning Director with written concurrence that the height of the proposed structure or building would create no significant military mission impacts.

B. In instances where the required written concurrence from the military is requested by not received within a reasonable period of time. the required zone modification or zone variance may be considered by the Board of Supervisors. A variation to the height-related development standard in B.1 above may be approved by the Board of Supervisors generally following the zone variance procedures set forth in Chapter 19.106 and payment of related fees, upon a finding that the benefits of the requested height deviation outweigh the potential impacts on military flight operations.

Figure 19.08.160



Military Review Requirements

- All structures over 500 feet
- No review requirement
- No review requirement. County to provide building permit summary
- All structures over 200 feet
- All wind turbines & communication towers over 80 feet. All other structures over 100 feet

0 5 Miles

April 27, 2010

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Kern County, California

identification to the site and the Planning Director further determines that the installation of the street identification signs is deemed necessary to safeguard the public health, safety, and welfare. If street identification sign installation will be required pursuant to this section, the street sign shall be designed, constructed, and installed in a manner consistent with the Kern County Development Standards manual, or as otherwise authorized by the Planning Director, and shall be installed at on-site or off-site locations approved in advance by the Planning Director.

19.08.405 SETBACK REQUIREMENTS FROM SECTION AND MIDSECTION LINES

Within the San Joaquin Valley portion of Kern County, section lines and midsection lines located on properties below one thousand (1,000) feet above mean sea level shall be reserved for arterial and collector highway purposes, respectively, unless otherwise specified by the Circulation Element of the Kern County General Plan, Western Rosedale Specific Plan, Metropolitan Bakersfield 2010 General Plan, or other adopted plan. A minimum setback of forty-five (45) feet and fifty-five (55) feet shall be required for all permanent buildings and structures from midsection and section lines, respectively.

19.08.410 LAND DIVISIONS

Land Division actions, including subdivision tracts, parcel maps, parcel map waivers, and lot line adjustments shall comply with the requirements of Title 18, the Kern County Development Standards, the Uniform Code of Building Regulations adopted by Kern County, and the requirements of this title.

19.08.415 SMALL WIND ENERGY SYSTEM

A. A small wind energy system, as defined in Section 19.04.775, is a single system designed to supplement other electricity sources, or as an accessory use to existing buildings or facilities, wherein the power generated is used primarily for on-site consumption. No small wind energy system shall be installed until after a "small wind energy system permit" is obtained pursuant to Section 19.102.070 of this title, except as provided for in this section.

B. The following development standards shall apply to all small wind energy systems, except as provided for in this section:

1. The overall height of the tower and blade extension shall not exceed 120 feet and is subject to Section 19.08.160.

2. A minimum setback of sixty-five (65) feet shall apply from all property lines that abut a residential zoning district (E, R-1, R-2 and R-3). This setback may be reduced to thirty (30) feet, if the overall height of the tower and blade extension do not exceed eighty (80) feet and decibel levels for the system do not exceed forty-five (45) decibels (dBA) at any time, as measured from the exterior surface of any off-site residence existing at the time the system is installed. A minimum setback of thirty (30) feet shall apply from all property lines that abut any other zoning district.

3. Except as provided above, decibel levels for the system shall not exceed sixty (60) decibels (dBA) at any time, as measured from the exterior surface of any off-site residence existing at the time the system is installed.

4. The system shall employ no lighting, except as may be required as a condition of approval.

5. The system's turbine shall have been approved for use by the California Energy Commission.

6. The tower and blades shall have a nonreflective surface.

7. Additional conditions may be required pursuant to Section 19.102.070 of this title.

C. Where the lot on which the small wind energy system will be installed contains a minimum area of one-half (1/2) acre and the overall height of the tower and blade extension does not exceed eighty (80) feet, a "small wind energy system permit" pursuant to Section 19.102.070 and adherence to the development standards specified in Section B above shall not be required, provided that the installation complies with the following standards:

1. The tower shall be located no closer than one times (1x) the overall height of the tower and blade extension or thirty (30) feet, whichever is greater, from any property line and guy wire anchors, if used, shall not be located within ten (10) feet of any property line. Roof-mounted turbines shall not exceed a height of eight (8) feet above the tallest roof ridgeline.

2. The tower shall be located no closer than fifty (50) feet from any existing off-site dwelling. This restriction does not apply to roof-mounted systems.

3. Decibel levels for the system shall not exceed forty-five (45) decibels (dBA) at any time, as measured from the exterior surface of any off-site residence existing at the time the system is installed.

4. The system shall employ no lighting.

5. The system's turbine shall have been approved for use by the California Energy Commission under its Emerging Renewables Program, or similar program, or has been certified by a national program recognized and approved by the Commission.

6. The tower and blades shall have a nonreflective surface.

D. Any approved small wind energy system that becomes inoperable, shall be repaired or removed within ninety (90) days from the date that written notice by the County is provided to the property owner.

19.08.420 DOG KEEPING IN RESIDENTIAL DISTRICTS

No more than three (3) dogs over the age of four (4) months shall be kept or housed as an accessory use on any property located within the E (1/4), R-1, R-2, and R-3 residential zoning districts on any parcel less than ten thousand eight hundred ninety (10,890) square feet in size located within the Metropolitan Bakersfield General Plan area, except for kennels and animal shelters, as provided for by this title. Only licensed dogs in residence as of March 2, 2003, in excess of the three (3) dogs

5. Special Purpose Districts

— RF Recreation-Forestry District
— OS Open Space District
— NR Natural Resource District
— DI Drilling Island District
— FPP Floodplain Primary District
— SP Special Planning District
— PL Platted Lands District

B. Every lot or parcel of land, or portion thereof, in unincorporated Kern County shall be classified in only one (1) of the base zoning districts established by this section.

19.10.020 ESTABLISHMENT OF COMBINING ZONING DISTRICTS

A. In order to classify, regulate, restrict, and segregate the uses of lands and buildings, to regulate and restrict the height, bulk, and construction of buildings, to regulate the area of yards and other open spaces around buildings, and to regulate intensity of land use and the density of population, the following combining zoning districts are established:

1. Lot Size Combining District
2. PD Precise Development Combining District
3. CL Cluster Combining District
4. RS Residential Suburban Combining District
5. Rural Living Combining District
6. MH Mobilehome Combining District
7. WE Wind Energy Combining District
8. PE Petroleum Extraction Combining District
9. GH Geologic Hazard Combining District
10. FP Floodplain Combining District
11. FPS Floodplain Secondary Combining District
12. H Airport Approach Height Combining District

B. In addition to being classified in a base zoning district, a lot or parcel of land, or portion thereof, may be classified in one (1) or more combining zoning districts established by this section. When used on official zone maps, combining districts shall be shown in parenthesis.

19.10.030 INTERIM ZONING DISTRICTS

The Automobile Parking (P) and the Mobilehome Subdivision (MS) zone classifications in effect on the date of adoption of the ordinance from which this title derives have been determined by the Board of Supervisors to be no longer necessary to effect the purposes of the Kern County Zoning Ordinance. The P District and the Mobilehome Subdivision (MS) District shall be interim zone districts, and no additional areas shall be so zoned. All development within the P District and the Mobilehome Subdivision (MS) District shall comply with the requirements and standards set out in Chapter 19.78 of this title.

C H A P T E R 19.64

WIND ENERGY (WE) COMBINING DISTRICT

SECTIONS:

19.64.010 PURPOSE AND APPLICATION

A. It is the intent of the Board of Supervisors, in adopting this chapter, to promote the use of proven wind-driven generators for energy recovery, and to promote safeguards ensuring the maintenance of the health, safety, and welfare of the citizens of the County. In addition, in adopting this chapter, it is the intent of the Board of Supervisors to promote the use of an alternative to fossil-fuel-generated electrical power in areas of the County which are identified to have suitable wind resources for production of commercial quantities of wind-generated electrical power. Furthermore, it is the intent of the Board of Supervisors that site-specific application of this chapter shall occur only in a manner that provides a harmonious balance between the suitability of a project site with existing area land use and physical surroundings.

B. The WE District is a combining district and shall only be applied to the following district classifications: Exclusive Agriculture (A), Industrial (M-1, M-2, and M-3), Natural Resource (NR) with a minimum lot size of twenty (20) acres, Recreation-Forestry (RF) with a minimum lot size of twenty (20) acres, Limited Agriculture (A-1) with a minimum lot size of twenty (20) acres, or Estate (E) with a minimum lot size of twenty (20) acres. The uses allowed and the regulations required in the WE District shall be in addition to the regulations of the base district with which the WE District is combined. The WE District may not be adopted as a single land use designation.

19.64.020 PERMITTED USES

The following uses and all others determined to be similar to these uses pursuant to Sections 19.08.030 through 19.08.080 of this title are permitted in a WE District:

A. Wind-driven electrical generators, prototype, as defined in Chapter 19.04 of this title

B. Wind-driven electrical generators, production, as defined in Chapter 19.04 of this title

C. Accessory administrative and maintenance structures and facilities, electrical substations, transmission lines, and other facilities and electrical structures accessory and incidental to the main use.

D. Uses permitted by the base district with which the WE District is combined.

19.64.030 USES PERMITTED WITH A CONDITIONAL USE PERMIT

The following uses and all others determined to be similar to these uses pursuant to Sections 19.08.030 through 19.08.080 of this title are permitted in a WE District subject to securing a conditional use permit in accordance with the standards and procedures set out in Chapter 19.104 of this title:

A. Wind-driven electrical generators, experimental, as defined in Chapter 19.02 of this title, on a temporary basis.

B. Wind-driven electrical generators, manufacture, or assembly

C. Conditional uses permitted by the base district with which the WE District is combined.

19.64.040 PROHIBITED USES

The following uses are prohibited in a WE District:

A. Wind-driven electrical generators, experimental, as defined in Chapter 19.02 of this title, on a permanent basis.

B. All other uses not permitted by Sections 19.64.020 and 19.64.030 of this chapter or accessory thereto under Section 19.08.110 are prohibited in a WE District.

19.64.050 MINIMUM LOT SIZE

Minimum lot size requirements in a WE District are per the requirements of the base district with which the WE District is combined.

19.64.060 MINIMUM LOT AREA PER DWELLING UNIT

Requirements for minimum lot area per dwelling unit requirements in a WE District are per the requirements of the base district with which the WE District is combined.

19.64.070 YARDS AND SETBACKS

Yard and setback requirements in a WE District are as follows:

A. Wind-driven electrical generators shall comply with the setback requirements specified in Sections 19.64.130 through 19.64.150 of this title.

B. All other structures shall comply with the requirements of the base district with which the WE District is combined.

19.64.080 HEIGHT LIMITS

Height limits in a WE District are as follows:

A. Wind-driven electrical generators and associated meteorological towers shall comply with the height limits specified in Section 19.64.140 of this chapter.

B. All other uses and structures shall comply with the requirements of the base district with which the WE District is combined.

19.64.090 MINIMUM DISTANCE BETWEEN STRUCTURES

Requirements for minimum distance between structures in a WE District are as follows:

A. Wind-driven electrical generators shall comply with the requirements specified in Sections 19.64.130 through 19.64.150 of this chapter.

B. All other uses shall comply with the requirements of the base district with which the WE District is combined.

19.64.100 PARKING

Parking requirements in a WE District are per the requirements of the base district with which the WE District is combined.

19.64.110 SIGNS

Sign requirements in a WE District are as follows:

A. Signs in connection with wind-driven electrical generators shall comply with the requirements specified in Sections 19.64.130 through 19.64.150 of this chapter.

B. All other signs shall comply with the requirements of the base district with which the WE District is combined.

19.64.120 LANDSCAPING

Landscaping requirements in a WE District are as follows:

A. None required in connection with wind-driven electrical generators.

B. All other uses shall comply with the requirements of the base district with which the WE District is combined.

19.64.130 DETAILED PLOT PLAN REQUIRED — CONTENTS

Prior to issuance of construction permits, the developer shall submit a detailed plot plan for review and approval by the Planning Director. The plan boundaries shall coincide with those of the project parcel. The following information shall be included in said plan:

A. Existing topography and drainage channels.

B. Direction of prevailing winds across the project site.

C. Location, height, and dimensions of all existing structures.

D. Distance to all residences located within one (1) mile of exterior project boundary.

E. Manufacturer and model designation, rated KW capacity, overall machine height (grade level to highest tip extension), total blade diameter, hub height, rated maximum rotor RPM, location of proposed structures and buildings and, upon request of the Planning Director, manufacturer's production record, and/or sufficient manufacturer's data in order to classify machines as experimental, prototype, or production in accordance with the definitions contained in this chapter.

F. Location, grades, and dimensions of all roads and parking areas, both existing and proposed.

G. Location and extent of known archaeological remains.

H. Location and type of project security fencing.

I. Location of site by longitude and latitude coordinates within ten (10) feet and elevation of site above mean sea level within ten (10) feet.

J. A plan of proposed project phasing.

K. Any and all reports, approvals, or requirements which may be required by mitigation measures incorporated into an environmental document adopted for implementation of this district for specific parcels; including a plan for implementation of recommendations contained in such reports.

L. A certificate signed by a registered civil engineer or licensed land surveyor stating that area encompassed by the project has been surveyed under his supervision or that a previous survey was performed by a registered civil engineer or licensed land surveyor and that sufficient monuments have been placed to accurately establish the exterior project boundaries.

M. A certificate signed by a registered civil engineer or licensed land surveyor stating that the proposed development is in full compliance with the requirements of this chapter. The

Director of the Kern County Planning Department may require the submittal of additional documentation of compliance when deemed necessary.

N. Soil erosion and sedimentation control plan, including revegetation plan, as provided for in Section 19.64.140.K (grading permits only).

19.64.140 DEVELOPMENT STANDARDS AND CONDITIONS

Development in the WE Combining District, and commercial wind-driven electrical generators permitted subject to securing a conditional use permit, shall comply with the following standards:

A. All necessary building and grading permits shall be obtained from the Kern County Planning Department. For construction and permit purposes, all wind generator towers shall conform to the regulations of the applicable seismic zone of the Uniform Building Code and the applicable groundshaking zone.

B. Towers and blades shall be painted a nonreflective, unobtrusive color or have a nonreflective surface.

C. Fencing shall be erected for each wind machine or on the perimeter of the total project. Wind project facilities shall be enclosed with a minimum four- (4-) foot-high security fence constructed of four (4) strand barbed wire or materials of a higher quality. Fencing erected on the perimeter of the total project shall include minimum eighteen- (18-) inch by eighteen- (18-) inch signs warning of wind turbine dangers. Such signs shall be located a maximum of three hundred (300) feet apart and at all points of site ingress and egress. Where perimeter fencing is utilized, the Planning Director may waive this requirement for any portion of the site where unauthorized access is precluded due to topographic conditions.

D. All on-site electrical power lines associated with wind machines shall be installed underground within one hundred fifty (150) feet of a wind turbine and elsewhere when practicable, excepting therefrom "tie-ins" to utility type transmission poles, towers, and lines. However, if project terrain or other factors are found to be unsuitable to accomplish the intent and purpose of this provision, engineered aboveground electrical power lines shall be allowed.

E. Prior to issuance of construction permits, the developer shall provide the Kern County Planning Department with proof of approved access to the site.

F. Wind generator setback shall be as follows:

1. Setback Where Adjacent Parcels Contain Less Than Forty (40) Acres. A minimum wind generator setback of two (2) times the overall machine height (measured from grade to the top of the structure, including the uppermost extension of any blades) or five hundred (500) feet, whichever is less, shall be maintained from exterior project boundaries where the project site is adjacent to existing parcels of record which contain less than forty (40) acres and are not zoned WE Combining District.

   The Planning Director may allow a reduction in this setback, not to exceed a minimum setback of one (1) times the overall machine height (measured from grade

to the top of the structure, including the uppermost extension of any blades) if a letter of consent from the owner(s) of record of adjacent parcels is filed with the Kern County Planning Department.

2. Setback Where Adjacent Parcels Contain Forty (40) Acres or More. A minimum wind generator setback of one and one-half (1 1/2) times the overall machine height (measured from grade to the top of the structure, including the uppermost extension of any blades) or five hundred (500) feet, whichever is less, shall be maintained from all exterior project boundaries.

   The Planning Director may allow a reduction or waiver of this setback requirement in accordance with both of the following provisions:

   a. The project exterior boundary is a common property line between two (2) or more approved wind energy projects or both properties are located within the WE District; and

   b. The property owner of each affected property has filed a letter of consent to the proposed setback reduction with the Planning Director.

3. Setback From Off-site Residence(s) on Adjacent Parcels. In all cases, regardless of parcel area, a minimum wind generator setback of one and one-half (1 1/2) times the overall machine height (measured from grade to the top of the structure, including the uppermost extension of any blades) or five hundred (500) feet, whichever is greater, shall be maintained from any off-site residence.

   The Planning Director may allow a reduction in this setback, not to exceed a minimum setback of one (1) times the overall machine height, if a letter of consent from the owner(s) of record of the adjacent parcel is filed with the Planning Director.

4. Project Interior Wind Generator Spacing. Wind generator spacing within the project boundary shall be in accordance with accepted industry practices pertaining to the subject machine.

5. Setback From On-site Residences and Accessory Structures Designed for Human Occupancy. A minimum wind generator setback of one (1) times the overall machine height (measured from grade to the top of the structure, including the uppermost extension of any blade) shall be maintained from any on-site residence or accessory structure designed for human occupancy.

6. Setback From Public Highways and Streets, Public Access Easements, Public Trails, and Railroads. A minimum wind generator setback of one and one-half (1 1/2) times the overall machine height (measured from grade to the top of the structure, including the uppermost extension of any blade) shall be maintained from any publicly maintained public highway or street. A minimum wind generator setback of one (1) times the overall machine height shall be maintained from any public access easement or railroad right-of-way. A minimum wind generator setback of one hundred fifty (150) feet shall be maintained from the outermost extension of any blade to any public trail, pedestrian easement, or equestrian easement.

G. Wind generator machine and associated meteorological tower overall height shall not exceed six hundred (600) feet and is subject to Section 19.08.160. For the purposes of this chapter, machine height shall be measured as follows:

1. Overall machine height of horizontal axis machines shall be measured from grade to the top of the structure, including the uppermost extension of any blades.

2. Machine height of vertical axis or other machine designs shall be measured from grade to the highest point of the structure.

H. All wind projects including wind generators and towers shall comply with all applicable County, State, and federal laws, ordinances, or regulations.

I. One (1) project identification sign, located at each point of project ingress and egress, not to exceed thirty-two (32) square feet in area, may be erected on the project site. No other signs shall be installed other than safety signs and the required warning signs. The developer shall submit a sign elevation drawing to the Planning Director for review and approval prior to installation.

J. Where a residence, school, church, public library, or other sensitive or highly sensitive land use, as identified in the Noise Element of the County General Plan, is located within one (1) mile in a prevailing downwind direction or within one-half (1/2) mile in any other direction of a project's exterior boundary, an acoustical analysis shall be prepared by a qualified acoustical consultant prior to the issuance of any building permit. The consultant and the resulting report shall be subject to review and approval by the Kern County Health Department. The report shall address any potential impacts on sensitive or highly sensitive land uses.

In addition, the acoustical report shall demonstrate that the proposed development shall comply with the following criteria:

1. Audible noise due to wind turbine operations shall not be created which causes the exterior noise level to exceed forty-five (45) dBA for more than five (5) minutes out of any one- (1-) hour time period ($L8._3$) or to exceed fifty (50) dBA for any period of time when measured within fifty (50) feet of any existing residence, school, hospital, church, or public library.

2. Low frequency noise or infrasound from wind turbine operations shall not be created which causes the exterior noise level to exceed the following limits when measured within fifty (50) feet of any existing residence, school, hospital, church, or public library.

One-third Octave Bank Center Frequency (Hz)	Sound Pressure Level (dB)
2 to 1	70 (each band)
20	68
25	67
31.5	65
40	62
50	60
63	57
80	55
100	52
125	50

3. In the event audible noise due to wind turbine operations contains a steady pure tone, such as a whine, screech, or hum, the standards for audible noise set forth in Subparagraph (1) of this subsection shall be reduced by five (5) dBA. A pure tone is defined to exist if the one-third (1/3) octave band sound pressure level in the band, including the tone, exceeds the arithmetic average of the sound pressure levels of the two (2) contiguous one-third (1/3) octave bands by five (5) dBA for center frequencies of five hundred (500) Hz and above, by eight (8) dBA for center frequencies between one hundred and sixty (160) Hz and four hundred (400) Hz, or by fifteen (15) dBA for center frequencies less than or equal to one hundred and twenty-five (125) Hz.

4. In the event the audible noise due to wind turbine operations contains repetitive impulsive sounds, the standards for audible noise set forth in Subparagraph (1) of this subsection shall be reduced by five (5) dBA.

5. In the event the audible noise due to wind turbine operations contains both a pure tone and repetitive impulsive sounds, the standards for audible noise set forth in Subparagraph (1) of this subsection shall be reduced by a total of five (5) dBA.

6. In the event the ambient noise level (exclusive of the development in question) exceeds one (1) of the standards given above, the applicable standard shall be adjusted so as to equal the ambient noise level. For audible noise, the ambient noise level shall be expressed in terms of the highest whole number sound pressure level in dBA which is exceeded for no more than five (5) minutes per hour (L8.3). For low frequency noise or infrasound, the ambient noise level shall be expressed in terms of the equivalent level (Leq) for the one-third (1/3) octave band in question, rounded to the nearest whole decibel. Ambient noise levels shall be measured within fifty (50) feet of potentially affected existing residences, schools, hospitals, churches, or public libraries. Ambient noise level measurement techniques shall employ all practical means of reducing the effects of wind-generated noise at the microphone. Ambient noise level measurements may be performed when wind velocities at the proposed

project site are sufficient to allow wind turbine operation, provided that the wind velocity does not exceed thirty (30) mph at the ambient noise measurement location.

7. Any noise level falling between two (2) whole decibels shall be the lower of the two (2).

8. In the event that noise levels, resulting from a proposed development, exceed the criteria listed above, a waiver to said levels may be granted by the Planning Director provided that the following has been accomplished:

   a. Written consent from the affected property owners has been obtained stating that they are aware of the proposed development and the noise limitations imposed by this code, and that consent is granted to allow noise levels to exceed the maximum limits allowed.

   b. A permanent noise impact easement has been recorded in the County Hall of Records which describes the benefitted and burdened properties and which advises all subsequent owners of the burdened property that noise levels in excess of those permitted by this code may exist on or at the burdened property.

K. Prior to the issuance of any grading permit, a plan for the mitigation of potential soil erosion and sedimentation shall be prepared by a registered civil engineer or other professional and submitted for the approval by the Director of the Engineering and Survey Services Department. The plan shall include provisions for site revegetation, including any necessary re-soiling, proposed plant species, proposed plant density and percentage of ground coverage, and the methods and rates of application and shall include sediment collection facilities as may be required by the Engineering and Survey Services Department.

The soil erosion and sedimentation control plan shall be consistent with the applicable requirements of the California Regional Water Quality Control Board pertaining to the preparation and approval of Storm Water Pollution Prevention Plans. Notwithstanding the foregoing, the revegetation portion of the soil erosion and sedimentation plan shall be prepared by a professional biologist or other professional approved, in advance, by the Engineering and Survey Services Department.

The plan shall include a timetable for full implementation, estimated costs, and a surety bond or other security as approved by the Engineering and Survey Services Department in an amount determined by that department to guarantee plan implementation. The soil erosion and sedimentation control plan, including the revegetation plan and security instrument, shall be submitted to, and approved by, the Floodplain Management Section of the Engineering and Survey Services Department prior to the issuance of any grading permit. The security shall remain on file with the Engineering and Survey Services Department until that department has verified that the plan has been successfully implemented.

L. A minimum of on-site roadways shall be constructed. Temporary access roads utilized for initial machine installation shall be revegetated to a natural condition after completion of machine installation. The applicant shall submit a plan of all proposed roads, temporary and

permanent, for approval by the Planning Director prior to the issuance of any building permits.

M. Construction of any slopes steeper than four to one (4:1) shall be prohibited unless specifically authorized by the Kern County Planning Department and mitigation is provided.

N. Wind project facilities shall be encircled with a ten- (10-) foot-wide fuel break. Subject fuel breaks may be installed for each wind machine or the perimeter of the total project, but in no event shall encompass more than forty (40) acres per block. Permanent access roads may also be considered fuel breaks. This requirement may be modified at the discretion of the Kern County Fire Chief.

O. No building permits will be issued until the grading has been completed in accordance with the approved plans and "As Graded Certification" has been made by the engineer.

19.64.150 WIND TURBINE MAINTENANCE AND ABANDONMENT

A. Except for maintenance periods, wind turbines shall be maintained in an operational condition. A turbine or group of turbines seeking, but unable to obtain transmission service or a power purchase agreement and out of service for that reason, shall be considered to be in a maintenance period provided such wind turbines are otherwise viable by general industry practices.

B. Any wind turbine not in operational condition for a consecutive period of twelve (12) months shall be deemed abandoned and shall be removed within sixty (60) days from the date a written notice is sent to the property owner and turbine owner, as well as the project operator, by the County. Within this sixty- (60-) day period, the property owner, turbine owner, or project operator may provide the Planning Director with a written request and justification for an extension for an additional twelve (12) months. The Planning Director shall consider any such request at a Director♣s Hearing as provided for in Section 19.102.070 of this title. In no case shall the Planning Director authorize an extension beyond two (2) years from the date the wind turbine was deemed abandoned without requiring financial assurances to guarantee the removal of the wind turbine, and that portion of the support structure lying above the natural grade level, in the form of a corporate surety bond, irrevocable letter of credit, or an irrevocable certificate of deposit wherein the County is named as the sole beneficiary. In no case shall a wind turbine which has been deemed abandoned be permitted to remain in place for more than forty-eight (48) months from the date the wind turbine was first deemed abandoned.

C. If the property owner fails to remove an abandoned wind turbine within the time frame specified above, the County may remove the structure(s) at the property owner♣s expense and lien the property to recover all enforcement and removal costs; however, the County shall first notify the property owner of its intent to remove the structure(s) in accordance with this section in writing at least thirty (30) days prior to removing said structure(s). The County shall not issue any grading or building permits for any new development on the subject property until any such lien has been paid in full.

19.64.160 PERMIT REVOCATION AND MODIFICATION

Any permit issued pursuant to this chapter may be revoked or modified pursuant to Section 19.102.020 of this title.

Kittitas County, Washington
***Kittitas County Code* (2011)**

Title 17. ZONING

Chapter 17.61A
WIND FARM RESOURCE OVERLAY ZONE

Sections

17.61A.010 Legislative findings, purpose and intent.
The purpose and intent of this chapter is to establish a process for recognition and designation of properties located in areas of Kittitas County suitable for the location of wind farms, to protect the health, welfare, safety, and quality of life of the general public, and to ensure compatible land uses in the vicinity of the areas affected by wind farms. (Ord. 2002-19 (part), 2002)

17.61A.020 Definitions.
The following definitions shall be used in conjunction with the administration of this chapter:

1. "Wind farm" means a single wind turbine exceeding 120 feet in height above grade or more than one wind turbine of any size proposed and/or constructed by the same person or group of persons on the same or adjoining parcels.

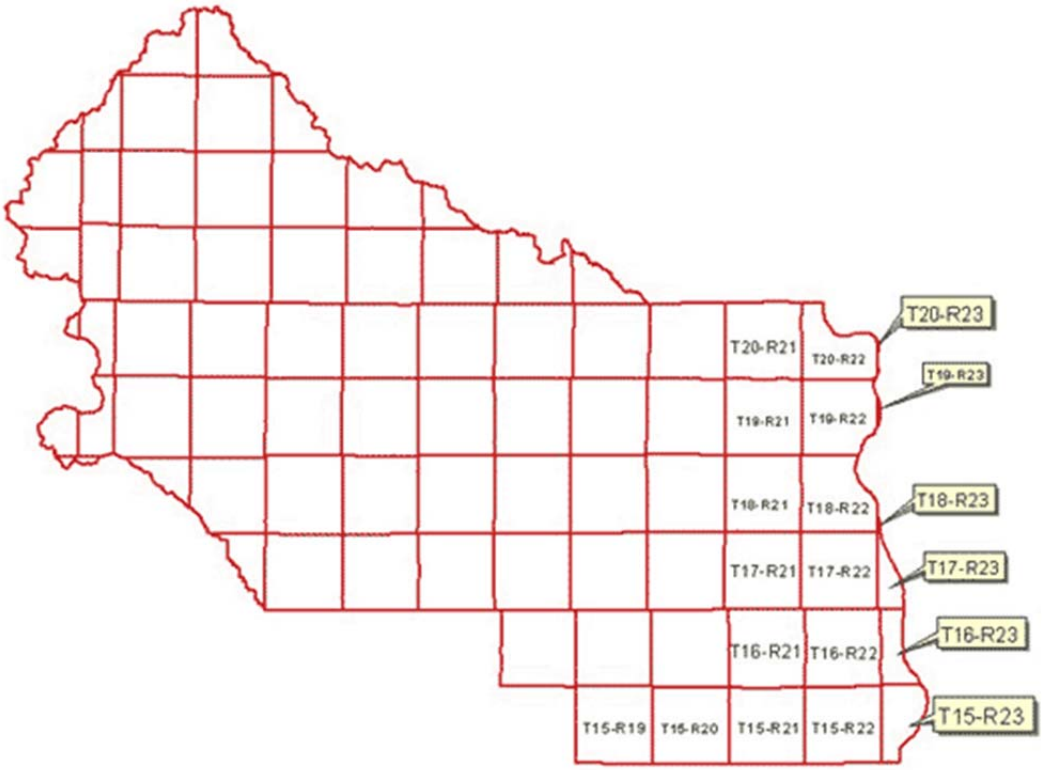
2. "Wind turbine" means any machine used to produce electricity by converting the kinetic energy of wind to electrical energy. Wind turbines consist of the turbine apparatus and any other buildings, support structures or other related improvements necessary for the generation of electric power. (Ord. 2002-19 (part), 2002)

17.61A.030 Development uses, requirements, and restrictions.
Development uses, requirements, and restrictions. All listed permitted uses in the underlying zoning district of this overlay zone are permitted. All listed conditional uses in the underlying zoning district of this overlay zone are subject to conditional use permit process and review. Wind farms are a permitted use in a wind farm resource overlay zoning district, subject to the additional approval requirements and restrictions set forth in KCC 17.61A.040. (Ord. 2002-19 (part), 2002)

17.61A.035 Pre-identified areas for siting.
For proposed wind farms located in identified areas in Kittitas County meeting specific siting standards as identified in this code, a process separate from the requirement for wind farm resource overlay zone as identified in Kittitas County Code 17.61A.40 can be undertaken.

The purpose of this code is to identify areas where environmental review and public process has already occurred, expediting the siting of proposed wind farm facilities. The intent of this code is to streamline the development process for such applications, separate from the process already allowed in 17.61A.40. It is recognized that lands contained within this area may be under federal, state and local ownership and may be subject to additional requirements per jurisdiction.

A map of the pre-identified areas identifies the following Townships and Ranges open to this process. This includes T.15N., Ranges 19E., 20E., 21E., 22E., 23E., T.16N., Ranges 21E., 22E., 23E., T.17N., Ranges 21E., 22E., 23E., T.18N., Ranges 21E., 22E., 23E., T.19N., Ranges 21E., 22E., 23E., T.20N., Ranges 21E., 22E., 23E. W.M. in Kittitas County.



The following siting standards are established for these areas: a minimum 1/2 mile setback from existing structures at the time of application shall apply. If not attainable, additional analysis shall be included to support the application. Further, analysis shall also include, but is not limited to, the following as part of the application: wildlife impact analysis, noise impact analysis, visual impact analysis, and traffic impact analysis.

A wind farm may be authorized by the county in these pre-identified areas only through approval of a site plan and development agreement by the board of county commissioners. The development agreement shall be consistent as authorized in Kittitas County Code 15A.11, Development Agreements. (Ord. 2007-22, 2007)

17.61A.040 Approvals required for wind farm resource overlay zone.

1. Except as noted in 17.61A.035, a wind farm may be authorized by the county only through approval of a wind farm resource development permit in conjunction with approval by the board of county commissioners of a development agreement as authorized by Chapter 15A.11 KCC, Development Agreements, and RCW 36.70B.170 through 36.70B.210. Consistent with KCC 15A.11.020(B) and RCW 36.70B.170, the development agreement approved by the board of county commissioners must set forth the development standards applicable to the development of a specific wind farm, which may include, but are not limited to:

a. Densities, number, size, setbacks, and location of turbines;

b. Mitigation measures and such other development conditions as deemed appropriate by the board of county commissioners to be necessary including measures to protect the best interests of the surrounding property or neighborhood or the county as a whole; and

c. Other development standards including those identified in KCC 15A.11.020(E) and RCW 36.70B.170(3).

2. Required Applications/Approvals. In addition to approval of a wind farm resource development permit and a development agreement as set forth in subsection A of this section, a wind farm shall require the following approvals from the county:

a. A site-specific amendment of the comprehensive plan land use designation map to wind farm resource overlay district (the subarea planning process described in Chapter 1 of the county comprehensive plan and Chapter 15B.03 KCC, Amendments to Comprehensive Plan, may be used if deemed appropriate by the applicant and county);

b. A site-specific rezone of the county zoning map to wind farm resource overlay zoning district pursuant to Chapter 17.98 KCC, Amendments.

3. The approvals by the board of county commissioners set forth in subsections A and B of this section shall only be made if it determined that:

a. The proposal is essential or desirable to the public convenience;

b. The proposal is not detrimental or injurious to the public health, peace, or safety or to the character of the surrounding neighborhood; and

c. The proposed use at the proposed location(s) will not be unreasonably detrimental to the economic welfare of the county and it will not create excessive public cost for facilities and service.

d. A comprehensive plan amendment or subarea plan for a wind farm resource overlay district must be processed by the county concurrent with the rezone application, development permit, and development agreement required for approval of a wind farm. (Ord. 2007-22, 2007; Ord. 2002-19 (part), 2002)

Chapter 17.61B
SMALL WIND ENERGY SYSTEMS

Sections

17.61B.010 Purpose.
The purpose of this Chapter is to facilitate the installation and construction of small wind energy systems in Kittitas County for private landowners, subject to reasonable restrictions to protect life, health and safety. (Ord. 2010-02, 2010; Ord. 2009-25, 2009)

17.61B.020 Definitions.
As used in this Chapter the following terms shall have the meanings indicated:

1. "County" means Kittitas County Government.

2. "FAA" means the Federal Aviation Administration.

3. "Small Wind Energy System (SWES)" means a wind energy conversion system which converts wind energy into electricity through the use of a wind turbine generator, and includes any of the following to accomplish this production: a wind turbine, rotor blades, tower, foundation, and associated control or conversion electronics, which has a rated capacity of not more than 20kW and which is intended to primarily reduce on-site consumption of utility power.

4. "Wind Turbine Total Height" means the distance measured from the grade plane to the tip of the rotor blade when extended vertical to its highest point.

5. "Wind Turbine" means any of the parts of the small wind energy system including, but not limited to, the rotor blades, generator, housingtail, guyed wire, foundation or other items necessary to erect, maintain or operate a small wind energy system. (Ord. 2010-02, 2010; Ord. 2009-25, 2009)

17.61B.030 Applicability.
The requirements set forth in this Chapter shall govern the siting and permitting of small wind energy systems used to generate mechanical or electrical energy to perform work, and which may be connected to the utility grid pursuant to the Revised Code of Washington, Chapter 80.60 (Net Metering of Electricity), serve as an independent source of energy, or serve as part of a hybrid system. The requirements of this Chapter shall apply to Small Wind Energy Systems (SWES) proposed after the effective date of this Chapter. Any SWES for which a required permit has been properly issued prior to the effective date of this Chapter shall not be required to meet the requirements of this Chapter; provided, however, that any such pre-existing SWES that are not producing energy for a continuous period of twelve (12) months shall meet the requirements of this Chapter prior to production of energy. No modification that increases the height of the system or significantly increases its output shall be allowed without full compliance with this Chapter. (Ord. 2010-02, 2010; Ord. 2009-25, 2009)

17.61B.040 Regulatory Framework.

1. A SWES may be installed pursuant to KCC 17.61.010 as a "minor alternative energy system" for the production of energy that:

    a. Uses as its fuel wind;

    b. Is located on the power beneficiary's premises;

    c. Is intended primarily to offset part or all of the beneficiary's requirements for electricity; provided, excess energy may be sold on the utility grid; and

d. Is secondary to the beneficiary's use of the premises for other lawful purposes.

2. Pursuant to KCC 17.61.020, minor alternative energy facilities shall be a permitted use in all zoning districts, provided the following limitations shall apply to wind turbines located within urban growth areas:

a. Wind turbines shall not exceed a total height of 75 feet above grade; and

b. Rotors shall not exceed 30 feet in diameter;

c. Provided, however, that where a municipality has adopted regulations governing wind turbines or other regulations involving height restrictions that are more restrictive, such regulations shall control in the surrounding urban growth areas.

3. Pursuant to the limitations of KCC 17.61.010 and KCC 17.61A.020, only one wind turbine, with a maximum height of 120 feet above grade, shall be allowed to be constructed by the same person or group of persons on the same or adjoining tax parcels.

4. A SWES may be installed in any land use zone of Kittitas County per the requirements as outlined in Table 5.3.

TABLE 5.3

LOT SIZE	# TOWERS	POLE TYPE	TOTAL HEIGHT[2]	SETBACKS[3]
INSIDE UGA[1] (minimum 1 acre)	1	MONOPOLE	MAXIMUM 75 FEET	1.2 TIMES HEIGHT
1-3 ACRES OUTSIDE UGA	1	MONOPOLE	MAXIMUM 75 FEET	1.2 TIMES HEIGHT
3-5 ACRES OUTSIDE UGA	1	MONOPOLE, GUYED, LATTICE	MAXIMUM 100	1.2 TIMES HEIGHT
>5 ACRES OUTSIDE UGA	1	MONOPOLE, GUYED, LATTICE	MAXIMUM 120	1.2 TIMES HEIGHT

[1]Rotors shall not exceed 30 feet in diameter in the UGA.
[2]Total Height shall be the distance measured from the grade plane to the tip of the rotor blade when extended vertical to its highest point.
[3]Each SWES shall be setback from the nearest property line a distance no less than 1.2 times the Total Height, unless appropriate easements are secured from adjacent property, or other acceptable mitigation is approved by the Zoning Administrator or Board of Adjustment. (Ord. 2010-02, 2010; Ord. 2009-25, 2009)

17.61B.050 General Requirements.

1. The following visual appearance, lighting and power-line requirements shall apply to all SWES.

a. Wind Turbines shall be painted a non-reflective, non obtrusive color. Small wind energy towers shall maintain galvanized steel, brushed aluminum, white or gray finish, unless FAA standards require otherwise.

b. At SWES sites, the design of buildings and related structures shall use materials, colors, textures, screening and landscaping that will blend the SWES to the natural setting and the existing environment.

c. No SWES shall be artificially lighted, except to the extent required by the FAA or other applicable authority.

d. No SWES shall be used for displaying any advertising except for reasonable identification of the manufacturer.

e. Electrical controls, control wiring and power-lines shall be wireless or underground after reaching grade from the turbine and extending away from the base of the tower. Wiring may be exposed vertically from the turbine to the base of the tower.

2. Guyed, lattice and monopole towers are allowed to support Wind Turbines per the limitations as outlined in Table 5.3. Lattice type towers shall not include any horizontal members; all lattice tower members must be angled to prevent bird roosting.

3. The following setback and tower height requirements shall apply to all SWES.

a. The total Height of a SWES shall not exceed the limitations as established in Table 5.3.

b. Property lines: Each SWES shall be set back from the nearest property line a distance no less than 1.2 times the Total Height as established in Table 5.3.

c. At the time of application, each SWES shall be set back from the nearest non-participating building structure (i.e., buildings on neighboring land) a distance no less than on and a half (1.5) times its Total Height.

d. Communication and electrical lines: Each SWES shall be set back from the nearest above-ground public or private non-participating electric power line or telephone line a distance no less than 1.5 times its Total Height, determined from the existing power line or telephone line or easement. Each SWES shall be set back from the nearest above-ground public or private participating utility a distance as specified by said utility.

e. Setbacks shall be measured to the outer edge of the base of the SWES structure towers. Guy cables and other accessory support structures may be located within setback areas.

4. Audible sound due to SWES operations shall not exceed (55) dBA for any period of time, when measured at the property line of any abutting property. The sound level may, however, be exceeded during short-term events such as utility outages and/or severe wind storms.

5. The rotor blade tip of any Wind Turbine shall, at its lowest point, have ground clearance of no less than (15) feet, as measured at the lowest point of the arc of the rotor blades.

6. The following safety requirements shall apply to all SWES.

a. Wind Turbine towers shall not be climbable up to 15 feet above ground level.

b. All electrical equipment shall be safely and appropriately enclosed from unintentional access by means such as barrier fencing, equipment cabinetry or similar means. All access doors to electrical equipment shall remain locked unless access is necessary.

c. Appropriate warning signage (i.e., electrical hazards) shall be placed on SWES equipment.

d. All SWES shall be equipped with manual and/or automatic overspeed controls to limit rotation of the rotor blades to a speed below the designed limits of the system.

e. Any SWES found to be unsafe by the building official shall be repaired by the landowner to meet federal, state and local safety standards or removed within 3 months.

7. All SWES shall comply with all current adopted Kittitas County Codes and Ordinances and all other current adopted Federal and State requirements.

8. All SWES must comply with all regulations of the Federal Aviation Administration (FAA), including any necessary approvals for installations close to airports.

9. All SWES shall comply with all applicable sections of the Washington State Building Code and adopted International Building Codes.

10. All SWES shall comply with requirements per the Washington State Department of Labor & Industries (L&I) and the current adopted edition of the National Electrical Code (NEC).

11. All SWES that are connected to the utility grid shall comply with the requirements of Chapter 80.60 of the Revised Code of Washington, Net Metering of Electricity. (Ord. 2010-02, 2010; Ord. 2009-25, 2009)

17.61B.060 Permit Application Requirements.
In addition to all other Building Permit Application requirements, the following items shall be provided by the applicant for a SWES Building Permit Application.

1. Description of the project including specific information on the type, size, rotor material and diameter, rater power output, performance, safety, and maximum noise characteristics of the system, including name and address of the manufacturer, model and serial number.

2. A site plan showing:

a. The planned location of the SWES on the parcel and type and location of any associated support structures.

b. The location of and distance to all SWES setback lines, property lines, roads, adjacent properties, ROW's, any overhead utility and/or communication lines on the subject property and adjacent properties within 300 feet of the SWES base, and easements.

c. The location of all buildings on the parcel and immediately adjoining parcels, including the building(s) use.

3. A scaled representation of the SWES showing the system height and rotor diameter and evidence that the proposed height does not exceed the height recommended by the manufacture of the system or any limitation contained in this Chapter.

4. Structural drawings and an engineering analysis from the SWES manufacturer or a licensed professional showing compliance with the current adopted Washington State Building Code and International Building Code. The engineering analysis must include a

complete analysis of the tower, the tower foundation and the connection of the tower to the foundation. The engineering analysis must be completed by a licensed engineer, certified to practice in the State of Washington. A "wet" stamp may not be required, provided that the engineering analysis and accompanying drawings demonstrate that the system is designed to meet the most stringent requirements at the site for wind speed and exposure, seismic class, and the weakest soil class, with a soil strength of not more than 1,000 pounds per square foot.

5. Description of emergency and normal shutdown procedures.

6. If a roof-mounted or wall-mounted system is proposed, the roof or wall of the structure shall be certified by a licensed professional engineer to be sufficiently sturdy to support the proposed SWES under all applicable design requirements.

7. If a SWES is intended to be connected to the utility grid, the applicant must provide written documentation that the provider of electrical service to the property has been notified of and agrees to the intent of the applicant to install an interconnected electricity generator to the electricity grid. (Ord. 2010-02, 2010; Ord. 2009-25, 2009)

17.61B.070 Abandonment Requirements.

1. At any time a SWES is scheduled to be abandoned or is discontinued, as later described, the owner shall notify the Building Official, Code enforcement Officer or designee by certified U.S. mail Upon abandonment or discontinuation of use, the owner shall physically remove the SWES within 90 days from the date of abandonment or discontinuation of use. This period may be extended at the discretion of the Building Official, Code Enforcement Officer, or designee. The term "physically remove" shall in include, but not be limited to:

a. Removal of the wind turbine and tower and related above grade structures.

b. Restoration of the location of the SWES to its natural condition, except that any landscaping, grading or below-grade foundation may remain in the after-conditions.

2. In the event an owner fails to give such notice as required in '1' above, the Building Official, Code Enforcement Officer or designee may presume an SWES is abandoned or discontinued if it has been out-of-service, or not generating power, for a continuous 12-month period. If any SWES is not operational for a period of 12 consecutive months, the Building Official, Code Enforcement Officer or designee may issue a Notice of Abandonment to the owner of the SWES. The owner shall have the right to respond to the Notice of Abandonment within 30 days from the Notice receipt date. The Building Official, Code Enforcement Officer or designee may withdraw the Notice of Abandonment and notify the owner that the Notice has been withdrawn if the owner provides sufficient information to demonstrate that the SWES has not been abandoned.

3. If the owner fails to respond to the Notice of Abatement or if after review by the Building Official, Code Enforcement Officer or designee it is determined that the SWES has been abandoned or discontinued, the owner of the SWES shall remove the SWES at the owner's sole expense within 3-months of receipt of the Notice of Abandonment. If the owner fails to physically remove the SWES after the Notice of Abandonment procedure, the County shall have the authority to enter the subject property and physically remove the SWES and to recover costs associated with that removal from the property owner.

As a condition of initial SWES permit approval, the applicant may be required to provide a form of surety (i.e., post a bond, letter of credit or establish and escrow account or other means) at the time of building permit approval to cover costs of the removal in the event the County must remove the facility. The applicant shall submit a fully inclusive estimate of the costs associated with removal, prepared by a qualified professional. The amount shall include a mechanism to accommodate the rate of inflation of 15 years. (Ord. 2010-02, 2010; Ord. 2009-25, 2009)

KITTITAS COUNTY COMMUNITY DEVELOPMENT SERVICES
411 N. Ruby St., Suite 2, Ellensburg, WA 98926
CDS@CO.KITTITAS.WA.US
Office (509) 962-7506
Fax (509) 962-7682
"Building Partnerships – Building Communities"

WIND FARM SITING APPLICATION

(For proposing a wind farms in the Wind Farm Resource Overlay zone, as provide for in KCC 17.61A)

*A **preapplication conference** is encouraged for this permit. The more information the County has early in the development process, the easier it is to identify and work through issues and conduct an efficient review. To schedule a preapplication conference, complete and submit a Preapplication Conference Scheduling Form to CDS. Notes or summaries from preapplication conference should be included with this application.*

Please type or print clearly in ink. Attach additional sheets as necessary. Pursuant to KCC 15A.03.040, a complete application is determined within 28 days of receipt of the application submittal packet and fee. The following items must be attached to the application packet.

REQUIRED ATTACHMENTS

- ❑ Vicinity map(s) showing project location in relation to the project area and surrounding area; turbine locations in relation to existing structures. (Include applicable distances)
- ❑ Project Drawing(s) and Site plan(s) of the project site with all proposed: project areas; turbine locations; transmission lines; buildings; points of access, roads, and parking areas; septic tank and drainfield and replacement area; areas to be cut and/or filled; and, existing structures and natural features such as contours, streams, gullies, cliffs, etc.
- ❑ Development Agreement, see KCC 15A.11
- ❑ SEPA Checklist (if not exempt per KCC 15.04 or WAC 197-11-800)
- ❑ Project Narrative responding to Questions 9-12 on the following pages.
- ❑ In addition to the materials listed above, for projects not utilizing a "pre-identified area for siting" described in KCC 17.61A.035, the following County approvals are also required and shall be processed concurrently (see KCC 17.61. A.04.2):
  - A site-specific amendment of the Comprehensive Plan land use designation map to "Wind Farm Resource Overlay"
  - A site-specific rezone of the County zoning map to "Wind Farm Resource Overlay"

APPLICATION FEES:

4,420.00	Kittitas County Community Development Services (KCCDS)
836.00	Kittitas County Department of Public Works
745.00	Kittitas County Fire Marshal
$6,001.00	**Total fees due for this application (**One check made payable to KCCDS)

FOR STAFF USE ONLY

Application Received By (CDS Staff Signature): _____ DATE: _____ RECEIPT # _____

DATE STAMP IN BOX

GENERAL APPLICATION INFORMATION

1. Name, mailing address and day phone of land owner(s) of record:
Landowner(s) signature(s) required on application form.

Name: _____

Mailing Address: _____

City/State/ZIP: _____

Day Time Phone: _____

Email Address: _____

2. Name, mailing address and day phone of authorized agent, if different from landowner of record:
If an authorized agent is indicated, then the authorized agent's signature is required for application submittal.

Agent Name: _____

Mailing Address: _____

City/State/ZIP: _____

Day Time Phone: _____

Email Address: _____

3. Name, mailing address and day phone of other contact person
If different than land owner or authorized agent.

Name: _____

Mailing Address: _____

City/State/ZIP: _____

Day Time Phone: _____

Email Address: _____

4. Street address of property:

Address: _____

City/State/ZIP: _____

5. Legal description of property (attach additional sheets as necessary):
_____
_____

6. Tax parcel number: _____

7. Property size: _____(acres)

8. Land Use Information:

Zoning: _____ Comp Plan Land Use Designation: _____

PROJECT NARRATIVE

(INCLUDE RESPONSES AS AN ATTACHMENT TO THIS APPLICATION)

9. **Narrative project description (include as attachment):** Please include at minimum the following information in your description: describe project size, location, water supply, sewage disposal and all qualitative features of the proposal; include every element of the proposal in the description.

10. **Statement of how project complies with the provision of KCC 17A.035 and/or KCCA.040.3, as applicable:** Please include how the project complies with the minimum 1/2 mile setback requirement from existing structures at the time of application, how the project complies with location in relation to the pre-identified siting area as provided for in Kittitas County Code 17.61A.035 and how the project addresses wildlife impact, noise impact, visual impact, traffic impact, etc.

11. **Describe the development existing on the subject property and associated permits if applicable. List permit numbers if know. (i.e. building permits, access permits, subdivisions)**

12. **Name the road(s) or ingress/egress easements that provide legal access to the site.**

AUTHORIZATION

13. Application is hereby made for permit(s) to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agencies to which this application is made, the right to enter the above-described location to inspect the proposed and or completed work.

All correspondence and notices will be transmitted to the Land Owner of Record and copies sent to the authorized agent or contact person, as applicable.

Signature of Authorized Agent:
(REQUIRED if indicated on application)

Date:

X_____ _____

Signature of Land Owner of Record
(*Required for application submittal):*

Date:

X_____ _____

LaPorte County, Indiana
***Code of Ordinances* (2011)**

Title XV. Land Usage.
Chapter 157. Zoning.
Section 157.138. Wind Energy Conversion Systems.

(A) The purpose and intent of this section is to provide for the development of wind generated electricity in LaPorte County but to regulate siting requirements of such systems to provide for the general safety and well-being of LaPorte County residents.

(B) No individual, business, firm or other entities shall construct, operate or locate within the unincorporated area of LaPorte County a wind energy conversion system (WECS) without first having complied with the full provisions of this section.

(C) *Structural requirements.*

(1) *Height.* Any large WECS or meteorological tower greater than 200 feet tall shall require a special exception use permit and meet all requirements and height limitations imposed by the FAA rules and regulations.

(2) *Horizontal extensions.* The furthest horizontal extension of a WECS shall not extend into a required setback by the zoning district or be closer than 20 feet to any primary structure or ROW easement for any above ground telephone, electrical transmission, distribution or utilities both under and above ground.

(D) *Setback requirements.*

(1) *Minimum setbacks for large wind energy conversion systems.*

Distance from a...	Minimum Setback Distance
Property line measured from the center of the WECS to the property line.	1.1 times the total height (where the blade tip is at its highest point) for non-participating landowners.
Residential dwelling measured from the center of the WECS to the nearest corner of the structure.	1,000 feet for non-participating landowners. This is also reciprocal after establishment of a WECS.
Road ROW measured from the center of the WECS to the edge of the ROW.	1.1 times the total height (where the blade tip is at its highest point), provided that the distance is no less than 350 feet.
Other ROW, such as railroads and utility easements, measured from the center of the WECS to the edge of the ROW.	1.1 times the total height (where the blade tip is at its highest point), provided that the distance is no less than 350 feet.
Wetlands, defined by the Corps of Engineer, measured from the center of the WECS to the nearest point of the wetland in question.	Determined by a permit obtained from the Army Corps of Engineers.
Incorporated limits of a municipality, measured from the center of the WECS to city/town limits.	1/3 mile.

A platted and recorded subdivision of LaPorte County.	1/4 mile.

(2) *Minimum setbacks for small energy conservation systems.*

Distance from a...	Minimum Setback Distance
Property line measured from the center of the WECS to the property line.	1.1 times the total height (where the blade tip is at its highest point), provided that the distance is no less than the required yard setback prescribed for that zoning district.
Residential dwelling measured from the center of the WECS to the nearest corner of the structure.	1.1 times the total height (where the blade tip is at its highest point).
Road ROW measured from the center of the WECS to the edge of the ROW.	1.1 times the total height (where the blade tip is at its highest point), provided that the distance is no less than the required yard setback prescribed for that zoning district.
Other ROW, such as railroads and utility easements, measured from the center of the WECS to the edge of the ROW.	1.1 times the total height (where the blade tip is at its highest point), provided that the distance is no less than the required yard setback prescribed for that zoning district.
Wetlands, defined by the Corps of Engineer, measured from the center of the WECS to the nearest point of the wetland in question.	As determined by a permit obtained from the Corps of Engineers.
Public conservation lands, measured from the center of the WECS to the nearest point of the public conservation land in question.	750 feet.

(3) *Minimum setbacks for meteorological towers.*

Distance from a...	Minimum Setback Distance
Property line measured from the center of the WECS to the property line of non-participating landowners.	1.1 times the total height, provided that the distance is no less than the required yard setback.
Residential dwelling measured from the center of the WECS to the nearest corner of the structure.	1.1 times the total height.
Road ROW measured from the center of the WECS to the edge of the ROW.	1.1 times the total height, provided that the distance is no less than the required yard setback.
Other ROW, such as railroads and utility easements, measured from the center of the WECS to the edge of the ROW.	1.1 times the total height, provided that the distance is no less than the required yard setback.

(E) *Safety design and installation standards.*

(1) *Equipment type.*

(a) *Turbines.* All turbines shall be constructed of new commercially available equipment.

(b) *Towers.* All towers shall be guyed unless they are designed for temporary purposes like data collection and will be removed through the owner's expense in a timely manner.

(c) *Used equipment or proto-type equipment.* Used, experimental or proto-type equipment still in testing may be approved by the BZA per the variance process.

(d) All towers shall not be guyed unless they are designed for temporary purposes.

(2) *Industry standards and other regulations.* All WECS shall conform to applicable industry standards as well as all local, state and federal regulations. An applicant shall submit certificates of design compliance that wind turbine manufacturers have obtained from Underwriter's Laboratories, DET norske Veritas, Germanischer Lloyed Wind Energie or an equivalent third party.

(3) *Controls and brakes.*

(a) *Braking systems.* All WECS shall be equipped with a redundant braking system. This includes both aerodynamic over speed controls (including variable pitch, tip, and other similar systems) and mechanical brakes. Stall regulations shall not be considered a sufficient braking system for over speed protection.

(b) *Operation mode.* All mechanical brakes shall be operated in a fail safe mode.

(4) *Electrical components.*

(a) All electrical components of the WECS shall conform to applicable local, state and national codes and relevant national and international standards.

(b) *Electrical collection cables.* All WECS electrical collection cables between each WECS shall be located underground unless they are located on public or utility rights-of-way or with prior county approval. All transmission lines that are buried should be at a depth consistent with or greater than local utility and telecommunication underground lines standards or as negotiated with the landowner or the landowner's designate until the same reach the property line or a substation adjacent to the property line.

(5) *Color.*

(a) Towers and blades shall be painted white or gray or another non-reflective, unobtrusive color.

(b) The applicant for WECS shall comply with all applicable FAA requirements.

(6) *Warnings.*

(a) A reasonably visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.

(b) Visible, reflective, colored objects, such as flags, reflectors or tape shall be placed on the anchor points of guy wires and along the guy wires up to a height of not less than 15 feet from the ground.

(7) *Climb prevention.* All WECS tower designs must include features to deter climbing from the base of a lattice-based WECS tower or be protected by anti-climbing devices such as:

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

(b) Anti-climbing devices 15 feet vertically from the base of the WECS tower.

(c) Locked WECS tower doors.

(8) *Blade clearance.* The minimum distance between the ground and any protruding blade(s) utilized on a WECS shall be 15 feet as measured at the lowest point of the arc of the blades. The minimum distance shall be increased as necessary to provide for vehicle clearance in locations where over-sized vehicles might travel.

(9) *Noise and vibration.*

(a) Noise and vibration levels shall be in compliance with all county, state and federal regulations.

(b) At no point within 200 feet of a primary residence may the sound pressure levels from a wind turbine exceed the following sound levels. Sound levels shall be measured with an octave band analyzer or sound level meter and associated filer manufactured in compliance with standards prescribed by the National Standards Institute (ANSI).

Octave Bands for LaPorte County in Hertz (HZ)	Maximum Permitted Sound Level (Decibels) Measured 200 Feet from Edge of Any Primary Structure
63	75
125	70
250	65
500	59
1000	53
2000	48
4000	44
8000	41

(10) *Utility interconnection.* The WECS, if interconnected to a utility system, shall meet the requirements for interconnection and operate as set forth in the electrical utility's then-current service regulations applicable to WECS.

(11) *Waste management.* All solid waste whether generated from supplies, equipment, parts, packaging or operation or maintenance of the facility, including old parts and equipment, shall be removed from the site in a timely manner consistent with industry standards. All hazardous waste generated by the operation and maintenance of the facility, including but not limited to lubricating materials, shall be handles in a manner consistent with all local, state and federal rules and regulations.

(12) *Lighting.*

(a) Except with respect to lighting required by the FAA, all lighting shall be shielded so that no glare extends substantially beyond the boundaries of the wind farm facilities.

(b) Any WECS thereof declared to be unsafe by the LaPorte County Building Commissioner by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster, damage or abandonment is hereby declared to be a public nuisance and shall be abated by repair, rehabilitation, demolition or removal in accordance with the procedures set forth in the county ordinances governing the removal of nuisances.

(13) *Compliance with additional regulations.* Nothing in this section is intended to preempt other applicable state and federal laws and regulations.

(F) *Operation and maintenance.*

(1) *Physical modifications.* In general, any physical modifications to any WECS that alters the mechanical load, mechanical load path or major electrical components shall require recertification. Like-kind replacements shall not require recertification. Therefore, prior to making any physical modification, the owner or operator shall confer with the Building Department and/or Plan Commission to determine whether the physical modification requires recertification.

(2) *Interference.*

(a) *Pre-construction.* The applicant shall complete a communications study prior to construction so as to minimize interference with any public or public serving utility transmissions.

(b) *Post-construction.* If, after construction of the WECS, the owner or operator receives a written complaint related to interference with local broadcast residential television, telecommunication, public communication or microwave transmissions, the owner or operator shall take reasonable steps to respond to remedy the interference within 90 days.

(c) *Failure to remedy.* After 90 days if the interference is not remedied, appropriate action will be taken which can result in the inactivity of the WECS. However, this doesn't apply to interference with private telecommunications systems.

(G) *Decommissioning plan*. Prior to receiving siting approval under this section, the county and the applicant, owner or operator must formulate a decommissioning plan to ensure that the WECS project is properly decommissioned. The decommissioning plan shall include;

(1) Assurance that the facilities are properly decommissioned upon the end of the project life or facility abandonment. Applicant's obligations with respect to decommissioning shall include removal of all physical material pertaining to the project improvements to a depth of 48 inches beneath the soil surface and restoration of the area occupied by the project improvement to as near as practicable to the same condition that existed immediately before construction of such improvements. Prior to issuance of a building permit, the applicant shall provide a contractor cost estimate for demolition and removal of the WECS facility and will provide financial assurance in an amount at least equal to the demolition and removal contractor cost estimate, through the use of a bond, letter of credit or other security acceptable to the county updated every five years for the cost of decommissioning each tower to be constructed under that building permit, which security shall be released when such tower is properly decommissioned as determined by the LaPorte County Building Commissioner. In the event of abandonment by the owner or operator, the applicant will provide an affidavit to the LaPorte County Building Commissioner representing that all easements for wind turbines shall contain terms that provide financial assurance, including access to the salvage value of the equipment, for the property owners to ensure that facilities are properly decommissioned within 12 months of expiration or earlier termination of the project.

(2) The applicant, owner or operator's failure to materially comply with any of the above provisions shall constitute a default under this section.

(3) Prior to implementation of the existing county procedures for the resolution of such default (s), the appropriate county body shall first provide written notice to the owner and operator, setting forth the alleged default (s). Such written notice shall provide the owner and operator a reasonable time period, not to exceed 60 days, for good faith negotiations to resolve the alleged default(s).

(4) If the county determines in its discretion that the parties cannot resolve the alleged default(s) within the good faith negotiation period, the existing county ordinance provisions addressing the resolution of such default(s) shall govern.

(5) The decommissioning plan will be updated every five years through the use of a bond, letter of credit or other security acceptable to the county.

(H) *Application procedures*.

(1) *Conditional use permit for all WECS.* The application shall include the following items which may be supplemental to the County Plan Commission variance/special exception application:

(a) *Project description.*

1. The name(s), address(es) and phone number(s) of the applicants), owner and operator and all property owner(s) with WECS on their properties, if known.

2. A WECS project summary, including to the extent available, a general description of the project, including its approximate name plate generating capacity; the potential equipment manufacturers), type(s) of WECS(s), number of WECS(s) and name plate generating capacity of each WECS.

3. The maximum height of the WECS tower(s) and maximum diameter of the WECS (s) rotor(s).

4. A legal description, address and general location of the project.

(b) *Topographic map.* Depicting the project site and the surrounding area which shall encompass an area at least a quarter mile radius from the proposed project site with contours of not more than five-foot intervals.

(c) *Creation of a site plan.* This shall include distances and drawn to scale and certified by a registered land surveyor, at an appropriate scale including distances and drawn showing:

1. The proposed location of the wind energy facility, including planned locations of each WECS tower, guy lines and anchor bases (if any);

2. WECS access roads; substations; electrical cabling and ancillary equipment;

3. Primary structures within one quarter mile of any WECS;

4. Property lines, including identification of adjoining properties; setback lines; public roads; location of all above-ground utility lines within a distance of two times the WECS tower height of any WECS tower;

5. Recognized historic or heritage sites as noted by the Division of Historic Preservation and Archeology of the Indiana Department of Natural Resources;

6. Any wetlands based upon delineation prepared in accordance with the applicable U.S. Army Corps of Engineers requirements and guidelines.

(d) *Correspondence with wildlife agencies.* For the purposes of preventing harm to migratory birds, the applicant shall provide written documentation that he or she is in direct cooperation and in accordance with the U. S. Fish and Wildlife Service and IDEM.

(2) *Application for an improvement location permit.*

(a) *Application requirements*. After approval of the project through the special exception/variance process, the applicant shall apply to the Building Commissioner for an improvement location permit after approval from the BZA. In addition to the information required on the improvement location permit application, the applicant shall provide the following information to the Building Commissioner prior to the issuance of an improvement location permit.

1. Dimensional representation of the structural components of the tower construction including the base and footings.

2. Schematic of electrical systems associated with the WECS including all existing and proposed electrical connections.

3. Manufacturer's specifications and installation and operation instructions or specific WECS design information.

4. An engineer or qualified registered professional engineer shall certify as part of the building permit application that the turbine, foundation and tower design of the WECS is within accepted professional standards, given local soil and climate conditions. An engineering analysis of the tower showing compliance with the applicable regulations and certified by a licensed professional engineer shall also be submitted. The analysis shall be accompanied by standard drawings of the wind turbine structure, including the tower, base and footings.

5. All turbines shall be new equipment commercially available. Used, experimental or proto-type equipment still in testing shall be approved by the BZA as per the normal special exception process.

6. Necessary recorded access easements and necessary recorded utility easements, copies of which shall be submitted to the LaPorte County Building Commissioner.

7. No appurtenances other than those associated with the wind turbine operations shall be connected to any wind tower except with express, written permission by the BZA.

8. A transportation plan showing how vehicles would access the site and describing the impacts of the proposed energy project on the local and regional road system during construction and operation.

9. A vegetation plan for restoring areas temporarily disturbed during construction.

10. A fire protection plan for construction and operation of the facility.

11. Any other item reasonably requested by the BZA.

12. A drainage plan for construction and operation must be developed and approved by the LaPorte County Drainage Board.

13. An erosion control plan must be developed in consultation with the LaPorte County Soil and Water Conservation District.

(Ord. 2008-16, passed 8-5-08)

Use, Permitted	A use which may be lawfully established in a particular district or districts provided it conforms with all requirements, regulations, and performance standards, if any, of such districts.
Use, Principal	The primary use and chief purpose of a lot or structure.
Use, Special	A use, either public or private which, because of its unique characteristics, cannot be properly classified as a permitted use in any particular district or districts.
Utility, Major	Generating plants; electrical switching facilities and primary substations; water and wastewater treatment plants; water tanks; and radio, television and microwave transmission towers; and similar facilities of agencies that are under public franchise or ownership to provide the public with electricity, gas, heat, steam, communication, rail transportation, water, sewage collection or other similar service, wind power generating facilities including wholesale generators and or qualifying facilities. (6-18-02) The term "utility" shall not be construed to include corporate or general offices; gas or oil processing; manufacturing facilities; postal facilities; or other uses defined herein. In addition, utilities that are exempt as specified in Article 1 of these regulations shall not be considered to be major utilities as defined herein.
Utility, Minor	Services and facilities of agencies that are under public franchise or ownership to provide services that are essential to support development and that involve only minor structures, such as poles and lines.
Vehicle and Equipment Sales	An establishment engaged in the retail or wholesale sale or rental, from the premises, of motorized vehicles or equipment, along with incidental service or maintenance activities. Typical uses include new and used automobile and truck sales, automobile rental, boat sales, motorcycle sales, moving trailer rental, and farm equipment and machinery sales and rental.
Vehicle/Equipment Storage Yard	An outdoor area used or intended to be used for long-term storage of vehicles and equipment, other than a "Commercial Parking Lot" or accessory parking to a principal use.
Vehicle Paint and Body Shop	An establishment primarily engaged in painting of or body work to motor vehicles or heavy equipment.
Vehicle Repair	A use providing automobile repair or maintenance services within completely enclosed buildings, but not including "General Vehicle Repair" services.
Vibration	The periodic displacement, measured in inches, of earth.

Vocational School	A use providing education or training in business, commercial trades, language, arts or other similar activity or occupational pursuit, and not otherwise defined as a "College or University" or "School."
Warehouse, Self Storage	An enclosed storage facility containing independent, fully enclosed bays that are leased to individuals exclusively for dead storage of their household goods or personal property.
Warehousing and Wholesale	An establishment primarily engaged in the storage or sales of materials, equipment, or products or sales to wholesalers or retailers. Typical uses include cold storage, warehousing and dead storage facilities, but excluding "Residential Storage Warehouses" and sales of goods to the general public.
Waste	Any garbage, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility or other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining and agricultural operations, and from community activities, but does not include, solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Clean Water Act or sources, special nuclear, or by-product materials as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 921) or any solid or dissolved material from any facility subject to the Federal Surface Mining Control and Reclamation Act of 1977 (P.L. 95-87) or the rules and regulations thereunder or any law or rule or regulations adopted by the State of Illinois pursuant thereto.
Welding or Machine Shop	A workshop where machines, machine parts, or other metal products are fabricated. Typical uses include machine shops, welding shops and sheet metal shops.
Winery	A facility comprising of building or buildings used to convert fruit juices to wine, and to age, bottle, store, distribute and sell said wine. A winery includes crushing, fermenting, and refining, bottling, blending, bulk and bottle storage, aging, shipping, receiving, laboratory equipment and maintenance facilities, sales, and administrative office functions, and may include tasting and winery promotional events. (6-17-08)
Wind Energy System, Small	A wind energy conversion system consisting of a single wind turbine, single tower, and associated control or conversion electronics that generates power for an individual property for the purpose of reducing on-site consumption of utility power. (6-17-08)
Yard Waste	See definition of "Landscape Waste."

USE TYPE	ZONING DISTRICTS						
	RESIDENTIAL			NONRESIDENTIAL			
	A	R-1	R-2	C	M-1	M-2	Use Standards
Group Residential				S			
Manufactured Home			P				21
Manufactured Home – Residential Design	P	P	P				22
Manufactured Home Park			S				23
Mobile Home			P				21
Modular Home	P	P	P				22
Multi-Family			S				25
Recreational Area, Family (6-17-08)	P						
Rural Home-Based Off-Premise Business (2-20-01)	S						44
Single-Family, Attached Dwelling			P				22, 33
Single-Family, Detached Farm Dwelling	P	P	P	P	P	P	22, 34
Single-Family, Detached Non-Farm Dwelling	P	P	P				22, 35
Single-Family, Underground Dwelling	P	P	P				36
Single-Family, Zero-Lot-Line Dwelling		P	P				37
Transitional Living Facility			P	S			40
Wind Energy System, Small (6-17-08)	P	P	P	P	P	P	50
COMMERCIAL USES							
Adult Entertainment Establishment					S	S	2
Agricultural Processing (2-20-01)	S			S	S	P	
Agricultural Tourism (9-19-06)	S						49
Agricultural Sales and Service (2-20-01)				P	P	P	
Animal Care, General	S			S	P	P	
Animal Care, Limited (2-20-01)	S			P	P	P	
Auction Rooms (2-20-01)				P			
Bank or Financial Institution				P			
Bar or Tavern				P			

USE TYPE	ZONING DISTRICTS						
	RESIDENTIAL			NONRESIDENTIAL			
	A	R-1	R-2	C	M-1	M-2	Use Standards
Transit Facility				P	P	P	
Trucking Facility				S	P	P	45
Utility, Major (if not regional pollution control facility)	S	S	S	S	S	S	41
Utility, Minor	P	P	P	P	P	P	
Warehousing and Wholesale					P	P	
Welding or Machine Shop					S	P	
Winery (6-17-08)	P						51

602 USE STANDARDS. The use standards of this section shall apply to permitted uses, special uses and accessory uses as noted.

1. Accessory Uses: Permitted uses and approved special uses shall be deemed to include accessory uses and activities that are customarily associated with, and appropriate, incidental, and subordinate to the principal uses allowed in zoning districts. Accessory uses and activities shall be subject to the same regulations as apply to principal uses in each district, unless otherwise stated in this zoning ordinance. Accessory uses shall not be established prior to the principal use, unless specifically allowed by this zoning ordinance.

   Establishment of Accessory Uses - Accessory uses shall not be established prior to the principal use except that the Director of Building and Zoning may issue a temporary permit for the residential use, by one family, of any accessory building while the principal dwelling is under construction. Such temporary permit shall be valid until the date of the first occupancy of the principal building or 18 months after the issuance of the permit, whichever is the earlier date. Also, one accessory building may be established on a lot prior to the establishment of the principal use, provided that such building is used only for the storage of machinery and equipment necessary to maintain the otherwise vacant lot. The building shall be no larger than necessary for storage of the aforementioned machinery and equipment as determined by the Director of Building and Zoning. (6-18-02)

   A. Agricultural Accessory Uses: Any use that is accessory to an exempted agricultural use as determined by this zoning ordinance shall also be exempt from the regulations of this zoning ordinance. Agricultural accessory uses include, but shall not be limited to, the following activities and structures.

      (1) Fences and walls;

County for the costs of these services if not provided by the applicant. This requirement shall not apply if the event has been anticipated in the budget process and sufficient funds have been included in the budget to cover the costs incurred.

D. Garage or Porch Sales: The sale of used or second-hand merchandise shall be permitted on any lot where a single-family residential dwelling is the principal use provided that such garage or porch sale shall not exceed three consecutive days in duration, nor occur more than twice during a 12 month period at one residence.

40. Transitional Living Center: Transitional living centers shall be subject to the following standards.

A. Size: No more than ten persons, including staff, shall reside in the center at one time.

B. Separation: No transitional living center shall be located within 1,500 feet of any other transitional living center or substance abuse treatment facility, nor shall a transitional living center be located within 300 feet of any religious assembly, school, R-1 or R-2 zoned property.

41. Utility, Major (if not a regional pollution control facility or otherwise exempted in Article 1 of these regulations): Major utilities, that are not regional pollution c control facilities or otherwise exempted in Article 1 of these regulations, shall not be located within 200 feet of a boundary line of an R-1 or R-2 district.

However, wind power generation facilities shall not be located within 2000 feet of a boundary line of an R-1 or R-2 district and shall also conform to the following requirements: (6-18-02)

A. No building or tower that is part of a wind power generation facility shall encroach onto any recorded easement prohibiting the encroachment unless the grantees of the easement have given their approval.

B. Lighting shall be installed for security and safety purposes only. Except with respect to lighting required by the FCC or FAA, all lighting shall be shielded so that no glare extends substantially beyond the boundaries of a facility.

C. No facility shall encroach onto an existing septic field.

D. Any wind power generation facility located in a special flood hazard area or wetland shall comply with the requirements of the "FP" Flood Plain

Overlay District and Illinois Department of Natural Resources.

E. The height of the facility shall not exceed 499 feet, except if the facility is located within one and one-half miles of the corporate limits of a municipality with a population of 25,000 or more, the height of the facility shall not exceed 200 feet. (3-15-2005)

F. A tower that is part of a wind power generation facility shall require engineering certified by a registered engineer.

G. Documentation, approved by the Director of Building and Zoning, shall be provided which verifies that the site and design are acceptable to the FAA.

H. A wind power generation facility may be located on the same lot as one or more structures or uses.

42. Vehicle/Equipment Sales, Vehicle/Equipment Storage Yards and Vehicle Paint and Body Shop, Vehicle Repair: All vehicle and equipment storage areas and parking areas must be hard-surfaced and dust free. Vehicle Repair in the C - Commercial District shall be limited to vehicles that do not exceed one and one-half (1 ½) tons.

43. Facilities of a telecommunications carrier: These provisions shall not abridge any rights created by authority confirmed in the Federal Telecommunications Act of 1996, P.L. 104-104.

A. In designing a facility, a telecommunication carrier shall consider the following guidelines:

1) No building or tower that is part of a facility should encroach onto any recorded easement prohibiting the encroachment unless the grantees of the easement have given their approval.
2) Lighting shall be installed for security and safety purposes only. Except with respect to lighting required by the Federal Aviation Administration or the Federal Communications Commission, all lighting should be shielded so that no glare extends substantially beyond the boundaries of the facility.
3) No facility shall encroach on an existing septic field.
4) Any facility located in a special flood hazard area or wetland should meet the legal requirements for those lands.
5) Existing trees more than three inches in diameter should be preserved if reasonably feasible during construction. If any tree more than three inches in diameter is removed during construction, a tree three inches in diameter or more in diameter shall be planted as a replacement if reasonably feasible.
6) If any elevation of a facility faces an existing residential use in a

C. Adequate off street parking approved by the Director of Building and Zoning.

D. Temporary stands with canopies of produce are allowed and shall be removed at the end of each season: the floor area of structures for sale area shall not exceed 600 square feet.

50. Small Wind Energy System: A small wind energy system is allowed as a permitted use, a site plan shall be submitted to the Department of Building and Zoning demonstrating compliance with the following restrictions: (6-17-08)

A. Setbacks: All parts of the structure of a small wind energy system, including the tower, base, footings, and turbine but excluding guy cables and their anchors, shall be set back a distance equal to 110 percent of the system height from all adjacent property lines, road right-of-way, railroad right-of-way, and right-of-way for overhead electrical transmission or distribution lines. Guy cables and their anchors shall meet the setback requirements for accessory structures in the zoning district in which the system is proposed to be located.

B. Noise: The small wind energy system shall not exceed a noise level of 60 decibels as measured at the closest property line. The noise level may be exceeded during short-term events such as utility outages and/or severe wind storms.

C. Building permit applications shall be accompanied by standard drawings of the system structure, including the tower, base, footings, and guy cables certified by a licensed professional engineer. This certification may be supplied by the manufacturer.

D. Notifications regarding Aircraft: Small wind energy systems shall comply with all applicable regulations of the FAA, including any necessary approvals for installations closer than two miles to an airport. The applicant has the responsibility of determining the applicable FAA regulations and securing the necessary approvals. If the system is proposed to be sited in an agricultural area that may have aircraft operating at low altitudes, the applicant shall notify all such crop dusting businesses no later than 5 business days prior to submitting a building permit application. Copies of letters must be included in the building permit application. Orange safety balls shall be installed on each side of towers where guy wires are used for towers over 80 feet in height.

E. Local Utility Company Notification: If a small wind energy system is to be connected to the electricity grid, the applicant shall notify the electric utility service provider that serves the proposed site of his intent to install

an interconnected customer-owned electricity generator no later than 5 business days prior to submitting a building permit application. Copies of letters must be included in the building permit application.

F. Minimum Distances: The distance between any protruding blades utilized on a small wind energy system and the ground shall be a minimum of 15 feet as measured at the lowest point of the arc of the blades.

G. Radio and Television Signals: The small wind energy system shall not cause any radio, television, microwave, or navigation interference. If a signal disturbance problem is identified, the applicant shall correct the problem within 90 days of being notified of the problem.

H. Appearance: The small wind energy system shall maintain a galvanized neutral finish or be painted to conform the system color to the surrounding environment to minimize adverse visual effects. No small wind energy system shall have any signage, writing, pictures, or decorations placed on it at any time other than warning, equipment, and ownership information. No small wind energy system shall have any flags, streamers, banners, and other decorative items that extend from any part of the system placed on it at any time.

I. Removal Upon End of Useful Life: When a system reaches the end of its useful life and can no 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.

J. Fencing: The tower shall be enclosed with a fence of at least six (6) feet in height or the base of the tower shall not be climbable for a distance of eight (8) feet measured from the ground.

K. Required Safety Features: The small wind energy 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.

L. Tower: The upright portion of a small wind energy system to which the primary generator devices are attached.

M. System Height shall be measured from height above grade of the highest point of the arc of the blades and shall be limited as follows:

	Ag, C, M-1 & M-2 Districts	R-1 & R-2 Districts
Acreage	Height	Height
.99 or less acres	50 feet	50 feet
1 to 1.99 acres	65 feet	65 feet
2 to 4.99 acres	80 feet	80 feet
5 or more acres	150 feet	80 feet

51. Wineries: The following standards shall apply to wineries in the Agriculture District. (06-17-08)

A. Minimum parcel size in acres: A minimum of 6.5 acres of land.

B. Minimum wine producing acres: A minimum of 4 acres of wine grapes are planted and capable of producing a crop.

C. Parking requirement: A minimum of 3 paved parking spaces.

D. Handicap parking requirement: At least (1) one handicap parking space must be provided.

E. Shall be accessory to an existing single family residence or a farm as defined herein.

F. Setbacks: All production facilities, tasting facilities, and outdoor use areas, excluding parking lots shall be a minimum of 50 feet from all property lines.

G. Tasting Facilities: The tasting facility shall be clearly related, and subordinate to the primary operation of the winery. The primary focus of the tasting facility shall be the marketing and sale of the wine and grape products produced at the winery. Incidental sales of wine related merchandise and food shall be allowed.

H. Retail sales of wine fruit products shall be limited to those produced, vented, cellared, or bottled by the winery operator or grown on the winery premises or custom crushed at another facility for the wine operator.

I. Uses for receptions, clubs or conventions are not allowed, except a reception area may be approved by special use, provided a vineyard is established on the property and provided that if the vineyard or winery no longer function on the property, such receptions shall no longer be allowed on the property. (01/19/2010)

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Navajo County, Arizona
Requested By: BOARD OF SUPERVISORS
Navajo County Recorder - Laurette Justman
11-02-2010 10:04 AM Recording Fee $0.00

ORDINANCE NO. 06-10

AN ORDINANCE OF THE NAVAJO COUNTY BOARD OF SUPERVISORS, AMENDING ARTICLE 20 OF THE NAVAJO COUNTY ZONING ORDINANCE BY ADDING SECTION 2008

WHEREAS, Article 20 of the Navajo County Zoning Ordinance, Ordinance No. Z90-1, authorizes the issuance of Special Use Permits for "Electric power generating plants and facilities, including but not limited to those operated by nuclear or fossil fuel or solar, wind or geothermal energy"; and,

WHEREAS, the Public Works Department staff and the Planning and Zoning Commission have recommended that Article 20 be amended to include a new Section 2008, entitled Wind Energy Generation Facilities; and,

WHEREAS, following published notice as required by law and a duly noticed public hearing held this date, the Board of Supervisors finds that the recommended amendment to Article 20 is in the public interest and should be approved,

NOW, THEREFORE, BE IT ORDAINED by the Board of Supervisors that Article 20 of the Zoning Ordinance is hereby amended by inserting the following new Section 2008:

Section 2008: Wind Energy Generation Facilities

1. Introduction and purpose

The purpose of this section is to:

- Specify Special Use Permit application requirements for the development of utility-scale wind energy projects with actual or planned generating capacity of at least one megawatt.
- Establish standards for the permitting, construction, operation, maintenance, and decommissioning of utility-scale wind energy generation facilities.

This section does not apply to personal or institutional wind energy generation equipment that is intended to generate electricity or heat water for use primarily on the property on which the equipment is located, or to facilities with an actual or planned generating capacity of less than one megawatt.

2. Definitions

The following terms are defined as follows for purposes of this section. Other definitions may be found in Article 30.

SUP: A Special Use Permit approved by the Board of Supervisors pursuant to this section and the other applicable provisions of this ordinance.

Project boundary: The boundary of a Wind Energy Generation project as set forth in the project site plan and incorporated into the SUP.

Setback distance: The distance from the center of the wind turbine electrical generator tower foundation to the nearest property line, edge of a public road right-of-way or railroad right-of-way,

third-party transmission line, above-ground pipeline, communication tower, other structure or other boundary established by Navajo County.

Wind Energy Generation facility: An energy generation facility using wind technology and consisting of one or more wind turbines and accessory structures and buildings, including substations, anemometers and associated electrical infrastructure, with an actual or planned generating capacity of at least one megawatt. The term does not include stand-alone wind electricity generating systems primarily for on-site residential, institutional, commercial or agricultural use which may feed residual power into the electrical grid as defined by the Arizona Corporation Commission.

Wind turbines (or towers): A wind energy system that uses the wind to turn a set of aerodynamic blades or devices attached to an electric generator or turbine. The term does not include small wind turbines used primarily to generate electricity for on-site residential, institutional, commercial or agricultural use.

3. Zoning Districts in which allowed / SUP required

Wind Energy Generation facilities are allowed only in the A-General, Rural and Industrial Zoning Districts, subject to securing an SUP and to the applicable site development standards set forth herein. The SUP application shall comply with the submittal application requirements of Navajo County for the particular project.

4. General development standards for Wind Energy Generation facilities

a. A minimum of on-site roadways shall be constructed. Temporary access roads and excess roadway widths for initial equipment/facility installation shall be re-vegetated, using native species plants and seeds, to a pre-project condition (to the extent reasonably possible) after completion of installation as a condition of the SUP. The applicant shall submit a plan of all proposed roads, temporary and permanent, for review and approval by the Public Works Department prior to the issuance of any grading or building permits.

b. Electrical collector lines, which connect electricity generation devices to any substations, shall be placed underground except where (a) they cross sensitive biological or archaeological resources, such as canyons, wetlands or sites eligible for the national register, or rugged terrain that would prevent the use of underground trenching technology, (b) project terrain is found to be unsuitable, as determined by the applicant and confirmed by the County Engineer, or (c) burying the lines would violate applicable laws or regulations. In these cases, collector lines will be allowed above ground subject to approval by the Public Works Department. Utility lines serving the electricity or phone requirements of buildings shall be placed in accordance with the utility's easement requirements.

c. Wind Energy Generation projects shall include fire control and prevention measures as outlined in the Uniform Fire Code and as required by the local Fire District or State Fire Marshall.

d. Wind Energy Generation projects shall comply with applicable Federal Aviation Administration (FAA) lighting, navigation and other requirements. Lighting shall be the minimum required by FAA regulations or other public safety considerations. The use of low-intensity, red pulsating/blinking lighting is preferred so long as consistent with FAA regulations. The use of strobes and strobe-type lighting for nighttime use is prohibited unless specifically required by the FAA. All lighting shall be in compliance with the Navajo County Lighting Ordinance.

e. Wind Energy Generation projects shall comply with applicable Federal Communication Commission (FCC) requirements, including those applicable to microwave communication links in the vicinity. Wind Energy Generation facilities shall minimize and mitigate telecommunication

interference (electromagnetic fields and communications interference generated by the project). No interference with public communication systems shall be allowed.

f. Towers, generator housings, hubs and blades shall be painted a non-reflective, unobtrusive color which shall complement the surrounding landscape, including but not limited to white, off-white, beige or tan. The design of other buildings and other structures shall, to the extent reasonably feasible and consistent with public safety, use materials, colors, textures, screening and landscaping that will blend the facility into the existing environment

g. The applicant shall avoid locating turbines in mountain passes or draws or on cliff edges in order to minimize avian and/or bat collisions when wildlife studies show that the project would pose a significant risk to avian and/or bat populations. Towers and nacelles shall be designed so as not to attract nesting birds or serve as perches for raptors. The SUP holder shall refer to the Arizona Game and Fish Department's and the U.S. Fish and Wildlife Services' wind guidelines that have been developed to aid the project proponents in reducing impacts to wildlife.

h. A letter from the Arizona Game and Fish Department will be required prior to scheduling of the SUP application for a hearing before the Planning and Zoning Commission, detailing the agency's comments and/or recommendations for the project. Pre-construction and post-construction wildlife studies shall be developed and performed with consideration given to the Arizona Game and Fish Department and U.S. Fish and Wildlife Service guidelines. Any wildlife impacts discovered during formal post-construction surveys shall be identified in the formal annual report submitted to the Arizona Game and Fish Department and U.S. Fish and Wildlife Service, with a copy to the Public Works Department. The formal annual report shall include avian and bat deaths due to the project.

i. All wind towers must be designed and constructed, to the greatest extent feasible, so as to prevent interior/exterior access by the public and shall have interior ladders and locking doors.

j. Experimental or prototype wind towers are prohibited. All wind towers must be standard production models commercially available from the manufacturer.

k. Wind turbine designs with blades downwind of the tower are prohibited.

l. For construction and permit purposes, all wind towers shall conform to the regulations for the applicable seismic zone of the building code.

m. Documentation confirming an interconnection agreement and a power purchase agreement (or equivalent agreements) shall be required prior to issuance of any building or construction permits.

n. All necessary building, grading and other permits shall be obtained from the Public Works Department prior to any site preparation or construction. All facilities must be designed and constructed in compliance with all applicable federal, state and local development and building and safety codes.

o. No building or structure may be constructed or occupied prior to full compliance with all applicable Public Works Department requirements, including but not limited to requirements concerning grading and drainage plans, flood control requirements, and the issuance of building and other permits for the proposed structures.

p. Floodplain Use Permits (where required) for any development in a floodplain shall be obtained through the Flood Control District prior to any such development.

q. All wind towers and other structures shall comply with all applicable county, state and federal laws, ordinances and regulations.

r. Signs associated with the project are limited to one project identification, information, interpretive and address sign of not more than 24 square feet located on the project site at each point of ingress and egress. No other signs shall be installed except for required warning and directional signs. Limited logos and/or manufacturer names shall be permitted on the generator housing or hub. No other advertisements, prominent logos, or other prominent messages are allowed on any tower, blade, generator housing, hub or any other part of any structure. Signage shall not be used for advertising. Prior to installation of any signs, the SUP holder shall obtain sign permits from the Public Works Department for all signs for which permits are required.

s. Project fencing, if applicable, shall include minimum 18 inch by 18 inch signs warning of the presence of high voltage. Such signs shall be located a maximum of 300 feet apart and at all points of site ingress and egress. Projects without fencing shall place such warning signs on each transformer building and all points of ingress and egress. Project fencing, if applicable, shall be a minimum of six feet and maximum of eight feet in height (excluding barbed wire or cyclone wire fencing, which is permissible).

t. Navajo County reserves the right to contract with a qualified third-party consultant for the review and evaluation of the proposed project and any of the application materials, particularly the sound study. The selection of a consultant shall be made in consultation with the applicant, with a mutually agreed-upon "not to exceed" contract amount prior to final selection of the consultant. The cost for any such review shall be reimbursed to Navajo County by the applicant before any building permit is issued. Additionally, and if deemed necessary, the reasonable cost for any third-party review(s) of any long-term monitoring or response to complaints or operational changes shall be reimbursed to Navajo County by the SUP holder within 30 days after written demand by the County. In such cases Navajo County shall provide written notice of the use of a third-party consultant to the applicant prior to such use.

u. A decommissioning plan shall be required and shall address the removal of the facilities and the restoration of the site upon a revocation of the SUP pursuant to paragraph 6 of this Section 2008 or the expiration of the SUP. Removal of the facilities and restoration of the site shall mean that all safety hazards created by the installation and operation of the Wind Energy Generation facility shall be removed and the site shall be restored to its pre-project condition to the extent reasonably possible, including the removal of foundations and footings to 36" below grade and the re-vegetation of any roads created or other areas graded or disturbed during the project. The SUP holder shall maintain a decommissioning bond in the amount of the full decommissioning cost at the end of the anticipated life of the project, net of salvage value, as estimated by a Professional Engineer registered in the State of Arizona. Said bond shall be reviewed and approved as to form, substance and amount by the Public Works Department. The engineer's estimate of decommissioning cost shall be renewed no less than every five years by a Professional Engineer registered in the State of Arizona, and a copy of each renewed estimate shall be provided to the Public Works Department for review and approval. The decommissioning bond shall be adjusted in accordance with the renewed cost estimate within 30 days after approval by the Public Works Department. The SUP holder shall provide proof that the bond is in place no later than the date of the commencement of construction. Bond(s) shall be provided for the benefit of Navajo County and all private lessors on whose land any portion of the project will be located. This requirement shall be a condition of approval of the SUP. The Board of Supervisors, upon the recommendation of the County Attorney and the Director of Public Works, may approve variations from the requirements of this paragraph if warranted by the particular circumstances of a project.

v. Noise requirements and mitigation measures:

(1) Audible sound limits:

A. Audible noise due to project operations shall not exceed the greater of: (a) 45 dBA $L_{Aeq,10}$; or, (b) the measured background, $L_{A90,10}$ plus 5 dB, as measured at the exterior at any legal residence, school, library or hospital in existence at the time of approval of the SUP.

B. If sound levels resulting from a proposed facility exceed the criteria specified above, a waiver may be granted by the Board of Supervisors after review and recommendation by the Planning and Zoning Commission, provided that the following has been accomplished:

i. An irrevocable written consent (or sound waiver easement) has been obtained from each affected property owner, stating that the owner is aware of the proposed facility and the sound limitations imposed by this section, that consent is granted to allow sound levels to exceed the maximum limits specified herein, and that such consent will be memorialized in a notice recorded with the Navajo County Recorder to notify future owners of the affected property that sound levels may exceed the sound levels specified herein. The consent shall include a legal description of the affected property. A copy of each such consent on which the SUP holder relies shall be submitted prior to approval of the SUP.

(2) All wind turbine operations shall meet the operational low-frequency noise requirements applicable to wind turbines as specified in Noise Requirement Guidelines adopted, published and amended from time to time by the Board of Supervisors.

(3) Background and compliance testing:

The requirements of subparagraph (1) above require that background (pre-development) sound levels be properly assessed, that sound levels be forecast in advance of SUP approval, and that, once a project commences operation, sound levels again be assessed as part of compliance-period assessment. Before an SUP is issued, the applicant's independent consultant shall complete a sound evaluation by determining existing (pre-project) background sound levels and forecasting ambient sound levels anticipated upon completion of the facility. The evaluation shall address facility aging and planned or probable modifications. If the project is permitted and constructed, when it is in operation the SUP holder's independent consultant shall complete a compliance-period sound evaluation. Background and post-construction compliance sound measurements shall comply with Noise Requirement Guidelines adopted, published and amended from time to time by the Board of Supervisors. If there is any conflict between the requirements of this ordinance and the requirements of such guidelines, the more stringent requirement(s) shall control.

For phased / staged development, background sound levels shall be determined before the initial phase of the project. For a situation in which multiple developments by the same or multiple developers are expected in an area, the same applies.

(4) During the first three months of facility operation and more specifically during a period of normal full production operations, the SUP holder shall verify compliance with subparagraph (1) above utilizing an independent consultant. If operational sound is found to exceed the limits specified in subparagraph (1) above, the SUP holder shall institute remedies to achieve compliance with the applicable limits, or submit a consent from each owner of an affected property in accordance with subparagraph v.(1).B above. During the remedy period the SUP holder shall identify and remove from service the equipment responsible for the excessive sound until the problem can be cured or mitigated. Navajo County staff may require additional compliance testing when deemed appropriate.

(5) Plans for determining background sound levels and for modeling/simulation shall be submitted by the applicant for the Public Works Department's review and approval in advance of the work.

w. Setbacks. The minimum safety setback distance, location and spacing requirements for Wind Energy Generation facilities shall be as follows. As used herein, "total tower height" means the height from grade to the top of the structure, including the uppermost extension of any blade (i.e., "straight up").

(1) Wind towers shall be placed in accordance with the greater of the applicable setback and location requirements set forth in paragraphs A, B and C below:

A. Such that the sound standards established in subparagraph 4.v of this Section 2008 will not be exceeded.

B. Setbacks related to areas outside the project boundary:

i. Setback to existing residence: Individual wind towers shall be placed within the project boundary at least ½-mile (2,640 feet) from an existing residence that is located outside of the project boundary.

ii. Setback to adjacent privately-owned land that is not zoned Industrial (I-1 or I-2):

a. Parcels greater than 2.5 acres in size: Individual wind towers shall be placed within the project boundary at least ¼-mile (1,320 feet) or 150% of the total tower height (whichever is greater) from the common property line with such parcels.

b. Parcels 2.5 acres or smaller in size: Individual wind towers shall be placed within the project boundary at least ½-mile (2,640 feet) or 150% of the total tower height (whichever is greater) from the common property line with such parcels.

Adjacent parcel sizes as set forth in subparagraphs a and b above shall be determined as of the effective date of this Section 2008.

iii. All other adjacent land not included in one of the foregoing categories: Individual wind towers shall be placed at least 1.1 times (110%) the total tower height from the project boundary.

C. Setbacks related to areas within or outside the project boundary:

i. Roadway (public or publicly-maintained): Individual wind towers shall be set back from any public or publicly-maintained roadway (as measured to the nearest edge of the right-of-way) at least ¼-mile (1,320 feet).

ii. Railways, utility lines, interior phase lines and structures: Individual wind towers shall be set back from any railway (as measured to the nearest edge of the right-of-way), or from any utility line (above or below ground - as measured to the nearest edge of the utility easement), or from any interior phase line or structure (regardless of use), at least 1.5 times (150%) the total tower height.

(2) The minimum setbacks from the project boundary for all non-tower uses and structures (such as administrative buildings, meteorological or anemometer towers, maintenance buildings, operations buildings, transformers, etc.) shall conform to the setback requirements for the Zoning District in which the use or structure is located.

(3) The Board of Supervisors may approve a reduction in the setback requirements set forth above in accordance with any or a combination of the following circumstances:

A. The project shares a common property line with another approved Wind Energy Generation facility.

B. An irrevocable written consent from an affected property owner has been obtained, stating that the owner is aware of the proposed facility and the setback requirements imposed by this section, that consent is granted to allow lesser setbacks than those specified herein, and that such consent will be memorialized in a notice recorded with the Navajo County Recorder to notify future owners of the subject property that setbacks are less than those specified herein.

C. An adjacent property owner who is also pursuing the development of a Wind Energy Generation facility or similar use has filed a letter of consent to the proposed setback reduction with the Public Works Department.

D. The parcel on which the project is located and an adjacent parcel are held in common ownership.

E. The current use of an adjacent property generates sound in excess of that permissible for the Wind Energy Generation facility under the terms of this section.

(4) Setback areas may be used for access within the development but are otherwise to remain in their current vegetative state.

5. Use of SUP, terms and conditions

a. Any Wind Energy Generation facility that is granted an SUP shall be developed in accordance with the schedule for development and stipulations set forth in the SUP.

b. An SUP for a Wind Energy Generation facility shall be valid for the anticipated useful life of the project.

c. An SUP for a Wind Energy Generation facility shall be granted in the name of the applicant and may be transferred or assigned to a new holder only with the written approval of the Board of Supervisors, following a public hearing. The new holder shall only be bound to agree to all existing conditions and shall provide adequate assurances to demonstrate that the new holder has the financial ability to fulfill the obligations as specified in the SUP.

6. SUP suspension and revocation

a. Any SUP issued pursuant to this section may be suspended or revoked in whole or part by the Board of Supervisors for material non-compliance with the requirements of this section or the stipulations set forth in the SUP. An SUP shall be subject to suspension or revocation at a duly noticed public hearing only if the SUP holder has failed to cure the material non-compliance after no less than 30 days' written notice of such non-compliance from the Director of Public Works.

b. If a Wind Energy Generation facility becomes unsafe or inoperable, the SUP is likewise subject to suspension or revocation by the Board of Supervisors as follows:

(1) An "inoperable Wind Energy Generation facility" is one that does not generate a significant amount of electricity for 180 consecutive days, unless such non-generation is due to an act of nature, declared emergency or other cause beyond the reasonable control of the SUP holder

or unless the SUP holder demonstrates that modernization, rebuilding or repairs are in progress or are planned and will be diligently completed.

(2) An "unsafe Wind Energy Generation facility" is one that has been found by a state or federal administrative agency or a court of competent jurisdiction to have materially violated applicable health or safety laws, unless the SUP holder demonstrates that measures to cure such violations are in progress or are planned and will be diligently completed.

(3) Every unsafe or inoperable Wind Energy Generation facility is hereby declared to be a public nuisance per se which shall be subject to abatement by all available legal and equitable remedies.

(4) Upon a complaint by the Director of Public Works that a Wind Energy Generation facility is inoperable or unsafe, the Board of Supervisors shall convene a public hearing at the earliest possible date after written notice to the SUP holder. Pending a final determination that the facility is inoperable or unsafe, the Board may suspend the SUP in whole or part or impose such conditions as may be appropriate to protect the public health, safety and welfare. Upon a final determination that the facility is inoperable or unsafe, the Board may suspend or revoke the SUP in whole or part or impose such conditions as may be appropriate to protect the public health, safety and welfare.

c. No later than 30 days after the revocation or expiration of the SUP, the decommissioning plan required by subparagraph 4.u of this Section 2008 shall be implemented and decommissioning shall proceed diligently to completion.

7. Joint agency approvals

a. If the applicant is also applying to the State of Arizona, U.S. Bureau of Land Management (BLM) Forest Service (USFS) or other federal agency for a right-of-way grant, lease or any other form of authorization or approval for a wind energy project in Navajo County to be located in whole or part on land managed by the State, BLM, USFS or other federal agency, or the applicant is also applying to the Western Area Power Administration or other federal power marketing agency (PMA) for an interconnection or transmission agreement for a wind energy project in Navajo County, then the applications may be jointly considered by the Planning and Zoning Commission and Board of Supervisors and the State, BLM, USFS, other federal agency or PMA (including without limitation joint hearings and coordinated application and mitigation requirements), and any and all findings, reports, studies, statements, assessments or analyses issued, approved or adopted by the State, BLM, USFS, other federal agency or PMA, including any mitigation measures required by any of those agencies, may be considered and adopted by the Planning and Zoning Commission and the Board of Supervisors in connection with the SUP application.

b. This Section 2008 does not purport to regulate wind energy generation projects on state or federal land except insofar as state or federal agencies may require compliance with Navajo County zoning requirements as part of their own application processes.

c. In the event of any inconsistency between any requirement of this Section 2008 and any requirement of state or federal law, now or in the future, the state or federal requirement shall control and this section shall be interpreted and applied consistently therewith.

8. Public Outreach.

As part of the SUP review and approval process, and to ensure adequate public outreach, the applicant shall do the following:

a. Provide the following:

(1) A list of all property owners of record within one mile of the project boundary, with current contact information (address and telephone number).

(2) A list of all property owners of record within 300 feet of each access route to the project from a public roadway, as well as within 300 feet of each public roadway that requires any improvements in connection with the project, with current contact information (address and telephone number).

(3) Notice by first class mail to all property owners listed under subparagraphs (1) and (2) above, such notice to include a narrative description of the project, identification of transportation routes, vicinity map showing surrounding properties, and a layout of the proposed facility and accessory buildings indicating setback distances to property lines.

(4) Notice by first class mail to all incorporated communities within three miles of the project boundary.

b. Schedule, publicize and conduct at least two public meetings (in collaboration with neighborhood groups and property owner associations, where available) in the project area at least 30 days before the Planning and Zoning Commission hearing. Public Works staff is available to suggest to the applicant potential meeting sites and publicity measures.

Feedback cards shall be provided to attendees and tabulated results shall be submitted to the Public Works Department within five days after each meeting.

c. Establish a web site or ".ftp" site, linked to the Navajo County web site if possible, giving a summary of the project (site plan, context plan and summary description) and applicant contact information before holding the first public meeting as required above. Provide a mechanism on this site for the submission of public comments.

d. Provide a contact name and telephone hotline, the details of which are printed on a prominent sign at each project entrance and maintained on record with the Public Works Department, by which citizens can leave comments and complaints 24 hours a day for the life of the project. The SUP holder shall take all reasonable efforts to review and address (including returning the call when appropriate) all non-urgent messages within 72 hours and all urgent messages within 24 hours. Provide the County with a monthly summary of complaints and the manner in which they were addressed.

SO ORDAINED by the Navajo County Board of Supervisors at Holbrook, Arizona, on October 26, 2010, by a vote of 5 ayes and 0 nays.

NAVAJO COUNTY BOARD OF SUPERVISORS

By Jesse Thompson
Jesse Thompson
Chairman of the Board

Attest:
Melissa W. Buckley
Melissa Buckley, Clerk of the Board

Rockingham County, Virginia
***Code of Ordinances* (2011)**

Chapter 17. Zoning.
Article XII. Wind Energy Conversion Systems.

DIVISION 1. - SMALL WIND ENERGY SYSTEMS

Sec.17-263. Purpose - and intent.

The purpose of this article is to regulate the placement, construction and modification of small wind energy systems while promoting the safe, effective and efficient use of small wind energy systems and not unreasonably interfering with the development of independent renewable energy sources.
(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-264. - Applicability.

The requirements set forth in this division shall govern the siting of small wind energy systems used to generate electricity or perform work which may be connected to the utility grid pursuant to the Virginia's net metering laws (Section 56-594 Code of Virginia (COV)), serve as an independent source of energy, or serve in a hybrid system.
(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-265. - Siting requirements.

The requirements for siting and construction of all small wind energy systems regulated by this division shall include the following:

(a) Small wind energy towers shall maintain a galvanized steel finish, unless FAA standards require otherwise, or if the owner is attempting to conform the wind energy tower to the surrounding environment and architecture, in which case it may be painted to reduce visual obtrusiveness. A photo simulation may be required.

(b) Small wind energy systems shall not be artificially lighted unless required by the Federal Aviation Administration (FAA) or appropriate authority.

(c) Small wind energy towers shall not have any signs, writing, or pictures that may be construed as advertising.

(d) Small wind energy systems shall not exceed sixty (60) decibels, as measured at the closest property line. The level, however, may be exceeded during short-term events such as severe windstorms.

(e) The applicant shall provide evidence that the proposed height of the small wind energy system tower does not exceed the height recommended by the manufacturer or distributor of the system.

(f) The applicant shall provide evidence that the provider of electric utility service to the site has been informed of the applicant's intent to install an interconnected customer-owned electricity generator, unless the applicant intends, and so states on the application, that the system will not be connected to the electricity grid. This action shall not construe approval for net metering by the electric utility.

(g) The applicant shall provide information demonstrating that the system will be used primarily to reduce on-site consumption of electricity.

(h) The wind energy tower height shall not exceed a maximum height of sixty-five (65) feet on a parcel of less than five (5) acres, or a maximum height of eighty (80) feet on a parcel of five acres or more.

(i) The minimum distance between the ground and any protruding blades utilized on a small wind energy system shall be fifteen (15) feet, as measured at the lowest point of the arc of the blades. The supporting wind energy tower shall also be enclosed with a six-foot tall fence or the base of the wind energy tower shall not be climbable for a distance of twelve (12) feet.

(j) The applicant shall provide proof of adequate liability insurance for a small wind energy system. Whether or not the applicant is participating in the net metering program, the applicant shall meet the insurance coverage requirements set forth in 20 VAC 5-315-60.

(k) The small wind energy system generators and alternators shall be constructed so as to prevent the emission of radio and television signals and shall comply with the provisions of Section 47 of the Federal Code of Regulations, Part 15 and subsequent revisions governing said emissions.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-266. - Review process.

(a) Administrative review process.

(1) The installation of a small wind energy system in prime agricultural district A-1, general agricultural A-2, and public service zoning district S-1, shall be considered provided that all requirements of these standards are met.

(2) Applications shall be permitted "by-right" and be reviewed and considered for approval by the director of community development or his designee.

(3) Upon receipt of an application for small wind energy system the county shall send written notification to all adjoining landowners. A decision on the application shall not be made within thirty (30) days of the receipt of the application. Applications requiring a special use permit shall meet all state code requirements for public notification.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-267. - Federal and state requirements.

(a) Compliance with Uniform Statewide Building Code: Building permit applications for wind energy systems shall be accompanied by standard drawings of the wind turbine structure, including the wind energy tower, base, and footings. An engineering analysis of the wind energy tower showing compliance with the Uniform Statewide Building Code and certified by a licensed professional engineer shall also be submitted.

(b) Compliance with FAA regulations: Wind energy systems shall comply with applicable FAA regulations, including any necessary approvals for installations close to airports.

(c) Compliance with National Electric Code: Building permit applications for wind energy systems shall be accompanied by a line drawing of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the National Electrical Code.

(d) Compliance with regulations governing energy net metering: Wind energy systems connected to the utility grid shall comply with the Virginia Administrative Code 20 VAC 5-315: Regulations Governing Energy Net Metering.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-268. - Setbacks.

The wind energy system shall be set back a distance at least equal to one hundred ten (110) percent of the structure height from all adjacent property lines and a distance equal at least to one hundred and fifty (150) percent of the structure height from any dwelling inhabited by humans on neighboring property. These setbacks may be reduced by notarized consent of the owner of the property on which the requested wind energy system is to be erected and the adjacent landowner whose property line or dwelling falls within the specified distance. Additionally such adjacent landowner must execute a deed of easement for the benefit of the property on which the wind energy system is to be erected prohibiting construction of any new structure on such adjacent property within the specified easement. Wind energy systems shall meet all setback requirements for primary structures for the zoning district in which the wind energy system is located in addition to the requirements set forth above. Additionally, no portion of the small wind energy system, including guy wire anchors, may extend closer than ten (10) feet to the property line.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-269. - Removal of defective or abandoned wind energy systems.

Any wind energy system found to be unsafe by the building official shall be repaired by the owner to meet federal, state and local safety standards or removed within six (6) months. Any wind energy system that is not operated for a continuous period of twenty-four (24) months shall be considered abandoned and the owner of the system shall remove the turbine within ninety (90) days of receipt of notice from the county instructing the owner to remove the abandoned wind energy system.

(P.C. Ord. No. 10-21, 11-17-10)

Secs. 17-270—17-279. - Reserved.

DIVISION 2. - LARGE SCALE WIND ENERGY SYSTEMS

Sec. 17-280. - Purpose and intent.

The purpose of this article is to regulate the placement, construction and modification of wind energy conversion systems while promoting the safe, effective and efficient use of wind energy conversion systems and not unreasonably interfering with the development of independent renewable energy sources. These facilities will be considered for approval in locations deemed appropriate, while assessing the visual impacts and minimizing potential adverse safety and environmental impacts of the proposed facilities.

Specifically, the purposes of this article are to:

(a) Permit the provision of wind energy services to the residents and businesses of the county in an orderly fashion;

(b) Regulate the siting of wind energy conversion systems in the county;

(c) Assess the visual impacts of the proposed facilities;

(d) Minimize adverse safety and environmental impacts associated with proposed facilities through careful design, and siting techniques;

(e) Avoid potential harm to persons and damage to property and natural resources posed by wind energy conversion systems by ensuring that such facilities are soundly and carefully designed, constructed, modified, maintained and removed when no longer used or determined to be structurally unsound;

(f) Ensure that the deployment of wind energy conversion systems is compatible with surrounding land uses;

(g) Protect the county's rural and scenic landscapes including, but not limited to, cultural and historic sites.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-281. - Applicability.

In addition to the special use permit application and review process and requirements, the additional regulations set forth in this division shall govern the siting of wind energy conversion systems used to generate electricity and connected to the local utility's electric transmission and/or distribution system, or used to generate electricity and connected pursuant to the Virginia's net metering laws (Section 56-594 Code of Virginia (COV)), serve as an independent source of energy, or serve in a hybrid system.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-282. - General requirements.

The requirements for siting and construction of all wind energy conversion systems regulated by this division shall include the following:

(a) The construction of a wind energy conversion system shall be permitted in the prime agricultural district A-1, general agricultural district A-2, public service zoning district S-1, subject to the issuance of appropriate approvals by the county and provided that the use complies with all requirements set forth in this division.

(b) Wind energy conversion systems shall be constructed and operated in locations that minimize adverse safety and environmental impacts. Approval shall not be granted unless it is found in writing that:

(1) The use will not pose a significant adverse impact to the health or public safety, or on the natural resources of the neighborhood;

(2) There will be no serious hazard to pedestrians or vehicles from the use; and

(3) Adequate and appropriate facilities will be provided for the proper operation of the wind energy conversion system.

(c) Wind energy structures shall maintain a painted, coated, or galvanized steel finish, unless Federal Aviation Administration (FAA) standards require otherwise, or if the owner is attempting to have the structure conform to the surrounding environment

and architecture, in which case the owner may propose an alternative to reduce visual obtrusiveness.

(d) Wind energy conversion systems shall not be artificially lighted unless required by the FAA or an appropriate authority.

(e) The applicant shall provide photo-simulations of proposed wind energy conversion system from at least three (3) different locations. The simulations shall show views of such simulated wind energy structures from such locations as property lines, roadways, as deemed necessary by the county in order to assess the visual impact of the wind energy system.

(f) The applicant shall conduct balloon testing after the submission of the official application at the sites identified in the photo-simulations. Balloons shall be placed at each site for at least four (4) hours and flown at a height equal to the structure height requested in the application. The total number, locations, and type of balloons will be agreed upon by the county and the applicant. The balloon testing date and time shall be advertised at least two (2) weeks prior to the actual testing date.

(g) Structures shall not have any signs, writings, or pictures that may be construed as advertising.

(h) Wind energy conversion systems and temporary meteorological towers will not require a height exception under the provisions of these siting standards.

(i) The county shall provide written notification to the office of a national or state forest, national or state park, wildlife management area, or known historic or cultural resource site, if a proposed wind energy conversion system is within five (5) miles of the boundary of said entity.

(j) The applicant shall conduct two (2) public information meetings to discuss their development plans and obtain community feedback. The first meeting shall be held prior to application submission. The second meeting shall be held after the application submission but prior to the special use permit public hearing. Both meetings shall be advertised in the local paper of record.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-283. - Height and setbacks.

(a) Height.

(1) The structure height shall not exceed five hundred (500) feet above the existing average grade. An exception as defined in subsection 17-283(a)(2) may be granted by the board of supervisors.

(2) The board of supervisors may allow the height to exceed the specified limits as specified in subsection 17-283(a)(1) as part of the special use permit process if the project applicant can demonstrate:

a. That the additional height is needed and would result in significant additional benefits in terms of energy production and efficiency;

b. By submission of substantial evidence that such height reflects industry standards for a similarly rated wind energy conversion system;

c. That the proposed wind energy conversion system satisfies all other criteria for the granting of a special use permit under this section of the zoning ordinance; and

d. The allowance to exceed the height limit shall not constitute a variance from the zoning ordinance.

(b) Setbacks and separation.

(1) The wind energy conversion system shall be set back a distance at least equal to one hundred twenty-five (125) percent of the structure height from all adjoining nonparticipating property lines and a distance equal to one hundred sixty (160) percent of the structure height or eight hundred (800) feet, whichever is greater, from any residential or public use structure on neighboring property and any public use areas as determined by the board of supervisors. These setbacks may be reduced by notarized consent of the owner of the property on which the requested wind energy conversion system is to be erected and the adjoining landowner whose property line or dwelling falls within the specified distance. Additionally such adjoining landowner must execute a deed of easement for the benefit of the property on which the wind energy conversion system is to be erected prohibiting construction of any new structure on such adjacent property within the specified easement.

(2) Wind energy conversion systems shall meet all setback requirements for primary structures for the zoning district in which the wind energy conversion system is located in addition to the requirements set forth above.

(3) The setbacks shall be kept free of all habitable structures so long as the facility is in place; however, these areas need not be cleared of trees or other vegetation. Setbacks shall be measured from the outside surface at the base of the wind energy tower and in a horizontal direction. The board of supervisors may reduce or increase the setbacks as appropriate, based on site specific considerations, and only after review of substantial evidence, including but not limited to detailed engineering reports or product engineering certification, which demonstrate that safety concerns have been adequately addressed and that setbacks have been complied with to the maximum extent practicable.

(4) Such reduction of required setbacks, if granted, shall not constitute a variance from the zoning ordinance.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-284. - Environmental.

(a) Wetlands. Wind energy conversion system shall be located in a manner consistent with all applicable local and state wetlands regulations.

(b) Land clearing/open space. Wind energy conversion system shall be designed to minimize land clearing, and shall avoid permanently protected open space when applicable.

(c) Noise. The wind energy conversion systems shall not exceed sixty (60) decibels, as measured at the closest nonparticipating property line. An analysis, prepared by a qualified acoustical engineer, shall be provided to demonstrate compliance with the standard for sound emission. Appropriate sound mitigation measures shall be applied when necessary.

(d) Shadowing/flicker. Wind energy conversion system shall be sited in a manner that does not result in significant shadowing or flicker impacts. The applicant has the burden of proving that this effect does not have significant adverse impact on habitable structures through siting or mitigation.

(e) Fish, wildlife, and native plant protection. The proposed wind energy system shall be designed, constructed, and operated without significant adverse impact to fish, wildlife, or native plant resources, including fish and wildlife habitat, migratory routes, and state or federally-listed threatened or endangered fish, wildlife, or plant species, and to meet all state and federal environmental requirements.

(f) Hold harmless. The owner, developer and operator, jointly and severally, of the wind energy system shall indemnify and hold Rockingham County harmless from any and all costs and expenses, and ordered reimbursements, penalties and fines, to the greatest extent permissible at law, resulting from any responsibility or liability, or alleged responsibility or liability, of any description under any state or federal law or regulation arising out of the construction or operation of the wind energy system. Costs and expenses shall include, but not be limited to, costs, expenses and attorney fees incurred in the negotiation and settlement of disputes over alleged liability, as well as those incurred in actual litigation.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-285. - Federal and state requirements.

Wind energy conversion systems shall meet or exceed all applicable federal and state standards.

(a) All regulatory requirements of the following agencies shall be met:

(1) Virginia State Corporation Commission (SCC).
(2) Virginia Department of Environmental Quality (DEQ).

(b) If such standards and regulations are changed, then the owners and operators of the wind energy conversion systems governed by this ordinance shall bring such systems into compliance as required. Failure to comply with federal or state standards and regulations shall constitute grounds for condemnation and removal of the noncompliant systems by the county at the owner's or operator's expense.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-286. - Review and approval.

(a) The board of supervisors shall require a public hearing under the special use permit process for all applications for wind energy conversion systems regulated under this section.

(b) All state and federal requirements shall be met prior to application for construction of the wind energy structures with the exception of state approved pre-construction activity. Approval letters must be included with application.

(c) Failure by the applicant, owner or operator to meet the conditions of the special use permit, or failure to meet the requirements of any state or federal agency shall be grounds for the county to revoke the special use permit as outlined in subsection 17-207(m) of the Rockingham County Code.

(d) The board of supervisors may submit the application to the Shenandoah Valley Airport Commission for review and comments.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-287. - Site access and control.

The applicant shall submit, at the time of application for a special use permit, documentation of the legal right to install and use said property for the proposed facility. Documentation shall include proof of control over the land or possession of the right to use the land in the manner requested. The applicant may redact sensitive financial or confidential information. The county may ask that the applicant supply an attorney's opinion letter with documentation.

The applicant shall submit written documentation that the applicant or his assignee has accepted full financial responsibility for repairs to damage to private roads used during the construction or operation of the proposed facility. Private roads used to access the proposed facility, including roads that serve nonparticipating landowners, shall be restored and maintained to pre-construction conditions during operation of the facility.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-288. - Proof of liability insurance.

The applicant, owner and operator shall be required to provide evidence of the availability of liability insurance in an amount sufficient to cover loss or damage to persons and structures occasioned by the failure or use of the facility. Whether or not the applicant is participating in the net metering program, the applicant will be required to meet the insurance coverage requirements set forth in 20 VAC 5-315-60.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-289. - Public notification.

(a) The county shall post a sign on the property giving notice that a wind energy conversion system application has been filed; said sign shall be located within one (1) foot of the right-of-way of each public street or road, upon which the proposed wind energy conversion system fronts. The sign shall be placed on the property at main access to the site of the proposed facility. Where property does not front on an existing public right-of-way, said sign shall be placed within the right-of-way of the nearest street or road.

(b) The county shall post a sign approximately one-half (½) mile from the site on all roads serving the proposed site giving notice that a wind energy conversion system application has been filed.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-290. - Application submission, associated fees, and review.

(a) A completed wind energy conversion system application and all supporting documentation identified in application filing requirements shall be submitted in accordance with the appropriate special use permit review schedule.

(b) An application fee as established by the Board of Supervisors shall be submitted with the wind energy conversion system application.

(c) Within sixty (60) days of submission, the county shall review the application and make a determination regarding compliance with the ordinance. An incomplete application shall be returned to the applicant for correction and resubmission.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-291. - Independent consultant's services.

Within thirty (30) days of acceptance of a complete application, the county shall submit said application to an independent consultant for review and recommendations. The cost of these services will be borne by the applicant but included in the application fee.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-292. - Modifications.

The county shall be notified of all modifications to a wind energy conversion system made after issuance of the special use permit. Such modifications shall require approval by the board of supervisors in accordance with the county's existing process for modifications to special use permit approvals.

An amendment of the special use permit shall not be required if the proposed changes reflect upgrade in technology in the models or manufacturer of wind turbines. This waiver is allowed only if the extension in the tower height is within fifteen (15) feet of the height granted and all other special use permit regulations and conditions are met.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-293. - Monitoring and maintenance.

As proposed, all requirements are specified to ensure a legally defensible position by the county.

(a) The applicant shall maintain the wind energy conversion system in good condition. Such maintenance shall include, but not be limited to, painting, structural integrity of the foundation and support structure and security barrier (if applicable), and maintenance of the buffer areas and landscaping if present. Site access shall be maintained to a level acceptable to the fire chief. The project owner shall be responsible for the cost of maintaining the wind energy conversion system and access road, unless accepted as a public way, and the cost of repairing any damage occurring as a result of operation and construction.

(b) State of the station report.

(1) The applicant shall provide to the board of supervisors an annual state of the station report. The report shall include a summary of all public information submitted annually to state and federal agencies.

(2) The county administrator and station manager or such other site officer as may be designated shall coordinate a public meeting date upon which a report shall be presented to the governing body.

(c) Notice shall be provided to the county of any change in ownership of the facility.
(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-294. - Abandonment or discontinuation of use.

(a) At such time that a wind energy conversion system is scheduled to be abandoned or discontinued, the owner shall notify the county by certified U.S. mail of the proposed date of abandonment or discontinuation of operations.

(b) Within three hundred sixty-five (365) days of the date of abandonment or discontinuation, the owner shall physically remove the wind energy conversion system. This period may be extended at the request of the owner and at the discretion of the county. Physical removal shall include but not be limited to:

(1) Removal of the wind turbine and wind energy tower, all machinery, equipment, equipment shelters, security barriers and all appurtenant structures from the subject property;

(2) Proper disposal of all solid or hazardous materials and wastes from the site in accordance with local and state solid waste disposal regulations;

(3) Restoration of the location of the wind energy conversion system to its natural pre-existing condition, except that any landscaping or grading may remain in the after-condition if a written request is submitted by the landowner to the county.

(4) Foundations shall be removed to a depth of four (4) feet below ground level or covered to an equivalent depth with fill material. At the time of removal, the site shall be restored to its pre-existing condition. If a written request is submitted by the landowner to the county then this requirement may be waived or altered for any other legally authorized use. Restoration shall be verified by the county.

(c) If the wind energy conversion system, or any part thereof, is inoperable for more than one hundred eighty (180) days and the owner fails to give such notice to the county, then the wind energy conversion system shall be considered abandoned or discontinued. The county shall determine in its discretion what proportion of the wind energy conversion system is inoperable for the wind energy conversion system to be considered abandoned.

(d) Decommissioning.

(1) If an applicant fails to remove a wind energy conversion system in accordance with this section of this ordinance, the county shall have the authority to enter the subject property and physically remove the facility. The county shall require the applicant, and/or subsequent owners of the property or wind energy conversion system, to provide a form of surety mutually agreeable to the applicant and the county to cover costs of the removal in the event the county must remove the facility.

(2) Prior to obtaining a certificate of occupancy from the county and on every tenth (10th) anniversary of the commencement of the commercial operation of the project, applicant shall provide to the county an estimate of the projected salvage value of the turbines and other equipment to be removed from the project site ("salvage value"), as well as the projected cost of removing the turbines and other equipment from the site as determined by an independent engineer mutually agreeable to the applicant and county ("gross decommissioning cost").

(3) Based on this determination, applicant shall post and maintain decommissioning funds in an amount equal to net decommissioning cost, that being gross decommissioning cost minus salvage value.

(4) Decommissioning funds may be in the form of a performance bond, surety bond, letter of credit, corporate guarantee or other form of financial assurance as may be mutually acceptable to the applicant and the county.

(5) The decommissioning funds shall be posted and maintained with a bonding company or federal or state chartered lending institution mutually agreeable to the applicant and county.

(P.C. Ord. No. 10-21, 11-17-10)

Sec. 17-295. - Severability.

The provisions of this section are severable and, in the event that any provision of this section is determined to be invalid for any reason, the remaining provisions shall remain in full force and effect.

(P.C. Ord. No. 10-21, 11-17-10)

Saline County, Kansas
***Code of Ordinances* (2010)**

Appendix A. Zoning and Master Plan Resolution.
Part 1. Zoning Resolution.
Article XII. General Provisions.

Section 12.12. Private wind energy conversion systems.

12.12.01. Purpose. The purpose of this section is to provide for the construction and operation of private wind energy conversion systems in Saline County.

12.12.02. Findings. Saline County finds that wind energy is an abundant, renewable and nonpolluting energy resource and that its conversion to electricity will reduce individual dependence on nonrenewable energy resources and decrease the air and water pollution that results from the use of conventional energy sources. Wind energy systems also reduce peak power demands and help diversify the county's energy supply.

12.12.03. Definitions.

a. Private wind energy facility: An energy facility that consists of one or more small-scale wind turbines or other such devices and their related or supporting facilities that produces electric power from wind that is to be used primarily by the individual or entity that owns the property on which the facility is located.

b. Commercial wind energy facility: An energy facility that consists of one or more wind turbines or other such devices and their related or supporting facilities that produces electric power from wind, some or all of which is to be distributed to an off-site customer or customers.

12.12.04. Application process—Private wind energy facility: Private wind energy facilities shall be permitted in unincorporated Saline County and shall require approval of a Saline County Zoning Compliance Certificate. Private facilities must be approved by a small wind certification program recognized by the American Wind Energy Association (AWEA). Along with a completed zoning compliance certificate, the applicant shall also provide the following:

a. Scale site plan with sufficient detail to understand the nature and scope of the proposed project and the attributes of the specific location. The specific location shall include at a minimum the entire area within 1.5 times the height of the proposed structure. Per the Zoning Administrator, the specific location may include additional area.

b. Standard drawings of the wind turbine structure, including the tower, base and footings. An engineering analysis and certification by a licensed professional engineer for the tower, base and footings shall also be provided. This analysis may be supplied by the manufacturer.

c. Manufacturer's specification sheets; all wind energy facilities shall be constructed according to manufacturer's specifications.

d. Confirmation that the affected utility company is aware of the property owner's intent to install a private wind energy facility.

e. Certificate of completion provided by a licensed electrical contractor certifying that all electrical work has been completed in accordance with the manufacturer's specifications or the National Electric Code.

f. Approved CUP if the proposed facility will be located in the Airport Overlay district.

12.12.05. Requirements for a private wind energy facility.

a. One single turbine shall be permitted for all legal lots of record in unincorporated Saline County up to 80 acres in size. Additional turbines may be allowed for additional acreage at the rate of one turbine for each additional 80 acres. Turbines shall be located at least two rotor diameters away from each other. Lots smaller than 80 acres that require more than one turbine shall obtain approval of a conditional use permit.

b. The total height of any single turbine shall not exceed 200 feet. Total height means the highest point reached by the rotor blades. Any private wind energy facility taller than 200 feet shall require approval of a conditional use permit.

c. The lowest point of the rotor blades shall be at least 25 feet above ground level at the base of the facility.

d. Individual wind turbines shall be set back from all property lines, easements and existing utilities a minimum of 1.5 times the total structure height.

e. All power lines shall be installed underground within a distance equal to 1.5 times the height of the turbine.

f. Individual wind turbine lighting and markings shall comply with, but not exceed, FAA requirements. If lighting of turbines or other structures is required, "daytime white/nighttime red" shall be the only type of lighting allowed with shielding from the ground and area residences.

g. Freestanding turbines may be mounted on either guyed or monopole type structures. Guyed structures shall provide shields or color markings on guy wires. All towers shall provide fencing at the base of the tower for security purposes.

h. All wind energy facilities shall maintain a galvanized finish or be painted in a color in conformance with the surrounding environment (white, gray, pale blue or pale green). No signage or writing may be placed on the facility at any time. In addition, no flags, streamers or other items may be attached to the facility.

i. Any project that does not meet the above requirements must be approved through a conditional use permit process.

12.12.06. Nuisance management. Wind energy conversion systems shall be located in areas where there are adequate setbacks from residential areas and adjacent rural homes so that noise from the turbines is not an intrusion.

a. Upon receipt by the Saline County Planning and Zoning Department of a complaint regarding an existing private wind energy conversion system, the property owner

may be required, at the owner's expense, to mitigate any violations or make any necessary repairs to the facility at the owner's expense.

b. Upon receipt by the Saline County Planning and Zoning Department of a complaint regarding noise from an existing private wind energy conversion system, the property owner may be required, at the owner's expense, to have prepared by an independent acoustical consultant an acoustical study that shall demonstrate that the noise level caused by the operation of the project, measured at five feet above ground level at the property line of the subject property, shall not exceed 60 decibels.

c. The property owner shall minimize or mitigate, at the owner's expense, any interference with electromagnetic communications such as radio, telephone or television signals caused by any wind energy facility.

d. Any wind energy system that is not functional shall be repaired by the owner or removed. A wind energy system that has been nonfunctional for more than six months shall be considered a nuisance.

12.12.07. Environmental factors.

a. Wind facilities shall be required to meet any applicable flood plain requirements.

b. Construction and operation shall be done in a manner so as to minimize soil erosion. Facilities should avoid steep slopes.

c. In areas where grassland burning is practiced, infrastructure should be able to withstand periodic burning of vegetation.

(Amend. 1254-29, 5-13-08)

Section 12.12. Commercial wind energy conversion systems.

12.13.01. Purpose. The purpose of this section is to provide for the construction and operation of Commercial Wind Energy Conversion Systems (WECS) in Saline County, subject to reasonable restrictions, which will preserve the public health and safety.

12.13.02. Findings. Saline County finds that wind energy is an abundant, renewable and nonpolluting energy resource and that its conversion to electricity will reduce individual dependence on nonrenewable energy resources and decrease the air and water pollution that results from the use of conventional energy sources. Wind energy systems also reduce peak power demands and help diversify the County's energy supply.

12.13.03. Definitions.

a. Private wind energy facility: An energy facility that consists of one or more small-scale wind turbines or other such devices and their related or supporting facilities that produces electric power from wind that is to be used primarily by the individual or entity that owns the property on which the facility is located. (See Section 12.12.)

b. Commercial wind energy facility: An energy facility that consists of one or more wind energy conversion systems or other such devices and their related or supporting

facilities that produces electric power from wind, some or all of which is to be distributed to an off-site customer or customers.

12.13.04. Application process—Commercial Wind Energy Facility. Commercial wind energy facilities shall be permitted in the AG (Agricultural) zoning district and shall require approval of a Saline County Conditional Use Permit from the Saline County Planning and Zoning Commission, a zoning compliance certificate from the Saline County Planning and Zoning Department, and a City of Salina Building Permit from the City of Salina Building Services Department. Commercial wind energy facilities shall be prohibited in all other zoning districts governed by these regulations.

Minimum requirements for conditional use permit submittal for a commercial wind energy facility:

a. Survey of the subject property stamped by a licensed Kansas surveyor showing the location of the proposed facility including ingress and egress. (Also see submittal requirements as outlined in document entitled Commercial Submittal Process Checklists.)

b. Site plan of the proposed facility stamped by a licensed Kansas civil engineer with sufficient detail to understand the nature and scope of the proposed project and the attributes of the specific location. (Also see submittal requirements as outlined in document entitled Commercial Submittal Process Checklists.)

c. Written approval from FAA for the proposed structure or evidence of nonapplicability.

d. Written approval from the Kansas Department of Wildlife and Parks that the project as proposed will have no affect [effect] on threatened or endangered species as designated by the Kansas Nongame and Endangered Species Conservation Act of 1975 and amendments thereto. If affected, the applicant shall provide a copy of the special action permit issued from the KDWP for the proposed use.

e. Map showing all the residences within 1,500 feet of the subject property and waivers signed by all the property owners of any identified residences.

f. Proof that the affected utility company has been informed of the customer's intent to install a Commercial Wind Energy Facility.

g. Standard drawings of the wind turbine structure, including the tower, base, footings and ice/wind loads. In addition, a site-specific engineering analysis (which shall include a soils analysis), and certification of all WECS by a licensed professional engineer shall also be required.

h. Data pertaining to the tower's safety and stability, including safety results from test facilities.

i. Narrative including how noise, soil erosion and dust, water quality, safety issues, and fire risks will all be handled.

j. Decommissioning Plan describing the manner in which the Commercial Wind Energy Facility shall be dismantled and removed from the site at the end of its useful life.

k. Surety in the form of an escrow account, surety bond or insurance policy in an amount approved by the Board of County Commissioners as necessary to restore the site to its predevelopment state. Predevelopment shall mean removing all visible above-grade infrastructure.

l. Written statement from the landowner confirming that they have read Section 12.13.06 and understand the extent of their liability for any commercial WECS located on their property. This shall include a document recorded with the Saline County Register of Deeds indicating that future property owners will also be made aware of the potential liability.

12.13.05. Requirements for a Commercial Wind Energy Facility.

a. No turbine shall be located closer than 1.5 times the total turbine height from public roads or property lines. Total turbine height is defined as the height of the structure supporting the turbine, plus the height of the rotor blade at its highest point, measured from the elevation of the ground surface at the base of the tower.

b. No turbine shall be located closer than 1,500 feet to any residence located off the subject property unless a signed and executed waiver form signed by the property owner of the affected residence is supplied to the applicant and included with the CUP application.

c. No turbine shall be located closer than two times the total turbine height from another turbine.

d. The lowest point of the rotor blades shall be at least 30 feet above ground level at the base of the tower.

e. Individual wind turbines shall be set back from easements and existing utilities a minimum of 1.5 times the total turbine height. In order to be closer to the easement, written permission from the easement owner will be required.

f. All new power lines associated with energy production shall be installed underground. Power lines associated with distribution of energy to customers may be located above ground.

g. All turbines shall be mounted on non-guyed or monopole type structures.

h. All wind energy facilities shall maintain a galvanized finish or be painted a color in conformance with the surrounding environment (white, gray, pale blue or pale green). No signage, writing or images may be placed on the tower at any time. In addition, no flags, streamers or other items may be attached to the facility.

i. Individual wind turbine heights, lighting and markings shall comply with but not exceed FAA requirements. If lighting of turbines or other structures is required, "daytime white/nighttime red" shall be the only type of lighting allowed with shielding from the ground and area residences.

12.13.06. Nuisance management. Commercial Wind Energy Facilities shall be located in areas where there are adequate setbacks from residential areas and adjacent rural homes so that negative impacts from the turbines are mitigated.

a. Upon receipt by the Saline County Planning and Zoning Department of a complaint regarding noise from an existing public wind energy conversion system facility, the owner of the property on which the commercial facility is located may be required, at the owner's expense, to have prepared by an independent acoustical consultant an acoustical study that shall demonstrate that the noise level caused by the operation of the project—measured at five feet above ground level at the property line of the subject property—shall not exceed 65 decibels.

b. Upon receipt by the Saline County Planning and Zoning Department of a compliant [complaint] regarding any other issues from an existing commercial facility, the owner of the property on which the WECS are located may be required, at the owner's expense, to have prepared by an independent consultant a study that shall demonstrate that the issue identified in the complaint is either within reasonable standards or mitigated to within reasonable standards.

c. The owner of the property on which the commercial facility is located shall minimize or mitigate, at the owner's expense, any interference with electromagnetic communications, such as radio, telephone or television signals caused by any wind energy facility.

d. Any WECS that are not functional shall be repaired by the property owner or removed at the property owner's expense.

e. In the event that the County becomes aware of any commercial facility that has been nonfunctional for a continuous period of six months, the County will notify the property owner by registered mail and provide 45 days for corrective action or a written response. In such a response, the property owner shall set forth reasons for the operational difficulty and provide a reasonable timetable for corrective action. If the County deems the timetable for corrective action as unreasonable, the County shall notify the owner of the property on which the commercial facility is located and such property owner shall remove all evidence of the project within a reasonable time frame at their expense.

f. On all of the above issues, the County will determine on a case-by-case basis a reasonable length of time in which property owners will either need to respond to complaints (maximum of 30 days) or correct confirmed violations.

12.13.07. Environmental Factors.

a. All commercial facilities shall be required to meet any applicable floodplain requirements.

b. Construction and operation shall be done in a manner so as to minimize soil erosion; facilities should avoid steep slopes.

c. Dust emission control measures shall be utilized during construction and, where appropriate, during the life of the project.

d. In areas where grassland burning is practiced, infrastructure should be able to withstand periodic burning of vegetation.

12.13.08. Enforcement and Penalties.

a. The Zoning Administrator shall be responsible for the administration and enforcement of this section.

b. If the Zoning Administrator determines that any of the provisions of the zoning resolution are being violated or if any of the conditions of approval of the Conditional Use Permit are being violated, the property owner of the commercial facility will be notified in writing. The written notice will indicate the nature of the violation and order the action necessary to correct the violation within a reasonable time frame at the property owner's expense. The County will determine on a case-by-case basis what a reasonable time frame is.

c. Any violation of any condition of Conditional Use Permit approval shall be addressed at a public hearing before the Saline County Planning Commission. Three such violations shall constitute revocation of the Conditional Use Permit. Upon revocation of the Conditional Use Permit, the County shall notify the property owner and such property owner shall remove all evidence of the project within a reasonable time frame at their expense. The County will determine on a case-by-case basis what a reasonable time frame is.

d. On all of the above issues, a "reasonable length of time" for property owners to respond to complaints shall not exceed 30 days; a "reasonable length of time" to correct confirmed violations shall be based on the nature of the violation(s) and shall be determined by the County.

(Amend. 1254-31, att. A, 11-25-08)

Washoe County, Nevada
***Washoe County Development Code* (2011)**

Division 3, Regulation of Uses

Article 326 WIND MACHINES
[This Article amended in its entirety by Ord. 1443, provisions eff. 7/26/10.]

Sections:

Section 110.326.00 Purpose. The purpose of this article, Article 326, Wind Machines, is to regulate wind machines used for residential and commercial production of electricity.

Section 110.326.05 Applicability.
(a) Private Wind Machines. A private wind machine consists of a wind turbine, tower, and associated control or conversion electronics for the purpose of providing electrical power to a lawful principal use. A wind machine having a rated capacity of 100 kilowatts (kW) or less shall be considered a private wind machine for the purposes of these regulations. Not more than one (1) wind machine shall be allowed per parcel of land when the size of the parcel is less than one (1) acre in size. Any wind machine or combination of wind machines having a rated capacity greater than twenty-five (25) kW up to one-hundred (100) kW on a parcel, or any wind machine that is greater than seventy-five (75) feet in height if located on a lot of five (5) acres or smaller, or any wind machine that is greater than one-hundred (100) feet in height if located on a lot over five (5) acres, shall be required to obtain a special use permit from the Washoe County Board of Adjustment. Private wind machines are considered accessory uses as stated in Article 306, Accessory Uses, and are allowed in those land use designations specified in Article 302, Allowed Uses.

(b) Commercial Wind Machines. Wind machines that have a rated capacity of more than one-hundred (100) kW shall be considered commercial wind machines for the purposes of these regulations. Commercial wind machines may be grouped together into a wind energy

facility consisting of one or more wind machines and other structures and buildings, including substations, electrical infrastructure, and other appurtenant structures and facilities. Commercial wind machines are considered a principal use on a parcel of land and are allowed in those land use regulatory zones specified in Article 302, Allowed Uses.

Section 110.326.08 Definitions.

A-Weighted Sound Pressure Level (dBA). "A-Weighted Sound Pressure Level (dBA)" is defined as the sound pressure level in decibels as measured on a sound level meter using the Aweighted filter network. The A-weighted filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.

Ambient Noise. "Ambient Noise" is defined as the composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.

Interference or Degradation. "Interference or Degradation" shall mean a significant and measureable reduction in the ability to communicate or receive data which cannot be mitigated by other means by the group interfered with by the wind machine.

Meteorological Towers. "Meteorological Towers" are those towers which are erected primarily to measure wind speed and directions plus other data relevant to siting wind machines, and include the tower, guy cables and hardware, anemometers, wind direction vanes, booms to hold equipment, data logger, instrument wiring, and telemetry devices that are used to monitor or transmit wind speed and wind flow characteristics over a period of time for either instantaneous wind information or to characterize the wind resource at a given location. Meteorological towers under this section do not include towers and equipment used by airports, Nevada Department of Transportation (NDOT), or similar applications to monitor weather conditions; such towers are exempt from the provisions of this article.

Public Roads. "Public Roads" are defined as roadways that are owned and/or maintained by the county, the state, or a local general improvement district (GID).

Shadow Flicker. "Shadow Flicker" is defined as alternating changes in light intensity caused by the moving blade casting shadows on stationary objects (Receptor), such as a residential dwelling which exceeds ten (10) hours a year. The dissipation of shadow intensity over the distance from a wind machine limits the classification of shadow flicker to ten (10) rotor diameters or three-thousand (3,000) feet, whichever is greater.

Site Restoration. "Site Restoration" of a commercial wind energy facility shall mean the removal of all wind machines and all ancillary structures and equipment, excluding the wind machine foundations, and regrading and revegetation of all disturbed area.

Trail Easements. "Trail Easements" are defined as a Washoe County recorded easement for pedestrian, equestrian, bicycle or other similar public access uses.

LeqA. "LeqA" is defined as the equivalent or energy-averaged noise level.

Lmax. "Lmax" is defined as the highest root-mean-square (RMS) noise level measured over a given period of time.

L50. "L50" is defined as the noise level exceeded fifty percent (50%) of the time during a given period of time.

Section 110.326.10 Information Requirements. All permit applications for commercial wind machines shall include the information listed in this section in addition to that normally required by other articles in the Development Code. The applicant may appeal to the Director of Community Development for the consideration of waiving certain submittal requirements of this article in cases where the wind machine(s) are not used for power sales and are constructed to offset power demands on site.

(a) Site Plan(s). A scaled site plan showing the following information:

(1) Existing topography, trees and drainage channels;

(2) Direction of prevailing winds across the project site;

(3) Location of all existing structures within one mile of the proposed wind machine sites;

(4) Location and height above ground of all proposed wind machines and, existing and proposed above-ground utility lines;

(5) Location, height and direction of all radar and microwave stations that could be affected; and

(6) Preliminary dimensions, grading and alignment for all temporary and permanent road, power transmission and distribution line easements, structures, wind machine sites, substation(s), staging areas and other site work.

(b) Distances to all dwellings, churches, schools, nursing homes, roads, access easements, trails, public and private airports and airstrips, parks, wetlands, and listed historic sites identified by the State Historic Preservation Office (SHPO) within one (1) mile; and important bird and wildlife areas as identified in federal, state, and university databases, or other generally available documentation;

(c) Standard drawings and photographs of the wind turbine structure, including the tower, base, turbine and blades;

(d) A GIS map(s) and visual simulations, showing the impact of the topography upon visibility of the project from other locations, to a radius that shall be approved by the Washoe County Department of Community Development. The base map used shall be a published topographic map showing non-natural features, such as roads, towers, and buildings;

(e) A regrading and revegetation program for temporary roads no longer needed after project construction;

(f) A preliminary drainage, sediment collection and erosion control plan for all areas proposed to be disturbed on the parcel(s); and

(g) Decommissioning plans prepared in conformance with Section 110.326.90(b), Removal of Wind Machines, below.

(h) Provide location of all public and private airports within ten (10) miles of the nearest proposed wind turbine.

(i) A current determination letter resulting from a Federal Aviation Administration (FAA) Form 7460-1, Notice of Proposed Construction or Alteration, for each proposed wind machine or tower.

(j) A summary of the status of all FAA determinations with details on how any unresolved problems with aircraft safety are being addressed as well as a detailed description of any obstruction marking and lighting that will be required by the FAA.

Section 110.326.15 Setbacks and Height.

(a) Setbacks from Adjacent Parcels – Private Wind Machines. Notwithstanding Section 110.402.10, Heights: Special Exceptions, of the Development Code, minimum setback for a private wind machine shall be:

(1) All private wind machines shall be erected in accordance with the setback requirements of the regulatory zone in which they are located (see Table 110.406.05.1, Standards). Additionally, all private wind machines shall maintain a minimum setback of one (1) times the overall machine height including the uppermost extension of any blades, from any public roads and highways, railroads, trail easements, aboveground utility lines, and any existing residence on an adjoining property.

(2) Private wind machines shall be allowed closer to a property line within any land use designation if the abutting property owner(s) grants written approval of the proposed setback. The written consent shall be signed and notarized by the owner of record of the adjoining property and shall detail the setback distance and the size and height of the proposed private wind machine. The written consent shall be recorded with the Washoe County Recorder, a conformed copy of which shall be submitted with the building permit application to construct the wind machine.

(3) Guy wire anchors may not extend closer than five (5) feet from any property line and shall be made clearly visible to a minimum height of six (6) feet.

(4) Private wind machines shall not be located within the front yard setback of any parcel of land nor within the front yard setback facing a street on a corner parcel of land.

(b) Setbacks from Adjacent Parcels – Commercial Wind Machines. A minimum setback for each commercial wind machine is identified below. These setbacks may be reduced with the written consent of the owner(s) of the adjoining property(s):

(1) Three (3) times the overall machine height, including the uppermost extension of any blades, from the property line of any nonparticipating Washoe County Development Code June 22, 2010 WIND MACHINES Page 326-5 residentially zoned property including any property within the General Rural Residential (GRR) regulatory zone.

(2) One (1) times the overall machine height, including the uppermost extension of any blades, from railroads; trail easements; aboveground utility lines; and public roads which are maintained by the county, state or a local GID.

(3) One (1) times the overall machine height, including the uppermost extension of any blades, from the property line of any privately owned non-residentially zoned properties.

(4) Thirty (30) feet from any undeveloped federally owned property unless greater setbacks are requested by that affected federal agency.

(5) One (1) mile from any existing off-site dwelling(s) or other occupied buildings within Washoe County.

(c) Height Restrictions – Commercial Wind Machines. The overall height of Commercial wind machines, including the uppermost extension of any blades, shall not exceed six-hundred (600) feet.

Section 110.326.20 Tower and Facility Access. All wind machine towers must comply with the following provisions:

(a) The tower shall be designed and installed so that there shall be no exterior step, bolts, or a ladder on the tower readily accessible to the public for a minimum height of twelve (12) feet above the ground. For lattice or guyed towers, sheets of metal or wood or other barrier shall be fastened to the bottom tower section such that it cannot readily be climbed. Any guy wires shall be made clearly visible to a minimum height of six (6) feet; and

(b) All ground-mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.

Section 110.326.25 Rotor Safety. Each wind machine shall be equipped with both manual and automatic controls to limit the rotational speed of the blade within the design limits of the rotor. The minimum distance between the ground and any protruding blades utilized on a private wind machine shall be fifteen (15) feet as measured at the lowest point of the arc of the blades.

Section 110.326.30 Electromagnetic Interference. To avoid interference, the owner(s) of any radar facility, television, radio, licensed Ham radio station, cellular telephone or microwave reception facility within a radius of five (5) miles from any commercial wind machine shall be notified in writing no less than forty-five (45) days prior to any public hearing, of a proposed project and shall be provided an opportunity to assess and determine any detrimental impact(s) on the operation of their facility. If degradation of television, radio, cellular telephone, radar microwave or licensed Ham radio reception occurs as the result of the wind machine and confirmation that the wind machine is the source of the interference, the owner/developer of the wind machine shall pay all reasonable costs to correct the television, radio, cellular telephone or microwave reception within thirty (30) days of notification by Washoe County that a problem exists.

Section 110.326.35 Utility Notification. No wind machine that is to be connected to electric utility equipment of any utility grid shall be operated until a net metering agreement or interconnection agreement has been made with the affected electric utility company(ies), and the utility company or companies have approved the proposed method of interconnection. Off-grid systems shall be exempt from this requirement.

Section 110.326.40 Noise.

(a) Commercial Wind Machine Noise Standards

(1) Noise Studies.

(i) As part of the application submittal for a commercial wind machine, the applicant shall provide modeling and analysis that will confirm that the facility will not exceed the maximum permitted noise levels.

(ii) A post-construction noise study shall be conducted within six (6) months of the date when the project is fully operational. The post-construction measurements will be reported to the Washoe County Department of Community Development using the same format as used for the pre-construction sound studies. As with the pre-construction study, the post-construction study shall be conducted by an Independent Qualified Acoustical Consultant approved by the Washoe County Department of Community Development, but paid for by the applicant/owner/developer of the wind project. The post-construction noise study shall be performed according to the procedures in the most current version of American National Standards Institute (ANSI) S12.18. All noise levels shall be measured with a sound meter that meets or exceeds the most current version of ANSI S1.4 specifications for a Type I sound meter. Any post-construction noise levels that exceed any of the limits set forth in item (ii) of this section will constitute proof that the wind machine(s) is non-compliant and must be rectified or shut down immediately.

(iii) Noise studies shall not be required in the event that the placement of a wind turbine is located more than two (2) miles from any existing residence.

(2) Audible Noise Limit. No wind machine shall be located so as to generate post-construction sound levels that exceed forty-five (45) dBA at night or fifty (50) dBA during the day as measured a minimum distance of fifty (50) feet from any existing residence within one (1.0) mile from a wind machine. The appropriate value to use for the post-construction sound level is LeqA.

(3) Noise Setbacks. Setbacks greater than those set forth in Section 110.326.15, Setbacks and Heights, shall be imposed if necessary to meet the noise level requirements of this section.

(b) Private Wind Machine Noise Standards. No wind machine shall create noise that exceeds a maximum of fifty-five (55) dBA at any property line abutting a residential regulatory zone or sixty (60) dBA at any other property line. Measurement of sound levels shall not be adjusted for, or averaged with, nonoperating periods.

Section 110.326.45 Roads. Construction of roads for the installation and operation of wind machines shall be minimized. Existing roads in the area of the proposed wind machines shall be used to the maximum extent possible. Temporary roads used for initial installation shall be regraded and revegetated to a natural condition upon completion of construction of the wind machines.

Section 110.326.50 Aesthetics and Maintenance.

(a) Appearance. Wind machines shall, subject to any applicable standards of the Federal Aviation Administration (FAA), be of a non-reflective, non-obtrusive color: off-white, white, light silver, tan, gray, or sand are permitted. The painting or coating shall be kept in good repair for the life of the wind machine.

(b) Maintenance. Wind machines shall be maintained in good repair, as recommended by the manufacturer's scheduled maintenance or industrial standards, and shall be free from rust.

(c) Lubricants and Cooling Fluids. Waste or used lubricants and cooling fluids shall be properly and safely removed in a timely manner from the site(s) of any commercial wind facility and shall not be allowed to accumulate.

Section 110.326.55 Signs.

(a) Warning Signs. Signs warning of high voltage electricity or electric shock hazard shall be posted on stationary portions of each wind machine.

(b) Advertising Signs. The only advertising sign allowed on a wind machine shall be a logo on the generator housing. Logos on commercial wind machines shall not exceed eight square feet in size.

(c) Project Signs for Commercial Wind Machines. Each commercial wind machine shall have posted on the site in a visible, easily accessible location, two signs having no more than four (4) square feet in area, displaying a current address and telephone number for emergency calls. The emergency telephone number shall allow a caller to contact a responsible individual to address emergencies at any time during or after regular business hours and on weekends or holidays. One sign shall be located at the service drive entrance to the site.

Section 110.326.60 Wildlife Impact.

(a) Prior to approval of a building permit, the applicant for any commercial wind machine shall prepare and submit for review to the Nevada Department of Wildlife and the Washoe County Department of Community Development, a report that discusses the year-round use of the proposed project site by wildlife, and shall identify any anticipated impacts that may negatively affect wildlife or their habitat, and shall suggest mitigation measures that will compensate for any negative effects. The report shall be prepared by a qualified biologist familiar with the local wildlife species.

(b) Prior to the operation of any commercial wind machine, the applicant shall prepare and submit for review to the Nevada Department of Wildlife and the Washoe County Department of Community Development a post-construction monitoring plan to investigate and document wildlife injury and mortality resulting from operation of the proposed project. The plan shall identify the methods used, which are expected to be consistent with current scientific practices. Post construction monitoring shall be performed by an independent third party contractor familiar with the methodology and procedures for conducting mortality studies and dead bird searches.

(c) Where a project is subject to the National Environmental Protection Act (NEPA), such as projects located on federal lands, Washoe County will act as a cooperating agency, and will accept the requirements of the Environmental Assessment or Environmental Impact Statement as meeting Washoe County requirements for this section (110.326.60).

Section 110.326.65 Lighting. Wind machine towers shall not be artificially lighted unless required, in writing, by the Federal Aviation Administration (FAA) or other applicable authority that regulates air safety. Where the FAA requires lighting, the lighting shall be the lowest intensity allowable under FAA regulations; the fixtures shall be shielded and directed

to the greatest extent possible to minimize glare and visibility from the ground; and no strobe lighting shall be permitted, unless expressly required by the FAA.

Section 110.326.70 Shadow Flicker. Wind machines shall be sited in such a manner to minimize shadow flicker on a roadway and on residences located off the property on which the wind machine is constructed. It shall be the responsibility of the owner/developer to modify operations to restrict shadow flicker on existing dwellings and/or existing occupied buildings. If necessary to minimize shadow flicker from crossing occupied structures, the wind machine may be required to be programmed to stop rotating during the time the wind machine shadow crosses these structures. Alternatively, the wind machine owner/operator may obtain a written easement or other written agreement that specifically allows shadow flicker to cross an occupied structure. This easement or agreement shall be recorded with the Washoe County Recorder, a conformed copy of which shall be submitted with the building permit application.

Section 110.326.75 Ice Throw. The potential ice throw or ice shedding from the proposed wind machine shall not cross the property lines of the site to strike adjacent residences or accessory buildings, nor impinge on any public right-of-way or access easement.

Section 110.326.80 Waiver of Parking and Landscaping Regulations. For commercial wind machines, the following requirements are waived:

(a) Landscaping requirements, as contained in Article 412, Landscaping, of the Development Code, are hereby waived for the wind machines, transmission lines and all related electrical works. Landscaping for any maintenance building, control building or substation located more than one mile from any public local, collector, arterial road or highway, shall also be exempt from landscaping requirements.

(b) Hard surface parking requirements as contained in Article 410, Parking and Loading, of the Development Code, are hereby waived for the wind machines sites, transmission lines, substations and all related electrical works. Instead, a parking surface consisting of decomposed granite or other material approved by the Engineering Division shall be used for the parking surface. The width of the required parking areas shall be approved by the Washoe County Department of Community Development and the Washoe County Engineering Division. The parking surface and parking construction requirements shall be determined by the Washoe County Engineering Division.

Section 110.326.85 Roof Mounted Private Wind Machines. Roof mounted wind machines shall be located so that in the event of failure, no part of the machine will fall across any parcel line and onto any adjacent building. Attachment of the wind machine to the building shall be in strict compliance with regulations of the Washoe County Department of Building and Safety.

Section 110.326.90 Repair and Removal of Wind Machines. Any wind machine found to be unsafe by an official of the Washoe County Department of Building and Safety shall be repaired by the owner to meet federal, state, and local safety standards, or, if not repaired, shall be removed in accordance with the provisions of this article within six (6) months of being notified by the Department of Building and Safety of the existence of an unsafe condition. Wind machines that are not operated for a continuous period of twelve (12) months shall be removed by the owner of the wind machine.

(a) For commercial wind machines, the applicant/developer shall submit a decommissioning plan at the time of application for a special use permit. The plan shall include:

(1) The anticipated life of the project,

(2) The estimated decommissioning costs net of salvage value in current dollars,

(3) The method of ensuring that funds will be available for decommissioning and restoration, and

(4) The anticipated manner in which the project will be decommissioned and the site restored.

(b) When a wind machine is removed from a site, all associated and ancillary equipment, batteries, devices, structures or support(s) for that system shall also be removed. For the purposes of this section, non-operation shall be deemed to include, but shall not be limited to, the blades of the wind machine remaining stationary so that wind resources are not being converted into electric or mechanical energy, or the wind machine is no longer connected to the public utility electricity system.

(c) In the event a commercial wind machine owner fails to remove the wind machine tower and all associated and ancillary equipment, batteries, devices, structures or support(s) for that system, as required in this section, Washoe County shall have the authority to remove or authorize the removal of the tower and all associated elements of the project. If the performance security is not sufficient to cover the cost of the removal, additional costs associated with the removal shall be assigned as a lien on the personal property of the wind machine owner in question. If the performance security has expired or is not available, the County shall have the authority to have the tower removed and associated costs assigned as a lien on the personal property of the wind machine owner in question.

Section 110.326.100 Meteorological Towers. All meteorological towers provided for under this section shall comply with the following standards:

a) A temporary meteorological tower used to site wind machines shall be permitted under the same setback and access standards and requirements that apply to Private Wind Machines. No administrative or special use permit shall be required. Setbacks to property lines shall be equal to the height of the tower.

(b) A permit for all temporary meteorological towers shall be valid for a maximum of five (5) years. Towers shall be removed within one (1) month after the five (5) year-year period has ended. Failure to remove the tower within the one (1) month period may result in a lean being place against the property for the entire cost to Washoe County to remove and dispose of it; salvage value, if any, shall not be deducted from this amount. An extension of time of one (1) year may be permitted by the Director of the Department of Community Development upon submittal of a letter explaining the need for the extension.

(c) A permit for a permanent, non-exempt meteorological tower shall require a special use permit from the Board of Adjustment as provided for under Article 810, Special Use Permits, of the Washoe County Development Code.

(d) All meteorological towers shall comply with applicable requirements of the Federal Aviation Administration. Lighting, signage, aesthetics and maintenance shall comply with the requirements of this article.

(e) Guy wires shall not extend closer than five (5) feet of a property line. Red navigation marker balls or other acceptable marker devices such as flags, reflectors, or bright colored coils shall be installed and maintained on guy wires that support a tower above seventy (70) feet in height to mitigate potential hazards to aviation and to birds and bats.

(f) Meteorological towers shall not be climbable for a minimum of twelve (12) feet above the ground, and shall be surrounded by a six (6) foot fence when not enclosed within fencing constructed for a residence.

Section 110.326.105 Compliance with Regulations. The audible noise limit, shadow flicker, maintenance, and ice throw standards are absolute; no variances to these standards may be given. Once wind machines are permitted, the owners have the option of compliance with these standards or discontinuation of operations. If the affected neighboring property owner does not allow such measurements to commence on their property it shall be deemed that the standard is being met. If the operation of the wind machine(s) does not comply with the provisions of this article, the operator shall promptly take all measures necessary to comply with these regulations, including, but not limited to, discontinued operation of one or more wind machines until compliance has been achieved.