

Article 19: Wind Energy Conversion Systems

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SECTION 19-1 INTENT

19-101. The regulations set forth in this Article, or set forth elsewhere in these regulations when referred to in this Article, are the regulations governing the placement and operation of domestic Wind Energy Conversion Systems (WECS). The intent of this Article is to allow domestic WECS as accessory uses in the Agricultural (~~Article 5A~~), Low Density Residential District (R-1) ~~Countryside (Article 7)~~, Public Use (~~Article 12P~~), Light Industrial (~~Article 15 I-1~~), and Heavy Industrial (~~Article 15 I-2~~), Zoning Districts, subject to compliance with the relevant provisions for such use set forth in this Article.

SECTION 19-2 DEFINITIONS

19-201.

- a. **Wind Energy Conversion System:** The combination of mechanical and structural elements used to produce electricity by converting the kinetic energy of wind to electrical energy. Wind Energy Conversion Systems (WECS) consist of the turbine apparatus and any other buildings, support structures and other related improvements necessary for the generation of electric power from wind.
- b. **Domestic Wind Energy Conversion System:** A Wind Energy Conversion System consisting of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity of not more than 25 kW, which is less than 120 feet in height above grade and which is intended to primarily reduce on-site consumption of utility power and not primarily for commercial power production.
- c. **Wind Energy Conversion System Height:** The distance measured from the ground level at the base of the tower structure to the highest point on the Wind Energy Conversion System, including the rotor blades.

SECTION 19-3 DOMESTIC WIND ENERGY CONVERSION SYSTEMS

19-301. ~~As an Accessory Use in the Agricultural District. In the "A" Agricultural District domestic WECS are allowed as an accessory use.~~

- a. **Domestic wind energy conversion systems.** The following conditions and restrictions shall apply to domestic wind energy conversion systems:
 1. **Spacing.** No system may be located within 300 feet of another domestic system.
 2. **Setbacks.** Every system shall meet the following minimum setbacks:
 - (a) A setback from the nearest property line a distance equal to twice the height of the system, including the rotor blades.
 - (b) A setback from the nearest public road right-of-way a distance equal to the height of the system, including the rotor blades, plus an additional 50 feet.
 3. ~~**Blade height.** The lowest point of the rotor blades shall be at least 50 feet above ground level at the base of the tower.~~
 4. **3. Tower height.** A maximum of 100 feet.

Commented [JW1]: Remove Countryside since that district is being removed. Add R-1 which would be the most similar district.

Commented [JW2]: This language is unnecessary as it is already spelled out in 19-101.

Commented [JW3]: While the premise behind minimum blade height is understood, this also forces all WECS to be more than 50 feet in height regardless of the height needed. I also did not see this in other cities' regulations.

5. ~~4. Security. All WECS must be secured to protect against trespass or unauthorized use of the property, tower or similar structures.~~

Commented [JW4]: This is similar to the verbiage for Telecommunications Towers.

~~19-302. As an Accessory Use in the Countryside and Public Use Districts. In the "CS" District and the "P" District domestic WECS are allowed as an accessory use.~~

a. ~~Domestic wind energy conversion systems in the "CS" Countryside and "P" Public Use Districts. The following conditions and restrictions shall apply to domestic wind energy conversion systems:~~

1. ~~Spacing. No system may be located within 300 feet of another domestic system.~~
2. ~~Setbacks. Every system shall meet the following minimum setbacks:~~
 - (a) ~~A setback from the nearest property line a distance equal to twice the height of the system, including the rotor blades.~~
 - (b) ~~A setback from the nearest public road right of way a distance equal to the height of the system, including the rotor blades, plus an additional 50 feet.~~
3. ~~Blade height. The lowest point of the rotor blades shall be at least 50 feet above ground level at the base of the tower.~~
4. ~~Tower height. A maximum of 100 feet.~~

~~19-303. As an Accessory Use in the Light Industrial and Heavy Industrial Districts. In the "I-1" and "I-2" zoning districts domestic WECS are allowed as an accessory use.~~

a. ~~Domestic wind energy conversion systems in the "I-1" and "I-2" Industrial districts. The following conditions and restrictions shall apply to domestic wind energy conversion systems:~~

1. ~~Spacing. No system may be located within 300 feet of another domestic system.~~
2. ~~Setbacks. Every system shall meet the following minimum setbacks:~~
 - (a) ~~A setback from the nearest property line a distance equal to the height of the system, including the rotor blades.~~
 - (b) ~~A setback from the nearest public road right of way a distance equal to the height of the system, including the rotor blades, plus an additional 50 feet.~~
3. ~~Blade height. The lowest point of the rotor blades shall be at least 50 feet above ground level at the base of the tower.~~

Commented [JW5]: The regulations are the same for all areas allowed. There is no reason to have all of these extra sections.