

## **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. (See Section 12.13.)

**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 & 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 & 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 non-functional 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.