## **SUBCHAPTER 82**

## SMALL WIND AND SOLAR ENERGY SYSTEMS

## 82.010 Small Wind Energy Systems

A. Accessory use. A small wind energy system is allowed as an accessory use in Industrial and Agricultural zones only.

B. General standards.

1. The minimum distance between the ground and any part of a rotor blade must be at least 20 feet. Additionally, wind turbines must be placed at least 30 feet above any physical wind barrier (e.g. trees or buildings) within a 300 foot radius.

2. Small wind energy systems may not be illuminated, except as needed to prevent creating a hazard to aircraft, nor may they bear any signs or advertising.

3. Small wind energy systems must have automatic braking, governing, or feathering system to prevent uncontrolled rotation, overspeeding, and excessive pressure on the support structure, rotor blades, and turbine components.

4. All wiring serving small wind energy systems must be underground.

5. Noise produced by small wind energy systems may not exceed 55 dBA measured at the property line.

6. Small wind energy systems must not cause any interference with normal radio and television reception in the surrounding area, with any public safety agency or organization (including but not limited to police, fire, and ambulance) radio transmissions, or with any microwave communications link. The owner shall bear the costs of immediately eliminating any such interference should any occur, or must immediately shut down the system or parts of the system causing the interference.

7. A finish (paint/surface) must be provided for the small wind energy system that reduces the visibility of the facility, including the rotors. In most circumstances this condition may be satisfied by painting the support structure and rotors with flat light haze gray paint. If the support structure is unpainted it must be of a single color throughout its height. The owner must maintain the finish, painted or unpainted, so that no discoloration is allowed

to occur.

8. The diameter of the area swept by the rotors may not exceed 25 feet.

C. Free-standing systems, additional standards. Small wind energy systems may be mounted on a tower detached from other structures on the lot.

1. Setback. The minimum setback from any property line, overhead utility line, or public right-of-way shall be a distance equal to the vertical distance from the ground to the tip of a wind generator blade when the tip is at its highest point unless the affected utility, property owner, or governmental entity grants written permission for a lesser setback. In addition to the system's structures, buy wires associated with towers shall meet applicable setbacks for the zone district.

2. Height. Support structures for free-standing systems must be at least 60 feet tall and may not exceed 80 feet in height in any other zone.

3. Security. Support structures for free-standing systems must be unclimbable from the ground to a height of at least 15 feet.

4. Number. In order to construct a free-standing wind generator, the subject lot must be at least 1 acre in size. A maximum of one (1) free-standing small wind generator system may be allowed per acre of property.

D. Roof-mounted systems, additional standards. Small wind energy systems may be mounted on the roof of a structure as an appurtenance.

1. Height. Roof-mounted systems may not be more than five (5) feet over the maximum allowed height for the structure.

2. Number. There is no maximum number of roof-mounted systems permitted.

3. Engineering report. Before any roof-mounted system is mounted the property owner must submit a report prepared by an Oregon Licensed professional engineer attesting to the fact that the structure to which the system will be mounted is or will be sufficiently strong to support the system and to withstand the wind, vibratory, and other loads to which it would be subjected as a result of mounting the system on int. This report is subject to approval by the Community Development Director prior to the mounting of the system.

## 82.030 Small Solar Energy Systems

A. Accessory use. A small solar energy system is allowed as an accessory use in all zones in which structures are permitted.

B. General standards.

1. Ground-mounted solar energy systems are considered structures and must meet applicable setbacks for the zone district.

2. Roof-mounted systems shall be mounted as flush as possible to the roof but in any case not more than three (3) feet above the existing roof.