

APPENDIX: AWEA MODEL SMALL WIND ZONING ORDINANCE

Writing Small Wind into Existing Laws

This model zoning ordinance is used by many localities across the country and aims to strike an equitable balance among the interests of the consumer, industry, and community. It is the product of lessons learned over decades of industry experience and tens of thousands of installations.

AWEA MODEL ZONING ORDINANCE

Use Regulation for Small Wind Energy Conversion Systems

Section 1: Purpose

It is the purpose of this regulation to allow the safe, effective and efficient use of small wind energy systems installed to reduce the on-site consumption of utility supplied electricity.

Section 2: Findings

The [city or county] finds that wind energy is an abundant, renewable, and nonpolluting energy resource and that its conversion to electricity will reduce our dependence on nonrenewable energy resources and decrease the air and water pollution that results from the use of conventional energy sources. Distributed small wind energy systems will also enhance the reliability and power quality of the power grid, reduce peak power demands, and help diversify the State's energy supply portfolio. Small wind systems also make the electricity supply market more competitive by promoting customer choice.

The State of _____ has enacted a number of laws and programs to encourage the use of small-scale renewable energy systems including rebates, net metering, property tax exemptions, and solar easements. [As appropriate] However, many existing zoning ordinances contain restrictions, which while not intended to discourage the installation of small wind turbines, that can substantially increase the time and costs required to obtain necessary construction permits.

Therefore, we find that it is necessary to standardize and streamline the proper issuance of building permits for small wind energy systems so that this clean, renewable energy resource can be utilized in a cost-effective and timely manner.

Section 3: Definitions

Small Wind Energy 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 100 kilowatts (kW) and which is intended to primarily reduce on-site consumption of utility power.

Tower Height: The height above grade of the fixed portion of the tower, excluding the wind turbine itself.

Total Extended Height: The height above grade to a blade tip at its highest point of travel.

Section 4: Allowed Use

Small wind energy systems shall be allowed as an accessory use in all zoning districts where structures of any sort are allowed; subject to the requirements of Section 5 below. Small wind energy systems not meeting the performance standards of Section 5 may be allowed by conditional use permit.

See p. 4 for a sample of cities, counties, and states that have enacted zoning laws for small wind systems.

Section 5: Use Standards for Small Wind Electric Conversion System

5.01	Setback: The base of the tower shall be set back from all property lines, public right-of-ways, and public utility lines a distance equal to the total extended height. Turbines shall be allowed closer to a property line than its total extended height if the abutting property owner(s) grants written permission and the installation poses no interference with public utility lines or public road and rail right-of-ways.
5.02	Tower Height: So long as the total extended height meets sound and set-back requirements, there shall be no specific height limitation, except as imposed by Federal Aviation Administration regulations as stated in 5.07.
5.03	Sound: Sound produced by the turbine under normal operating conditions, as measured at the property line, shall not exceed the definition of nuisance noise. Sound levels, however, may be exceeded during short-term events out of anyone's control such as utility outages and/or severe wind storms.
5.04	Wind Turbine Equipment: Small wind turbines must have been approved under the state public benefits program or any other small wind certification program recognized by the American Wind Energy Association.
5.05	Requirement for Engineered Drawings: Building permit applications for small wind energy systems shall be accompanied by standard drawings of the wind turbine structure and stamped engineered drawings of the tower, base, footings, and/or foundation as provided by the manufacturer. Wet stamps shall not be required.
5.06	Soil Studies: For standard soil conditions (not including gravel, sand, or muck), foundations developed by the wind turbine manufacturer shall be acceptable for turbine installations of 20kW or less and will not require project-specific soils studies or an engineer's wet stamp.
5.07	Compliance with FAA Regulations: No WEC shall be constructed, altered, or maintained so as to project above any of the imaginary airspace surfaces described in FAR Part 77 of the FAA guidance on airspace protection.
5.08	Compliance with National Electric Code: Building permit applications for small wind energy systems shall be accompanied by a line drawing of the electrical components, as supplied by the manufacturer, in sufficient detail to allow for a determination that the manner of installation conforms to the National Electrical Code.
5.09	Utility Notification: No small wind energy system shall be installed until evidence has been given that the utility company has been informed of the customer's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.
5.10	Insurance: Additional insurance beyond homeowners' coverage shall not be required.
5.11	Abandonment: If a wind turbine is inoperable for six consecutive months the owner shall be notified that they must, within six months of receiving the notice, restore their system to operating condition. If the owner(s) fails to restore their system to operating condition within the six-month time frame, then the owner shall be required, at his expense, to remove the wind turbine from the tower for safety reasons. The tower then would be subject to the Public Nuisance provisions of the zoning code.
5.12	Signage: 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 small wind energy system visible from any public road shall be prohibited.
5.13	Lighting: No illumination of the turbine or tower shall be allowed unless required by the FAA.
5.14	Access: Any climbing foot pegs or rungs below 12 feet of a freestanding tower shall be removed to prevent unauthorized climbing. For lattice or guyed towers, sheets of metal or wood may be fastened to the bottom tower section such that it cannot readily be climbed.

For more information contact Ron Stimmel at rstimmel@awea.org.