

ORDINANCE NO. 2009-144

AN ORDINANCE ADDING 18-4.9 OF CHAPTER XVIII, ZONING, OF THE
MUNICIPAL CODE OF THE CITY OF CLEARLAKE

The City Council of the City of Clearlake, State of California does hereby ordain as follows:

SECTION 1. DECLARATION OF INTENT

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

SECTION 2. Section 18-4.9 of the Clearlake Municipal Code is hereby added as follows:

18-4.9 Small Wind Energy Systems.

18-4.900 Purpose.

The purpose of this section is to regulate small wind energy systems for the production of electricity in order to balance the need for clean, renewable energy resources with the protection of the health, safety and welfare of the community.

18-4.901 Definitions.

Small Wind Energy System A wind energy conversion system shall consist of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity of not more than 10 kW (Kilowatts) and which is intended primarily to reduce on-site consumption of utility power.

Wind Turbine The individual component of a small wind energy system that converts kinetic energy from the wind into electrical energy, independent of the electrical conductors, electrical storage system, electrical metering, or electrical inverters. This term shall include the towers or supporting structures.

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

Total Height The vertical distance from ground to tip of wind turbine blade at its highest point.

18-4.902 Permitted Zone Districts.

Small wind energy systems are allowed in all zone districts if all the requirements are met in this section.

18-4.903 Permit Requirements.

A site plan review permit shall be processed in accordance with Section 18-1.4, Procedures and Administration.

18-4.904 Application Materials.

All small wind energy systems are subject to and must comply with the following provisions of this section:

a. **Application.**

1. The application shall include standard drawings and an engineering analysis of the system's tower, showing compliance with Clearlake Municipal Code Section 9-1, Building Codes and Regulations, and certification by a professional mechanical, structural, or civil engineer licensed by the State of California. A wet stamp shall be required.
2. The application shall also include a line drawing of the electrical components of the system in sufficient detail to allow for a determination that the manner of installation conforms to Clearlake Municipal Code Section 9-1, Building Codes and Regulations.

- b. **Utility Notification.** Unless the applicant does not plan to connect the system to the electricity grid, the application shall include evidence that the electric utility service provider that serves the proposed site has been informed of the applicant's intent to install an interconnected customer-owned electricity generator.

18-4.905 **Regulations.**

- a. **Approval.** The small wind system must have been approved by the California Energy Commission (CEC) as qualifying under the Emerging Renewables Fund of the Commission's Renewables Investment Plan or certified by a national program recognized and approved by the Energy Commission.
- b. **Minimum Lot Size and kW Capacity.** A minimum parcel size of 5,000 square feet is required for the placement of any small wind energy system. The maximum rated capacity for lots less than one half acre is 2 kW and less. The maximum rated capacity for lots greater than one half acre is 10 kW and less.
- c. **Easements.** No part of a small wind energy system shall be located within or over drainage, utility or other established easements.
- d. **Number Per Parcel.** A maximum of one small wind energy system per parcel is permitted on parcels less than one acre in size. A maximum of one small wind energy system per acre is permitted on parcels greater than one acre in size.
- e. **Setbacks.** The minimum setbacks for small wind energy systems shall be the minimum setbacks for the zone district. The location may be modified by the Director of Planning and Community Development or the Planning Commission as part of the site plan review permit to place the wind energy system as far as possible from the property lines. The small wind energy systems shall not be allowed in the front yard or a side yard with frontage.
- f. **Height.** The maximum total height of a small wind energy system for lots less than one half acre is 30 feet and 40 feet for lots greater than one half acre.
- g. **Lighting.** No illumination of the turbine or tower shall be allowed.
- h. **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 so it cannot readily be climbed.

- i. **Rotor Safety.** Each small wind energy system shall be equipped with both manual and automatic controls to limit the rotational speed of the blade within the design limits of the rotor. An external, manual shut-off switch shall be included with the installation. The minimum distance between the ground and any protruding blades utilized on a small wind energy system shall be 10 feet as measured at the lowest point of the arc of the blades.
- j. **Noise.** No small wind energy system or combination of small wind energy systems on a single parcel shall create noise that exceeds a maximum of 60 CNEL, as measured at the closest neighboring dwelling. These levels, however, may be exceeded during short-term events such as utility outages and severe wind storms.
- k. **Aesthetics and Maintenance.**
 - 1. **Appearance.** The system's tower and supporting structures shall be painted a single, neutral, non-reflective, non-glossy color that visually blends with the surrounding natural and built environments.
 - 2. **Electrical Wires.** All electrical wires leading from the tower to electrical control facilities shall be located underground.
 - 3. **Maintenance.** Small wind energy systems shall be maintained in good repair, as recommended by the manufacturer's scheduled maintenance or industry standards, and shall be free from rust.
- l. **Signs/Labels.** All signs, with the exception of manufacturer's, installer's identification, appropriate warning signs, or owner identification, are prohibited.
- m. **Compliance with FAA Regulations.** All small wind energy systems shall comply with applicable FAA regulations, including any necessary approvals for installations.
- n. **Repair and Removal of Small Wind Energy Systems.** Any small wind energy system found to be unsafe by the Building Official shall immediately cease operation upon notification by City of Clearlake and shall be repaired by the owner to meet Federal, State, and local safety standards or be removed within six months. Small wind energy systems that are not operated for a continuous period of 12 months shall be removed by the owner of the small wind energy system.

When a small wind energy system 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 small wind energy system remaining stationary so that wind resources are not being converted into electric or mechanical energy.

- o. **Exceptions.** Exceptions to the regulations and standards of this section may be permitted if a conditional use permit, is approved pursuant to Title 18, Section 18-1.8 (Conditional Use Permits).

SECTION 3:

CONFLICTS:

All ordinances or parts of ordinances or resolutions in conflict herewith are hereby repealed to the extent of such conflicts and no further.

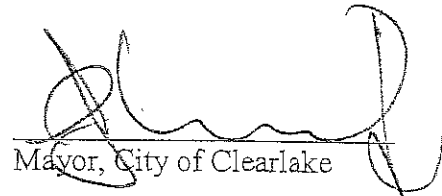
SECTION 4:

EFFECTIVE DATE:

The effective date of this Ordinance is thirty (30) days after its adoption by the City Council.

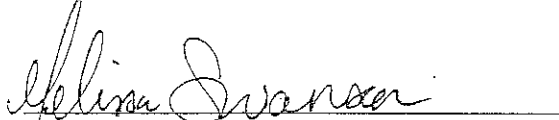
PASSED AND ADOPTED this 10th day of December, 2009
by the following vote:

- AYES: Mayor Chuck Leonard, Vice Mayor Judy Thein, Council Member Joyce Overton,
Council Member Roy Simons, Council Member Curt Giambruno
NOES: None
ABSENT: None
ABSTAIN: None



Mayor, City of Clearlake

ATTEST:



City Clerk, City of Clearlake

