Windmills and Wind Generators

Updated: 3/19/2009

Wind Generator Definition
A generator specifically designed to convert kinetic energy in wind into electrical energy. A wind generator may include a generator, tower, and associated control or conversion electronics. The height of a wind generator is measured at the hub of the generator.

Accessory Wind Generator - Land Use Code, Section 4.3.10.1
Each lot may include a wind generator for the use of the property owner.
An accessory wind generator that cannot meet all the following standards requires review and approval through the Minor Special Review Application process.
Approval of the special review must be obtained prior to submitting a building permit application.
Wind generator standards:
1. One wind generator per lot is allowed.
2. The lot must be at least one acre.
3. The hub height of the wind generator must not exceed 40 feet.
4. The wind generator must be setback from property lines, public right of way and access easements at least 2 times the hub height of the generator.
5. The wind generator must be painted or coated a non-reflective white, gray or other neutral color.
6. The wind generator must not be artificially illuminated.
7. The wind generator must not be used to display advertising.
8. Electrical controls must be wireless or underground and power lines must be underground except for an interconnection to an existing above ground power grid.
9. Noise emanating from the wind generator must be in compliance with Larimer County Code Chapter 30, Article V, Noise.

Small Wind Energy Facility Definition
A facility which is used for the production of electrical energy from energy supplied by the wind including any transmission lines, and developed for the purposes of supplying or distributing electrical energy to a customer or customers, and in which there are no more than three wind generator towers and the hub height of the wind towers does not exceed 80 feet.

Minor Special Review Approval
Section 4.3.7.N of the Larimer county Land Use Code requires Minor Special Review application and approval for a Small Wind Facility. This approval must be obtained prior to submitting a building permit application.

Building Permit
Wind generators greater than twelve (12) feet in hub height are required to obtain a building permit. All building permits will be reviewed for compliance with zoning setback requirements and zoning use as designated by the Land Use Code.

Building Permit Submittal Requirements
1. Four Plot plan drawings showing the location of the wind generator tower, any accessory generator or buildings. Include the hub height in plot plan drawing.
2. Two sets of engineered construction drawings including calculations for wind design according to the high wind speed map with ½” ice retention and engineered foundation plans.

Electrical Permit
Wind generators need to obtain an electrical permit for inspection of electrical work.

Colorado State Electrical Board
1560 Broadway, Suite 1500
Denver, CO 80202
Telephone: 303-894-2985
Electrical Permits Online: www.dora.state.co.us/electrical