

WIND TURBINE SYSTEMS, ZONING REGULATIONS

DEFINITIONS:

Wind Turbine: A device which converts the kinetic energy of the wind into a useable form of electrical energy.

Wind Turbine System, Small: An installation consisting of no more than one wind turbine with a maximum blade swept area of 220 square feet. This area shall be measured in the vertical plane perpendicular to the wind direction. (A 220 square foot blade swept area corresponds approximately with a blade diameter of 16.5 feet for a conventional horizontal axis wind turbine.)

Wind Turbine System, Medium: An installation consisting of one or two wind turbines in which the sum of the blade swept area of the turbines is greater than 220 square feet but no more than 850 square feet. This area shall be measured in the vertical plane perpendicular to the wind direction. (A 850 square foot blade swept area corresponds approximately with a blade diameter of 33 feet for one conventional horizontal axis wind turbine).

Wind Turbine System, Large: An installation consisting of one or more wind turbines in which the sum of the blade swept area of all turbines is greater than 850 square feet, or three or more wind turbines of any size. This area shall be measured in the vertical plane perpendicular to wind direction. No individual wind turbine shall have a blade swept area greater than 6400 square feet. The "Wind Turbine System, Large" shall be classified as a Major Impact Services and Utilities use type.

Wind Turbine, Non-operational: Any wind turbine(s) whose power output (in kilowatt hours) for any consecutive 12 months is less than 10% of the expected power output. The expected power output for commercial wind turbines shall be the amount claimed in the company's prospectus.

REGULATIONS:

4620 PERMITTED EXCEPTIONS TO HEIGHT LIMITS.

The following structures shall be exempt from the maximum height provisions of an applicable height designator:

Wind turbines, windmills, wind-driven water pumps and appurtenant structures required for the function thereof.

SECTION 6156 (ACCESSORY REGULATIONS)*ALLOWED IN ALL ZONES
WHERE RESIDENTIAL OR
AGRICULTURAL USES ARE PERMITTED.*

- z. **Wind Turbine Systems, Small.** A wind turbine system, small shall be permitted on a building site in compliance with the following conditions:
1. **Setback.** The system shall be set back from property lines and roads at least 2 times the height of the wind system (to the top of the blade in vertical position).
 2. **Fencing.** Public access to the wind turbines shall be restricted through the use of a fence with locked gates, non-climbable towers or other suitable methods.
 3. **Signs.** Suitable warning signs containing a telephone number for emergency calls shall face all approaches to the system. Individual signs shall be between 5 and 16 square feet.
 4. **Noise.** The wind turbine shall be operated in such manner that it does not exceed the sound level limits of Title 3, Division 6, Chapter 4 of the San Diego County Code (Noise Abatement and Control).

Any waiver or modification of the above requirements shall be allowed only in accordance with the Variance Procedure commencing at Section 7100.

6950 WIND TURBINE SYSTEM, MEDIUM.*ALLOWED IN ALL ZONES*

A wind turbine system, medium shall require an administrative permit approved in accordance with the **Administrative Permit Procedure** commencing at Section 7050 and the following requirements:

- a. **Notification.** Notification shall be in accordance with paragraph c of Section 7060.
- b. **Setback.** The wind turbines shall be set back from property lines and roads at least 3 times the height of the wind turbine (to the top of blade in vertical position).
- c. **Fencing.** Public access shall be restricted through the use of a fence with locked gates, non-climbable towers or other suitable methods.
- d. **Signs.** Suitable warning signs containing a telephone number and an address for emergency calls and informational inquiries shall face all approaches to the project. Individual signs shall be between 5 and 16 square feet.

- e. Review. Review shall include an assessment of the impact on adjacent property with regard to:
 - 1. Location of installation in its relation to topographic features which would constitute an unusual safety hazard.
 - 2. Sensitivity of adjacent uses to noise and electrical interference and visual impact.
- f. Noise. The system shall meet the sound level limits of Title 3, Division 6, Chapter 4 of the San Diego County Code (Noise Abatement and Control).
- g. It shall be a condition of the permit that non-operational wind turbines shall be removed.

Any waiver of modification of the above requirements shall be allowed only in accordance with the Variance Procedure commencing at Section 7100.

6951 WIND TURBINE SYSTEM, LARGE. *ALLOWED IN MOST ZONES*

Wind turbine systems, large shall be considered a Major Impact Services and Utilities use type requiring a **major use permit** approved in accordance with the Use Permit Procedure commencing at Section 7350 and the following requirements:

- a. Setbacks. The wind turbines shall observe the following setbacks measured from the closest point on the base or support structure. For purposes of calculating setbacks, height of the wind turbines shall mean the distance from ground to the top of blade in vertical position:
 - 1. From property lines or public road setback 4 times the height.
 - 2. From all existing residences or buildings occupied by civic use types setback 8 times the height.
 - 3. From the furthestmost property line of adjacent parcels which are vacant setback 9 times the total height.
 - 4. Setbacks for experimental wind turbines (those which are not produced by an established wind turbine manufacturer on a production basis) may be greater than those specified above based on the discretion of the permit granting authority.
 - 5. Setbacks may be reduced up to a maximum of 50% with the written consent to the granting of a setback reduction signed by the owner or owners of each lot or parcel affected by the proposed setback reduction.

- b. Fencing. Public access shall be restricted through the use of a fence with locked gates, non-climbable towers or other suitable methods.
- c. Signs. Suitable warning signs containing a telephone number and an address for emergency calls and informational inquiries shall face all approaches to the project. Individual signs shall be between 5 and 16 square feet.
- d. Noise. The project shall meet the sound level limits of Title 3, Division 6, Chapter 4 of the San Diego County Code (Noise Abatement and Control).
- e. Visual. The following measures should be followed whenever possible in order to minimize the visual impact of the project:
 - 1. Removal of existing vegetation should be minimized.
 - 2. Internal roads should be graded for minimal size and disruption.
 - 3. Any accessory buildings should be painted or otherwise visually treated to blend with the surroundings.
 - 4. The turbines and towers should be painted with non-reflective paint to blend with the surroundings.
- f. Turbine Description. The following information shall be specified as part of the permit:
 - 1. The wind turbine manufacturer, model, power rating and blade dimensions.
 - 2. The tower manufacturer and model.
- g. Non-Operational Wind Turbines. It shall be a condition of the permit that non-operational wind turbines shall be removed:
 - 1. The project owner shall insure that a copy of all prospectuses shall be placed in the County's permit file.
 - 2. County staff may, at any time in the future, compare the amount of power stated (in kilowatt hours) in the appropriate prospectus with the actual power sold to the utility (as reported in the California Energy Commissions' "Wind Project Performance Reporting System") and determine if any wind turbine systems meet the definition for "wind turbine non-operational."
 - 3. County staff may collect other data as necessary to determine if any wind turbine systems meet the definition for "wind turbine non-operational."