

An excerpt from the Yolo County Code zoning regulations (see <http://www.yolocounty.org/community-development/planning-public-works/planning-division/2014-zoning-code>):

## **Sec. 8-2.1103 Small and large wind energy systems**

### **(a) Purpose**

The purposes of this section are as follows:

- (1) To provide for the placement of small, accessory wind energy systems to enable generation of electricity from the wind, primarily for on-site use, thereby reducing the consumption of electricity supplied by utility companies.
- (2) To provide regulations to process applications for utility-scale large wind energy systems that generate electricity from the wind primarily for off-site customers.
- (3) To minimize potential adverse impacts associated with wind energy systems on area residents, historic sites, aesthetic quality and wildlife through careful siting, design and screening, consistent with state law.
- (4) To avoid or minimize public safety risks associated with wind energy systems by providing standards for the placement, design, construction, modification and removal of such systems, consistent with federal, state and local regulations.

### **(b) Definitions**

#### **Wind energy, free air zone**

“Wind energy, free air zone” shall mean that the bottom of the turbine’s blades are at least 10 feet above any structure or object that is within 300 feet.

#### **Large wind energy system**

“Large wind energy system” shall mean a utility-scale wind energy conversion system consisting of several wind turbines, towers, and associated control or conversion electronics, which have a rotor size greater than 200 square meters in size (approximately 52 feet in diameter), or which have a rated capacity of more than 150 kilowatts per turbine site, whichever is less, and that will be used to produce utility power to off-site customers.

#### **Meteorological (met) tower**

“Meteorological (or met) tower” shall mean a temporary wind test tower erected by a wind energy company to measure wind speeds and other meteorological data, in preparation of applying for a permanent large-scale wind energy system.

#### **Wind energy, on-site**

“Wind energy, on-site” shall mean only the parcel upon which a small wind energy system and its associated accessory structure(s) are located and the location upon which the electrical power generated is primarily used.

**Small wind energy system**

“Small wind energy system” shall mean 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 150 kilowatts per customer site consistent with the requirements of paragraph (3) of subdivision (b) of Section 25744 of the Public Resources Code and that will be used to reduce net onsite consumption of utility power. Such uses are accessory to a primary use on the site.

**Wind energy, system height**

“Wind energy, system height” shall mean the height above existing grade of the fixed portion of both a small or large wind energy system tower, and the height to the tip of the blade or the highest point of the system at the 12:00 position.

**Wind energy, tower height**

“Wind energy, tower height” shall mean the height above existing grade of the fixed portion of a small or large wind energy system tower, excluding the wind turbine.

**(c) Permitted and prohibited locations**

The provisions of this Section apply to small wind energy systems that generate more than one (1) kilowatt of electricity, or are greater than thirty-five (35) feet in height, or have rotors one (1) meter or more in diameter. These small wind energy systems require the issuance of a Site Plan Review, Minor Use Permit, or Major Use Permit approval, as set forth below. In addition, the installation of any wind energy system below these size criteria is allowed in any zone district and requires issuance of a building permit only.

The provisions of this Section also apply to large wind energy systems that generate more than one hundred fifty (150) kilowatts of electricity. Any wind energy systems installed prior to the effective date of this section shall be treated as a prior nonconforming use pursuant to this chapter unless, through the issuance of a permit pursuant to this Section, they are subsequently made conforming.

- (1) Permitted locations. Small wind energy systems used to reduce onsite consumption of electricity may be installed and operated in the following districts: agricultural districts (in the Agricultural Intensive (A-N), the Agricultural Extensive (A-X), the Agricultural Commercial (A-C), the Agricultural Industrial (A-I), and the Agricultural Residential (A-R) zones); residential districts (in the Rural Residential (RR-5 and RR-1), Residential Low (R-L), Residential Medium (R-M), and Residential High (R-H) zones); commercial districts (in the Local Commercial (C-L), the General Commercial (C-G), the Downtown Mixed Use (DMX), and the Highway Commercial (C-H) zones); industrial districts (in the Light Industrial (I-L), the Heavy Industrial (I-H), and the Office Park/Research and Development (OPRD) zones); and open space and recreation districts (in the Public Open Space (POS), Park and Recreation (P-R), and Public Quasi-Public (PQP) zones).

Large utility scale wind energy systems used to produce electricity for off-site customers, and meteorological towers, may be installed and operated in the

following districts: agricultural districts (the Agricultural Intensive (A-N), the Agricultural Extensive (A-X), and the Agricultural Industrial (A-I) zones.

- (2) Prohibited Locations. Small and large wind energy systems, and meteorological towers, may not be allowed or permitted in locations other than those identified in subsection (1), above, or where otherwise prohibited by any of the following:
- (i) Sites listed in the National Register of Historic Places or the California Register of Historical Resources pursuant to Section 5024.1 of the Public Resources Code.
  - (ii) A comprehensive land use plan and any implementing regulations adopted by an airport land use commission pursuant to Article 3.5 (commencing with Section 21670) of Chapter 4 of Division 9 of Part 1, as well as height limits established in any provision of federal, state, or local laws or regulations for structures located in the vicinity of an airport.
  - (iii) The terms of an open-space easement entered into pursuant to the Open-space Easement Act of 1974, Chapter 6.6 (commencing with Section 51070) of Division 1 of Title 5 of the Government Code.
  - (iv) The terms of an agricultural conservation easement entered into pursuant to the California Farmland Conservancy Program Act, Division 10.2 (commencing with Section 10200) of the Public Resources Code.
  - (v) The terms of a contract entered into pursuant to the Williamson Act, Chapter 7 (commencing with Section 51200) of Division 1 of Title 5 of the Government Code.
  - (vi) The terms of any easement entered into pursuant to Chapter 4 (commencing with Section 815) of Division 2 of Part 2 of the Civil Code.

**(d) Minimum parcel size**

All small wind energy systems shall be located on parcels of at least one (1) acre in size. All large wind energy systems, and meteorological towers, shall be located on parcels of at least twenty (20) acres in size, subject to a Major Use Permit being issued, as required below.

**(e) Number of systems allowed**

On parcels containing large agricultural operations, up to a maximum of one small wind energy system for every ten (10) acres may be allowed, provided that each of the systems meet the definition of a small wind energy system contained in Section 8-2.1103(b), above. For large wind energy systems, and meteorological towers, up to a maximum of one wind energy system or tower for every ten (10) acres may be allowed, subject to a Major Use Permit being issued, as required below.

**(f) Permits required**

The following types of approvals are required:

- (1) Construction of small wind energy systems on rural lands zoned for agricultural uses (including the Agricultural Intensive (A-N), the Agricultural Extensive (A-X), the Agricultural Commercial (A-C), the Agricultural Industrial (A-I), and the Agricultural Residential (A-R) zones) may be approved through the issuance of a Site Plan Review approval by staff. This approval is a ministerial, “over the counter” approval like a building permit, and does not require a public hearing, unless the application fails to meet the specific Development Standards set forth in Section 8-2.1103(h), below, in which case the application may be referred by staff to the Zoning Administrator or the Planning Commission for a hearing and decision to issue a Minor or Major Use Permit.
- (2) Construction of small wind energy systems located on properties within non-agricultural or urban areas that are zoned for rural residential, commercial, and industrial uses are also allowed through the issuance of a Minor or Major Use Permit, depending on the application’s consistency with all of the Development Standards set forth in Section 8-2.1103(h), below. Specifically, wind systems are permitted with approval of a Minor Use Permit, issued by the Zoning Administrator after a public hearing, on lots of two acres or more, and which meet all of the Development Standards set forth in Section 8-2.1103(h), below, in areas zoned for residential uses (in the RR-5, RR-1, R-L, R-M, and R-H zones), commercial uses (in the C-L, C-G, DMX, and C-H zones), industrial uses (in the I-H, I-L, and OPRD zones), and open space and recreation uses (in the POS, P-R, and PQP zones). If the application for a small wind energy system is proposed on a small lot of less than two acres, or if the application fails to meet any of the Development Standards, the application may be referred by staff to the Planning Commission for a public hearing and issuance of a Major Use Permit.
- (3) Construction of large wind energy systems, and meteorological towers, on rural lands zoned for agricultural uses (including the A-N, A-X, and A-I zones) shall be approved in all cases through the issuance of a Major Use Permit.

**(g) Application**

An application for a large wind energy system shall include all of the application requirements for a Major Use Permit, in addition to all of the detailed site plan materials noted below. An application for a meteorological tower shall be required to submit only the site plan materials that are relevant to its construction and operation:

- (1) Existing topography and drainage channels.
- (2) Direction and velocity of prevailing winds across the project site, at various elevations.
- (3) Location, height, and dimensions of all existing structures.
- (4) Distance to all residences and any sensitive receptors located within two (2) miles of the wind turbine(s).
- (5) Manufacturer and model designation, rated KW capacity, overall machine height (grade level to highest tip extension), total blade diameter, hub height, rated

maximum rotor RPM, location of proposed structures and buildings and, upon request of the Planning Director, manufacturer's production record.

- (6) Location, grades, and dimensions of all roads and parking areas, both existing and proposed.
- (7) Location and extent of known archaeological resources.
- (8) Location and type of project security fencing.
- (9) Location of site by longitude and latitude coordinates within ten (10) feet and elevation of site above mean sea level within ten (10) feet.
- (10) A plan of proposed project phasing.
- (11) Any and all technical reports which may be required to prove consistency with applicable policies and design standards listed in this section, and which may be used as the basis for implementing mitigation measures incorporated into the environmental document adopted for the project, such as noise, biological resources, scenic resources, geotechnical and other studies.
- (12) A certificate signed by a registered civil engineer or licensed land surveyor stating that area encompassed by the project has been surveyed under his supervision or that a previous survey was performed by a registered civil engineer or licensed land surveyor and that sufficient monuments have been placed to accurately establish the exterior project boundaries.
- (13) A certificate signed by a registered civil engineer or licensed land surveyor stating that the proposed development is in full compliance with the requirements of this chapter. The Director of the Planning, Public Works and Environmental Services Department may require the submittal of additional documentation of compliance when deemed necessary.
- (14) A soil erosion and sedimentation control plan, including revegetation plan.
- (15) If the application includes any wind energy system tower with a total height over 200 feet or any system which is located within 20,000 feet of the runway of any airport, the application shall be accompanied by a copy of written notification to the Federal Aviation Administration.
- (16) An application including any wind energy system located within two miles of any microwave communications link shall be accompanied by a copy of a written notification to the operator of the link.
- (17) An application including any wind energy system located within a 100-year flood plain area, as such flood hazard areas are shown on the maps designated by the county or the Federal Emergency Management Agency, shall be accompanied by a detailed report which shall address the potential for wind erosion, water erosion, sedimentation and flooding, and which shall propose mitigation measures for such impacts.

- (18) Photo simulations showing how the proposed project would appear visually from several viewing points.
- (19) Such additional information as shall be required by the Planning Director.

**(h) Development standards for small wind energy systems**

Applications for small wind energy systems shall meet all of the following standards and any permit issued for such a system shall be conditioned to meet the standards, unless findings of fact to justify a waiver of any of the standards are adopted by the Zoning Administrator or the Planning Commission. Such a waiver shall be appropriate only where the findings demonstrate that a waiver is consistent with the overall purposes described in this chapter and all relevant considerations of public health, safety, and welfare:

- (1) Maximum tower and system height. Any system application shall include evidence that the proposed height does not exceed the height recommended by the manufacturer or distributor of the system. In no case shall the system height exceed any limits established by applicable Federal Aviation Administration requirements.
- (2) On agricultural and open space/recreation (A-N, A-X, A-C, A-I, A-R, POS, P-R, and PQP) zoned parcels of one acre to five acres, the height of small wind energy systems shall not exceed a maximum height of sixty (60) feet for the tower and eighty (80) feet for the system.
- (3) On agricultural and open space/recreation (A-N, A-X, A-C, A-I, A-R, POS, P-R, and PQP) zoned parcels of more than five acres, the height of small wind energy systems shall not exceed a maximum height of one hundred (100) feet for the tower and one hundred sixty (160) feet for the system unless the applicant can demonstrate that such height is not in the free air zone. In no case shall the system height exceed any limits established by applicable Federal Aviation Administration requirements.
- (4) Small wind energy systems proposed on agricultural and open space/recreation (A-N, A-X, A-C, A-I, A-R, POS, P-R, and PQP) zoned parcels with heights greater than those specified in (1) and (2), above, may be permitted through the issuance of either a Minor Use Permit or a Major Use Permit, to be determined by County staff.
- (5) On parcels of two (2) acres or more within the residential (RR-5, RR-1, R-L, R-M, and R-H) zones, the commercial (C-L, C-G, DMX, and C-H) zones, and the industrial (I-L, I-L and OPRD) zones, the height of small wind energy systems shall not exceed a maximum height of fifty (50) feet for the tower and one hundred (100) feet for the system, and the systems may be permitted through the issuance of a Minor Use Permit. Wind energy systems on parcels between one (1) and two (2) acres within the residential (RR-5, RR-1, R-L, R-M, and R-H) zones, the commercial (C L, C-G, DMX, and C-H) zones, and the industrial (I-L, I-H and OPRD) zones, and wind energy systems between fifty (50) and one hundred (100) feet in height for the tower, and between one hundred (100) feet

and one hundred sixty (160) feet in height for the system, may be permitted through the issuance of a Major Use Permit;

- (6) Notwithstanding the height limits in (1) through (5), above, all allowed and permitted wind energy towers located on properties within or adjacent to an Airport Overlay (A-O) zone that are within a designated aviation safety zone and/or which are regulated by an applicable airport master or land use plan, shall comply with applicable Federal Aviation Administration (FAA) safety height requirements and/or the applicable adopted airport master or land use plans.
- (7) Setbacks. The minimum setback from any property line to the base of wind energy system shall be equal to the system's height. The setbacks required by this subsection shall be measured from the base of the tower to the property line of the parcel on which it is located; provided that where guy wire supports are used, setbacks shall be measured from where the guy wire is anchored to the ground, rather than the base of the tower. The Zoning Administrator or Planning Commission may allow reduced setbacks if s/he determines it would result in better screening of the system, i.e., closer spacing would allow greater screening from trees, structures, or topography or otherwise reduce the systems' visual impact, provided that the owner of the neighboring property agrees in writing.
- (8) Lattice and/or guyed towers shall not be allowed within five hundred (500) feet of a residential district (R-L, R-M, R-H districts), excluding Rural Residential (RR-5 and RR-1) districts.
- (9) Measures to minimize aesthetic impacts:
  - (i) Use of existing site features for screening. Wind energy systems should be located to take advantage of the screening afforded by any existing trees, topography and structures to minimize the system's visibility from dwellings on adjacent property and public roads, but without significantly compromising viable system performance. Screening should not significantly block or reduce the wind reaching the turbine and should not increase the turbulence (gustiness) of the wind to the turbine. Priority for appropriate screening shall be given (in descending order) to minimizing visibility from existing dwellings on adjacent properties and across the roadway from the wind energy system, public rights-of-way, and public parks and open spaces. At the discretion of staff, applicants proposing wind energy systems in locations that are not at least partially screened by any existing trees, topography or structures must submit documentation as to why locations which would provide screening are not available or technically feasible due to wind speeds or other characteristics.
  - (ii) Colors and finish. Wind energy system components shall have a nonglare/non-reflective finish (e.g., galvanized metal) or appropriate color of neutral white or light gray. On smaller turbines, darker neutral colors (dark gray, black, unfinished metal) are usually also acceptable. Logos and advertising are explicitly prohibited.
  - (iii) Signals, Lights and Signs. No signals, lights or signs shall be permitted on a small wind energy system unless required by the

Federal Aviation Administration (FAA). If lighting is required, the County shall review the available lighting alternatives acceptable to the FAA and approve a design that it determines would cause the least impact on surrounding views. Such permitted wind systems shall be of a height that does not require installation of a flashing light or signal in compliance with FAA regulations, unless the lights/signals are screened from view of motorists, pedestrians, and occupants of adjacent structures, consistent with FAA requirements; or the applicant demonstrates that the alternative locations for the system would also require a light/signal and would be no less visible from the surrounding area than the proposed location. However, in documented migratory bird flyways, preference shall be given to white strobe lights operating at the longest interval allowed per FAA requirements.

- (10) Crop Dusting. In the event a wind energy system is proposed to be sited in an agricultural area that may have pest control aircraft operating at low altitudes, the applicant and County shall take reasonable steps to notify and solicit comments from pest control aircraft pilots registered to operate in the County. Wind energy systems shall not be allowed where the Zoning Administrator or Planning Commission determines they would pose a risk for pilots spraying fields.
- (11) Biological Impacts. Wind energy systems shall not be allowed in locations that would significantly affect habitat for special status protected bird and bat species. Monthly monitoring of bird and/or bat strikes for at least the first year of operation shall be required as a Condition of Approval for large wind turbines located within sensitive habitat areas, as modified by recommendations from the wildlife agencies involved.

To minimize the potential for special status birds and bats to collide with towers/turbines, wind energy systems shall not be located in the following general locations, as mapped or determined by the Natural Diversity Data Base, the Yolo County Natural Heritage Program, or similar programs, unless findings are adopted by the Zoning Administrator or Planning Commission, as described in (iv), below:

- (i) Within five hundred (500) feet of wetlands, staging areas, wintering areas, bat roosts, or rookeries documented as supporting birds or bats listed as endangered or threatened species under the federal or California Endangered Species Acts; or
- (ii) Within migratory flyways documented by state or federal agencies; or
- (iii) Within one thousand (1,000) feet of publicly owned wildlife refuges.
- (iv) Wind energy systems may be located in such areas described above in (i), (ii), or (iii), if discretionary Use Permit review is provided and the Zoning Administrator or Planning Commission adopts findings of fact, after consultation with the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service, as appropriate, and consistent with *The California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development*, (October 2007, as amended), that determine installation of a small wind energy system in the proposed location will not have a significant impact on any protected birds and bats. In determining

potential impacts, the design of the proposed tower shall be considered, and the use of monopoles, as opposed to lattice or guyed-lattice towers, shall be encouraged.

- (12) Views and scenic corridors. Wind energy systems shall not be located where they would substantially obstruct views of adjacent property owners and shall be placed or constructed below any major ridgeline visible from any designated scenic corridor listed by the state or in the Open Space Element of the Countywide General Plan, unless they are designed to blend in with the surrounding environment in such a manner that they would not have a significant visual impact, as determined by the Zoning Administrator or Planning Commission.
- (13) Slopes. Construction of a wind energy system on any slopes steeper than four to one (4:1) is prohibited.
- (14) Noise. The proposed system shall not generate noise levels exceeding 60 decibels or any existing maximum noise levels applied pursuant to the Noise Element of the General Plan, or noise ordinance, for the applicable zoning district, as measured at the nearest property line, except during short-term events such as utility outages and severe wind storms. This 60 decibel noise threshold may be exceeded if the adjacent property owner agrees in writing, and/or if the adjacent property is commonly owned by the applicant or owner of the project site.
- (15) Climbing apparatus. Climbing apparatus shall be located at least twelve (12) feet above the ground, and the tower shall be designed to prevent climbing within twelve (12) feet of the ground.
- (16) Site access and on-site roads. Construction of on-site roads to install and maintain wind energy systems shall be minimized. Temporary access roads used for initial installation shall be regraded and revegetated to a natural/preconstruction condition after completion of installation.
- (17) Turbine certification. Wind energy system turbines shall be approved by the California Energy Commission or certified by a national program (i.e., National Electrical Code (NEC), American National Standards Institute (ANSI) and Underwriters Laboratories (UL)).
- (18) Building, engineering, and electrical codes. The system shall comply with the California Building Code and be certified by a professional mechanical, structural, or civil engineer licensed by the state. However, a wet stamp shall not be required, provided that the applicant demonstrates that the system is designed to meet the:
  - (i) UBC requirements for wind exposure D;
  - (ii) UBC requirements for Seismic Zone 4;
  - (iii) Requirements for soil strength of not more than 1,000 pounds per square foot; or
  - (iv) Other relevant conditions required by the County to protect public safety.
  - (v) Electrical components of the system shall conform to the National Electric Code.

**(i) Development standards for large wind energy systems**

Applications for large wind energy systems, and meteorological towers, shall meet all of the following standards and any Major Use Permit issued for such systems shall be conditioned to meet the standards, unless findings of fact to justify a waiver of any of the standards are adopted by the Planning Commission:

- (1) Large wind energy systems, and meteorological towers, shall comply with subsections (5) through (17) of Section 8-2.1103(h), above.
- (2) Maximum tower and system height. Any system application shall include evidence that the proposed height does not exceed the height recommended by the manufacturer or distributor of the system.
- (3) Setbacks. The following setbacks shall be required for large wind energy systems:
  - (i) The minimum setback from the base of any large wind energy system to any adjacent property line(s) where the adjacent parcel(s) are not under common applicant ownership and contain less than forty (40) acres shall be equal to two (2) times the overall system's height, or five hundred (500) feet, whichever is more;
  - (ii) The minimum setback from the base of any large wind energy system to any adjacent property line(s) where the adjacent parcel(s) are not under common applicant ownership and contain more than forty (40) acres shall be equal to one and one-half (1.5) times the overall system's height, or five hundred (500) feet, whichever is more;
  - (iii) The minimum setback from the base of any large wind energy system to any off-site residence(s) on adjacent parcels not under common applicant ownership shall be three (3) times the overall system's height, or one thousand (1,000) feet, whichever is more, unless the adjacent neighbor approves a lesser distance;
  - (iv) The Planning Commission may allow a reduction in the setbacks in (i), (ii) or (iii), above, not to exceed a minimum setback of one (1) times the overall wind system's height, if a letter of consent from the owner(s) of record of adjacent parcels is filed with the County. The Planning Commission may also allow a reduction or waiver of the setbacks in (i) or (ii), above, if the project exterior boundary is a common property line between two (2) or more approved wind energy projects and the property owner of each affected property has filed a letter of consent to the proposed setback reduction with the County.
  - (v) The minimum setback from the base of any large wind energy system to any on-site residence(s) and accessory structures designed for human occupancy shall be equal to one and one-half (1.5) times the overall system's height, or five hundred (500) feet, whichever is less;
  - (vi) The minimum setback from the base of any large wind energy system to any publicly maintained public highway or street, any public access easement, including any public trail, pedestrian easement, or equestrian easement, or railroad right-of-way, shall be equal to one and one-half

(1.5) times the overall system's height, or five hundred (500) feet, whichever is less.

- (4) Wind generator setbacks (spacing) within the project boundary shall be in accordance with accepted industry practices pertaining to the subject machine.
- (5) Fencing shall be erected for each wind machine or on the perimeter of the total project. Wind project facilities shall be enclosed with a minimum four- (4-) foot-high security fence constructed of four (4) strand barbed wire or materials of a higher quality. Fencing erected on the perimeter of the total project shall include minimum eighteen- (18-) inch by eighteen- (18-) inch signs warning of wind turbine dangers. Such signs shall be located a maximum of three hundred (300) feet apart and at all points of site ingress and egress. Where perimeter fencing is utilized, the Planning Commission may waive this requirement for any portion of the site where unauthorized access is precluded due to topographic conditions.
- (6) All on-site electrical power lines associated with wind machines shall be installed underground within one hundred fifty (150) feet of a wind turbine and elsewhere when practicable, excepting therefrom "tie-ins" to utility type transmission poles, towers, and lines. However, if project terrain or other factors are found to be unsuitable to accomplish the intent and purpose of this provision, engineered aboveground electrical power lines shall be allowed.
- (7) Colors and finish. Wind energy system components shall have a nonglare/non-reflective finish (e.g., galvanized metal) or color appropriate to the background against which they would be primarily viewed, as determined by the Planning Commission, unless it is not technically possible to do so.
- (8) Signals, Lights and Signs. No signals, lights or signs shall be permitted on a wind energy system unless required by the Federal Aviation Administration (FAA). If lighting is required, the County shall review the available lighting alternatives acceptable to the FAA and approve a design that it determines would cause the least impact on surrounding views. However, in documented migratory bird flyways, preference shall be given to white strobe lights operating at the longest interval allowed per FAA requirements.
- (9) Noise. Where a sensitive receptor such as a group of residences, a school, church, public library, or other sensitive or highly sensitive land use, as identified in the Noise Element of the County General Plan, is located within one-half (1/2) mile in any direction of a project's exterior boundary, a noise or acoustical analysis shall be prepared by a qualified acoustical consultant prior to the issuance of any Major Use Permit. The report shall address any potential noise impacts on sensitive or highly sensitive land uses, and shall demonstrate that the proposed wind energy development shall comply with the following noise criteria:
  - (i) Audible noise due to wind turbine operations shall not be created which causes the exterior noise level to exceed forty-five (45) dBA for more than five (5) minutes out of any one- (1-) hour time period, or to exceed fifty (50) dBA for any period of time, when measured within fifty (50) feet of any existing group of residences, a school, hospital, church, or public library.

- (ii) In the event that noise levels, resulting from a proposed development, exceed the criteria listed above, a waiver to said levels may be granted by the Planning Commission provided that: written consent from the affected property owners has been obtained stating that they are aware of the proposed development and the noise limitations imposed by this code, and that consent is granted to allow noise levels to exceed the maximum limits allowed; and a permanent noise impact easement has been recorded on the affected property.
- (10) A toll-free telephone number shall be maintained for each wind energy project and shall be distributed to surrounding property owners to facilitate the reporting of noise irregularities and equipment malfunctions.
- (11) Fire Protection. Any Major Use Permit issued for a large wind energy system project shall include fire control and prevention measures stated in the Conditions of Approval which may include, but are not limited to, the following:
  - (i) Areas to be cleared of vegetation and maintained as a fire/fuel break as long as the wind system is in operation, such as thirty (30) feet around the periphery of the system base and around all buildings (access driveways and roads that completely surround the project may satisfy this requirement); and ten (10) radius feet around all transformers.
  - (ii) All buildings or equipment enclosures of substantial size containing control panels, switching equipment, or transmission equipment, without regular human occupancy, shall be equipped with an automatic fire extinguishing system of a Halon or dry chemical type, as approved by the applicable Fire Department.
  - (iii) Service vehicles assigned to regular maintenance or construction at the wind energy system shall be equipped with a portable fire extinguisher of a 4A40 BC rating.
  - (iv) All motor driven equipment shall be equipped with approved spark arrestors.
- (12) Erosion and Sediment Control. Any Major Use Permit issued for a large wind energy system project shall include erosion and sediment control measures stated in the Conditions of Approval which may include, but are not limited to, necessary re-soiling, proposed plant species, proposed plant density and percentage of ground coverage, the methods and rates of application, sediment collection facilities. The soil erosion and sedimentation control plan shall be consistent with the applicable requirements of the California Regional Water Quality Control Board pertaining to the preparation and approval of Storm Water Pollution Prevention Plans.
- (13) Monitoring. Upon reasonable notice, County officials or their designated representatives may enter a lot on which a large wind energy system permit has been granted for the purpose of monitoring noise environmental impacts, and other impacts which may arise. Twenty-four hours advance notice shall be deemed reasonable notice.

- (14) Building, engineering, and electrical codes. The system shall comply with the California Building Code and be certified by a professional mechanical, structural, or civil engineer licensed by the state. A wet stamp shall be required.

**(j) Abandonment, financial surety, and other violations**

- (1) A small wind energy system that ceases to produce electricity on a continuous basis for eighteen 18 months shall be considered abandoned. A large wind energy system that ceases to produce electricity on a continuous basis for twelve months shall be considered abandoned. Facilities deemed by the County to be unsafe and facilities erected in violation of this Section shall also be subject to this provision. The code enforcement officer or any other employee of the Planning, Public Works and Environmental Services Department shall have the right to request documentation and/or affidavits from the system owner/operator regarding the system's usage, shall make a determination as to the date of abandonment or the date on which other violation(s) occurred.
- (2) Upon a determination of abandonment or other violation(s), the County shall send a notice hereof to the owner/operator, indicating that the responsible party shall remove the wind energy system and all associated facilities, and remediate the site to its approximate original condition within ninety (90) days of notice by the County, unless the County determines that the facilities must be removed in a shorter period to protect public safety. Alternatively, if the violation(s) can be addressed by means short of removing the wind energy system and restoring of the site, the County may advise the owner/operator of such alternative means of resolving the violation(s).
- (3) In the event that the responsible parties have failed to remove the wind energy system and/or restore the facility site or otherwise resolve the violation(s) within the specified time period, the County may remove the wind energy system and restore the site and may thereafter initiate judicial proceedings or take any other steps authorized by law against the responsible parties to recover costs associated with the removal of structures deemed a public hazard.
- (4) Financial Surety. Prior to the issuance of a building permit authorizing installation of a large wind energy system, the applicant shall provide a demolition surety in a form and amount deemed by the County to be sufficient to remove and dispose of the wind energy system and restore the site to its approximate preconstruction condition. The County shall draw upon this surety in the event the responsible party fails to act in accordance with the provisions of this section within ninety (90) days of termination of operations, or upon determination by the County that the wind energy system is unsafe, has been abandoned, or is in violation of this Chapter. The surety shall remain in effect until the wind energy system is removed.