Three Points-Liebre Mountain Town Council
P.O. Box 76
Lake Hughes, CA 93532

SENT VIA EMAIL

4 June 2014

Planner Thuy Hua
Los Angeles County Department of Regional Planning
320 West Temple Street Thirteenth Floor
Los Angeles, CA 90012

Dear Ms. Hua,

Subject: Renewable Energy Ordinance Draft 2

Our Town Council appreciates being able to comment on the Renewable Energy Ordinance, and I have been tasked with responding. However, we have concerns about several aspects that we believe bear importance to rural areas, openspace, viewshed, biological significance, preservation lands—public and private. Regarding this particular ordinance, our main interests lie in preservation of our lifestyle and health, our viewshed, and the environment we share with amazing wildlife. To this end, we are concerned about the ordinance allowing unsightly visual effects; excessive noise; unhealthful air quality; potential hazardous waste generation; damage to water quality; ill-effects to local, and valley-wide biota created by utility-scale, and also small-scale projects.

For clarity's sake, we do not approve of utility-scale renewable energy as described in the ordinance, which addresses primarily wind and solar generation. We are of the opinion that industrial uses covering thousands of acres comprise inappropriate development that is not consistent with either the current or proposed Antelope Valley Areawide Plans as they describe policies and goals to "protect" rural communities and their lifestyles. Furthermore, "industrializing" agricultural land that is not technically degraded, through ministerial review or conditional use permit, is injurious to communities and wildlife.

County elected representatives will never review projects in their constituents' area unless an expensive appeal is initiated (currently $800 per project, per level of appeal, i.e., Hearing Officer to Planning Commission to Board of Supervisors). Moreover, projects that have more than one site, like Silverado West, with six separate projects, would cost $4,800 to appeal. This is an affront to rural residents, and may violate the California Environmental Quality Act. We disagree with the use of ministerial review and conditional use permits. It is not unreasonable to request that all proposed utility-scale renewable energy, currently allowed on so-called"disturbed" agricultural land, or within any other land use area, require a zone change to industrial use that triggers review by the Board of Supervisors---our elected representatives.

Creating this ordinance and conducting its programmatic environmental impact review is a disservice to the people of the Antelope Valley. Our taxpayer monies have provided the grant Los Angeles County Regional Planning is using to create a streamlined process of review that will seriously harm agricultural and rural communities, SEAs, scenic roads, ridgelines, public and private trust lands; and will create dust and air quality issues that contribute to serious health problems like Valley Fever. As stated in the press release dated June 12, 2013, by Sandra Louie, "Los Angeles County will receive $603,000 to create a renewable energy ordinance and a programmatic EIR that will help mitigate development issues such as cumulative impacts. Having the ordinance and the EIR will help shorten the environmental review because developers can use information from the EIR when seeking permits for individual projects. Renewable energy polices will be revised as the county updates the general plan and the Antelope Valley Area Plan. The policies will be the foundation for the ordinance." Certainly, the time saved in facilitated environmental review could be allocated for Board of Supervisors' review. Rather than streamline the process for damage and injury to residents that will undoubtedly be caused by utility-scale RE development, we believe that *promoting and incentivizing* distributed generation could help eliminate the wholesale destruction of thousands of acres in the north county.

So-called"disturbed" agricultural areas often support special status species and large winter raptor populations. Many perceive agricultural lands as appropriate places to site renewable energy projects because of the supposed "disturbed" nature and potentially lower biotic values of these lands. Imposing a streamlined process for A-2 Heavy Agriculture zoned land by describing it as "disturbed" is mistaken and a misuse of the term for purposes of siting projects that really are inappropriate. This, in turn, inappropriately targets farmland for RE (Renewable Energy) development, and codifies the misuse. Farmland is not degraded land. It not only supports grazing and crops, but provides high-quality habitat and foraging areas for a variety of wildlife in the Antelope Valley; hence its designation by the National Audubon Society as a Globally Important Bird Area. Many Significant Ecological Areas contain agricultural land use designations. The only lands that should be streamlined for industrial utility-scale renewable energy are "degraded" lands. Degraded lands include brownfields, closed and capped landfills, Superfund sites, Resource Recovery and Conservation Act lands, abandoned or closed open pit mining areas, i.e., areas that do not support environmentally sensitive resources, winter forage for migratory birds, or special status species. Also,there must be assurance that the ordinance describe criteria, including penalties, that will guard against the strategic or artificial degradation or fallowing of land to make it available for development.

In 2011, Regional Planning passed the "Rural Outdoor Lighting Ordinance," meant to reduce glare, light trespass, and preserve dark night skies. In its overview, it states, " Height limits for residential, agricultural, open space and watershed zones is 20 feet, except each outdoor light fixture installed above 15 feet shall have an output rating of less than 400 lumens. Height limit for commercial zones is 30 feet, and height limits for industrial zones is 35 feet." This confirms another reason for requirement of a Conditional Use Permit and Zone Change for placement of meteorological towers, and wind towers, and validates the case for another inconsistency concerning the Renewable Energy Ordinance. Since the height of utility-scale wind turbine towers and some meteorological towers will exceed 200 feet in height; the lighting regulations of the Federal Aviation Administration for pilot safety will supercede the the lighting ordinance,

allowing obtrusive, flashing red lights in dark sky areas. Of what use is the Rural Outdoor Lighting Ordinance if Regional Planning allows placement of wind turbines as tall as 500 feet and met towers of over 200 feet in unincorporated areas?

We continue to request that utility-scale renewable energy projects be excluded from Significant Ecological Areas (SEAs), high fire hazard Areas, flood zones, and earthquake zones. Many current and proposed SEAs and SEA expansions are in mountain and canyon areas that may be deemed suitable for wind energy development, and may be in Hillside Management areas, and/or are classed as "Hazard Management Areas." This includes flood potential, injury or pollution of watershed areas (oil leaks from turbine motors and soil erosion), catastrophic earthquake, and dreaded wildfire.

One of our most serious concerns is the fire hazard posed by utility-scale wind energy positioned along our mountains and grassland transition areas, all considered "Extremely High Fire Hazard Areas." Our Lakes Communities experienced the Pine Fire in the Three Points area (17,418 acres) in 2004, losing two residences, several outbuildings, and surrounding forest areas; and most recently, the Powerhouse Fire in 2013, burning more than 30,000 acres, which destroyed 53 structures, including 24 homes. At the fire's peak it threatened more than 1000 structures, and two thousand firefighters were deployed to fight the fire. The communities of Lake Hughes, Elizabeth Lake, and Green Valley were evacuated. Additional threat, beyond what exists already is too much a burden to our area. Research has confirmed a serious level of threat by wind turbines and is detailed in an article by George H. Potter, posted on www.fireengineering.com. Several important points relevant to our argument are listed below:

- "Wind turbines must be considered industrial facilities subject to a full range of emergencies such as fire, entrapments, electrical accidents, falls, and even hazmat."

- "Fuels can include electrical cables, plastics, and even textiles, any and all of which can also be found at all heights. Since the construction materials used in these towers and their components will invariably include plastics and possibly some combustible metals (e.g., titanium and aluminum, among others), as well as relatively easily deformable metallic structural and enclosure materials, the consequences of a fire in a wind turbine can be disastrous."
- "Also, a fire in a turbine assembly can propagate to surrounding vegetation and produce a wildland fire risk, and a fire involving surrounding vegetation could pose a threat to the wind farm"--and our additon: thousands of homes; forest lands; state parks; and other public and private conservation lands!
- "The origins of fires in wind generators are numerous and in some instances almost inevitable. Statistics show that the major cause of fires in aerogenerators is lightning. Although aerogenerators include lightning arresters and other elements to reduce the potential of ignition from lightning strikes, they do not completely eliminate possible lightning damage."
- "Another frequent cause of fires is the mechanical friction among the multiple moving parts of the turbine assembly, gears, shafts, and other moving or rotating metal components that may provoke sparking. Since the average wind turbine may contain

more than 200 gallons of hydraulic fluid plus variable quantities of other lubricants and similar combustible liquids, there's no shortage of fuel."

- "Electrical short circuits can occur in numerous locations, anywhere from the windmill's top to the base. Fires in wind turbines are known to contribute to structural failure and collapse."
- "Responding fire departments may normally be several miles away and have to travel over roads that quite often require all-wheel-drive vehicles. The primary limiting factors to fire department intervention are the height of the fire and the extremely limited vertical access."

Furthermore, aerial firefighting would be hindered in a field of wind turbines, and could exclude the use of multi-engine air tankers. These air tankers typically make retardant drops from a height of 150 to 200 feet above vegetation and terrain, at air speeds from 125 to 150 knots (American Helicopter Services and Aerial Firefighting Association at AHSAFA.org). Without high-capacity loads of retardant from large air tankers, uncontrolled wildfire could devastate our communities.

There is a large amount of anecdotal evidence of low-frequency vibration and shadow flicker that pose considerable nuisance, and frequently, health problems to residents near large wind turbines. For the Renewable Energy Ordinance Draft 1, we suggested that noise levels for any residents maintain current levels. As indicated, quiet rural areas generally measured at 24 dB or quieter. For areas such as ours, no increase in noise levels created by small-scale or utility-scale projects should be allowed. It is unreasonable to expect neighbors to withstand noise impacts beyond current "quiet rural areas." To avoid vibrational effects and noise, research has show the minimum safe distance is 1.5 miles for large turbines to assure dissipation of frequencies and minimization of advertant shadow flicker. This should be considered, also, for small-scale wind turbines that may cast shadow and cause shadow flicker upon neighboring properties. Distance measured should include the longest shadows of the year in locating small-scale wind systems, which would rely upon height, and should not encroach on neighboring structures or properties.

Ordinances supposedly designed to protect scenic areas mention setbacks of 2x facility height, which is the same for any residence or habitable structure. Unfortunately, a five hundred foot tall wind turbine will be quite visible from any area for fifty miles or more—even at night. How does this ordinance, then, protect viewshed? We request that no utility-scale wind projects be allowed in viewshed along the proposed SEA 21, along which lies several conservation trust areas, public and private, and scenic roads listed in the Scenic Highways Element 1974, and proposed for the Antelope Valley Areawide Plan 2035. This also includes scenic areas in the eastern portion of the north county along the San Gabriel Mountains. Views are very important in the north county, whose presence generates a great deal of economic value to local communities and municipalities.

This viewshed extends to the wind towers that support meteorological study. By the way, please use "met tower" when you mean meteorological tower. The use of "wind tower" for all towers is slightly confusing. As mentioned before, the use of aviation orange paint for met towers under 200 feet will certainly affect scenic viewshed. Some met towers will become permanent; some

orange and white towers may become permanent, yet there is no part of the ordinance that addresses the conversion, clearly. The Table 22.52.1620-A does not indicate what type of permit is required for a temporary met tower, or the process of conversion or modification, or the permanent placement of a met tower. Any tower should be placed without guy wires. Guy wires have been shown to kill as many birds as a wind turbine, as noted by California Department of Fish and Wildlife Central Region Manager Jeffry R. Single, Ph.D. In his comment regarding NextEra's North Sky-Jawbone Project, he states, **"** The Department recommends that all met towers are free-standing, without guy wires. In both of the available fatality studies from Kern County wind power plants (Alite project and Pine Tree Wind Farm), avian fatalities at individual met towers equaled or exceeded the rates attributed to any single turbine (Erickson et al. 2009, Bioresource Consultants, Inc. 2011). If un-guyed turbine structures are to be erected, then the Department requests clarification as to why un-guyed met towers would be infeasible." Concerning bird flight diverters, he says, "there is no evidence that bird flight diverters are effective at guy wire arrays (studies to date deal with only power lines)."

Public participation at all levels of review are crucial. Requirement of notification no matter what the project size should be part of the ordinance. In rural areas, that might mean individual property owners on all sides or in a reasonable distance of a project be notified by certified mail, and proposal signage be posted at the nearest well-traveled, paved road. At this point in time it is only CUPs and CEQA that trigger notifications. We request that you include MCUPs, and SPRs, and modifications to permits as well.

Residents here generally believe their communities are healthy places to live. We have mentioned shadow flicker and low-frequency vibration, and seek further protections to humans who are subject to the effects of utility-scale RE projects. Air quality should not be compromised, and the inclusion in the ordinance of measures like wood chips and preservation and mowing of native vegetation are admirable, but so far, no projects have been successful in controlling fugitive dust, not AQMD best management practices, not soil stabilizers, not water, not additional water. A Los Angeles Times article by Julie Cart, titled "Officials study Valley Fever Outbreak at Solar Power Projects," states:

> The threat of acquiring the respiratory illness extends to residents living near expansive construction sites. That risk is rising given the scope of the renewable energy boom centered in the state. Scores of solar projects are planned for millions of acres across California's Mojave Desert and elsewhere. The Centers for Disease Control and Prevention announced in March that valley fever cases in the Southwest have increased by 90% from 1998-2011. California's increase mirrors that, with reported cases growing 71% over the decade 2001 to 2011. A journal article published last year examined national death records from 1990 to 2008 and found 3,089 instances in which valley fever was the underlying or contributing cause of death. Nearly half of those deaths — 1,451 — occurred in California.

Does the ordinance protect public health from serious disease like Valley Fever? High wind events are common in the Antelope Valley, and the required cessation of work during such events exceeding 25 miles per hour has not protected downwind residents from Dust Bowl-like clouds of dirt, and infiltration of sand into their homes and drifts piling onto their properties. What cost will rural residents endure in order that massive RE projects can be built in unincorporated areas?

We would like to add that the requirement that large-scale projects adhere to California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development, October 2007 (Guidelines), is helpful, but request clarification that adherence to the Guidelines is not a guarantee of project approval, that narrower restrictions may be required for the health, safety, and well-being of residents; and NEPA, CEQA, Endangered Species Act, the California Endangered Species Act, the Golden and Bald Eagle Protection Act, and the Migratory Bird Treaty Act provide further protections to wildlife, and that more stringent accommodation to reduce loss of wildlife may be required and demanded by these documents and the public.

Yours truly,

Susan Zahnter
Vice President

CC: Supervisor Michael Antonovich, Planning Deputy Edel Vizcarra, Field Deputy Norm Hickling

This is the second draft of this ordinance. The first draft was released on October 3, 2013. This second draft includes some revisions based on the feedback received on the first draft. Revisions from the first draft are shown in track changes with strikethrough for deleted items and underline for added items. This draft ordinance is intended to provide baseline standards for renewable energy projects. Where a discretionary permit is required, project conditions and/or mitigation measures will be required to address site specific needs.

Please send your questions and comments regarding this draft ordinance via email or postal mail to:

Contact: **Thuy Hua**
Email: **thua@planning.lacounty.gov**
Postal Mail: **LA County Department of Regional Planning**
Attn: Thuy Hua
320 W Temple St 13th Flr
Los Angeles CA 90012

Comments on this draft are due June 4, 2014.

ORDINANCE NO. _____

An ordinance amending Title 22 – Planning and Zoning – of the Los Angeles County Code related to the establishment of regulations for small-scale renewable energy systems, utility-scale renewable energy facilities, and temporary meteorological towers.

SECTION 1. Section 22.08.040 D is hereby amended to add a definition to read as follows:

-- "Decommissioning" means the removal of a use from service, which includes safe storage, dismantling, disposal, recycling, removal of concrete pads, and/or site restoration.

SECTION 2. Section 22.08.070 G is hereby amended to add a definition to read as follows:

-- "Guy wires" means wires or cables used to support a wind tower as defined by Section 22.08.230, or other structures that require the use of such wires or cables for support.

SECTION 3. Section 22.08.190 S, is hereby amended to add definitions to read as follows:

-- "Small-scale solar energy system" means a system where solar resources are used to generate energy primarily for on-site use. Such system may be affixed either to the ground or to a structure other than the system's mechanical support structure, such as a building or carport. Such system does not provide for more than 150% of the on-site energy demand. Any energy generated by a solar energy system that exceeds the on-site energy demand may be used off-site.

-- "Small-scale wind energy system" means a system where wind resources are used to generate energy primarily for on-site use. Such system may be affixed to either the ground or to a structure other than the system's mechanical support structure, such as a building or carport. Such system has a rated capacity of 50 kilowatts or fewer. Any energy generated by a wind energy system that exceeds the on-site energy demand may be used off-site.

-- "Solar array" means the mechanically integrated assembly of modules or panels with a support structure and foundation, tracker, and other components, as required to generate energy using solar resources.

SECTION 4. Section 22.08.210.U is hereby amended to add definitions to read as follows:

-- Utility-scale renewable energy facility, ground-mounted. "Ground-mounted utility-scale renewable energy facility" means a facility affixed to the ground where renewable resources are used to generate energy primarily for off-site use. This definition includes all on-site and off-site equipment and accessory structures related to the facility, including but not limited to solar collector arrays, wind turbines, mounting posts, substations, electrical infrastructure, transmission lines, operations and maintenance buildings, and other accessory structures.

-- Utility-scale renewable energy facility, structure-mounted. "Structure-mounted utility-scale renewable energy facility" means a facility affixed to a structure that is separate from the facility's mechanical support structure, such as a building or carport, where renewable resources are used to generate energy primarily for off-site use. This definition includes all on-site and off-site equipment and accessory structures

related to the facility, including but not limited to solar collector arrays, wind turbines, mounting posts, substations, electrical infrastructure, transmission lines, operations and maintenance buildings, and other accessory structures.

SECTION 5. Section 22.08.230 W is hereby amended to add a definition to read as follows:

-- "Wind tower" means the vertical component, including blades if any, of a small-scale wind energy system, a utility-scale renewable energy facility using wind resources, or a temporary meteorological tower that elevates the wind turbine generator and attached blades above the ground.

SECTION 6. Part 15 of Chapter 22.52 is hereby repealed in its entirety.

SECTION 7. Part 15 of Chapter 22.52 is hereby added to read as follows:

PART 15

RENEWABLE ENERGY

SECTIONS:

22.52.1600 Purpose.

This Part 15 establishes regulations and permit requirements that support and facilitate the development of small-scale renewable energy systems, utility-scale renewable energy facilities, and temporary meteorological towers in a manner that minimizes potential safety hazards and impacts to the environment.

22.52.1610 Applicability.

A. The provisions of this Part 15 shall apply to the development of any small-scale renewable energy system, utility-scale renewable energy facility, or temporary meteorological tower on private property. The provisions serve as the basis for development standards applicable to other renewable energy technologies, including but not limited to biomass, geothermal, hydrogen, hydropower, ocean, and any future viable renewable energy technology.

B. Applicability of zone and supplemental district regulations. All provisions of the zone and any supplemental district in which a small-scale renewable energy system, utility-scale renewable energy facility, or temporary meteorological tower is located shall also apply. Where a provision of the zone or supplemental district regulates the same matter as this Part 15, whichever provision is more restrictive shall apply.

C. Exemption. The provisions of this Part 15 shall not apply to any small-scale renewable energy system, utility-scale renewable energy facility, or temporary meteorological tower approved prior to the effective date of the ordinance establishing this Part 15.

D. Subsequent application. The provisions of this Part 15 shall apply to:

1. Any subsequent application that would increase the physical size, height, or footprint of a previously approved small-scale renewable energy system, utility-scale renewable energy facility, or temporary meteorological tower; and

2. Any subsequent application that would change the type of equipment used by the previously approved small-scale renewable energy system,

utility-scale renewable energy facility, or temporary meteorological tower, except for replacement of equipment for maintenance purposes.

22.52.1620 Permit Requirements.

A. Property may be used for the following uses, as set forth in Table 22.52.1620-A:

TABLE 22.52.1620-A: RENEWABLE ENERGY PERMIT REQUIREMENTS*

Permit Required By Zone
P = Permitted
Zoning Conformance Review = ZCR
SPR = Site Plan Review, Ministerial
MCUP = Minor Conditional Use Permit
CUP = Conditional Use Permit
N/A = Prohibited

	A-1	*A-2, A-2-H*	*OS, W*	*R-A, R-1, R-2, R-3, R-4,*	*C-H,C-1, C-2 C-3, C-M, C-R, R-R,*	*M-1,M-1.5, M-2,M-2.5, D-2*
Small-Scale Renewable Energy System						
Small-Scale Solar Energy System						
• Structure-mounted	P	P	P	P	P	P
• Ground-mounted	ZCR	ZCR	ZCR	ZCR	ZCR	ZCR
Small-Scale Wind Energy System	MCUP	MCUP	N/A	MCUP	MCUP	MCUP
Utility-Scale Renewable Energy Facility						
Utility-Scale Renewable Energy Facility, Ground-mounted	N/A	CUP	N/A	N/A	CUP	CUP
Utility-Scale Renewable Energy Facility, Structure-mounted	SPR	SPR	N/A	SPR	SPR	SPR
Temporary Meteorological Tower	MCUP	MCUP	N/A	MCUP	MCUP	MCUP

B. Aviation Review. For any use subject to a minor conditional use permit or conditional use permit pursuant to Table 22.52.1620-A above, and located within the Military Installations and Operations Areas (MIOAs) as identified by the General Plan:

1. Consultation. Aviation-related agencies shall be consulted for review of the proposed project for any potential impacts to ensure the safety of

residents and continued viability of military training and testing operations. The Department shall distribute copies of the proposed site plan, elevation plan, and location map to the aviation-related agencies and shall request comments within a minimum 30-day period. Aviation-related agencies to be consulted include, but are not limited to, the Federal Aviation Administration (FAA), United States Navy, Edwards Air Force Base, Air Force Plant 42, United States Forest Service, California Department of Transportation Division of Aeronautics, County Department of Public Works – Aviation Division, County Forester and Fire Warden, and County Sheriff. The consultation review shall request consideration of the following:

a. Uses that produce electromagnetic and frequency spectrum interference, which could impact military operations;

b. Uses that release into the air any substances that may impair visibility such as steam, dust, or smoke;

c. Uses that produce light emissions that could interfere with pilot vision or be mistaken for airfield lighting such as glare or distracting lights;

d. Uses that physically obstruct any portion of the MIOA due to relative height above ground level.

2. Any comments received within the consultation period shall be considered by the Department and provided to the Hearing Officer.

C. Findings. In addition to the findings required under Part 1 of Chapter 22.56, the Hearing Officer shall not approve a minor conditional use permit or conditional use permit it finds that if the requested use penetrates the lower floor elevation of any MIOA, the military operator of the MIOA has determined that the

requested use is not detrimental to the function of the MIOA and would not pose a health or safety hazard to military personnel or the public.

22.52.1630 Standards for Small-Scale Solar Energy Systems.

A. Conformance with state requirements. A small-scale solar energy system shall be in conformance with the California Solar Rights Act (California Civil Code Section 714 et seq.).

B. Structure-mounted. The combined height of a structure and structure-mounted small-scale solar energy system shall not exceed the height limit of the zone by more than five feet.

22.52.1640 Standards for Temporary Meteorological Towers.

A. Access roads. All temporary and permanent ingress and egress points to the facility shall be designed and sited to the satisfaction of the Director of Public Works and the Fire Department, shall consider adequate spacing from intersections, and shall maintain adequate sight distances.

B. Aviation safety.

1. A safety light that meets FAA standards shall be required for any wind tower that exceeds an overall tower height of 200 feet measured from finished grade. A safety light may be required on shorter wind towers when deemed necessary by any aviation-related agency or the Department. No other lights shall be placed on the wind tower.

2. Wind towers of less than 200 feet measured from finished grade shall be marked with alternating bands of aviation orange and white paint, and high

visibility sleeves installed on the outer guys with high spherical marker balls of aviation orange color.

C. Climbing apparatus. All climbing apparatus shall be located at least 12 feet above the finished grade, and all wind towers shall be designed to prevent climbing within the first 12 feet of wind tower height from finished grade.

D. Colors. Except as otherwise required in this section, the colors used in the construction materials or finished surface shall be muted and visually compatible with surrounding development or environment.

E. Location. The minimum setback for a wind tower shall be as depicted in Table 22.52.1640-A – Setback Requirements for Temporary Meteorological Towers. The required distance shall also comply with any applicable fire setback requirements pursuant to California Public Resources Code Section 4290.

TABLE 22.52.1640-A – SETBACK REQUIREMENTS FOR TEMPORARY METEOROLOGICAL TOWERS

Setback from	Minimum Distance
On-site or Off-site Residence or Habitable Structure	1.5 x system height
Public Road, Highway	As required by Department of Public Works to meet sight distance and minimum setback requirements from traveled lanes.
Above Ground Transmission Line, Public Access Easement, or Public Trail	1.25 x system height
Property Line	1.25 x system height
On-site or Off-site Buildings Other Than a Residential Structure	1 x system height
Trees	As required by the Fire Department
Scenic Drives and Scenic Routes as identified	1,000 feet

in the General Plan or applicable Area or Community Plan	

F. Maintenance. All equipment and facilities shall be maintained in an operational condition that poses no potential safety hazards. Maintenance shall include, but not be limited to, painting, regularly scheduled cleaning, mechanical and/or electrical repairs, structural repairs, and security measures.

G. Maximum number and separation.

1. More than one wind tower may be located on the same property if all of the location requirements and standards of this Part 15 are met for each facility. A maximum of two wind towers are permitted for each five gross acres of land; and

2. Wind towers must be separated from each other by the safe industry practice depicted in Figure 22.52.1640-A - Separation Standards for Temporary Meteorological Towers, below.

FIGURE 22.52.1640-A – SEPARATION STANDARDS FOR TEMPORARY METEOROLOGICAL TOWERS

FIGURE 22.52.1640-A HERE

H. Maximum wind tower height. The maximum wind tower height shall not exceed the height limit as depicted in Figure 22.52.1640-B - Height Standards for Temporary Meteorological Towers below:

1. 35 feet measured from the finished grade to the top of the blade in the vertical position for lots of less than one gross acre in size;

2. 65 feet measured from the finished grade to the top of the blade in the vertical position for lots from one gross acre to less than two gross acres in size; and

3. 85 feet measured from the finished grade to the top of the blade in the vertical position for lots two gross acres or greater in size.

FIGURE 22.52.1640-B – HEIGHT STANDARDS FOR TEMPORARY METEOROLOGICAL TOWERS

FIGURE 22.52.1640-B HERE

J. Structure-mounted. The combined height of a structure and structure-mounted wind tower shall not exceed the height limit of the zone by more than five feet.

J. Signs. One sign, limited to 18 inches in length and 12 inches in height, shall be posted at the base of each wind tower. The sign shall include a note of no trespassing, a warning of high voltage, and the phone number of the property owner to call in the event of an emergency.

22.52.1650 Standards for Small-Scale Wind Energy Systems. In addition to the standards required under Section 22.52.1640, the following standards shall apply to small-scale wind energy systems:

A. Automatic overspeed controls. A small-scale wind energy system shall be equipped with manual and automatic overspeed controls to limit the blade rotation speed to within the design limits of such system.

B. Blade clearance. No portion of a blade shall extend within 20 feet of the finished grade.

C. Guy wires. Safety wires shall be installed on the turnbuckles on guy wires. Anchor points for any guy wires shall be located within the same property as the system, and located in such a manner so as not to be on or across any above-ground electric transmission or distribution lines; and

D. Noise. Noise from a small-scale wind energy system shall not exceed 60 dBA SEL (single event noise level), as measured at the closest neighboring inhabited dwelling.

E. Visual impact.

1. The highest point of a small-scale wind energy system shall be located at least 50 vertical feet and 50 horizontal feet from a significant ridgeline identified in the General Plan, in an applicable area or community plan, or within an applicable community standards district;

2. Any small-scale wind energy system placed within the viewshed of a Scenic Drive or Scenic Route identified in the General Plan or in an applicable area or community plan shall be assessed for its visual impacts, and appropriate conditions shall be applied relating to siting, buffers, and design of the system; and

3. Within the coastal zone, the placement of any small-scale wind energy system shall not obstruct public views of the ocean from a scenic element (i.e.,

significant ridgeline, scenic route, scenic area, scenic viewpoint) identified in the applicable local coastal program, unless specific provisions for such siting are provided for in the applicable local coastal program and coastal development permit or long-range development plan.

22.52.1660 Standards for Ground-Mounted Utility-Scale Renewable Energy Facilities.

A. Access roads. All temporary and permanent ingress and egress points to the ground-mounted utility-scale renewable energy facility shall be designed and sited to the satisfaction of Director of Public Works and the Fire Department, shall consider adequate spacing from intersections, and shall maintain adequate sight distances.

B. Aviation safety.

1. A ground-mounted utility-scale renewable energy facility shall not be located within the Runway Protection Zone of any airport, as depicted in the County's airport land use plans.

2. A ground-mounted utility-scale renewable energy facility shall not penetrate the imaginary surfaces (primary, approach, transitional, horizontal, and conical surfaces) as defined by the FAA Federal Aviation Regulations Part 77 to protect the use of navigable airspace.

3. A safety light that meets FAA standards shall be required for all wind towers that exceed a height of 200 feet. A safety light may be required on shorter wind towers when deemed necessary by any aviation-related agency. No other lights shall be placed on such wind towers.

C. Fencing. Except as otherwise required by Department of Public Works to maintain minimum corner sight distance:

1. Non-opaque fences may be permitted.

2. Fencing up to eight feet in height may be permitted regardless of any other fencing standards.

3. Fencing shall not be located within 15 feet of a public right-of-way but may be located within the required setback area.

4. Existing drought-tolerant native or non-native vegetation approved by the staff biologist shall be retained, or new such vegetation shall be planted along fencing, unless determined infeasible or inappropriate by the Hearing Officer.

D. Lighting. Night-lighting, limited to that required for safety and security, shall be shielded and directed downward to avoid light trespass, and shall consist of:

1. Motion sensors for entry-lighting to the on-site equipment structures and buildings; and

2. Light-sensor or motion-sensor lighting for the main facility access gate, operations and maintenance building doorways, and any parking areas of facilities with operation and maintenance buildings.

E. Setbacks. Setbacks from the perimeter of the property line shall be:

1. 30 feet in agricultural zones; or

2. As provided in the base zone for all non-agricultural zones.

F. Signs. One ground-mounted or pole-mounted project identification sign may be located at each temporary and permanent ingress and egress point. Signs shall include owner information and emergency contact. No other signs shall be installed for

the facility other than safety, directional, and required warning signs as outlined in Part 10 of Section 22.52.

G. Site disturbance.

1. Existing vegetation may be mowed, but removal of existing vegetation root systems shall be prohibited to ensure dust control and minimal soil erosion, except where necessary for access roads, drainage, debris basins, inverter pads, or other County requirements.

2. The facility shall be designed to minimize erosion, sedimentation, or other impacts to the natural hydrology and drainage patterns of the site. Existing topography and watercourses shall be retained or restored to pre-existing conditions following construction and during operations, except for drainage features specifically designed to mitigate drainage impacts. A drainage plan shall be submitted at time of application that complies with all requirements showing the extent of drainage impacts, comply with the most recent County standards for addressing drainage impacts to the satisfaction of Department of Public Works, and obtain all agency approvals.

3. The facility shall be designed to minimize grading and amount of ground disturbance in order to control fugitive dust and preserve the natural topography. A site plan shall be submitted depicting the extent of grading and ground disturbance, and comply with all applicable standards for addressing grading and ground disturbance impacts. Grading involves any mechanical disturbance that removes the root system with the exception of access roads, drainage, debris basins, and inverter pads.

4. Fugitive dust emission shall be controlled by phased earthwork, site watering, use of clean gravel or composted wood chips not to exceed a depth of six

inches where applicable, application of non-toxic soil stabilizers, limiting public access on unpaved areas, posting private roadways with reduced speeds, and/or re-vegetation. Use of other fugitive dust mitigation measures may be implemented if determined by Regional Planning and Public Works to be suitable methods to adequately control dust during construction, operations, and removal and restoration activities.

H. Transmission lines. On-site and off-site transmission lines shall be placed underground to the satisfaction of Department of Public Works and the Department, except where above-ground crossings are otherwise required (such as over the California Aqueduct). A franchise agreement shall be required for distribution/transmission facilities within the public right of way. Disturbed areas shall comply with Section 22.52.1660.G to ensure dust control and minimal soil erosion.

I. Visual impact.

1. The highest point of a utility-scale renewable energy facility shall be located at least 50 vertical feet and 50 horizontal feet from a significant ridgeline identified in the General Plan, in an applicable area or community plan, or in an applicable community standards district;

2. Any utility-scale renewable energy facility that is placed within the viewshed of a Scenic Drive identified in the General Plan or in an applicable Area Plan or Community Plan shall be analyzed for its visual impacts, and appropriate conditions relating to siting, buffering, height, and design of the facility may be imposed to minimize significant effects on the viewshed; and

3. Within the Coastal Zone, the placement of any utility-scale renewable energy facility shall not obstruct public views of the ocean from a scenic

element (i.e., significant ridgeline, scenic route, scenic area, scenic viewpoint) identified in the applicable local coastal plan unless specific provisions for such siting are provided for in the applicable local coastal plan and coastal development permit or long-range development plan.

J. Water quality protection. Measures to protect groundwater and surface water from waste discharge shall be incorporated into the project design, as appropriate, and shall meet the requirements of the Regional Water Quality Control Board.

K. Blade clearance. No portion of a utility-scale renewable energy facility blade utilizing wind resources shall extend within 30 feet from the finished grade.

L. Impacts to birds and bats. All utility-scale renewable energy facilities utilizing wind resources shall be designed, constructed, and operated pursuant to the *California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development* published by the California Energy Commission and conditions of approval may be imposed by the Hearing Officer, consistent with these guidelines, to reduce significant impacts to birds and bats.

M. Location. The minimum distance and safe clearances for a utility-scale renewable energy facility utilizing wind resources shall be as depicted in Table 22.52.1660-A – Setback Requirements for Ground-Mounted Utility-Scale Renewable Energy Facility Using Wind Resources. The required distance shall also comply with any applicable fire setback requirements pursuant to the California Public Resources Code Section 4290.

TABLE 22.52.1660-A – SETBACK REQUIREMENTS FOR GROUND-MOUNTED UTILITY-SCALE RENEWABLE ENERGY

FACILITY USING WIND RESOURCES	
Setback from	**Minimum Distance**
On-site or Off-site Residence or Habitable Structure	2 x facility height
Public Road or Highway	As required by the Department of Public Works to meet sight distance and minimum setback requirements from traveled lanes
Above Ground Transmission Line, Public Access Easement, or Public Trail	2 x facility height
Property Line	2 x facility height
On-site or Off-site Buildings Other Than a Residential Structure	1 x facility height
Trees	As required by the Fire Department
Scenic Drives and Scenic Routes as identified in the General Plan or in an applicable area or community plan	2 x facility height
Railway	2 x facility height

N. Maximum height. Wind tower height shall not exceed 500 feet above finished grade.

O. Decommissioning. In the event that any portion of a utility-scale renewable energy facility is not in operational condition for a consecutive period of six months, ceased operation, or the permit for the use has expired, operations for that use shall be deemed to have been discontinued. The Department shall send written notice to the permittee advising of the discontinued use and require that the use be removed from the site within the time period specified below:

1. Within six months after the written notice of discontinued use is sent to the permittee, decommissioning of the use shall commence according to the decommissioning plan.

2. Within the six month period specified by subsection 1 above, the permittee may provide the Department with a written request and justification for an extension of up to six months to resume operations of the system, facility, or portions thereof. The Director may approve one six month extension.

22.52.1670 Standards for Structure-Mounted Utility-Scale Renewable Energy Facilities

A. Setbacks. Setbacks from the perimeter of the roof shall be:

1. Three feet on residential buildings; or

2. Four feet on non-residential buildings.

B. Accessory structures. Accessory structures constructed for the purposes of operating and maintaining the utility-scale renewable energy facility must meet all applicable development standards of the zone.

22.52.1680 Modifications

A. Where a site plan review is required pursuant to Section 22.52.1620, a conditional use permit in compliance with Part 1 of Chapter 22.56, is required for any modification to the applicable standards in this Part 15, except as otherwise noted herein. In addition to those required by Section 22.52.1620.B, the applicant for such conditional use permit shall substantiate the following findings:

1. Due to topographic or physical features of the site, strict compliance with all of the required standards would substantially and unreasonably interfere with the establishment of the proposed development on the subject property; and

2. The requested modification(s) would not be contrary to the purpose of this Part 15.

B. Where a minor conditional use permit or conditional use permit is required pursuant to Section 22.52.1620, any modification of the applicable standards in this Part 15 may be requested as part of the minor conditional use permit and conditional use permit, except as otherwise noted herein. The applicant for such minor conditional use permit or conditional use permit shall substantiate the findings provided in subsection A above in addition to those required by Section 22.52.1620.B and Part 1 of Chapter 22.56.

C. A wind tower greater than 500 feet in height requires approval of a variance pursuant to Part 2 of Chapter 22.56.