COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

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November 18, 2013

IN REPLY PLEASE
REFER TO FILE: LD-2

TO: Mark Child
Advanced Planning Division
Department of Regional Planning

Attention Thuy Hua

FROM: Anthony Nyivih
SB
Land Development Division
Department of Public Works

RENEWABLE ENERGY ORDINANCE–JULY 2013 DRAFT

Thank you for the opportunity to review the July 2013 draft of the Renewable Energy Ordinance (REO). The intent of this ordinance is to minimize environmental impacts and bring energy production closer to the demand by encouraging small-scale systems and structure-mounted, utility-scale facilities through an easy ministerial process.

It is our understanding that the REO is an all-encompassing combination of previous draft ordinances that were reviewed separately under differing names. As such, for record keeping purposes, the following is a brief outline documenting the evolution of the REO:

- Public Works was asked to review three separate ordinances (Chapter 22.98–Accessory Solar and Wind Facilities, Chapter 22.100–Utility-Scale Solar and Wind Renewable Energy Facilities, and Chapter 22-102–Temporary Meteorological Towers) in May 2012. These three ordinances, at the time, were considered under the umbrella of the REO prompting our review comments dated July 16, 2012. All of the above-mentioned ordinances and the July 16, 2012, comment memo are attached for reference.

- In September 2012, Public Works was asked to review an ordinance titled "Chapter 22.100–Privately Owned, Utility-Scale, and Wind Renewable Energy Facilities," which prompted our review comments dated March 7, 2013. A copy of this ordinance and the applicable comment letter are also attached for reference.

The following Public Works comments are related to the July 2013 draft of the REO, which, as we understand, is taking the place of all of the previous ordinances outlined above.

For specific revisions, additions, or deletions of wording directly from the project document, the specific section, subsection, and/or item along with the page number is first referenced then the excerpt from the document is copied within quotations using the following nomenclature:

Deletions are represented by a ~~strikethrough~~.
Additions are represented by *italics* along with an <u>underline</u>.
Revisions are represented by a combination of the above.

Prior to Regional Planning's approval of the ordinance, the following items need to be addressed:

<u>Transportation:</u>

1. While we understand that the permitting process allows Public Works to review and provide comments on proposed projects, we feel that it is important to clarify in the ordinance the compliance requirements for permit approval as it relates to Aviation. Therefore, the following additions should be made:

   Section 22.52.1620, Permit Requirements, Subsection B, Findings, pages 7 and 8 of 20, modify this subsection as follows:

   "B. Findings: The Reviewing Authority (Director, Hearing Officer, or Regional Planning Commission) shall not approve a Minor Conditional Use Permit or Conditional Use Permit unless the applicant substantiates the following findings:

   1. All findings required by Part 1 of Chapter 22.56 (Conditional Use Permits);

   2. All findings required by Part 27 of Chapter 22.52 (Significant Ecological Areas), if applicable; ~~and~~

   3. If the requested use penetrates the lower floor elevation of any Military Installations and Operations Area (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 the public and military personnel; *and*

4. The proposed project fully complies with all applicable Federal Aviation Administration (FAA) and California Department of Transportation, Division of Aeronautics (Caltrans) rules, regulations, and policies."

If you have any questions regarding the Transportation comment, please contact Jason Morgan of Aviation Division at (626) 300-4602 or jmorgan@dpw.lacounty.gov.

Waste Management:

1. As previously discussed, in addition to solar and wind, please include the following list of renewable energy sources in the renewable energy ordinance. We would like to work with the Department of Regional Planning to determine the various resources that should be identified within each category and the level of detail at which they should be addressed in the ordinance.

    a. Biomass
    b. Geothermal
    c. Hydrogen
    d. Hydropower
    e. Ocean

If you have any questions regarding the Waste Management comment, please contact Christopher Sheppard of Environmental Programs Division at (626) 458-5163 or csheppard@dpw.lacounty.gov.

Development Services:

1. Section 22.52.1640, Standards for Temporary Meteorological Towers, Subsection D, Location, page 9 of 20: Modify Table 22.52.1640-A, Setback Requirements for Temporary Meteorological Towers and Small-Scale Wind Energy Systems as shown below:

TABLE 22.52.1640-A – SETBACK REQUIREMENTS FOR TEMPORARY METEOROLOGICAL TOWERS AND SMALL-SCALE WIND ENERGY SYSTEMS	
Setback from	**Minimum Distance**
On-site Residence or Habitable Structure	1 x system height
~~Public Road, Highway, or~~ Railway	1 x system height
Above-Ground Transmission Line, Public Access Easement, or Public Trail	1 x system height
Property Line	1 x system height
Buildings Other Than a Residential Structure	1 x system height
Trees	As required by the Fire Department
Scenic Drives as identified in the General Plan or in an applicable Area or Community Plan	1,000 feet
Public Road or Highway	*As required by the Department of Public Works to meet sight distance and minimum setback requirements from traveled lanes.*

2. Section 22.52.1640, Standards for Temporary Meteorological Towers, Subsection F, Maximum Number and Separation, Item 2 , page 10 of 20: Identify what all the acronyms in Figure 22.52.1640-A stand for. This includes, WECS, OS, W, RS, RM, RHD, and RMI.

3. Section 22.52.1640, Standards for Temporary Meteorological Towers, Subsection G, Maximum Wind Tower Height, page 11 of 20: A definition of the wind tower height should be provided similar to Chapter 22.100.020.F of the Privately Owned Utility-Scale Solar and Wind Renewable Energy Facilities Ordinance that was previously reviewed (see attached). A suggested modification to Section 22.52.1640.G is below:

   "G. Maximum Wind Tower Height: The maximum wind tower height shall not exceed the following height limits as depicted in Figure 22.52.1640-B -

Height Standards for Temporary Meteorological Towers and Small-Scale Wind Energy Systems, below:

1. 35 feet ~~above~~ *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 ~~above~~ *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 ~~above~~ *measured from the* finished grade *to the top of the blade in the vertical position* for lots two gross acres or greater in size."

4. Section 22.52.1640, Standards for Temporary Meteorological Towers, Subsection G, Maximum Wind Tower Height, page 11 of 20: Identify what all the acronym WECS stands for in Figure 22.52.1640-B.

5. Section 22.52.1640, Standards for Temporary Meteorological Towers, page 8 of 20: Add a subsection addressing access roads similar to Subsection A of Section 22.52.1660.

6. Section 22.52.1660, Standards for Ground-Mounted Utility-Scale Renewable Energy Facilities, Subsection H, Transmission Lines, page 16 of 20: Modify this subsection as follows:

   "H. Transmission lines: Transmission lines shall be placed underground to the satisfaction of Public Works and Regional Planning. ~~except where above-ground right-of-way crossings are required.~~ *A franchise agreement will be required for distribution/transmission facilities within the public right of way."*

   It is our understanding that above-ground right-of-way crossings are not specifically "required" anywhere and, therefore, this portion of the ordinance should be deleted as noted above.

7. Section 22.52.1660, Standards for Ground-Mounted Utility-Scale Renewable Energy Facilities, Subsection G, Site Disruption, page 15 of 20: Previous versions of this ordinance included a definition of grading that Public Works provided comments on. This latest version of the ordinance eliminated the grading definition in its entirety. We would like to work with Regional Planning to

include a definition of grading and site disruption in this ordinance as these definitions will have an impact on how our respective departments analyze/review grading plans. The inclusion of these definitions in this ordinance shall be consistent with Supervisor Michael D. Antonovich's Board Motion (http://file.lacounty.gov/bos/supdocs/76703.pdf) regarding fugitive dust control. It is our understanding that Regional Planning's Zoning Permits North staff has been working to develop specific definitions in this regard, and Public Works would like to continue to work with Regional Planning to memorialize these items in this ordinance.

In addition, although this ordinance contains provisions to prevent fugitive dust emissions during construction, it is lacking a plan or specific mitigation for future fugitive dust emissions after the project is constructed. Once a site is disturbed, the potential for transportation of dust increases dramatically. It is recommended that this subsection be expanded upon to include a provision that would require an applicant that is proposing grading to submit a dust mitigation plan for the duration of the project and its decommissioning.

8. Section 22.52.1660, Standards for Ground-Mounted, Utility-Scale Renewable Energy Facilities, Subsection G, Site Disruption, Item 1, page 15 of 20: The language used in this section appears to be in conflict and is subject to differing interpretations.

   The meaning of the phrase "to the greatest extent possible" as used in the first sentence ("To ensure minimal soil erosion and dust control, removal of existing vegetation shall be minimized to the greatest extent possible.") may be interpreted to mean something by County staff while a developer's interpretation may be completely different. In addition, the last sentence that reads, "Methods to maintain the vegetation root system shall be used," appears to require that vegetation remain in place, which is not what the first sentence of this section indicates.

   To minimize soil erosion and provide for adequate dust control, vegetation should remain in place. It is recommended that this ordinance indicate exactly what the County will require an applicant to submit to prove that vegetation will not be impacted.

9. Section 22.52.1660, Standards for Ground-Mounted, Utility-Scale Renewable Energy Facilities, Subsection G, Site Disruption, Item 4, page 16 of 20: Modify this subsection as follows:

"4. Fugitive dust emission shall be controlled by phased earthwork, site watering, *use of* clean gravel and/or wood chips where applicable, application of non-toxic soil stabilizers, limiting public access on unpaved areas, and posting private roadways with reduced speeds. Use of other fugitive dust mitigation measures may be implemented during construction and/or operations and maintenance *if determined by Regional Planning and Public Works* ~~that are suitable for dust shall be controlled~~ *to be suitable methods that will adequately control dust* during construction, operations, and removal and restoration activities."

10. Section 22.52.1660, Standards for Ground-Mounted, Utility-Scale Renewable Energy Facilities, Subsection M, Location, page 18 of 20: Modify Table 22.52.1660-A, Setback Requirements for Ground-Mounted, Utility-Scale Renewable Energy Facility Using Wind Resources as shown below:

TABLE 22.52.1660-A – SETBACK REQUIREMENTS FOR GROUND-MOUNTED UTILITY-SCALE RENEWABLE ENERGY FACILITY USING WIND RESOURCES	
Setback from	**Minimum Distance**
On-site ~~Resident~~ *Residence* or Habitable Structure	2 x facility height
~~Public Road, Highway, or~~ Railway	2 x facility height
Above-Ground Transmission Line, Public Access Easement, or Public Trail	2 x facility height
Property Line	2 x facility height
Buildings Other Than a Residential Structure	1 x facility height
Trees	As required by the Fire Department
Scenic Drives	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.*

If you have any questions regarding the Development Services comments, or if you require additional information, please contact Matthew Dubiel of Land Development Division at (626) 458-4921 or mdubiel@dpw.lacounty.gov.

MD:tb
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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, Definitions (D), is hereby amended to add a definition to read as follows:

-- "Decomissioning" means the removal of a utility-scale renewable energy facility from service, which includes safe storage, dismantling, disposal, recycling, and site restoration.

SECTION 2. Section 22.08.070, Definitions (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.

SECTION 3. Section 22.08.190, Definitions (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 to either the ground or to a structure other than the system's mechanical support structure, such as a building or carport. Such system shall provide no more than 125% 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 shall have 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 form a direct-current, power-producing unit as defined by the California Energy Commission.

SECTION 4. Section 22.08.230, Definitions (W), is hereby amended to add a definition to read as follows:

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

SECTION 5. Section 22.08.210, Definitions (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 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 other than 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 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 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.

22.52.1610 Applicability.

22.52.1620 Permit Requirements.

22.52.1630 Standards for Small-Scale Solar Energy Systems.

22.52.1640 Standards for Temporary Meteorological Towers.

22.52.1650 Standards for Small-Scale Wind Energy Systems.

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

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

22.52.1680 Modifications.

22.52.1600 Purpose.

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

22.52.1610 Applicability.

A. The provisions of this Part 15 shall apply to any privately-owned small-scale renewable energy system, utility-scale renewable energy facility, or temporary meteorological tower on private property.

B. 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.

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

1. Any subsequent application that would increase the size, height, or footprint of the 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 substantially compliant replacement of equipment.

22.52.1620 Permit Requirements.

TABLE 22.52.1620-A: RENEWABLE ENERGY PERMIT REQUIREMENTS						
				Permit Required By Zone *SPR = Site Plan Review* *MCUP = Minor Conditional Use Permit* *CUP = Conditional Use Permit* *N/A = Not Applicable*		
	A-1	*A-2, A-2-H*	*OS, W*	*R-A, R-1, R-2, R-3, R-4, R-5, MXD, MXD-RU*	*C-H,C-1, C-2 C-3, C-M, C-R, R-R, C-RU*	*M-1,M-1.5, M-2,M-2.5, M-3*
Small-Scale Renewable Energy System						
Small-Scale Solar Energy System	SPR	SPR	SPR	SPR	SPR	SPR
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	SPR	SPR	N/A	SPR	SPR	SPR

A. Aviation Review. If a Minor Conditional Use Permit or Conditional Use Permit is required pursuant to Table 22.52.1620-A above:

1. At least 60 days prior to a decision by the Reviewing Authority (Director, Hearing Officer, or Regional Planning Commission), the Department of Regional Planning shall distribute copies of the proposed site plan, elevation plan, and location map to aviation-related agencies with flight operations in the vicinity of the proposed project and shall request comments. Aviation-related agencies include but are not limited to the California Department of Transportation Division of Aeronautics, the Department of Public Works – Aviation Division, the Federal Aviation Administration

(FAA), the County Forester and Fire Warden, the County Sheriff, Edwards Air Force Base, the United States Navy, and Air Force Plant 42.

2. If the proposed project is located within the Military Installations and Operations Areas (MIOAs) as identified by the General Plan, aviation-related agencies shall review the proposed project for any potential impacts to ensure the safety of residents and continued viability of military training and testing operations. The review shall consider 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 which may impair visibility such as steam, dust, or smoke;

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

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

3. Any comments received within 30 days of distribution of the proposed site plan, elevation plan, and location map shall be considered by the Department of Regional Planning and provided to the Reviewing Authority (Director, Hearing Officer, or Regional Planning Commission).

B. Findings. The Reviewing Authority (Director, Hearing Officer, or Regional Planning Commission) shall not approve a Minor Conditional Use Permit or Conditional Use Permit unless the applicant substantiates the following findings:

1. All findings required by Part 1 of Chapter 22.56 (Conditional Use Permits);

2. All findings required by Part 27 of Chapter 22.52 (Significant Ecological Areas) if applicable; and

3. 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 the public and military personnel.

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. Height. A small-scale solar energy system may exceed the height limit of the zone by no more than five feet if it is placed on a building that is built to the maximum height limit.

C. Setbacks. A small-scale solar energy system shall meet all of the setback requirements of the zone.

22.52.1640 Standards for Temporary Meteorological Towers.

A. Aviation safety. A safety light that meets FAA standards shall be required for any wind tower that exceeds an overall tower height of 200 feet. A safety light may be required on shorter wind towers when deemed necessary by any of the aviation-

related agencies or the Department of Regional Planning. No other lights shall be placed on the wind tower.

B. Climbing apparatus. All climbing apparatus shall be located at least 12 feet above the finished grade and any wind tower shall be designed to prevent climbing within the first 12 feet of wind tower height.

C. Colors. The colors used in the construction materials or finished surface shall be muted and visually compatible with surrounding development.

D. Location. The minimum distance and safe clearances for a wind tower shall be as depicted in Table 22.52.1640-A – Setback Requirements for Temporary Meteorological Towers and Small-Scale Wind Energy Systems, below. 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 AND SMALL-SCALE WIND ENERGY SYSTEMS	
Setback from	Minimum Distance
On-site Residence or Habitable Structure	1 x system height
Public Road, Highway, or Railway	1 x system height
Above Ground Transmission Line, Public Access Easement, or Public Trail	1 x system height
Property Line	1 x system height
Buildings Other Than a Residential Structure	1 x system height
Trees	As required by the Fire Department
Scenic Drives as identified in the General Plan or in an applicable Area or Community Plan	1,000 feet

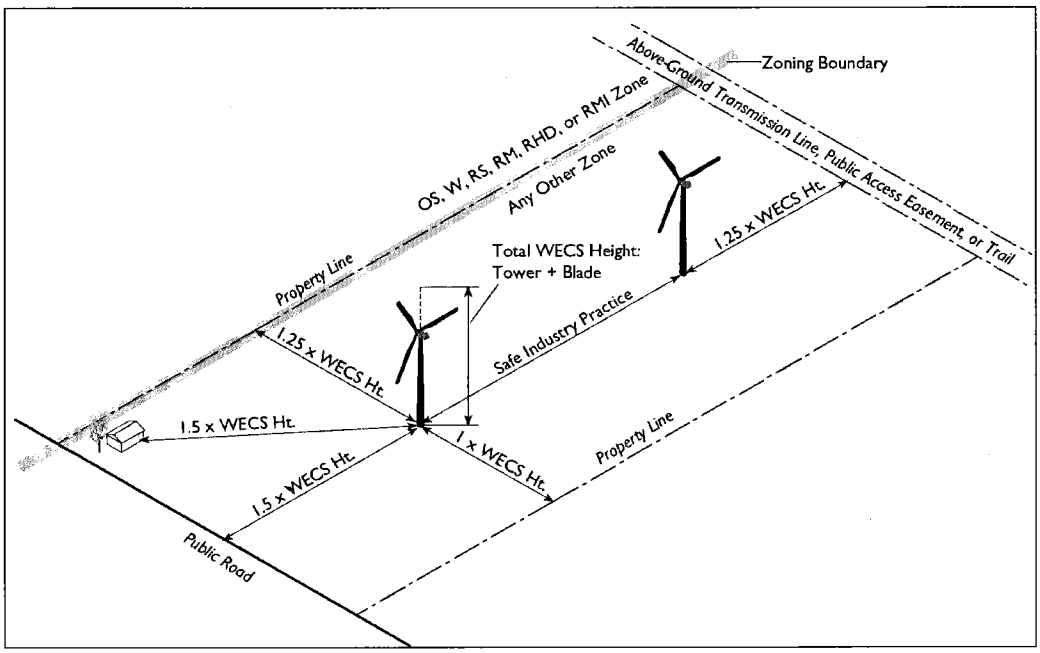
E. Maintenance. All equipment and facilities shall be maintained in an operational condition that poses no potential safety hazards. Maintenance shall include, but not be limited to, painting, regularly scheduled cleaning, mechanical/electrical repairs, structural repairs, and security measures.

F. 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 can be met for each facility. A maximum of two wind towers are permitted per 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 and Small-Scale Wind Energy Systems, below.

FIGURE 22.52.1640-A – SEPARATION STANDARDS FOR TEMPORARY METEOROLOGICAL TOWERS AND SMALL-SCALE WIND ENERGY SYSTEMS



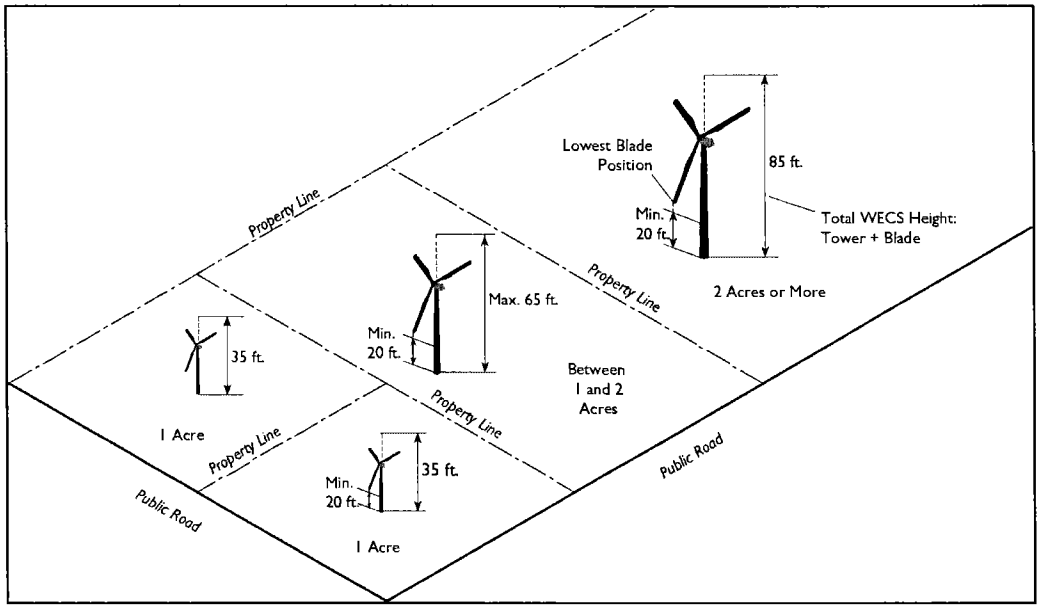
G. Maximum wind tower height. The maximum wind tower height shall not exceed the following height limits as depicted in Figure 22.52.1640-B - Height Standards for Temporary Meteorological Towers and Small-Scale Wind Energy Systems, below :

1. 35 feet above finished grade for lots of less than one gross acre in size;

2. 65 feet above finished grade for lots from one gross acre to less than two gross acres in size; and

3. 85 feet above finished grade for lots two gross acres or greater in size.

FIGURE 22.52.1640-B – HEIGHT STANDARDS FOR TEMPORARY METEOROLOGICAL TOWERS AND SMALL-SCALE WIND ENERGY SYSTEMS



H. Structure-mounted. A structure-mounted wind tower may exceed the height limit of the zone by no more than five feet if is placed on a building that is built to the maximum height limit.

I. Signs. One sign, limited to 18 inches in length and 12 inches in height, shall be posted at the base of the 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. The following standards shall apply in addition to all standards required by Section 22.52.1640:

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.

1. Safety wires shall be installed on the turnbuckles on guy wires for a small-scale wind energy system. Anchor points for any guy wires for a small-scale wind energy system shall be located within the property that the small-scale wind energy system is located on and not on, or across any, above-ground electric transmission or distribution lines; and

2. The point of attachment for the guy wires shall be enclosed by a fence six feet high.

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, except during short-term events such as utility outages and severe windstorms.

E. Visual impact.

1. The top of a small-scale wind energy system shall be located at least 25 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 small-scale wind energy system that is placed within the viewshed of a Scenic Drive 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 Drive 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.

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 facility shall be designed and sited to the satisfaction of the Director of Public Works,

shall consider adequate spacing from intersections, and shall maintain adequate sight distances.

B. Aviation safety.

1. A utility-scale renewable energy facility shall not be located within the Runway Protection Zone of any airport, as defined in the County's Airport Land Use Plans.

2. A utility-scale renewable energy facility shall not penetrate the imaginary surfaces (primary, approach, transitional, horizontal, and conical surfaces) defined by the Federal Aviation Administration 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 of the aviation-related agencies. No other lights shall be placed on such wind towers.

C. Fencing.

1. Non-opaque fences may be permitted.

2. Fencing up to eight feet in height may be permitted, regardless of any other fencing standards. Such fences shall not be located within 15 feet of a public right-of-way but can be located within the required setback area.

3. Fencing type, height and placement shall provide for the minimum corner sight distance to the satisfaction of the Department of Public Works.

4. Existing drought-tolerant native or non-native vegetation approved by the County Biologist shall be retained or new such vegetation placed along fencing,

between fencing and any public right-of-way, at least 10 feet in depth, unless determined infeasible or inappropriate by the Reviewing Authority (Hearing Officer or Regional Planning Commission).

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 and operations and maintenance building doorways and parking areas of projects 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 other than safety and required warning signs as outlined in Part 10 of Section 22.52..

G. Site disruption.

1. To ensure minimal soil erosion and dust control, removal of existing vegetation shall be minimized to the greatest extent possible. When necessary to reduce the existing vegetation, seek options to trim rather than remove the vegetation in its entirety. Methods to maintain the vegetation root system shall be used.

2. The project 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. All projects must submit a Drainage Plan that complies with all requirements to the satisfaction of the Department of Public Works showing the extent of drainage impacts and comply with the most recent County standards for addressing drainage impacts.

3. The project shall be designed to minimize grading and amount of ground disturbance in order to control fugitive dust and preserve the natural topography. All projects must show the extent of grading and ground disturbance on all plans and comply with all applicable standards for addressing grading and ground disturbance impacts.

4. Fugitive dust emission shall be controlled by phased earthwork, site watering, clean gravel and/or wood chips where applicable, application of non-toxic soil stabilizers, limiting public access on unpaved areas, and posting private roadways with reduced speeds. Use of other fugitive dust mitigation measures may be implemented during construction and/or operations and maintenance that are suitable for dust shall be controlled during construction, operations, and removal and restoration activities.

H. Transmission lines. Transmission lines shall be placed underground to the satisfaction of Public Works and Regional Planning, except where above-ground right-of-way crossings are required.

I. Visual impact.

1. 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

2. Within the Coastal Zone, the placement of any utility-scale renewable energy facility shall not obstruct public views of the ocean from a Scenic Drive 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 potential spills shall be incorporated into the project design, as appropriate. Any discharge of wastes into surface water 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 Regional Planning Commission, 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 Resident or Habitable Structure	2 x facility height
Public Road, Highway, or Railway	2 x facility height
Above Ground Transmission Line, Public Access Easement, or Public Trail	2 x facility height
Property Line	2 x facility height
Buildings Other Than a Residential Structure	1 x facility height
Trees	As required by the Fire Department
Scenic Drives	2 x facility height

N. Maximum height. Wind tower height shall not exceed 500 feet. A wind tower greater than 500 feet in height requires approval of a variance pursuant to Part 2 of Chapter 22.56.

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 of Regional Planning 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 of Regional Planning 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 of the Department of Regional Planning may approve one six month extension.

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

A. Height. A structure-mounted utility-scale renewable energy facility that is structure mounted may:

1. Exceed the height limit of the zone by no more than five feet if it is placed on a building that is built to the maximum height limit in residential and agricultural zones; or

2. Exceed the height limit of the zone by no more than 10 feet if it placed on a building that is built to the maximum height limit in commercial and manufacturing zones.

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

1. Three feet on residential buildings; or

2. Four feet on non-residential buildings.

C. Accessory structures. Accessory structures constructed for the purposes of operating and maintaining the utility-scale renewable energy facility must meet the 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 the modification of any applicable standards in this Part 15. The applicant for such Conditional Use Permit shall substantiate the following findings in addition to those required by Section 22.52.1620.B:

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 project on the subject property; and

2. The requested modifications would not be contrary to the intent and purpose of this Part 15.

B. Where a Minor Conditional Use Permit or Conditional Use Permit is required pursuant to Section 22.52.1620, modification of any applicable standards in this Part 15 may be requested. 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.

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

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ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

March 7, 2013

IN REPLY PLEASE
REFER TO FILE: LD-2

TO: Jon Sanabria
Advanced Planning Division
Department of Regional Planning

Attention Thuy Hua

FROM: Anthony Nyivih
Land Development Division
Department of Public Works

SB

PRIVATELY-OWNED, UTILITY-SCALE, SOLAR AND WIND, RENEWABLE-ENERGY FACILITIES DRAFT ORDINANCE.

Thank you for the opportunity to review the proposed draft privately-owned, utility-scale, solar and wind, renewable-energy facility ordinance that was submitted to Public Works for review on September 19, 2012. The draft ordinance establishes regulations and permit requirements that support and facilitate the responsible utilization of the County's solar and wind resources.

Prior to Regional Planning's approval of the ordinances, the following items need to be addressed:

Public Buildings

1. Section 22.100.030.A: Include *"The electrical system must comply with the current edition of the Los Angeles County Electrical Code."*

2. Section 22.100.030.A.2.b: The last sentence currently reads: *"A building permit may be required for the re-inspection of the building or structure; and"*. This sentence should be revised to state: *"A building permit may be required for the reinspection of the building or structure; however, an electrical permit, along with the applicable plan checks, will be required to ensure compliance with the Los Angeles County Electrical Code; and."*

3. Section 22.100.030.A.2.c: The last sentence currently reads: "*A building permit may be required for the re-inspection of the building or structure*. This sentence

should be revised to state: "*A building plan check and permit will be required for the reinspection of the building or structure*".

If you have any questions regarding the Public Building comments, please contact Francis Dominguez of Building and Safety Division at (661) 524-2390 or fdomingu@dpw.lacounty.gov.

Water Resources

Water

1. Section 22.100.20.C: This ordinance applies only to private facilities; however, there will be a question on every project whether the facility is private or not. Most solar farms, and possibly wind farms, are funded with government money but may end up being owned or connected to a private company, (e.g., Southern California Edison). This Ordinance's biggest impact is during construction, not operation. Therefore, clarification is needed in this regard within the Definitions Section.

2. Section 22.100.020.D.6: The definition of grading as indicated in this subsection of the Ordinance is "any amount of earthwork greater than one foot in height or depth which is not otherwise defined as not grading (e.g., footings, foundation work, etc.)." We would like to work with the Department of Regional Planning to improve this definition as this will have an impact on how our respective Departments analyze/review grading plans.

3. Fugitive dust control is a major issue that this ordinance needs to address; however, Section 22.100.050.B.8.a states that site watering and the use of non-toxic soil stabilizers, which require water, shall be used (among other methods) to control dust emissions. Due to the lack of water in some areas throughout the County, proper dust control may not be possible and, therefore, we need to defer to County Counsel for discussions on water supply and how this ordinance should address it, specifically in the Antelope Valley.

If you have any questions regarding the water comments, please contact Greg Even of Waterworks Division at (626) 300-3331 or geven@dpw.lacounty.gov.

Drainage

1. Section 22.100.050.B.15.b currently states that "*Existing topography and watercourses shall be retained or restored to preexisting conditions*". This statement should be revised to state: "*Existing topography and watercourses shall be retained or restored to preexisting conditions except for drainage features specifically designed to mitigate drainage impacts.*"

2. This ordinance should include the following language:

   All projects must submit a drainage plan showing the extent of drainage impacts and comply with the most recent County Standards for addressing drainage impacts. Required analysis may include, but are not limited to, increases in runoff, any change in drainage patterns, debris producing areas, and the capacity of existing storm drain facilities. Preliminary soils and geology reports related to debris, retention, and detention basins may be required based on geographic and adverse geotechnical conditions. Engineering calculations will be required to support sizing of any debris, retention, or detention basins. Flood Hazard analysis may be required for any project within an identified floodplain. Compliance with all existing drainage policies is required to the satisfaction of Public Works.

If you have any questions regarding the drainage comments, please contact Toan Duong at (626) 458-4921 or tduong@dpw.lacounty.gov.

Transportation

Aviation

1. Section 22.100.050.B.2.d,i applies to all renewable-energy facilities and not only within the Military Installations and Operations Area. Therefore, the current heading of Section 22.100.050.B.2.d, "Uses that are determined to produce a visual obstruction within a MOA shall comply with the following standards:", should be deleted and replaced with the verbiage currently contained in Section 22.100.050.B.2.d.i. Section 22.100.050.B.2.d.ii should then become Section 22.100.050.B.2.e.

If you have any questions regarding the aviation comment, please contact Jason Morgan of Aviation Division at (626) 300-4602 or jmorgan@dpw.lacounty.gov.

Development Services

Grading

1. Section 22.100.020.D.3 and 22.100.020.D.4: The definitions for Leveling Box and Finishing Box are similar. The only difference is the maximum box capacity of the equipment used. The definition should not be defined to the capacity of the equipment since our criteria for labeling the work "grading" or not is the elevation difference achieved by use of the process, not the amount of dirt that is actually moved. The definition should be combined into a single category called "Leveling, *the use of box scrapers, or similar equipment, to minimize the elevation differences in a given area through reduction of high points by no more than one foot in height and/or filling of low points by no more than one foot in depth; not grading."*

If you have any questions regarding the grading comment, please contact Mr. Andy Narag of Land Development Division at (626) 458-4921 or anarag@dpw.lacounty.gov.

If you have any other questions or require additional information, please contact Matthew Dubiel at (626) 458-4921 or mdubiel@dpw.lacounty.gov.

MD:tb
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Chapter 22.100 Privately Owned Utility-Scale Solar and Wind Renewable Energy Facilities

Sections:

22.100.010 Purpose
22.100.020 Definitions
22.100.030 Applicability
22.100.040 Permit Requirements
22.100.050 Development Standards for Privately Owned Utility-Scale Renewable Energy Facilities
22.100.060 Development Standards for Privately Owned Utility-Scale Solar Renewable Energy Facilities
22.100.070 Development Standards for Privately Owned Utility-Scale Wind Renewable Energy Facilities

22.100.010 Purpose

This Chapter establishes regulations and permit requirements that support and facilitate the responsible utilization of the County's solar and wind resources. These regulations assure that utility-scale solar and wind renewable energy facilities are designed and located in a manner that minimizes safety and environmental impacts on the surrounding community. The requirements encourage responsible development of these facilities to generate and transmit clean, renewable energy while protecting the health, safety and welfare of residents and the environment.

22.100.020 Definitions

A. **Decommissioning.** Removal of a utility-scale renewable energy facility from service, which includes the later actions of safe storage, dismantling, disposal, recycling and site restoration.

B. **Solar array.** Mechanically integrated assembly of modules or panels with a support structure and foundation, tracker, and other components, as required to form a direct-current, power-producing unit as defined by the California Energy Commission.

C. **Privately owned utility-scale renewable energy facility.** A privately owned and operated facility where energy generation using renewable resources is the primary

use. In addition to the solar collector arrays and wind turbines the facilities include related equipment and other accessory structures including substations, electrical infrastructure, transmission lines, operations and maintenance buildings and other appurtenant structures. Includes privately owned Utility-scale Solar Renewable Energy Facilities (SEF-US) and Utility-scale Wind Renewable Energy Facilities (WEF-US).

D. **Utility-scale renewable energy facility earthwork equipment definitions.**

1. Mow – mowing to ground level without earth movement; not grading.

2. Disk – using farming-type disk equipment to loosen soil a foot or less in depth; not grading.

3. Roll – using a continuous surface roller to lightly compact disked, leveled, or finished soil.

4. Leveling Box – maximum box capacity of [ask for DPW specification?]_cubic yard for leveling earth humps no greater than one foot in depth or for filling no greater than one foot in height; not grading.

5. Finishing Box – maximum box capacity of [ask for DPW specification?] cubic yard for leveling high or low areas no greater than one foot in depth or for filling no greater than one foot in height; not grading.

6. Grading – any amount of earthwork greater than one foot in height or depth which is not otherwise defined as not grading (eg. footings, foundation work, etc.).

E. **Wind facility height.** Facility height for a wind energy facility shall be measured from the finished grade to the top of the blade in the vertical position.

F. **Wind tower height.** Tower height for a wind energy facility shall be measured from the finished grade to the top of the tower, excluding the wind turbine generator, blades, and wind-measuring devices.

22.100.030 Applicability

A. **Requirements.**

1. The permit requirements and development standards in this Chapter apply to the construction of any privately owned utility-scale solar and wind renewable energy facilities.

2. A renewable energy facility approved prior to the effective date of this ordinance shall not be required to meet the requirements of this Chapter, except:

a. Any physical modification to any existing previously permitted utility-scale renewable energy facility that increases the size, height, footprint or type of equipment shall be subject to this Ordinance. Only the modification or alteration is subject to this Ordinance;

b. An increase in wattage due to technical advances does not require additional review by Regional Planning or modification of the permit as long as the components are of a similar size, shape and height and comply with this Ordinance. A building permit may be required for the re-inspection of the building or structure; and

c. Routine operation and maintenance or like-kind replacements do not require a new permit from Regional Planning. A building permit may be required for the re-inspection of the building or structure

B. **Where Allowed.** The uses that are subject to the standards in this Chapter shall be located only where allowed by the base zone, in conformance with Table 22.100.040-A (Utility-Scale Renewable Energy Facilities Permit Requirements).

C. **Co-location.** Renewable energy facilities may be permitted on properties with other primary uses such as, but not limited to, parking lots or on top of buildings. Any co-location of a renewable energy facility requires a conditional use permit.

D. **Other Similar Uses.** The Director may determine that a proposed renewable energy use not listed in Title 22 may be allowed. Any similar use not clearly defined by the County Zoning Ordinance as renewable energy may refer to a State or Federal definition of renewable energy uses if the similar use is so defined. The development standards in this Chapter shall serve as the minimum requirements for any similar use determined to be a renewable energy use. A conditional use permit is required for any similar use. Temporary Meteorological Facilities are regulated by Chapter 22.102 and Small Solar and Wind Facilities are regulated by Chapter 22.104.

22.100.040 Permit Requirements Permit requirements for utility-scaled renewable energy facilities are provided in Table 22.100.040-A.

TABLE 22.100.040-A: UTILITY-SCALE RENEWABLE ENERGY FACILITIES PERMIT REQUIREMENTS						
USE	*Permit Required By Zone* *CUP = Conditional use permit* *N/A = Not Applicable*					
	A-1	*A-2, A-2-H*	*OS, W, MXD, MXD-RU*	*R-A, R-1, R-2, R-3, R-4, R-5*	*C-H,C-1, C-2 C-3, C-M, C-R, R-R, C-RU*	*M-1,M-1.5, M-2,M-2.5, M-3*
Solar Energy Facilities						
Ground-mounted Utility-Scale	N/A	CUP	N/A	N/A	CUP	CUP
Structure-mounted Utility-Scale	N/A	CUP	N/A	N/A	CUP	
Wind Energy Facilities						
Ground-mounted Utility-Scale	N/A	CUP	N/A	N/A	CUP	CUP
Structure-mounted Utility-Scale	N/A	CUP	N/A	N/A	CUP	

22.100.050 Development Standards for Privately Owned Utility-Scale Renewable Energy Facilities

A. **Permit Requirements.**

1. ***Utility-Scale Renewable Energy Facilities.*** Permit requirements are as depicted in Table 22.100.040 – A. The filing information and documents required are as listed in the Department's Application Information and Checklists.

2. ***Findings for Privately Owned Utility-Scale Renewable Energy Facilities.*** The Commission shall approve an application only if the applicant substantiates the following required findings:

   a. The findings for a conditional use permit per Section 22.56.090;

   b. How this request addresses the State's goal of 33 percent of the State's electricity coming from a renewable energy source by December 31, 2020;

   c. The requested use at the location proposed will not be materially detrimental to the use, enjoyment or valuation of property or other persons or Military Installations and Operations Areas located in the vicinity of the site;

d. How the request mitigates any loss of Prime Farm Land, Unique Farmland or Farmland of Statewide Importance according to the State of California; and

e. The effect, if any, upon desirable community character, including the cumulative effect of the project to the area in addition to the ongoing and expected effects of existing and pending renewable energy projects.

3. ***Findings for Privately Owned Utility-Scale Renewable Energy Facilities Located within Military Installations and Operations Areas (MOA).*** The Commission shall approve an application only if the applicant substantiates the following required findings:

a. The findings for a conditional use permit per Section 22.56.090;

b. Facilities that are located within MOAs, as defined by the General Plan, shall be evaluated for any potential impacts to ensure the safety of the residents on the ground and continued viability of military operations within the MOAs. The review shall consider the following:

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

ii. Uses that release into the air any substances such as steam, dust and smoke, which impair visibility;

iii. Uses that produce light emissions, glare or distracting lights, which could interfere with pilot vision or be mistaken for airfield lighting; and

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

4. ***Modifications.*** A variance, in compliance with Part 2 of Chapter 22.56, is required for the modification of any development standard specified in this Chapter.

B. **Development Standards.** A privately owned utility-scale renewable energy facility shall comply with the following development standards:

1. ***Access roads.*** Temporary access roads utilized for initial installation shall be restored and re-vegetated to the pre-existing natural condition to the greatest extent possible after completion of the installation. All temporary and permanent ingress and egress points to the facility shall be designed and

sited to the satisfaction of Public Works and shall consider adequate spacing from intersection and sight distance.

2. ***Aviation safety.***

a. The Director shall distribute copies of the proposed site plan, elevation plan, and location map to aviation-related regulatory agencies and privately owned and operated facilities with flight operations in the vicinity of the proposed project, as determined by the Director. Regulatory agencies include the California Department of Transportation Division of Aeronautics, Department of Public Works, Aviation Division, Federal Aviation Administration (FAA), County Forester and Fire Warden, County Sheriff, Edwards Air Force Base, Navy, Air Force Plant 42, and the Airfield Land Use Commission. Any comments received within 30 days of distribution of the plans will be considered in establishing conditions of approval.

b. A safety light that meets FAA standards shall be required for all facilities that exceed an overall tower height of 200 feet. A safety light may be required on shorter towers as deemed necessary by any of the aviation-related regulatory agencies. No other lights shall be placed on the tower. Any safety light shall meet FAA standards and be visible to pilots utilizing night vision equipment.

c. A renewable energy facility shall not be located within the Runway Protection Zone of any airport, as defined in the County's Airport Land Use Plan.

d. Uses that are determined to produce a visual obstruction within a MOA shall comply with the following standards:

i. A utility-scale renewable energy facility shall not penetrate the imaginary surfaces (primary, approach, transitional, horizontal, and conical surfaces) designated by the FAA for airports to enhance the safe and efficient use of navigable airspace as defined by Federal Aviation Part 77; and

ii. Uses shall not penetrate the lower floor elevation of the MOA unless the military operator of the MOA has determined that the proposed use is not detrimental to the function of the MOA and would not pose a health or safety hazard to the public and military personnel. In instances where a written concurrence from the military operator is requested but not received within 30 calendar days, the conditional use permit may be approved upon a finding the benefits of the requested obstruction into the

MOA outweigh the potential impacts on military flight operations.

3. ***Site planning.*** Permanent storage areas, administration, maintenance, and operations buildings, and equipment associated with renewable energy facilities shall be located and screened such that impacts to biological resources, farmland, agricultural resources, and visual quality are minimized.

4. ***Decommissioning Plan.*** Prior to obtaining any grading permit, the permittee shall provide the Department of Regional Planning and the Department of Public Works with a Decommissioning Plan in connection with any and/or all of the terminating events described as a Discontinued Use. The Plan shall include, at a minimum, a detailed plan for decommissioning and deconstructing the facility and for the restoration of the site in the event the project or portion of the project is no longer useable or reusable as described below. The Plan shall be developed to the satisfaction of the Director of Regional Planning and the Director of Public Works. The Decommissioning Plan shall provide for, including, but not limited to, the following:

   a. Removal of solar panel and/or wind turbine structures and all appurtenant above-ground equipment;

   b. Removal of on-site overhead poles and above-ground electricity lines;

   c. Removal of permanent above-ground transmission lines and poles located in the public right-of-way if determined not usable by the County or any other applicable public or private utility. Otherwise such transmission poles shall be allowed to remain;

   d. Privately owned on-site substation may remain if public or private utility assumes ownership of the substation, otherwise it shall be removed;

   e. Restoration of any disturbed soil and revegetation of the site to its preconstruction condition, with native vegetation similar to the vegetation in the surrounding vicinity;

   f. If the site is used for farming, restoration o the site to its previous farmland condition;

   g. If the site includes reusable permanent facilities usable by the owner of the property, such facilities may remain, otherwise such facilities shall be removed and the site restored to pre-existing condition to the greatest extent possible. If the owner maintains existing facilities on the property for a different use an additional entitlement for the proposed use is required;

h. Restoration or reclamation of any project road to their pre-construction condition unless the then-existing owner of the site elects to retain the improved road for access throughout the site;

i. Documentation of the pre-graded condition of the project site, including, but not limited to, a photographic record;

j. Details of the performance and financial assurance guarantees, explaining the amounts and schedule for the provision of such guarantees;

k. Authorization for the County to enter a site and perform any work related to implementing the approved decommissioning plan and utilizing the decommissioning financial assurance guaranties; and

l. The project owner shall post a bond, lien contract agreement acceptable to the Director of Public Works, sufficient to allow for the decommissioning plan.

5. ***Discontinued Use.*** In the event that any portion of the facility is not in operational condition for a consecutive period of 12 months, operations for that portion of the site shall be deemed to have been discontinued and that portion of the facility shall be removed from the site within 90 days from the date that written notice is sent to the permittee from Regional Planning. Within this 90-day period, the permittee may provide the Director a written request and justification for an extension of up to 12 months to resume operations of that portion of the site, which request shall be subject to the satisfaction of the Director.

   A second written request and justification for a second extension of up to 12 months may also be submitted, which the Director may grant if the request is adequately justified based on the Director's determination. In no event shall the operation of the facility or portion of the facility be discontinued for more than 36 months from the date such operations were first deemed discontinued without being decommissioned pursuant to the approved Decommissioning Plan. Further, in no event shall any extension of the period to resume operations of any portion of the site pursuant to this standard be deemed to extend the term or expiration date of the approval.

6. ***Emergency Response Plan.*** An emergency response plan appropriate to the size and operation of the project shall be submitted for the County's Fire Department approval prior to the construction of the project. The plan shall address possible emergencies such as, but not limited to, blow-outs, spills, earthquakes, fires, and floods. The operator shall be responsible for ensuring

that the project is equipped and staffed to carry out all contingency measures at any time.

7. ***Fencing Allowed.*** To protect utility-scale renewable energy facilities chain-link fences up to 8 feet in height, regardless of any other fencing standards, shall be permitted. Such fences may not be located within 15 feet of a public street or highway. Fencing height and placement shall provide for minimum corner sight distance. Drought-tolerant vegetation shall be preserved or placed between fences and property frontage on public right-of-way, unless determined infeasible or inappropriate by the Planning Director. No fencing shall be required where projects employ full-time security guards or use video surveillance or allow for open space buffers. Mitigation measures to be in accordance with applicable state, regional and local regulations.

8. ***Fugitive dust.***

   a. Fugitive dust emission shall be controlled by phased earthwork, site watering, clean gravel where applicable, application of non-toxic soil stabilizers, limiting public access on unpaved areas, and posting roadways with reduced speeds. Dust shall be controlled during construction, operations, and removal and restoration activities. Mitigation measures should be in accordance with applicable state, regional and local regulations.

   b. A project shall be designed so as to minimize the amount of grading necessary to reduce dust impacts.

9. ***Lighting.*** Night-lighting, limited to that required for safety and security, shall be shielded and directed downward to avoid lighting trespass and shall consist of: (a) motion sensor for entry-lighting to the on-site equipment structures and buildings; (b) for projects with operation and maintenance buildings, install light-sensor or motion-sensor lighting for the main plant access gate and operations and maintenance building doorways and parking areas; and (c) all outdoor light fixtures shall be full cut-off light fixtures as defined in Part 9 of Chapter 22.44.

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

11. ***Noise.*** Noise-generating equipment in a renewable energy facility shall comply with Title 12, Chapter 12.08 of the Noise Control Ordinance, and comply with the General Plan. No noise shall exceed maximum levels, as measured at the closest neighboring inhabited dwelling, school, church,

hospital, or similar sensitive use, except during short-term events such as utility outages and severe windstorms. The power grid should be designed to minimize the impact associated with the corona effect noise on sensitive receptors.

12. ***Number and Spacing.*** More than one energy facility may be located on the same property if all of the location requirements and standards of this Chapter can be met for each facility. .

13. ***Significant Ecological Areas.*** All utility scale renewable energy projects located within a Significant Ecological Area shall not commence construction or operation prior to having a Habitat Mitigation and Monitoring Plan approved by the Department of Regional Planning as recommended by SEATAC.

14. ***Signs.*** One ground-mounted or pole-mounted project identification sign may be located at each point of project ingress and egress. Total sign area of all signs shall not exceed fifty square feet in area and five feet in height. Signs shall include owner information and emergency contact. No other signs shall be installed other than safety and required warning signs.

15. ***Site disruption.***

    a. Within the project site the land area exposed and the vegetation removed during construction shall be the minimum necessary to install and operate the facility.

    b. Existing topography and watercourses shall be retained or restored to preexisting conditions.

    c. All facilities and access ways shall be designed to minimize erosion, sedimentation, or other impacts to the natural hydrology and drainage patterns of the site.

    d. Grading quantities shall be distinguished from general disturbance earthwork. Use of disc, leveling less than one foot in height or depth, and final rolling of earthwork area is not to be counted as grading quantity.

16. ***Structural Safety.***

    a. All energy facilities shall be designed and constructed based on the current County of Los Angeles Building Code; and

    b. A wind analyses is required, and a geotechnical investigation report may be required, at the discretion of the Director of Public Works.

Conditions of approval may be imposed to implement the safety recommendation of such investigations

17. ***Transmission lines.*** Transmission lines shall be placed underground within existing rights-of-way to the greatest extent feasible. Where transmission lines are proposed to be constructed above ground due to barriers or other significant obstructions to underground construction, they should be planned and designed to minimize visual impacts as seen from public roads, other public viewing areas, and adjacent properties. Undergrounding is not required when connecting to a transmission station.

18. ***Visual impact.***

    a. Any renewable energy project that is placed within the viewshed of a County or State designated Scenic Highway shall be assessed for its visual effects, and conditions of approval relating to siting, buffers, and the height and design of the facility may be imposed to minimize significant effects on the viewshed.

    b. Within the Coastal Zone, the placement of a renewable energy project shall not obstruct public views of the ocean from a County or State designated Scenic Highway, unless specific provisions for such siting are provided for in the applicable Local Coastal Plan and Coastal Development Permit or Long Range Development Plan.

19. ***Water quality protection.*** Measures to protect groundwater and surface water from potential spills shall be incorporated into the project design, as appropriate, and any discharge of wastes into surface water must meet the requirements of the Regional Water Quality Control Board. Any discharge of wastes into surface water must meet the requirements of the Regional Water Quality Control Board.

22.100.060 Additional Development Standards for Privately Owned Utility-Scale Solar Renewable Energy Facilities (SEF-US)

A. **Applicability.** In addition to the development standards in Section 22.100.050.B, utility-scale solar renewable energy facilities shall comply with the development standards in this Section.

B. **Location.**

1. Solar panels shall be placed such that concentrated solar radiation or glare shall not be directed onto nearby properties or roadways.

2. Solar panels shall not be placed in the vicinity of any airport in a manner that would interfere with airport flight patterns. Acknowledgements from the FAA may be necessary.

C. **Maximum Ground Coverage.** Ground-mounted solar arrays may cover all portions of a lot except as limited by other regulations or by conditions of approval. These may include, but are not limited to: setback requirements of the zone, public access easements, additional buffering from sensitive adjacent uses, or environmental resource protection requirements.

D. **Maximum Height.**

1. ***Ground-mounted.*** The height of ground-mounted utility-scale solar energy facility shall meet the height requirements of the zone. Measurement to be taken from finished grade to the top of the solar panels.

2. ***Building-mounted.***

   a. Structures supporting solar energy systems on buildings or structures in agricultural zones may be erected above the building height by up to 3 feet, regardless of building height. The height shall be measured to the highest point of the structure and panel assembly; and

   b. Structures supporting solar energy systems on buildings and structures in all commercial and manufacturing zones where the building roof is flat, may be erected above the building height up to 15 feet, even if the building is built to or above the allowable building height. The height shall be measured to the highest point of the structure and panel assembly.

   (Provide Diagram)

E. **Parking Lots.** The Director of Planning may modify parking stall dimensions when the applicant is retrofitting existing parking lots to accommodate solar structures. The required width and length of a parking stall may be reduced to accommodate a structure supporting a solar energy system if it's in conformance with the following:

1. Support posts or similar structures shall be within 10 inches of a corner of the stall farthest from the access aisle or driveway;

2. When stalls are in tandem, only the stall farthest from the access driveway may have its required dimension reduced;

3. The reductions may not be applied to a parking stall for the disabled;

4. The number of parking accessible parking spaces and the layout shall comply with the latest requirements of the County of Los Angeles Building Code; and

5. The parking lot already exists and is not new construction.

(Provide Diagram)

F. **Setbacks.**

1. ***Agricultural zones.*** A utility-scale solar energy facility located within a agricultural zone shall be 30 feet from all property lines, including all accessory buildings and fencing.

2. ***Other zones.*** A utility-scale solar energy facility located in any zone except agricultural shall meet all of the setback requirements of the zone.

22.100.070 Additional Development Standards for Privately Owned Utility-Scale Wind Renewable Energy Facilities (WEF-US)

A. **Applicability.** In addition to the development standards in Section 22.100.050.B, utility-scale wind renewable energy facilities shall comply with the development standards in this Section.

B. **Clearance of Blade Above Finished Grade Level.** No portion of a WEF-US blade shall extend within 30 feet from the finished grade.

C. **Impacts to birds and bats.** All utility-scale wind renewable energy facilities 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 State of California Energy Commission and conditions of approval may be imposed by the Commission, consistent with these guidelines, to reduce significant impacts to birds and bats. Any WEF-US shall be prohibited to be located within the California Condor Preserve.

D. **Location.** The minimum distance and safe between a WEF-US, excluding guy wires and their anchors, shall be as depicted in Table 22.070.D-A Setback Requirements for Utility-scale Wind Energy Systems.

1. The required distance shall also comply with any applicable fire setback requirements pursuant to Section 4290 of the State Public Resources Code; and

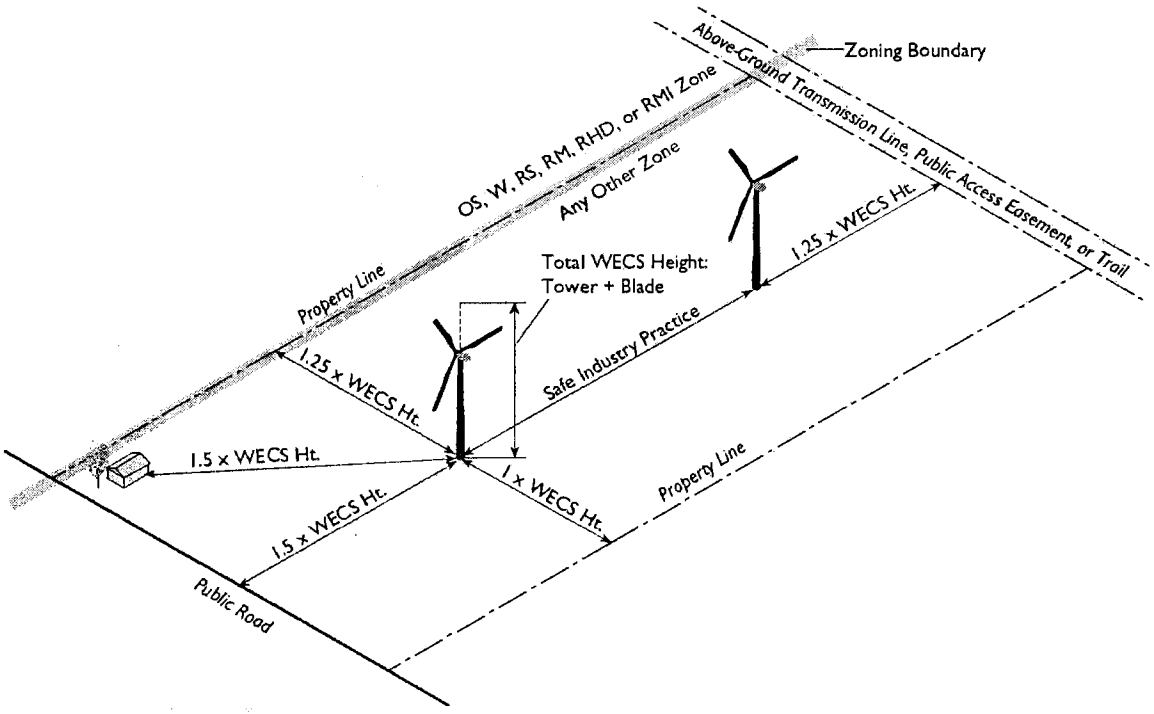
2. The setbacks required by this Section include any setback requirements within Section 22.100.060.

TABLE 22.070.D – A – SETBACK REQUIREMENTS FOR UTILITY-SCALE WIND ENERGY SYSTEMS

Setback From	Distance
On-Site Residence or Habitable Structure	4 x WEF–US facility height
Off-Site Residence or Habitable Structure	4 x WEF-US facility height
Public Road, Highway or Railroad	4 x WEF–US facility height
Public Access Easement, or Public Trail	4 x WEF-US facility height
Above Ground Transmission Line	1 x WEF-US facility height
Trees	As required by the Fire Department
County designated scenic highway	4 x WEF-US facility height

(Diagram to be revised, based on location decision)

UTILITY-SCALE WIND ENERGY FACILITIES



E. **Maximum Height.** Wind tower height shall not exceed 500 feet. A wind tower greater than 500 feet in height requires approval of a Variance pursuant to Section 22.134 of Title 22.

F. **Minimum Lot Size.** The minimum lot size for a WEF-US shall be five gross acres.

G. **Separation.** WEF-US must be separated from each other by the safe industry practice recommended by the manufacturer.

09/18/12

DRAFT

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
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GAIL FARBER, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

July 16, 2012

IN REPLY PLEASE
REFER TO FILE: LD-1

TO: John Gutwein
Land Use Regulation Division
Department of Regional Planning

Attention Alyson Steward

FROM: Anthony Nyivih
Land Development Division
Department of Public Works

SB

PROPOSED DRAFT RENEWABLE ENERGY ORDINANCE

Thank you for the opportunity to review the proposed draft renewable energy ordinance that was submitted to Public Works for review on May 15, 2012.

Prior to Regional Planning's approval of the ordinances, the following items need to be addressed:

Public Buildings

1. Section 22.100.030.A.2.b,c: These exempted items may not require a new permit from Regional Planning but may require a building permit from Public Works. Under the County of Los Angeles' building code, Maintenance Section 3401.2, the Building Official may require the reinspection of the building or structure. To avoid the applicant from thinking that they don't need a building permit or inspection, revise to include *"a building permit may be required for the reinspection of the building or structure."*

2. Section 22.100.050.B.17: The Uniform Building Code (UBC) is referenced instead of the current County of Los Angeles Building Code. A wind analysis is also required and in some cases may even govern. Revised the heading to "*Structural Safety*" and the wording should be revised to *"All energy facilities shall be designed and constructed based on the current County of Los Angeles Building Code."*

Section 22.100.050.B17.b: Geotechnical reports are required by the County of Los Angeles building code, and in some cases, the developer may think that a soils report is not required for structural design and review during the plan checking process. Revised to read, "A geotechnical investigation report may be required at the discretion of the Director."

3. Section 22.100.060.E3: Provide diagram for review.

4. Section 22.100.020.A: Include *"operation and maintenance buildings"* as other accessory structures.

5. Section 22.100.020.B: Include "*disposal" in the definition. "Removal of a utility-scale renewable energy facility from service, which includes the later actions of safe storage, dismantling, disposal, and site restoration."*

6. Section 22.100.020.C: Include "*Wind*" under heading. "*Wind Facility Height*"

7. Section 22.100.20.D: Redefine solar array to be "*mechanically integrated assembly of modules or panels with a support structure and foundation, tracker, and other components, as required, to form a direct-current, power-producing unit as defined in California Energy Commission."*

8. Section 22.100.20.E: Include "*Wind*" under heading. *"Wind Tower Height"*

9. Table 22.100.040-A: Distinguish "*Ground-mounted Utility-Scale"* and *"Structure-mounted Utility Scale."*

10. *Section* 22.100.050.A.2.c: Include "*and"* after the word "residents."

11. Section 22.100.060.E: Include "*Number of accessible parking spaces and the layout shall comply with the latest requirements of the County of Los Angeles Building Code."*

If you have any questions regarding the building and safety comments, please contact Ariel Palomares at (626) 458-3152 or apalomar@dpw.lacounty.gov.

Transportation

Aviation

1. Sections 22.98.060.B.2.a, 22.100.050.B.2.a, and 22.102.050.A.1: Include the California Department of Transportation Division of Aeronautics and the Department of Public Works, Aviation Division. For Section 22.98.060.B.2.a, include "*Navy*" as one of the regulatory agencies.

   The Director shall distribute copies of the proposed site plan, elevation plan, and location map to aviation-related regulatory agencies and facilities with flight operations in the vicinity of the proposed project as determined by the Director. Regulatory agencies include the Federal Aviation Administration (FAA), *California Department of Transportation Division of Aeronautics, Department of Public Works Aviation Division*, County Forester and Fire Warden, County Sheriff, Edwards Air Force Base, the *Navy*, and the Air Force's Plant 42. Any comments received within 30 days of distribution of the plans will be considered in establishing conditions of approval.

2. Section 22.98.060.B.2 and 22.100.050.2: Include a subsection to read the following:

   An accessory wind energy facility shall not penetrate the imaginary surfaces (primary, approach, transitional, horizontal, and conical surfaces) designated by the FAA for airports to enhance the safe and efficient use of navigable airspace as defined by Federal Aviation Regulation Part 77.

3. Section 22.100.050.2B.c: Recommend removal of this subsection.

4. Section 22.100.050B.2.d and 22.100.050B.2.e: Adjust the subsections accordingly.

5. Section 22.102.050.2: Include a subsection to read the following:

   A Temp Met Tower shall not penetrate the imaginary surfaces (primary, approach, transitional, horizontal, and conical surfaces) designated by the FAA for airports to enhance the safe and efficient use of navigable airspace as defined by Federal Aviation Regulation Part 77.

If you have any questions regarding the aviation comments, please contact Jason Morgan at (626) 300-4602 or jmorgan@dpw.lacounty.gov.

Traffic

1. Section 22.100.050.B.1: Add the following statement, *"All temporary and permanent ingress and egress access points to the facility shall be designed and sited to the satisfaction of Public Works and shall consider adequate spacing from intersections and sight distance."*

2. Section 22.100.050.B.11: Add the following statement, *"Fencing height and placement shall provide for minimum corner sight distance."*

If you have any questions regarding traffic and lighting comments, please contact Jeff Pletyak at (626) 300-4721 or jplety@dpw.lacounty.gov.

If you have any other questions or require additional information, please contact Ruben Cruz at (626) 458-4910 or rcruz@dpw.lacounty.gov.

RC:tb
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Chapter 22.100 Utility-Scale Solar and Wind Renewable Energy Facilities

Sections:

22.100.010 Purpose
22.100.020 Definitions
22.100.030 Applicability
22.100.040 Permit Requirements
22.100.050 Development Standards for Utility-Scale Renewable Energy Facilities
22.100.060 Development Standards for Utility-Scale Solar Renewable Energy Facilities
22.100.070 Development Standards for Utility-Scale Wind Renewable Energy Facilities

22.100.010 Purpose

This Chapter establishes regulations and permit requirements that support and facilitate the responsible utilization of the County's solar and wind resources. These regulations assure that utility-scale solar and wind renewable energy facilities are designed and located in a manner that minimizes visual and safety impacts on the surrounding community. The requirements encourage responsible development of these resources to generate and transmit clean, renewable energy while protecting the health, safety and welfare of residents and the environment.

22.100.020 Definitions

A. **Utility-scale renewable energy facility.** A renewable energy facility where energy generation is the primary use. In addition to the solar collector devices and wind turbines the facilities include related equipment and other accessory structures including substations, electrical infrastructure, transmission lines and other appurtenant structures. Includes utility-scale solar renewable energy facilities (SEF-US) and utility-scale wind renewable energy facilities (WEF-US).

B. **Decommissioning.** Removal of a utility-scale renewable energy facility from service, which includes the later actions of safe storage, dismantling, and site restoration.

C. **Facility Height.** Facility height for a wind energy facility shall be measured from the finished grade to the top of the blade in the vertical position.

D. **Solar array.** A linked collection of solar panels providing a single electrical or thermal output. Also known as photovoltaic array or PV array.

E. **Tower height.** Tower height for a wind energy facility shall be measured from the finished grade to the top of the tower, excluding the wind turbine generator, blades, and wind-measuring devices.

22.100.030 Applicability

A. **Requirements.**

1. The permit requirements and development standards in this Chapter apply to the construction of any utility-scale solar and wind renewable energy facilities.

2. A renewable energy facility approved prior to the effective date of this ordinance (DATE) shall not be required to meet the requirements of this Chapter, however:

   a. Any physical modification to any existing previously permitted renewable energy facility that increases the size, height, footprint or type of equipment shall be subject to this Ordinance. Only the modification or alteration is subject to this Ordinance;

   b. An increase in wattage due to technical advances does not require additional review as long as the components are of a similar size, shape and height; and

   c. Routine operation and maintenance or like-kind replacements do not require a new permit.

B. **Where Allowed.** The uses that are subject to the standards in this Chapter shall be located only where allowed by the base zone, in conformance with Table 22.100.040-A (Utility-Scale Renewable Energy Facilities Permit Requirements).

C. **Co-location.** Renewable energy facilities may be permitted on properties with other primary uses such as parking lots or on top of buildings. Any co-location renewable energy facility requires a conditional use permit.

D. **Other Similar Uses.** The Director may determine that a proposed renewable energy use not listed in Title 22 may be allowed. The development standards in this Chapter shall serve as the minimum requirements for any similar use. A conditional use permit is required for any similar use.

22.100.040 Permit Requirements Permit requirements for utility-scaled renewable energy facilities are provided in Table 22.100.040-A.

TABLE 22.100.040-A: UTILITY-SCALE RENEWABLE ENERGY FACILITIES PERMIT REQUIREMENTS						
USE	*Permit Required By Zone* *CUP = Conditional use permit* *DR = Director's Review* *_ = Use not allowed*					
	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, M-3, M-4,SR-D*
Solar Energy Facilities						
Ground-mounted Utility-Scale	_	CUP	_	_	CUP	CUP
Structure-mounted Utility-Scale	_	CUP	_	_	CUP	DR
Wind Energy Facilities						
Ground-mounted Utility-Scale	_	CUP	_	_	CUP	CUP
Structure-mounted Utility-Scale	_	CUP	_	_	CUP	DR

22.100.050 Development Standards for Utility-Scale Renewable Energy Facilities

A. **Permit Requirements.**

1. ***Conditional Use Permit for Utility-Scale Renewable Energy Facilities.*** A Conditional Use Permit is required for a utility-scale renewable energy facility in compliance with Part 1 of Chapter 22.56. The filing information and documents required are as listed in the Departments Information and Checklists.

2. ***Findings for Utility-Scale Renewable Energy Facilities.*** The Review Authority shall approve an application only if the applicant substantiates the following required findings:

   a. The findings for a conditional use permit per Section 22.56.090;

   b. How this request addresses the County's and State's goals for renewable energy;

   c. That the location, size, design, and operating characteristics of the proposed use will be compatible with adjacent uses, residents, buildings, with consideration given to:

i. Scale, bulk, coverage and density;

ii. The effect, if any, upon desirable community character; and

iii. The suitability of the site for the type and intensity of use or development which is proposed.

d. The following findings that address biotic resources:

i. That the requested development is designed to maintain water bodies, watercourses, and their tributaries in a natural state;

ii. That the requested development is designed so that wildlife movement corridors (migratory paths) are left in an undisturbed and natural state;

iii. That the requested development retains sufficient natural vegetative cover and/or open spaces to buffer critical resource areas from said requested development;

iv. That where necessary, fences or walls are provided to buffer important habitat areas from development; and

v. That roads and utilities serving the proposed development are located and designed so as not to conflict with critical resources, habitat areas or migratory paths.

3. ***Modifications.*** The review authority may modify any development standard specified in this Chapter upon finding that strict compliance with all of the required development standards would substantially and unreasonably interfere with the establishment of the proposed energy facility on the project site, and the requested modifications would not be contrary to the intent and purpose of this section.

B. **Development Regulations.** A utility-scale renewable energy facility shall comply with the following development standards:

1. ***Access roads.*** Temporary access roads utilized for initial installation shall be re-graded and re-vegetated to the pre-existing natural condition to the greatest extent possible after completion of the installation.

2. ***Aviation safety.***

a. The Director shall distribute copies of the proposed site plan, elevation plan, and location map to aviation-related regulatory agencies and facilities with flight operations in the vicinity of the proposed project, as determined by the Director. Regulatory agencies include the Federal

Aviation Administration (FAA), County Forester and Fire Warden, County Sheriff, Edwards Air Force Base, Navy, and Air Force Plant 42. Any comments received within 30 days of distribution of the plans will be considered in establishing conditions of approval.

b. Facilities that are located within the Military Installations and Operations Areas (MOA), as defined by the General Plan, shall be evaluated for any potential impacts to ensure the safety of the residents on the ground and continued viability of military operations within the MOAs. The review shall consider the following:

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

   ii. Uses that release into the air any substances such as steam, dust and smoke, which impair visibility;

   iii. Uses that produce light emissions, glare or distracting lights, which could interfere with pilot vision or be mistaken for airfield lighting; and

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

c. Any structure that exceeds the height limit established by the County's Airport Land Use Plan shall comply with all of the FAA's requirements for aviation safety.

d. A safety light that meets FAA standards shall be required for all facilities that exceed an overall machine height of 200 feet. A safety light may be required on shorter towers as deemed necessary by any of the aviation-related regulatory agencies. No other lights shall be placed on the tower.

e. A renewable energy facility shall not be located within the Runway Protection Zone of any airport, as defined in the County's Airport Land Use Plan.

3. ***Biological resource protection.*** All utility-scale renewable energy development must demonstrate that potential impacts to biological resources are minimized. Impact avoidance and minimization may be achieved by measures including, but not limited to, completion of an appropriate biological resources survey; avoidance and buffering of sensitive habitat; control of noxious weeds; assignment of a biological monitor; preparation of and

adherence to a habitat mitigation and monitoring plan, a weed control plan, and a revegetation program.

4. ***Compact site planning.*** Required permanent storage areas, administration, maintenance, and operations buildings, and equipment associated with renewable energy facilities shall be clustered and screened such that impacts to biological resources, agricultural resources, and visual quality are minimized.

5. ***Compliance monitoring.*** All applications shall include a Compliance Monitoring Plan for approval by the Review Authority. The Compliance Plan shall provide a means for assuring that the facility is constructed and operated in compliance with public health and safety, environmental and other applicable regulations, guidelines or conditions adopted by the County. A Compliance Plan prepared pursuant to Public Resources Code Section 25532 may be submitted to fulfill this requirement.

6. ***Construction and operational water supply.*** For projects located in un-adjudicated water basins, permit conditions shall specify terms of construction and maximum annual groundwater use for construction, and specify maximum annual groundwater use available for operations.

7. ***Cultural resource protection.*** *A* survey of cultural and archaeological resources on the project site shall be completed for the Review Authority's approval, and all State and federal requirements for tribal consultation and resource protection shall be followed. Conditions of approval may be imposed to ensure cultural resource protection.

8. ***Decommissioning Plan.*** Prior to obtaining any building permit, the permittee shall provide the Department of Regional Planning with a Decommissioning Plan. The Plan shall include, at a minimum, a detailed plan for decommissioning and deconstructing the facility, and for the restoration of the site. The Plan shall be developed to the satisfaction of the Director of Regional Planning and the Director of Public Works and subject to their review and approval. The Decommissioning Plan shall provide for, including, but not limited to, the following:

   a. Removal of solar panel and/or wind turbine structures and all appurtenant above-ground equipment;

   b. Removal of on-site overhead poles and above-ground electricity lines;

   c. Removal of permanent above-ground transmission lines and poles located in the public right-of-way if determined not usable by the

County or any other applicable public or private utility. Otherwise such transmission poles shall be allowed to remain;

d. Privately owned on-site substation may remain if public or private utility assumes ownership of the substation, otherwise it shall be removed;

e. Restoration of any disturbed soil and revegetation of the site to its preconstruction condition, with native vegetation similar to the vegetation in the surrounding vicinity;

f. If the site includes reusable permanent facilities usable by the owner of the property, such facilities may remain, otherwise such facilities shall be removed and the site restored to pre-existing condition to the greatest extent possible;

g. Restoration or reclamation of any project road to their pre-construction condition unless the then-existing owner of the site elects to retain the improved road for access throughout the site;

h. Documentation of the pre-construction condition of the project site, including, but not limited to, a photographic record; and

i. Details of the performance and financial assurance guarantees, explaining the amounts and schedule for the provision of such guarantees.

j. Authorization for the County to enter a site and perform any work related to implementing the approved decommissioning plan and utilizing the decommissioning financial assurance guaranties.

9. ***Discontinued Use.*** In the event that any portion of the facility is not in operational condition for a consecutive period of 12 months, operations for that portion of the site shall be deemed to have been discontinued and that portion of the facility shall be removed from the site within 90 days from the date that written notice is sent to the permittee from Regional Planning. Within this 90-day period, the permittee may provide the Director a written request and justification for an extension of up to 12 months to resume operations of that portion of the site, which request shall be subject to the satisfaction of the Director.

A second written request and justification for a second extension of up to 12 months may also be submitted, which the Director may grant if the request is adequately justified based on the Director's determination. In no event shall the operation of the facility or portion of the facility be discontinued for more than 36 months from the date such operations were first deemed

discontinued without being decommissioned pursuant to the approved Decommissioning Plan. Further, in no event shall any extension of the period to resume operations of any portion of the site pursuant to this standard be deemed to extend the term or expiration date of the approval.

10. ***Emergency Response Plan.*** An emergency response plan appropriate to the size and operation of the project shall be submitted for the Review Authority's approval. The plan shall address possible emergencies such as blow-outs, spills, earthquakes, fires, and floods. The operator will be responsible for ensuring that the project is equipped and staffed to carry out all contingency measures at any time.

11. ***Fencing Allowed.*** To protect utility-scale renewable energy facilities chain-link fences up to 8 feet in height, regardless of any other fencing standards. Such fences may not be located within 15 feet of a public street or highway. Drought-tolerant vegetation shall be preserved or placed between fences and property frontage on public right-of-way, wherever feasible. No fencing shall be required where projects employ full-time security guards or video surveillance.

12. ***Fugitive dust.***

    a. Fugitive dust emission shall be controlled by site watering, clean gravel, and application of soil stabilizers, limiting public access on unpaved areas, and posting roadways with reduced speeds. Dust shall be controlled during construction, operations, and removal and restoration activities.

    b. A project shall be designed so as to minimize the amount of grading necessary to reduce dust impacts.

    c. Project sites shall be revegetated with drought-tolerant native vegetation.

13. ***Lighting.*** Projects shall comply with Part 9 of Chapter 22.44 (Rural Outdoor Lighting District), if applicable. Night-lighting, limited to that required for safety and security, shall be shielded and directed downward to avoid lighting trespass and shall consist of: (a) motion sensor for entry-lighting to the on-site equipment structures; (b) light-sensor or motion-sensor lighting for the main plant access gate and operations and maintenance building doorways and parking areas; and (c) any and all light fixtures shall be full cut-off fixtures as defined in Part 9 of Chapter 22.44.

14. ***Maintenance.*** All equipment and facilities shall be maintained in an operational condition that poses no potential safety hazards nor becomes a

source of visual blight. Maintenance shall include, but not limited to, painting, regularly scheduled cleaning, mechanical/electrical repairs, structural repairs and security measures.

15. ***Noise.*** Noise-generating equipment in a renewable energy facility shall comply with Section 12.08.390 of the County Code, and no noise shall exceed maximum levels, as measured at the closest neighboring inhabited dwelling, school, church, hospital, or similar use, except during short-term events such as utility outages and severe windstorms.

16. ***Number and Spacing.*** More than one energy facility may be located on the same property if all of the location requirements and standards of this Chapter can be met for each facility.

17. ***Seismic Safety.***

    a. All energy facilities shall be constructed to withstand ground shaking, and must comply with the requirements for the applicable seismic zone as established in the Uniform Building Code.

    b. A geotechnical investigation may be required, at the discretion of the Director. Conditions of approval may be imposed to implement the safety recommendation of such investigations.

18. ***Signs.*** One project identification sign, located at each point of project ingress and egress, not to exceed fifty square feet in area and five feet in height may be erected on the project site. No other signs shall be installed other than safety and required warning signs.

19. ***Site disruption.***

    a. Within the project site the land area exposed and the vegetation removed during construction shall be the minimum necessary to install and operate the facility.

    b. Existing topography and watercourses shall be retained or restored to preexisting conditions.

    c. All facilities and access ways shall be designed to minimize erosion, sedimentation, or other impacts to the natural hydrology and drainage patterns of the site.

    d. Grading quantities shall be distinguished from general disturbance earthwork. Use of disc, leveling less than one foot in height or depth, and final rolling of earthwork area is not to be counted as grading quantity.

20. ***Transmission lines.*** Transmission lines shall be placed underground within existing rights-of-way to the greatest extent feasible. Where transmission lines are proposed to be constructed above ground due to barriers or other significant obstructions to underground construction, they should be planned and designed to minimize visual impacts as seen from public roads, other public viewing areas, and adjacent properties.

21. ***Visual impact.***

    a. Any energy project that is placed within the viewshed of a County or State designated Scenic Highway shall be assessed for its visual effects, and conditions of approval relating to siting, buffers, and the height and design of the facility may be imposed to minimize significant effects on the viewshed.

    b. Within the Coastal Zone, the placement of an energy project shall not obstruct public views of the ocean from a County or State designated Scenic Highway, unless specific provisions for such siting are provided for in the applicable Local Coastal Plan and Coastal Development Permit or Long Range Development Plan.

22. ***Water quality protection.*** Measures to protect groundwater and surface water from potential spills shall be incorporated into the project design, as appropriate, and any discharge of wastes into surface water must meet the requirements of the Regional Water Quality Control Board.

22.100.060 Additional Development Standards for Utility-Scale Solar Renewable Energy Facilities

A. **Applicability.** In addition to the development standards in Section 22.100.050.B, utility-scale solar renewable energy facilities shall comply with the development standards in this Section.

B. **Location.**

1. Solar panels shall be placed such that concentrated solar radiation or glare shall not be directed onto nearby properties or roadways.

2. Solar panels shall not be placed in the vicinity of any airport in a manner that would interfere with airport flight patterns. Acknowledgements from the FAA may be necessary.

C. **Maximum Ground Coverage.** Ground-mounted solar arrays may cover all portions of a lot except as limited by other regulations or by conditions of approval. These may include, but are not limited to: setback requirements of the zone, public access easements, or environmental resource protection requirements.

D. **Maximum Height.**

1. ***Ground-mounted.*** The height of a ground-mounted utility-scale solar energy facility buildings and structures shall meet the height requirements of the zone.

2. ***Structure-mounted.***

   a. Structures supporting solar energy systems agricultural zones may be erected above the building height by up to 3 feet, even if the building is built to or above the allowable building height;

   b. Structures supporting solar energy systems in all commercial and manufacturing zones where the building roof is flat, may be erected above the building height up to 10 feet, even if the building is built to or above the allowable building height.

   (Provide Diagram)

E. **Parking Lots.** Parking stall dimensions may be modified when retrofitting existing parking lots to accommodate solar structures. The required width and length of a parking stall can be reduced to accommodate a structure supporting a solar energy system if it's in conformance with the following:

1. Support posts or similar structures shall be within 10 inches of a corner of the stall farthest from the access aisle or driveway;

2. When stalls are in tandem, only the stall farthest from the access driveway may have its required dimension reduced; and

3. The reductions may not be applied to a parking stall for the disabled.

   (Provide Diagram)

F. **Setbacks.**

1. ***Agricultural and open space zones.*** A utility-scale solar energy facility located within an agricultural or open space zones shall be 30 feet from all property lines.

2. ***Other zones***. A utility-scale solar energy facility located in any zone except agricultural or open space shall meet all of the setback requirements of the zone.

22.100.070 Additional Development Standards Utility-Scale Wind Renewable Energy Facilities

A. **Applicability.** In addition to the development standards in Section 22.100.050.B, utility-scale wind renewable energy facilities shall comply with the development standards in this Section.

B. **Clearance of Blade Above Finished Grade Level.** No portion of a WEF-US blade shall extend within 30 feet from the finished grade.

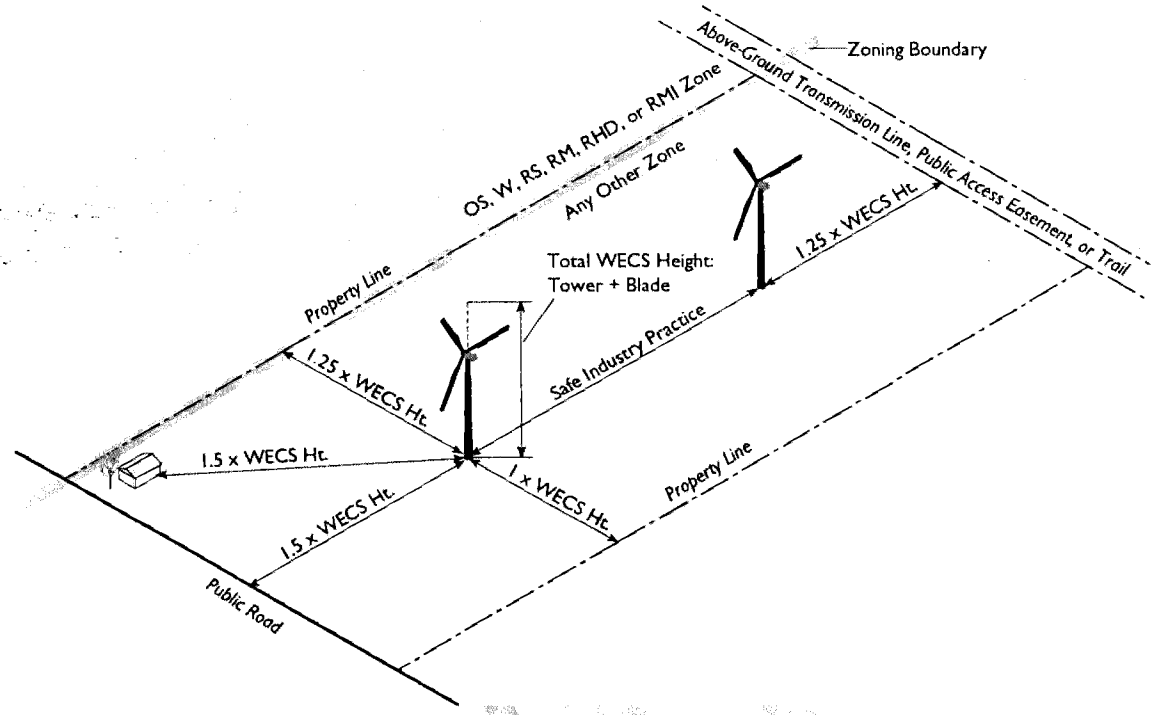
C. **Impacts to birds and bats.** All utility-scale wind energy conversion systems shall be designed, constructed and operated pursuant to the *California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development* published by the State of California Energy Commission and conditions of approval may be imposed by the Review Authority, consistent with these guidelines, to reduce significant impacts to birds and bats.

D. **Location.** The minimum distance and safe clearances between a WEF-US, excluding guy wires and their anchors, shall be as depicted in Table 22.070.D-A Setback Requirements for Utility-scale Wind Energy Systems. The required distance shall also comply with any applicable fire setback requirements pursuant to Section 4290 of the State Public Resources Code.

TABLE 22.070.E – A – SETBACK REQUIREMENTS FOR UTILITY-SCALE WIND ENERGY SYSTEMS	
Setback From	**Distance**
On-Site Residence or Habitable Structure	8 x WEF–US facility height
Public Road, Highway or Railroad	8 x WEF–US facility height
Public Access Easement, or Public Trail	8 x WEF-US facility height
Above Ground Transmission Line	1 x WEF-US facility height
Trees	As required by the Fire Department
County designated scenic highway	8 x WEF-US facility height

(Diagram to be revised, based on location decision)

FIGURE 22.100.070.E-B: LOCATION STANDARDS FOR UTILITY-SCALE WIND ENERGY FACILITIES



E. **Maximum Height.** Wind turbines shall not exceed 500 feet in height. A wind turbine greater than 500 feet in height requires approval of a Variance pursuant to Section 22.134 of Title 22.

F. **Minimum Lot Size.** The minimum lot size for a WEF-US shall be five acres.

G. **Required rotor-speed certification.** All permit applications shall include a statement by a California-registered professional engineer certifying that the rotor and overspeed controls have been designed and fabricated for the proposed use in compliance with good engineering practices, and that the proposed towers and rotors are structurally compatible. A certification supplied by the manufacturer may be accepted by the Review Authority in lieu of an engineer's certification.

H. **Separation.** WEF-US must be separated from each other by the safe industry practice recommended by the manufacturer.

05/11/2012

Chapter 22.98 Accessory Solar and Wind Energy Facilities

Sections:

22.98.010 Purpose
22.98.020 Definitions
22.98.030 Applicability
22.98.040 Permit Requirements
22.98.050 Development Standards for Accessory Solar Energy Facilities
22.98.060 Development Standards for Accessory Wind Energy Facilities

22.98.010 Purpose

The Section provides a uniform and comprehensive set of standards, conditions, and procedures for the placement of accessory solar and wind energy facilities to encourage the generation of electricity for on-site use, thereby reducing the consumption of electrical power supplied by utility companies. These regulations assure that such facilities are designed and located in a manner that minimizes visual and safety impacts on the surrounding community, while reducing significant regulatory barriers to the construction of accessory energy facilities.

22.98.020 Definitions

A. **Facility height.** Facility height for a wind energy facility shall be measured from the finished grade to the top of the blade in the vertical position.

B. **Solar Photovoltaic (PV) Systems.** A linked collection of solar panels providing a single electrical or thermal output.

C. **Tower height.** Tower height for a wind energy facility shall be measured from the finished grade to the top of the tower, excluding the wind turbine generator, blades, and wind-measuring devices.

22.98.030 Applicability

A. **Requirements.** The permit requirements and development standards in this Chapter apply to the construction and operation of any accessory wind and solar energy facility. The accessory facilities shall be subject to all applicable regulations of the zone in which they are proposed, except that the following standards shall

take precedence over regulations of the zone to the extent that they differ from the regulations of the zone.

B. **Where Allowed.** The uses that are subject to the standards in this Chapter shall be located only where allowed by the base zone, in conformance with Table 22.98.040-A (Accessory Energy Facilities Permit Requirements).

22.98.040 Permit Requirements

Permit requirements for accessory energy facilities are provided in Table 22.98.040-A.

TABLE 22.98.040-A: ACCESSORY ENERGY FACILITIES PERMIT REQUIREMENTS					
USE	*Permit Required By Zone* *P = Permitted use, zoning conformance review required* *MCUP = Minor conditional use permit* *_ = Use not allowed*				
	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, M-3, M-4,SR-D*
Solar Energy Facilities					
Accessory Use*	P	P	P	P	P
Wind Energy Facilities					
Accessory Use	MCUP	_	MCUP	MCUP	MCUP

* Refer to Section 22.98.050.A regarding residential exemptions

22.98.050 Development Standards for Accessory Solar Energy Facilities

A. **Applicability.**

1. ***Conformance with State Requirements.*** Accessory solar energy facilities shall be in conformance with the California Solar Rights Act (Section 714 of the Civil Code).

2. ***Residential Exemption.*** Roof-mounted solar photovoltaic systems on residential dwellings (single family or duplex), where the system does not project above the highest part of the existing roof, does not require review by Regional Planning.

B. **Permit Requirements.** A Zoning Conformance Review is required for a SEF-A in all zones. The filing information and documents required are as listed in the SEF-A Information Sheet and Checklist.

22.98.060 Development Standards for Accessory Wind Energy Facilities

A. **Permit Requirements.**

1. ***Minor Conditional Use Permit for WEF-A.*** A Minor Conditional Use permit is required for a WEF-A in compliance with Section 22.56.085. The filing information and documents required are as listed in WEF-A Information Sheet and Checklist.

2. ***Conditional Use Permit for WEF-A.*** A Conditional Use Permit is required for a WEF-A when:

   a. A Minor Conditional Use permit for a project has been denied by the Review Authority, but the applicant requests that the Commission hear the same application. The filing information and documents required are as listed in the WEF-A Information Sheet and Checklist.

   b. The applicant is requesting modifications to any of the WEF-A development standards listed in this Chapter.

3. ***Findings for WEF-A.*** The Commission shall approve an application only if the applicant substantiates the following required findings:

   a. The findings for a Conditional Use Permit per Section 22.56.090;

   b. How this request addresses the County's and State's goals for renewable energy;

   c. The proposed use complies with all applicable development standards specified in this Chapter, unless specifically modified as provided herein;

   d. The wind turbine generator is certified by a qualified, licensed engineer as meeting the requirements of wind turbine-specific safety or performance standards adopted by a national or international standards-setting body, including, but not limited to IEC (International Electric Code) standard 61400-2;

   e. The wind turbine generator has a manufacturer's warranty with at least five years remaining from the date the application is filed; and

   f. The model of equipment proposed has a documented record of at least one year of reliable operation at a site with average wind speeds of at least 12 mph.

4. ***Modification.*** If the applicant requests modification of any development standards, then the applicant shall submit to the satisfaction of the Commission:

a. Strict compliance with all of the required development standards would substantially and unreasonably interfere with the establishment of any proposed WEF-A in the subject property, and

b. The requested modifications would not be contrary to the intent and purpose of this Chapter.

B. **Development Standards.** An accessory wind energy system shall comply with the following development standards:

1. ***Automatic Overspeed Controls.*** A WEF-A shall be equipped with manual and automatic overspeed controls to limit the blade rotation speed to within the design limits of the WEF-A.

2. ***Aviation Safety.***

a. The Director shall distribute copies of the proposed site plan, elevation plan, and location map to aviation-related regulatory agencies and facilities with flight operations in the vicinity of the proposed project, as determined by the Director. Regulatory agencies include the Federal Aviation Administration (FAA), County Forester and Fire Warden, County Sheriff, Edwards Air Force Base, and Air Force Plant 42. Any comments received within 30 days of distribution of the plans will be considered in establishing conditions of approval.

b. A safety light that meets FAA standards shall be required for all facilities that exceed an overall machine height of 200 feet. A safety light may be required on shorter towers as deemed necessary by any of the aviation-related regulatory agencies. No other lights shall be placed on the tower.

c. An accessory wind energy facility shall not be located within the Runway Protection Zone of any airport, as defined in the County's Airport Land Use Plan.

3. ***Clearance of Blade Above Finished Grade.*** No portion of a WEF-A blade shall extend within 20 feet of the finished grade.

4. ***Climbing Apparatus.*** All climbing apparatus must be located at least 12 feet above the finished grade, and any tower must be designed to prevent climbing within the first 12 feet. If the tower is constructed so that it can be climbed within the first 12 feet, security fencing of at least five feet high is required around the tower. This fence shall be constructed of masonry block, woven or welded wire, chain link, wrought iron, metallic panels or similar materials approved by the Director. No barb or concertina wire fencing or barbed wire wrapped around the base of the tower is allowed.

5. ***Colors.*** The colors used in the construction materials or finished surface shall be muted and visually compatible with surrounding development. High-visibility colors, such as yellow, shall be prohibited.

6. ***Displacement of Parking Prohibited.*** The location of a WEF-A or Temp Met Tower shall not result in the displacement of required parking as specified in Part 11 of Section 22.52.

7. ***Guy Wires.***

   a. Safety wires shall be installed on the turnbuckles on guy wires of guyed towers. Anchor points for any guy wires for a tower shall be located within the property that the system is located on and not on or across any above-ground electric transmission or distribution lines.

   b. The point of attachment for the guy wires shall be enclosed by a fence six feet high or sheathed in a covering from three to eight feet above finished grade.

8. ***Location.*** The minimum distance and safe clearances for a WEF-A shall be as depicted in Table 22.98.070.C.4-A – Setback Requirements for Accessory Wind Energy Systems. The required distance shall also comply with any applicable fire setback requirements pursuant to Section 4290 of the State Public Resources Code.

TABLE 22.98.060.C.8 – A – SETBACK REQUIREMENTS FOR ACCESSORY WIND ENERGY SYSTEMS	
Setback From	**Distance**
On-Site Residence or Habitable Structure	1 x WEF–A facility height
Public Road, Highway or Railroad	1 x WEF–A facility height
Above Ground Transmission Line, Public Access Easement, or Public Trail	1 x WEF–A facility height
Property Line	1 x WEF–A facility height
Buildings Other Than a Residential Structure	6 feet
Trees	As required by the Fire Department
County designated scenic highway	1000 feet

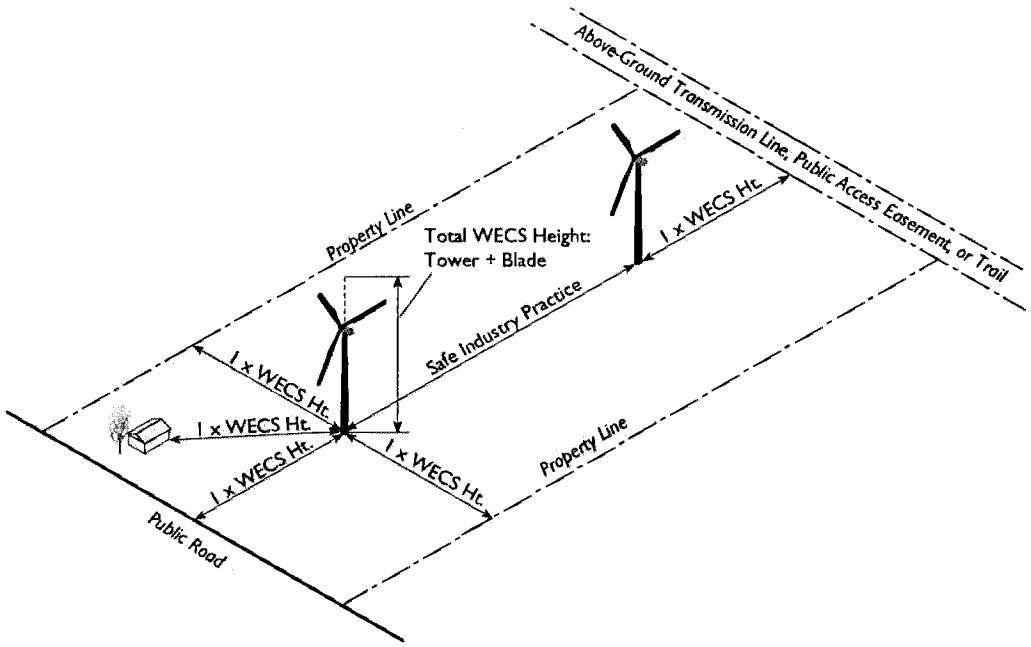
9. ***Maintenance.*** All equipment and facilities shall be maintained in an operational condition that poses no potential safety hazards. Maintenance shall include, but not limited to, painting, regularly scheduled cleaning, mechanical/electrical repairs, structural repairs and security measures.

10. ***Maximum Number and Separation.***

a. More than one WEF-A may be located on the same property if all of the location requirements and standards of this Chapter can be met for each facility. A maximum of two WEF-A units are permitted per five acres.

b. A WEF-A must be separated from one another by the safe industry practice.

FIGURE 22.98.060.C.10-A: LOCATION AND SEPERATION STANDARDS FOR ACCESSORY WIND ENERGY FACILITIES



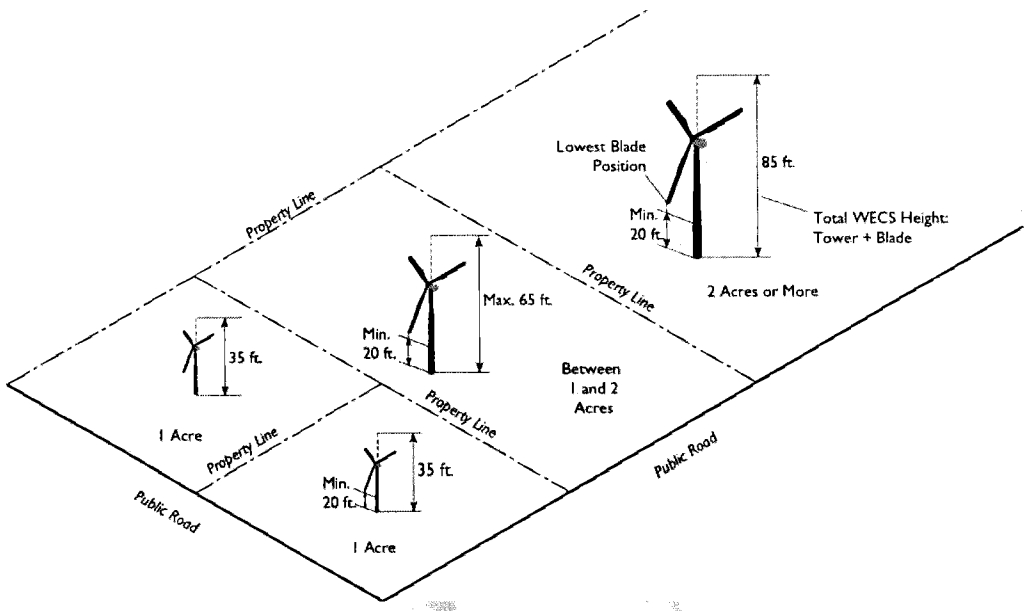
11. ***Maximum Tower Height.*** The maximum tower height shall not exceed:

a. The tower shall not exceed a height of 35 feet above finished grade for lots of less than one acre in size.

b. The tower shall not exceed a height of 65 feet above finished grade for lots from one acre to less than two acres in size.

c. The tower shall not exceed a height of 85 feet above finished grade for lots two acres or greater in size.

FIGURE 22.98.060.C.11-A: HEIGHT STANDARDS FOR ACCESSORY WIND ENERGY SYSTEMS



12. ***Noise.*** Noise from a WEF-A shall not exceed 60 dBA SEL (single event noise level), as measured at the closest neighboring inhabited dwelling, except during short-term events such as utility outages and severe windstorms.

13. ***Rooftop or building mounted.*** No rooftop- or building-mounted WEF-A shall exceed the maximum height limit of the zone in which it is located.

14. ***Minimum Lot Size.*** The minimum lot size for a WEF-A shall be 0.5 acres.

15. ***Removal.*** Within six months after the operation of a WEF-A has ceased or the permit for the use has expired, whichever occurs first, the permittee shall remove the facility, clear the site of all equipment, and restore the site as nearly as practicable to its condition prior to the installation of the facility. Failure to remove such facility as required above shall constitute a public nuisance. Prior to installation of any such facility, the permittee shall sign and file an affidavit with the Department of Regional Planning agreeing to remove the facility in the event it becomes inoperative for six months. In the event the facility is not so removed within 90 days after the permittee's receipt of notice requiring removal, the County may itself cause the facility to be removed, and the permittee shall be required to pay the County's costs of removal.

16. ***Signs.*** One sign, limited to 18 inches in length and one foot in height, shall be posted at the base of the 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.

17. ***Visual Effects.***

a. The top of a WEF-A facility shall be located at least 25 vertical feet and 50 horizontal feet from a significant ridgeline.

b. Any WEF-A that is placed within the viewshed of a designated Major, Secondary, Limited Secondary, or Scenic Highway shall be assessed for its visual effects, and appropriate conditions relating to siting, buffers, and design of the facility shall be applied.

c. Within the Coastal Zone, the placement of an energy project shall not obstruct public views of the ocean from a County or State designated Scenic Highway, unless specific provisions for such siting are provided for in the applicable Local Coastal Plan and Coastal Development Permit or Long Range Development Plan.

4/23/2012

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Chapter 22.102 Temporary Meteorological Towers

Sections:

22.102.010 Purpose
22.102.020 Definitions
22.102.030 Applicability
22.102.040 Permit Requirements
22.102.050 Development Standards for Temporary Meteorological Towers

22.102.010 Purpose

The Section provides minimum standards and procedures for the placement of temporary meteorological towers (Temp Met Towers) for the purpose of establishing the viability of wind-generated energy for both accessory and utility-scale renewable energy facilities. These regulations assure that such towers are designed and located in a manner that minimizes visual and safety impacts on the surrounding community.

22.102.020 Definitions

A. **Facility Height.** Facility height for a Temp Met Tower shall be measured from the finished grade to the top of the vertical component that elevates the wind measuring devices above the ground.

B. **Temporary Meteorological Tower.** An interim meteorological station that gathers atmospheric information. This information may include: temperature, humidity, solar radiation, wind speed, direction, duration, intensity and regularity. Includes ground-mounted and facilities mounted on existing structures.

22.102.030 Applicability The permit requirements and development standards in this Chapter apply to the construction and operation of Temp Met Towers for temporary use on and for the site where the Temp Met Tower is located. The Temp Met Towers shall be subject to all applicable regulations of the zone in which they are proposed, except that the following standards shall take precedence over regulations of the zone to the extent that they differ from the regulations of the zone.

22.102.040 Permit Requirements

A. **Allowed Use.** Temp Met Towers may be located in any zones except Watershed and Open Space. The Temp Met Tower shall be used only to measure or evaluate wind and other relevant conditions on and as to the land or site on which the tower is to be located.

B. **Time Requirement.** A Temp Met Tower may be placed on the property for no longer than thirty-six months from the date of the permit approval.

C. **Director's Review for Temp Met Towers.**

1. A Director's Review is required for Temp Met Towers. The filing information and documents required are as listed in the Temporary Meteorological Tower Information Sheet and Checklist.

2. In approving a Director's Review application for a Temp Met Tower, the Director shall impose conditions and all applicable development standards as specified in this Chapter and any other conditions the Director determines to be necessary to ensure that such use will be in accord with the findings.

22.102.050 Development Standards for Temporary Meteorological Towers

A. **Aviation Safety.**

1. The Director shall distribute copies of the proposed site plan, elevation plan, and location map to aviation-related regulatory agencies and facilities with flight operations in the vicinity of the proposed project, as determined by the Director. Regulatory agencies include the Federal Aviation Administration (FAA), County Forester and Fire Warden, County Sheriff, Edwards Air Force Base, Air Force Plant 42, and the Navy. Any comments received within 30 days of distribution of the plans will be considered in establishing conditions of approval.

2. Facilities that are located within the Military Installations and Operations Areas (MOA), as defined by the General Plan, shall be evaluated for any potential impacts to ensure the safety of the residents on the ground and continued viability of military operations within the MOAs. The review shall consider the following:

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

   ii. Uses that release into the air any substances such as steam, dust and smoke, which impair visibility;

iii. Uses that produce light emissions, glare or distracting lights, which could interfere with pilot vision or be mistaken for airfield lighting; and

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

3. A safety light that meets FAA standards shall be required for all facilities that exceed an overall machine height of 200 feet. A safety light may be required on shorter towers as deemed necessary by any of the aviation-related regulatory agencies. No other lights shall be placed on the tower.

4. A Temp Met Tower shall not be located within the Runway Protection Zone of any airport, as defined in the County's Airport Land Use Plan.

B. **Climbing Apparatus.** All climbing apparatus must be located at least 12 feet above the finished grade, and any tower must be designed to prevent climbing within the first 12 feet. If the tower is constructed so that it can be climbed within the first 12 feet, security fencing of at least five feet high is required around the tower. This fence shall be constructed of masonry block, woven or welded wire, chain link, wrought iron, metallic panels or similar materials approved by the Director. No barb or concertina wire fencing or barbed wire wrapped around the base of the tower is allowed.

C. **Colors.** The colors used in the construction materials or finished surface shall be muted and visually compatible with surrounding development. High-visibility colors, such as yellow, shall be prohibited.

D. **Displacement of Parking Prohibited.** The location of a Temp Met Tower shall not result in the displacement of required parking as specified in Part 11 of Section 22.52.

E. **Guy Wires.**

1. Safety wires shall be installed on the turnbuckles on guy wires of guyed towers. Anchor points for any guy wires for a tower shall be located within the property that the system is located on and not on or across any above-ground electric transmission or distribution lines.

2. The point of attachment for the guy wires shall be enclosed by a fence six feet high or sheathed in a covering from three to eight feet above finished grade.

F. **Location.** The minimum distance and safe clearances between a Temp Met Tower, excluding guy wires and their anchors, shall be as depicted in Table 22.102.070.F -A – Setback Requirements for Temp Met Towers. The required distance shall also

comply with any applicable fire setback requirements pursuant to Section 4290 of the State Public Resources Code.

TABLE 22.102.060.F – A – SETBACK REQUIREMENTS FOR TEMP MET TOWERS	
Setback From	**Distance**
On-Site Residence or Habitable Structure	1 x facility height
Public Road, Highway or Railroad	1 x facility height
Above Ground Transmission Line, Public Access Easement, or Public Trail	1 x facility height
Property Line	1 x facility height
Buildings Other Than a Residential Structure	6 feet
Trees	As required by the Fire Department
County designated scenic highway	1000 feet

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

H. **Maximum Number and Separation.**

1. More than one Temp Met Tower may be located on the same property if all of the location requirements and standards of this Chapter can be met for each tower. A maximum of two Temp Met Towers are permitted per five acres.

2. Temp Met Towers must be separated from each other by the safe industry practice.

I. **Maximum Facility Height.** The maximum height of Temp Met Towers installed prior to the installation of an accessory or utility-scale wind energy facility shall not exceed:

1. The tower shall not exceed a height of 35 feet above finished grade for lots of less than one acre in size.

2. The tower shall not exceed a height of 65 feet above finished grade for lots from one acre to less than two acres in size.

3. The tower shall not exceed a height of 85 feet above finished grade for lots two acres or greater in size.

J. **Minimum Lot Size.** The minimum lot size for a Temp Met Tower shall be 0.5 acres.

K. **Noise.** Noise from a Temp Met Tower shall not exceed 60 dBA SEL (single event noise level), as measured at the closest neighboring inhabited dwelling.

L. **Removal.** Within six months after the operation of a Temp Met Tower has ceased or the permit for the use has expired, whichever occurs first, the permittee shall remove the facility, clear the site of all equipment, and restore the site as nearly as practicable to its condition prior to the installation of the facility. Failure to remove such facility as required above shall constitute a public nuisance. Prior to installation of any such facility, the permittee shall sign and file an affidavit with the Department of Regional Planning agreeing to remove the facility in the event it becomes inoperative for six months. In the event the facility is not so removed within 90 days after the permittee's receipt of notice requiring removal, the County may itself cause the facility to be removed, and the permittee shall be required to pay the County's costs of removal.

M. **Rooftop or structure-mounted.** No rooftop- or structure-mounted Temp Met Tower shall exceed the maximum height limit of the zone in which it is located.

N. **Signs.** One sign, limited to 18 inches in length and one foot in height, shall be posted at the base of the 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.

5/11/2012