

PLANNING COMMISSION STAFF REPORT

To: Honorable Chairman & Planning Commission
From: Robert Kirschmann, Associate Planner
Date: May 5, 2011
For Commission Meeting: May 12, 2011

Subject: Ordinance No.
Wind Energy Conversion Systems (WECS) Regulations
Draft Ordinance

Prior Commission Review: The Planning Commission discussed this matter at its meeting of March 22, 2011. There were also related comments made during Public Hearing for an independent WEC application on Antelope Trail at the meeting of April 26, 2011.

The Draft Ordinance has not been modified since the March 22, 2011 Commission meeting. The Commission made several suggestions for Draft Ordinance, and the Commission's minutes and Staff Report from the March 22, 2011 meeting are attached to this Staff Report.

Recommendation: That the Planning Commission reviews the draft ordinance, accepts public testimony, and provides direction to staff.

Executive Summary: The Town of Yucca Valley has no regulations for the installation of renewable energy systems, such as wind generators. The Town has recently received a number of inquiries for the installation of both roof-mounted and frees standing wind generators.

Prior to the enactment of land use regulations, the Planning Commission is required by State law to hold no less than one public hearing, and forward a recommendation to the Town Council for consideration.

Discussion: At its meeting of March 22, 2011, the Planning Commission reviewed the draft WECS ordinance, accepted public comment, and requested staff to schedule a public hearing in order to obtain additional input and comment for Commission deliberations.

As the Commission is aware, continued growth in the use of alternative energy technology drives the need to develop regulations for these types of technology within the community. The intent of the regulations and standards contained in the Draft Ordinance is to ensure compatibility with building architecture, the neighborhood, and community appearance, and to minimize the visual appearance of WECS within neighborhoods and the community. Additionally, the regulations and standards ensure proper design, placement, construction and operational standards to promote the health, safety and welfare of the community.

Wind energy conversion systems convert wind energy to electrical energy. Large or commercial wind energy conversion systems are often used for commercial wind farms that generate hundreds of megawatts; whereas, small wind energy conversion systems are used for noncommercial applications and typically generate between 400 watts and 100 kilowatts, which can offset a portion of the energy needs of a home or business.

The use of small wind energy conversion systems is encouraged by the California Government Code, Section 65892.13(a)(2) which states: "Wind energy is an abundant, renewable and nonpolluting energy resource. When converted to electricity, it reduces our dependence on nonrenewable energy resources and reduces air and water pollution that result from conventional sources. Distributing small wind energy systems also enhances the reliability and power quality of the power grid, reduces peak power demands, increases in-state electricity generation, diversifies the State's energy supply portfolio and makes the electricity supply market more competitive by promoting consumer choice."

Wind energy conversion systems typically require wind speeds in excess of ten miles per hour; however, newer technologies are producing systems that may require wind speeds less than ten miles per hour to generate electricity. According to the California Wind Sources map from the California Energy Commission, the Yucca Valley area is shown as potentially having sources of wind to support wind energy conversion systems; however, this map is based on historical weather data sources. It will be incumbent upon persons intending to utilize a wind energy conversion system to verify that there is sufficient sustainable wind to ensure viability of the system.

Allowing small wind energy conversion systems within the Town is a quality of life issue for Yucca Valley residents; however, there are currently no standards in place to regulate them. Establishing standards, which allow small wind energy conversion systems to be used within the Town of Yucca Valley, will enable interested persons to reduce their dependency on utility provided electricity, to reduce their monthly electricity bills, to reduce green-house gas emissions which cause air pollution, and to support a renewable non-polluting energy source.

As the Commission is aware based upon public comments received on this matter, there are divergent views on what constitutes "quality of life" on land use matters. The Commission has heard public comments regarding the compatibility of WECS in residential neighborhoods, both based upon lot size, view sheds, noise, safety, potential impact to property values, etc.

Recent discussions with property owners have identified the desire to install both roof mounted and free standing (pole) WECS. The following information is provided as background information for the Commission's consideration of the Draft Ordinance.

ROOF MOUNTED:

One option available is for roof mounted WECS. These would be installed near the peak of the roof in order to be placed to receive the highest wind speeds. Though exact specifications can vary from model to model, recent discussions have identified

models with a blade diameter of approximately 60" and mounted approximately 24" above the roof for an overall height of 7'. There may be multiple WECS proposed or required to obtain the best overall system performance.

Since these structures are considerably larger (60" blade diameter mounted 24" above roof) than most roof mounted equipment the Planning Commission may wish to discuss if roof mounted WECS are appropriate for the Town. If the Commission feels that these are appropriate then a discussion should take place in regards limiting the number of these units that can be installed

POLE MOUNTED:

Another option that is available is a pole mounted or tower WECS. The design of pole mounted WECS can vary from having one fan to three fans mounted on a single pole. The height of freestanding systems commonly start at 25', though the majority have tower heights of 33' (or larger) plus 6' blades, bringing the total height to 39'. The Town's residential Land Use Districts all have a maximum height limitation of 35' for the primary structure. Pursuant to Section 87.0405, Permitted Structural Height Increases, maximum structure height may be increased by 50% subject to the approval of a Land Use Compliance Review. Section 87.0405(C) (18) is the only reference to wind mills found in the Development Code. This section would allow the tower to be increased in height to 52.5'.

One of the primary issues or questions is the compatibility of these accessory structures in residential land use districts. With the heights necessary for maximum generation and efficiencies of the systems, these accessory structures will make a "predominant" appearance in neighborhoods, especially in neighborhoods with smaller lot sizes.

While staff has researched a number of other agency standards, those standards vary from no standards to being highly regulated including lot size, height, color, noise levels, setbacks and locations on individual properties.

The following table identifies basic regulations from a few jurisdictions that staff was able to review.

| Residential Wind Energy Systems | Roof mounted | Min lot size | Tower height | setbacks | # of towers |
|--|--|---------------------|--|---------------------------|---------------------|
| Town of Yucca Valley | No Standards | No standards | 35' | Per building code | No standards |
| San Bernardino County | No discussion | 1 acre | Varies from 52.5' to 120' | Equal to height of system | 1 |
| Town of Apple Valley | Yes, not to exceed residential height limit | 2 acres | No maximum | 110% of height | 1 per developed lot |
| City of 29 Palms | No standards | none | 35', 52.5' subject to Minor Use Permit | 1 ¼ times the height | 1 |
| City of Palmdale | Not permitted in residential land use districts | | | | |
| City of Hemet | No regulations, likely to follow zoning district standards | | | | |
| City of San Jacinto | No regulations | | | | |
| City of Chino | No standards | 1 Acre | Not to exceed max building height for zone | 1' for every 1' in height | Not specified |

Summary: While the use of alternative energy resources is desired, careful evaluation of their implementation must be conducted in order to eliminate undesirable impacts to the surrounding area and the community.

Alternatives: None recommended

Fiscal impact: N/A

Attachments:

1. Draft Ordinance
2. Planning Commission minutes and Packet from 3-22-11
3. Photos/ background material on wind generators
4. Apple Valley Code Section 9.78 Wind Energy Systems
5. San Bernardino County Code Section 84.26.010
6. City of 29 Palms, page 8-4 of Ordinance 229
7. City of Hesperia section 16.16.063
8. City of Palmdale section 99.01
9. City of Lancaster Ordinance 954
10. City of Lancaster section 17.08.335
11. California Wind Resources maps (color)

ORDINANCE NO.

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF YUCCA VALLEY, CALIFORNIA, AMENDING TITLE 8, DIVISION 4, CHAPTER 4, SECTION 84.0410 OF THE COUNTY OF SAN BERNARDINO DEVELOPMENT CODE AS ADOPTED BY THE TOWN OF YUCCA VALLEY RELATING TO WIND ENERGY CONVERSION SYSTEMS (WECS).

The Town Council of the Town of Yucca Valley, California, does ordain as follows:

SECTION 1 Code Amended

Title 8, Division 4, Chapter 4, Section 84.0410 of the San Bernardino County Development Code as adopted by the Town of Yucca Valley is hereby amended as follows:

"CHAPTER 4"

ADDITIONAL USES

SECTIONS:

84.0410 LIST OF ADDITIONAL USES.

- (f) Wind Energy Conversion Systems (WECS)
 - 1. Purpose
 - 2. Administration
 - 3. Definitions
 - 4. Private, Non-commercial, WECS
 - 5. General Requirements for the Installation of WECS

1. PURPOSE

This Chapter is intended to establish regulations and procedures for the review of any WECS proposed for installation within the Town of Yucca Valley that are not otherwise permitted or regulated in this Development Code. It is intended to provide a mechanism to take advantage of renewable, green energy while minimizing potential adverse effects on surrounding properties and infrastructure or on the public health, safety and welfare.

A. APPLICABILITY

No WECS shall be erected, placed, displayed, or maintained in any district within the Town of Yucca Valley, except as specifically allowed by this Chapter. The number, design, type and size of such WECS, as outlined in this Chapter, are intended to be minimum standards

which do not necessarily ensure compatibility with building architecture, the neighborhood, and community appearance. Therefore, in addition to these standards, consideration shall be given to a WECS relationship to the overall appearance of the subject property as well as the surrounding community. Compatible design, simplicity and effectiveness, and conformance to the design guidelines provided by Section 88.0101, Single Residential Design Standards, and Commercial Design Guidelines approved by the Town Council, are to be used in determining approvals.

A Land Use Compliance Review approved by the Planning Commission, as provided in Section 83.030305 of this Code shall be required prior to the installation of any and all WECS. The Commission may approve, conditionally approve, modify or deny requests for the installation of WECS. The Commission may establish conditions and limitations necessary to minimize detrimental effects on surrounding property and/or the general public.

A Land Use Compliance Review allows for the architectural/aesthetic review of structures permitted by this Code for the various zoning districts. A Land Use Compliance Review is not required if a Conditional Use Permit has been submitted and approved where the Commission has addressed the aesthetics and site design issues required under a Land Use Compliance Review.

2. ADMINISTRATION

A. Administration. The Director is authorized to administer and enforce the provisions of this Chapter, unless otherwise provided in this Chapter. The Director may designate a representative to act in his/her place.

B. Interpretation

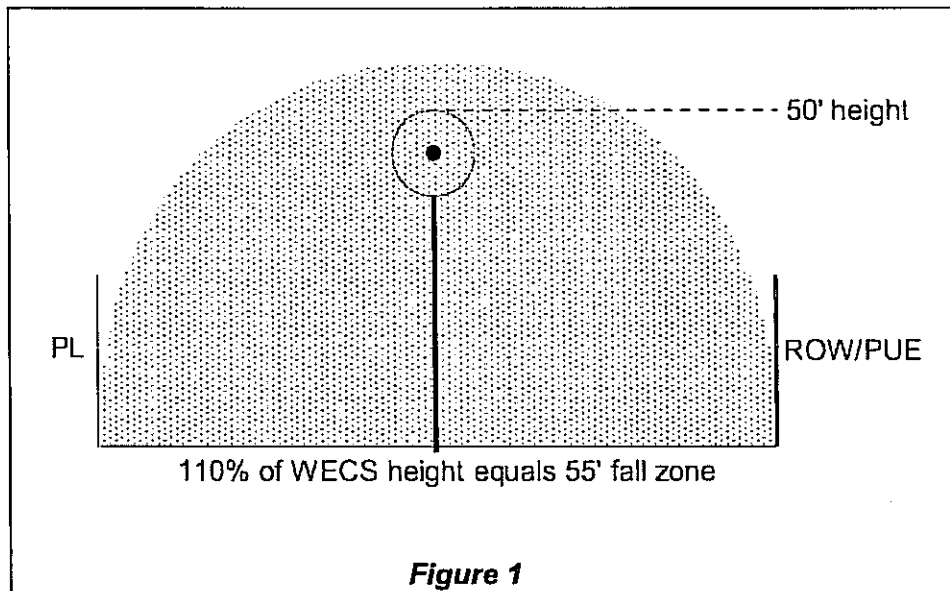
- 1.** This Chapter shall be interpreted in a manner which best fulfills the intent of its provisions.
- 2.** Questions arising from the application of the Chapter shall be interpreted by the Director. If any inconsistency still exists in the interpretation, an appeal application shall be referred to the Planning Commission for its determination.

C. Appeals

- 1.** Any decision or determination by the Director may be appealed to the Planning Commission in accordance with the provisions of this Development Code.
- 2.** Any decision of the Planning Commission may be appealed to the Town Council in accordance with the provisions of this Development Code.

3. DEFINITIONS

Fall Zone. The potential fall area for the wind energy conversion system. The fall area is measured by using 110 percent of the total height as the radius around the center point of the base of the tower. (Figure 1)



Height. The vertical distance from ground level to the top of the WECS, including the blade when at its highest point.

Net-Metering Service. A service to an electric consumer under which electric energy generated by that electric consumer from an eligible on-site generating facility and delivered to the local distribution facilities may be used to offset electric energy provided by the electric utility to the electric consumer during the applicable billing period. Net Metering does not allow the sale of power back to the electric company or into the wholesale electricity market.

Over-Speed Control. A mechanism used to limit the speed of blade rotation to below the safe design limits of the WECS.

Private, Non-Commercial WECS. A single WECS installed on a developed property for the purposes of providing energy for on-site consumption.

Wind Energy Conversion System (WECS). A device designed or used for the purpose of converting wind energy into electrical or mechanical power, including all interconnection and auxiliary equipment.

Wind Farm. Multiple WECS installed at a single property or area for the purpose of generating larger quantities of electrical or mechanical power for transmission to a public or private utility.

4. PRIVATE, NON-COMMERCIAL, WECS

The installation of a private, non-commercial, WECS is permitted as an accessory use within any zoning designation upon approval of a Land Use Compliance Review by the Planning Commission. The Land Use Compliance Review process grants the Planning Commission authority to modify these requirements based upon neighborhood compatibility.

A. Lot Size. WECS shall not be installed upon a lot or recorded parcel of less than two (2) net acres in size.

B. Setback Requirements.

1. WECS must be located behind the rear of the primary structure.
2. WECS shall be setback a distance equal to the fall zone from any property line, overhead utility lines, utility easement or right-of-way.

C. Height. Free-standing and Roof-top mounted WECS are subject to the maximum height permitted within the applicable zoning designation.

D. Noise. No WECS shall generate a sound level in excess of 50 dBA, as measured at the nearest property line, during the hours of 7:00 a.m. to 10:00 p.m., nor a level in excess of 40 dBA during the hours of 10:00 p.m. to 7:00 a.m. except during extreme weather conditions.

E. Design Standards.

1. During the Land Use Compliance Review process, each WECS shall be reviewed by the Planning Commission to ensure the WECS are installed in a manner that will not significantly detract from existing views.
2. WECS must consist of non-reflective materials.
3. Monopole mounted WECS are preferred.
4. WECS requiring the use of guyed wires are discouraged; however, guyed wires may be permitted based upon neighborhood compatibility.

F. Net-Metering. Private, noncommercial WECS may be net-metered with written authorization provided by the utility company.

G. Only one (1) WECS shall be permitted per developed lot. Any additional WECS, or any WECS located on a vacant parcel, will be considered a "wind farm" and subject to the Planning Commission's review and approval of a Conditional Use Permit.

H. Each WECS shall be operated and maintained in sound working order in conformance with the manufacturer's specifications at all times. This maintenance shall include the physical appearance of the device so it does not present an unsightly appearance. A copy of the manufacturer's specifications and use instructions shall be submitted with any application for review by the Planning Commission and/or Town Council and shall be retained within the public hearing record/file for that application.

I. Any WECS that is not operated for a continuous period of six (6) months shall be considered abandoned, and the owner of such WECS shall remove the same within thirty (30) days of receipt of written notice from the Town notifying the owner of such abandonment. If the owner does not remove the equipment, along with all associated and ancillary equipment, devices, structures or support for that WECS, or does not request a hearing before the Planning Commission on the issue of whether the equipment is abandoned and subject to removal, the Town may require removal of the equipment and store it in a secure location. The owner shall have fourteen (14) days from the date the Town provides the owner with written notice of removal of the equipment, and notification of the current location of equipment, to reclaim the equipment. If the equipment is not reclaimed in accordance with this section, the Town may dispose of the equipment in accordance with the Town's existing policy for disposal of abandoned or lost property.

Failure to remove an abandoned WECS within said thirty (30) days shall be grounds to remove the device at the owner's expense.

J. A Building Permit, issued by the Town of Yucca Valley, shall be obtained prior to the installation of a WECS system.

K. Every WECS shall be installed strictly per the Manufacturer's Installation specifications, or as modified and certified by an Engineer licensed by the State of California.

L. The Commission may impose Conditions of Approval that are necessary to address health, safety, community welfare and community aesthetic issues or concerns raised during the Land Use Compliance Review process

M. Noticing of the Land Use Compliance Review shall include all properties within 1,000 feet of the site requesting the installation of a WECS.

N. No WECS, or associated and ancillary equipment, batteries, devices, structures or support(s) shall be located within any required front, side or rear yard setback area.

O. No wiring between a WECS and the main or accessory structure on site, or any associated and ancillary equipment, batteries, devices, structures or support(s) for any WECS, shall be located above ground level.

P. When a WECS system is removed from a site, all associated and ancillary equipment, batteries, devices, structures or support(s) for that system shall also be removed.

5. GENERAL REQUIREMENTS FOR THE INSTALLATION OF ANY WECS

A. The safety of the design and construction of all WECS, including towers and associated equipment, shall be certified by the manufacturer or by an Engineer Licensed by the State of California.

B. Safety wires shall be installed on the turnbuckles on guy wires of guyed WECS towers.

C. All WECS towers shall be equipped with manual and automatic over-speed controls. The rotor and over-speed control design and fabrication shall conform to good engineering practices and shall be certified by the manufacturer or by an Engineer Licensed by the State of California.

D. All installations shall conform to the requirements of the latest adopted version of the National Electrical Code, adopted by the Town of Yucca Valley.

E. The compatibility of the tower structure with the rotors and others components of the WECS shall be certified by the manufacturer or by an Engineer Licensed by the State of California.

F. All WECS towers or facilities shall either have tower climbing apparatus located not closer than twelve (12) feet to the ground or be un-climbable by design for the first twelve (12) feet.

G. WECS sited on top of, or attached to and extending above the roof line of, an existing structure shall comply with all applicable provisions of the latest version of the Uniform Building Code as adopted by the Town of Yucca Valley. Certification by an Engineer Licensed by the State of California shall be required. Any device located in such a manner shall be subject to the height limitations of the underlying zoning.

H. No part of a WECS tower or facility shall be located upon, within or extend over a drainage, utility or other established easement(s). No portion or part of the WECS shall be located on or over any property line(s). The base of any WECS or the guy wire anchors of a guyed WECS tower shall not be located in any required minimum front, side or rear setback area. No such WECS shall be located between the main structure on site and any existing or planned public right-of-way.

I. Clearance between any WECS and existing or planned electrical lines shall be in compliance with the requirements of the most recently adopted edition of the National Electrical Safety Code.

J. Efforts should be made to site WECS to reduce the likelihood of blocking or reflecting television or other communications signals and from blocking established views. If signal interference occurs, the WECS owner shall make all reasonable efforts to resolve the problem. If the problem(s) cannot be eliminated or reduced to an acceptable level by the individual experiencing the interference, then the WECS owner shall shut down and remove the source of interference within thirty (30) days from the date of receiving official notice from the Town of Yucca Valley.

K. Nothing within this Chapter shall be construed to allow the infringement of the enjoyment rights of a property owner by another by the installation, maintenance or use of a WECS.

L. The owner of any WECS shall provide, as part of the submission for review by the Planning Commission of a Land Use Compliance Review, proof of liability insurance that specifically addresses the installation, use and maintenance of the WECS.

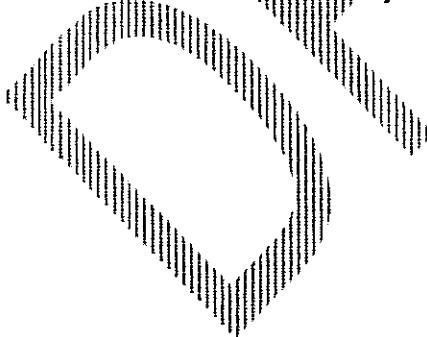
M. Homebuilt, experimental and prototype WECS shall be allowed provided they comply with all applicable regulations detailed within this Chapter.

N. Intentionally left blank.

O. The interconnections between a wind turbine and the electric utility shall be in compliance to the most recently adopted edition of the National Electrical Safety Code and all Federal regulations. Certification shall be submitted in writing by the owner that the WECS will automatically disconnect from the utility when there is no power input from the utility.

P. Battery storage units associated with a WECS shall be in compliance with the latest adopted edition of the National Electric Code or other applicable Codes and shall be inspected by an inspector for the Town of Yucca Valley.

Q. The safety of structural components of reconstructed or reconditioned WECS, and the compatibility of the rotors of reconstructed or reconditioned WECS, shall be certified by an Engineer Licensed by the State of California. The safety of electrical components of reconstructed or reconditioned WECS shall be certified by an Engineer Licensed by the State of California. The safety of all modifications to any WECS shall be certified by an Engineer Licensed by the State of California. Certification of safety is required before any Building Permit for a WECS is issued for modifications made prior to installation. Certification of the safety of modifications made after the WECS has been installed shall also be subject to the requirements of a Building Permit. Failure to have the safety of any modifications certified either prior to installation, or prior to use of a system modified after installation, shall result in the revocation of the Building Permit and any discretionary approvals granted for the WECS until such certification has been obtained and provided to the Town of Yucca Valley.



**TOWN OF YUCCA VALLEY
PLANNING COMMISSION MEETING MINUTES
March 22, 2011**

Chair Lombardo called the regular meeting of the Yucca Valley Planning Commission to order at 6:00 p.m.

Commissioners Present: Alberg, Graham, Humphreville and Chair Lombardo

Pledge of Allegiance was led by Chair Lombardo

APPROVAL OF AGENDA

Commissioner Alberg moved to approve the agenda. Commissioner Humphreville seconded. Motion carried 5-0 on a voice vote.

PUBLIC COMMENTS

None

PUBLIC HEARINGS

1. HOME OCCUPATION PERMIT, HOP 01-11 ZORAWICKI

A request for the approval of a home occupation permit for the purpose of assembling firearms that are purchased in kit form and for the buying and selling of firearms from and to the public from an existing single family residence.

With reference to the complete printed staff report provided in the meeting packets and preserved in the project and meeting files, Associate Planner Kirschmann presented the project discussion to the meeting. A PowerPoint presentation was projected on the screen during the discussion, a printed copy of which is preserved in the meeting file.

On February 22, 2011 the application was reviewed by Deputy Town Manager Stueckle at a staff level hearing. Based upon the amount of communication received from the public and those in attendance at the permit hearing, the item is being forwarded to the Planning Commission for review. Prior to the hearing the Town had received eleven responses in support of the project, fifteen in opposition and one response requesting the application be forwarded to the Commission. The objections raised dealt with concerns of safety and firing of weapons for tests.

Jonathan Zorawicki, Applicant, advised his request is for a small quiet business in his home assembling small rifles. He has submitted his application to the ATF and will be on an appointment only basis. His immediate neighbors have been notified and have no objections, as well as the Sheriff's Department.

Commission Humphreville moved to approve the Home Occupation Permit, HOP 01-11 based upon the information contained within the staff report and findings. Commissioner Graham seconded. Motion carried unanimously on a voice vote.

DEPARTMENT REPORTS:

2. DISCUSSION ON THE REGULATION OF WIND ENERGY GENERATORS AND PRESENTATION OF A DRAFT ORDINANCE.

A request from staff that the Commission discuss and provide direction on regulations regarding wind energy generators

With reference to the complete printed staff report provided in the meeting packets and preserved in the project and meeting files, Associate Planner Kirschmann presented the project discussion to the meeting. A PowerPoint presentation was projected on the screen during the discussion, a printed copy of which is preserved in the meeting file. At this time the Town has no regulations for the installation of renewable energy systems such as wind generators. The Town has recently received a number of inquiries for the installation of both roof mounted and freestanding wind generations, and since there are no regulations, staff is seeking feedback and direction on the draft regulations.

Deputy Town Manager Stueckle advised that there are examples of several of these generators between here and Apple Valley mounted on poles as high as 50 to 60 feet, noting if we have these on every parcel in Town it will have an impact.

Commissioner Alberg questioned the 2 acre lot size limitation and whether or not the units are loud. Planner Kirschmann advised the concern would be of height and the appearance of the systems on every residence in small lot areas. He noted the units are generally fairly quiet.

Commissioner Graham questioned how many inquiries the Town has had, expressed concern regarding the term "fall zone" noting there is no such requirement for cell towers or flag poles. He noted he feels it should be required that a Civil Engineer design the foundation and mounting. He also questioned the height restriction of 35'. Deputy Town Manager Stueckle advised there have been between 10-50 requests, and advised that engineering calculations would be necessary for both the roof and pole mounted systems, and the fall zone requirement is designed to insure that a pole mounted design would not fall on someone else's property. It is an additional safety element built into a number of ordinances in other jurisdictions. With regard to height, Planner Kirschmann advised that the Town's maximum height limitation is 35' and note that generally the poles are 33' plus the height of the blades would bring the

height to 39' so the poles would have to be cut to accommodate the Town's requirement.

Commissioner Humphreville stated the footing should be engineered so that a fall zone isn't necessary, and expressed concern about eliminating the ability of owners with smaller properties to install a system. He recommended looking at limiting the size and height of the system to the size of the property. He also questioned what the permit fee would be. Planner Kirschmann advised the fees would not be established in the ordinance, but determined by Building and Safety. Deputy Town Manager Stueckle advised the two types of fees would be WECS permit application and building permit based on valuation. Commissioner Humphreville recommended that there needs to be discussion regarding what is necessary to make the system useful, rather than talking about limiting height.

Chair Lombardo expressed concern about the number of units, noting he wants the systems to be effective and useful to those wanting to do it. The concern about overpopulation is understandable, however it is important to look at alternative energy forms and make them available for as many people as easily as possible. He is in favor of maybe allowing a larger quantity of them if appropriate, noting it should be based on lot size. The minimum lot size might be dropped so more people can participate, and the Commission should look at the possibility of allowing only roof mounted systems for smaller parcels. He also thinks that a fall zone may not be necessary if the foundation is well engineered.

Commissioner Graham expressed concern regarding the requirement to place the systems in the rear of the property noting there are many variables in the community and many lots don't have enough rear property area. He suggested requiring the rear half of the property and keep them out of the front setback. He also expressed concern about the recommendation for underground wiring, noting that is fine for pole mounted but there should be a variance for roof mounted units.

Commissioner Alberg shared the other Commissioners concern regarding lot size.

John Wright, and Andy Canada, Yucca Valley, distributed information regarding the units that will be retained in the file and answered questions of the Commissioners.

Larry Calendar, Yucca Valley, spoke in favor of allowing these systems on ½ acre or more lots.

Chair Lombardo requested Commissioner input regarding the impact of these units on the community.

Commissioner Alberg commented this is a green energy alternative and will be a benefit.

Commissioner Graham commented regarding the need to get as much public input as possible.

Commissioner Humphreville stated it is important to get plenty of public input noting the Commission can look at limiting the height of the structure on smaller lots but he would hate to limit it to people who have an acre or more.

Chair Lombardo commented there is consensus to receive more public input, lot size needs to be reviewed with the possibility of those with smaller lots having the option to install the units. With regard to allowing multiple units on one pole, the consensus was that multiple units may be ok especially if the lot size is bigger.

Deputy Town Manager Stueckle stated that, potentially Lancaster's ordinance provides for units on smaller residential lots.

Chair Lombardo questioned the ability of allowing a variance. Deputy Town Manager Stueckle advised that it is desirable to set standards by lot size etc., noting that ordinances call out precise measurements but they can be written with some flexibility. Commissioner consensus was to add flexibility in the language.

Dana Collins, Joshua Tree, expressed concern about the visual impact of allowing the units on smaller properties and the view shed on surrounding properties. She likes the 2 acre minimum lot size and the 110% setback.

Mary Ann Hill, Yucca Valley, expressed concern about the visual aspect on surrounding property, they should not be any more than 35' and the fall zone is very important.

Andy Canada, Yucca Valley, advised the units are designed to be small so they are not obtrusive.

Sarann Graham, Yucca Valley, commented there have been a lot of good points made tonight and the suggestions about getting public input would be recommended. She noted the number of units required to be useful changes the whole nature of the issue.

Commissioner Alberg advised he is looking forward to what staff brings back for review.

Chair Lombardo questioned if property owners have the ability to construct these units at this time. Planner Kirschmann advised there are several potential applications that may come in but there is the ability to apply for a conditional use permit.

Deputy Town Manager Stueckle have heard all commissions comments this evening in terms of way to look at standards will bring back and notice public hearing

3. CONTINUATION OF DISCUSSION OF REVISED TENTATIVE TRACT MAP APPLICATION AND FOLLOW UP TO COMMISSION QUESTIONS

A request from staff that the Commission receives and provides any additional feedback and comment on general timeframes for processing Tentative Tract Map applications and provide feedback and comment on the Standard Conditions of Approvals.

With reference to the complete printed staff report provided in the meeting packets and preserved in the project and meeting files, Associate Planner Kirschmann presented the project discussion to the meeting. A PowerPoint presentation was projected on the screen during the discussion, a printed copy of which is preserved in the meeting file.

With regards to Condition of Approval E1 Commissioner Graham questioned if the Town is only concerned about height not length. Planner Kirschmann stated it is evaluated on a case by case basis.

Commissioner Humphreville commented regarding the shelf life of special studies. Deputy Town Manager Stueckle advised that many of the timeframes are set by state and federal law, noting that information will be included in our application materials. Commissioner Humphreville commented that appraisals cost more than the actual park fee, and advised of the need to add a Condition of Approval to stop extortion payments to special interest groups, noting that he heard that such a group is suing Granite Construction on one of their projects. Deputy Town Manager Stueckle advised that issue is on the staff, Town Attorney discussion list.

Commissioner Graham questioned if it would be appropriate to flag fees so we can see what the estimated fees are. Deputy Town Manager Stueckle advised that one change staff is making to all application forms, primarily in area of Planning and Engineering, is including application fees specific to those for a plat map.

Commissioner Humphreville commented that frequently we have people stand in front of us and tell us he Town hinders development, noting we actually have very little to do with the requirements, they are mainly State and Federal requirements.

Deputy Town Manager Stueckle stated that the Commission has provided enough additional feedback so staff will be finalizing the application, bring back a flow chart and will return to the Commission one more time for discussion.

CONSENT AGENDA

None

FUTURE AGENDA ITEMS

April 2011 – Conditional Use Permit, CUP 01-11, a request to install a roof mounted cell tower at the location of Hutchins Motor Sports.

Tentative Parcel Map 19288, a request to subdivide a 0.69 acre parcel containing three previously constructed residences into three residential lots

STAFF REPORTS AND COMMENTS

None

COMMISSIONER REPORTS AND REQUESTS

Commissioner Alberg – None

Commissioner Graham - questioned if review of the antenna ordinance is still on the Commission's to do list. Deputy Town Manager Stueckle advised that it is.

Commissioner Humphreville – None

Chairman Lombardo – None

ANNOUNCEMENTS

Time, date and place for the next Planning Commission Meeting.

The next regular meeting of the Yucca Valley Planning Commission is Tuesday, April 12, 2011 at 6:00 p.m. in the Yucca Valley Community Center.

ADJOURNMENT

The meeting was adjourned at 7:25 p.m.

Respectfully submitted,

Jamie Anderson
Town Clerk

PLANNING COMMISSION STAFF REPORT

To: Honorable Chairman & Planning Commission
From: Robert Kirschmann, Associate Planner
Date: March 16, 2011
For Commission Meeting: March 22, 2011

Subject: Discussion of Wind Generator Regulations
Draft Ordinance
Review and Feedback to Staff

Prior Commission Review: The Planning Commission has not previously discussed this item.

Recommendation: That the Planning Commission reviews the draft ordinance and information presented and provides direction to Staff.

Executive Summary: The Town of Yucca Valley has no regulations for the installation of renewable energy systems, such as wind generators. The Town has recently received a number of inquiries for the installation of both roof mounted and freestanding wind generators. Since the Town has no regulations for these systems, Staff is seeking Planning Commission feedback and direction on the Draft regulations as attached to this Staff Report.

Discussion: The Town has recently received inquiries from property owners and companies looking to install wind generators on single family residences throughout the Town. The continued growth in the use of alternative energy technology drives the need to develop regulations for these types of technology within the community. The intent of the regulations and standards contained in the Draft Ordinance is to ensure compatibility with building architecture, the neighborhood, and community appearance, and to minimize the visual appearance of WECS within neighborhoods and the community. Additionally, the regulations and standards ensure proper design, placement, construction and operational standards to promote the health, safety and welfare of the community.

The Draft Ordinance establishes standards and regulations for the installation of wind energy conversion systems (WECS) within the Town. The following information outlines the general standards as drafted.

Approval Authority: As currently drafted, WECS must be approved through a land use compliance review process. As defined in the Draft Ordinance, the Planning Commission is the review authority for all WECS applications.

Noticing: The Draft Ordinance establishes the requirement to provide notice to all property owners within 1,000 feet of the site proposed for installation of a WECS.

Minimum Lot Size: A minimum lot size of 2 acres is required in order to install WECS on any property within the Town.

Maximum Height: The Draft Ordinance requires WECS to conform to the maximum height permitted within the existing zoning classifications.

Design Standard: The Draft Ordinance establishes minimum design standards, which are intended to ensure that the WECS do not significantly detract from existing views. The WECS cannot be constructed of reflective materials and guyed wires to support free standing poles are discouraged.

Location: WECS must be located to the rear of the primary structure on the property. Additionally, WECS cannot be located in a required set back or easement.

Fall Zone: WECS must be located to provide an adequate fall zone, which is defined as 110% of the structure height. A graphic example of this standard is provided in the Draft Ordinance.

Noise Standards: The Draft Ordinance establishes noise standards for two different time periods, those being 7:00 AM to 10:00 PM and 10:00 PM to 7:00 AM. The standards require a lower noise level during the 10:00 PM to 7:00 AM time frame.

Number of WECS Allowed: The Draft Ordinance establishes a maximum of one WECS per parcel. Where more than one WECS is desired, the Draft Ordinance defines that as a Wind Farm, which is subject to a Conditional Use Permit application.

Ancillary Equipment: The Draft Ordinance establishes standards for ancillary support equipment for WECS. Ancillary support equipment cannot be located in required setbacks,

Electrical Wiring: The Draft Ordinance requires that all electrical wiring necessary for WECS installation be placed below ground.

Abandonment: The Draft Ordinance defines a WECS that has not been operated for a continuous period of six months as abandoned, and removal of abandoned WECS is required.

Removal: The Draft Ordinance requires that when the WECS is removed, all support and ancillary equipment shall also be removed from the site.

Accessibility: The Draft Ordinance requires that access ladders be un-climbable by design for the first twelve feet of height in order to discourage or prevent unauthorized access.

Recent discussions with property owners have identified the desire to install both roof mounted and free standing (pole) WECS. The following information is provided as background information for the Commission's consideration of the Draft Ordinance.

ROOF MOUNTED:

One option available is for roof mounted WECS. These would be installed near the peak of the roof in order to be placed to receive the highest wind speeds. Though exact specifications can vary from model to model, recent discussions have identified models with a blade diameter of approximately 60" and mounted approximately 24" above the roof for an overall height of 7'. There may be multiple WECS proposed or required to obtain the best overall system performance.

Since these structures are considerably larger (60" blade diameter mounted 24" above roof) than most roof mounted equipment the Planning Commission may wish to discuss if

roof mounted WECS are appropriate for the Town. If the Commission feels that these are appropriate then a discussion should take place in regards to limiting the number of units that can be installed

POLE MOUNTED:

Another option that is available is a pole mounted or tower WECS. The design of pole mounted WECS can vary from having one fan to three fans mounted on a single pole. The height of freestanding systems commonly start at 25', though the majority have tower heights of 33' (or larger) plus 6' blades, bringing the total height to 39'

The Town's residential Land Use Districts all have a maximum height limitation of 35' for the primary structure. Pursuant to Section 87.0405, Permitted Structural Height Increases, maximum structure height may be increased by 50% subject to the approval of a Land Use Compliance Review. Section 87.0405(C) (18) is the only reference to wind mills found in the Development Code. This section would allow the tower to be increased in height to 52.5'.

Staff has had discussions with several contractors regarding pole mount windmills that are manufactured at a height of 33' plus the height of the blades, bringing the overall height to 39'. In order for these poles to meet the height limitation of 35' would require the pole to be specially constructed and engineered.

As the Commission is reviewing and discussing the Draft Ordinance, the following policy questions are design to assist the Commission in its policy deliberations.

Should WECS be allowed within the Town?

Should free standing/pole mounted and/or roof mounted WECS be allowed?

Should WECS be allowed on any property or should a minimum lot size be established?

If allowed, at what review level should WECS be reviewed, including staff level or Planning Commission?

Staff has attached a copy of San Bernardino County code sections relating to wind energy.

The following table identifies basic regulations from a few jurisdictions that staff was able to review.

| Residential Wind Energy Systems | Roof mounted | Min lot size | Tower height | setbacks | # of towers |
|---------------------------------|---|--------------|---------------------------|---------------------------|---------------------|
| Town of Yucca Valley | No Standards | No standards | 35' | Per building code | No standards |
| San Bernardino County | No discussion | 1 acre | Varies from 52.5' to 120' | Equal to height of system | 1 |
| Town of Apple Valley | Yes, not to exceed residential height limit | 2 acres | No maximum | 110% of height | 1 per developed lot |

| | | | | | |
|---------------------|--|--------|---|------------------------------|---------------|
| City of 29 Palms | No standards | none | 35', 52.5 subject to Minor Use Permit | 1 ¼ times the height | 1 |
| City of Palmdale | No standards | 1 acre | 60' | Per zoning code | No standards |
| City of Hemet | No regulations, likely to follow zoning district standards | | | | |
| City of San Jacinto | No regulations | | | | |
| City of Chino | No standards | 1 Acre | Not to exceed max building height for zone | 1' for every 1' in height | Not specified |

Alternatives: N/A

Fiscal impact: N/A

Attachments:

1. Draft Ordinance
2. Photos/ background material on WECS
3. San Bernardino County Code Section 84.26.010
4. City of 29 Palms, page 8-4 of Ordinance 229
5. City of Palmdale, Section 99.01, Chapter 4, Article 4.1
6. City of Chino, Chapter 20.10

ORDINANCE NO.

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF YUCCA VALLEY, CALIFORNIA, AMENDING TITLE 8, DIVISION 4, CHAPTER 4, SECTION 84.0410 OF THE COUNTY OF SAN BERNARDINO DEVELOPMENT CODE AS ADOPTED BY THE TOWN OF YUCCA VALLEY RELATING TO WIND ENERGY CONVERSION SYSTEMS (WECS).

The Town Council of the Town of Yucca Valley, California, does ordain as follows:

SECTION 1 Code Amended

Title 8, Division 4, Chapter 4, Section 84.0410 of the San Bernardino County Development Code as adopted by the Town of Yucca Valley is hereby amended as follows:

"CHAPTER 4"

ADDITIONAL USES

SECTIONS:

84.0410 LIST OF ADDITIONAL USES.

- (f) Wind Energy Conversion Systems (WECS)
 - 1. Purpose
 - 2. Administration
 - 3. Definitions
 - 4. Private, Non-commercial , WECS
 - 5. General Requirements for the Installation of WECS

1. PURPOSE

This Chapter is intended to establish regulations and procedures for the review of any WECS proposed for installation within the Town of Yucca Valley that are not otherwise permitted or regulated in this Development Code. It is intended to provide a mechanism to take advantage of renewable, green energy while minimizing potential adverse effects on surrounding properties and infrastructure or on the public health, safety and welfare.

A. APPLICABILITY

No WECS shall be erected, placed, displayed, or maintained in any district within the Town of Yucca Valley, except as specifically allowed by this Chapter. The number, design, type and size of such WECS, as outlined in this Chapter, are intended to be minimum standards

which do not necessarily ensure compatibility with building architecture, the neighborhood, and community appearance. Therefore, in addition to these standards, consideration shall be given to a WECS relationship to the overall appearance of the subject property as well as the surrounding community. Compatible design, simplicity and effectiveness, and conformance to the design guidelines provided by Section 88.0101, Single Residential Design Standards, and Commercial Design Guidelines approved by the Town Council, are to be used in determining approvals.

A Land Use Compliance Review approved by the Planning Commission, as provided in Section 83.030305 of this Code shall be required prior to the installation of any and all WECS. The Commission may approve, conditionally approve, modify or deny requests for the installation of WECS. The Commission may establish conditions and limitations necessary to minimize detrimental effects on surrounding property and/or the general public.

A Land Use Compliance Review allows for the architectural/aesthetic review of structures permitted by this Code for the various zoning districts. A Land Use Compliance Review is not required if a Conditional Use Permit has been submitted and approved where the Commission has addressed the aesthetics and site design issues required under a Land Use Compliance Review.

2. ADMINISTRATION

A. Administration. The Director is authorized to administer and enforce the provisions of this Chapter, unless otherwise provided in this Chapter. The Director may designate a representative to act in his/her place.

B. Interpretation

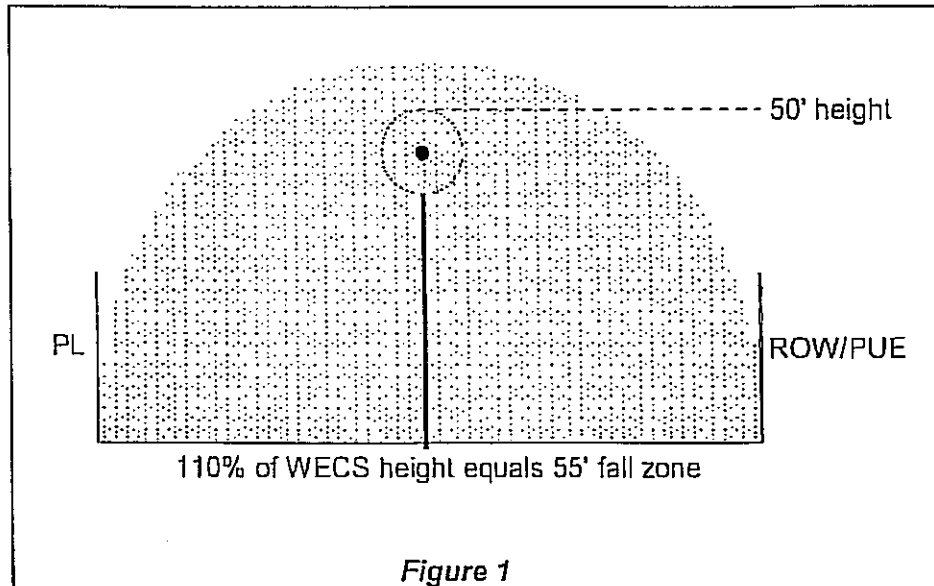
1. This Chapter shall be interpreted in a manner which best fulfills the intent of its provisions.
2. Questions arising from the application of the Chapter shall be interpreted by the Director. If any inconsistency still exists in the interpretation, an appeal application shall be referred to the Planning Commission for its determination.

C. Appeals

1. Any decision or determination by the Director may be appealed to the Planning Commission in accordance with the provisions of this Development Code.
2. Any decision of the Planning Commission may be appealed to the Town Council in accordance with the provisions of this Development Code.

3. DEFINITIONS

Fall Zone. The potential fall area for the wind energy conversion system. The fall area is measured by using 110 percent of the total height as the radius around the center point of the base of the tower. (Figure 1)



Height. The vertical distance from ground level to the top of the WECS, including the blade when at its highest point.

Net-Metering Service. A service to an electric consumer under which electric energy generated by that electric consumer from an eligible on-site generating facility and delivered to the local distribution facilities may be used to offset electric energy provided by the electric utility to the electric consumer during the applicable billing period. Net Metering does not allow the sale of power back to the electric company or into the wholesale electricity market.

Over-Speed Control. A mechanism used to limit the speed of blade rotation to below the safe design limits of the WECS.

Private, Non-Commercial WECS. A single WECS installed on a developed property for the purposes of providing energy for on-site consumption.

Wind Energy Conversion System (WECS). A device designed or used for the purpose of converting wind energy into electrical or mechanical power, including all interconnection and auxiliary equipment.

Wind Farm. Multiple WECS installed at a single property or area for the purpose of generating larger quantities of electrical or mechanical power for transmission to a public or private utility.

4. PRIVATE, NON-COMMERCIAL, WECS

The installation of a private, non-commercial, WECS is permitted as an accessory use within any zoning designation upon approval of a Land Use Compliance Review by the Planning Commission. The Land Use Compliance Review process grants the Planning Commission authority to modify these requirements based upon neighborhood compatibility.

A. Lot Size. WECS shall not be installed upon a lot or recorded parcel of less than two (2) net acres in size.

B. Setback Requirements.

1. WECS must be located behind the rear of the primary structure.
2. WECS shall be setback a distance equal to the fall zone from any property line, overhead utility lines, utility easement or right-of-way.

C. Height. Free-standing and Roof-top mounted WECS are subject to the maximum height permitted within the applicable zoning designation.

D. Noise. No WECS shall generate a sound level in excess of 50 dBA, as measured at the nearest property line, during the hours of 7:00 a.m. to 10:00 p.m., nor a level in excess of 40 dBA during the hours of 10:00 p.m. to 7:00 a.m. except during extreme weather conditions.

E. Design Standards.

1. During the Land Use Compliance Review process, each WECS shall be reviewed by the Planning Commission to ensure the WECS are installed in a manner that will not significantly detract from existing views.
2. WECS must consist of non-reflective materials.
3. Monopole mounted WECS are preferred.
4. WECS requiring the use of guyed wires are discouraged; however, guyed wires may be permitted based upon neighborhood compatibility.

F. Net-Metering. Private, noncommercial WECS may be net-metered with written authorization provided by the utility company.

G. Only one (1) WECS shall be permitted per developed lot. Any additional WECS, or any WECS located on a vacant parcel, will be considered a "wind farm" and subject to the Planning Commission's review and approval of a Conditional Use Permit.

H. Each WECS shall be operated and maintained in sound working order in conformance with the manufacturer's specifications at all times. This maintenance shall include the physical appearance of the device so it does not present an unsightly appearance. A copy of the manufacturer's specifications and use instructions shall be submitted with any application for review by the Planning Commission and/or Town Council and shall be retained within the public hearing record/file for that application.

I. Any WECS that is not operated for a continuous period of six (6) months shall be considered abandoned, and the owner of such WECS shall remove the same within thirty (30) days of receipt of written notice from the Town notifying the owner of such abandonment. If the owner does not remove the equipment, along with all associated and ancillary equipment, devices, structures or support for that WECS, or does not request a hearing before the Planning Commission on the issue of whether the equipment is abandoned and subject to removal, the Town may require removal of the equipment and store it in a secure location. The owner shall have fourteen (14) days from the date the Town provides the owner with written notice of removal of the equipment, and notification of the current location of equipment, to reclaim the equipment. If the equipment is not reclaimed in accordance with this section, the Town may dispose of the equipment in accordance with the Town's existing policy for disposal of abandoned or lost property.

Failure to remove an abandoned WECS within said thirty (30) days shall be grounds to remove the device at the owner's expense.

J. A Building Permit, issued by the Town of Yucca Valley, shall be obtained prior to the installation of a WECS system.

K. Every WECS shall be installed strictly per the Manufacturer's Installation specifications, or as modified and certified by an Engineer licensed by the State of California.

L. The Commission may impose Conditions of Approval that are necessary to address health, safety, community welfare and community aesthetic issues or concerns raised during the Land Use Compliance Review process

M. Noticing of the Land Use Compliance Review shall include all properties within 1,000 feet of the site requesting the installation of a WECS.

N. No WECS, or associated and ancillary equipment, batteries, devices, structures or support(s) shall be located within any required front, side or rear yard setback area.

O. No wiring between a WECS and the main or accessory structure on site, or any associated and ancillary equipment, batteries, devices, structures or support(s) for any WECS, shall be located above ground level.

P. When a WECS system is removed from a site, all associated and ancillary equipment, batteries, devices, structures or support(s) for that system shall also be removed.

5. GENERAL REQUIREMENTS FOR THE INSTALLATION OF ANY WECS

A. The safety of the design and construction of all WECS, including towers and associated equipment, shall be certified by the manufacturer or by an Engineer Licensed by the State of California.

B. Safety wires shall be installed on the turnbuckles on guy wires of guyed WECS towers.

C. All WECS towers shall be equipped with manual and automatic over-speed controls. The rotor and over-speed control design and fabrication shall conform to good engineering practices and shall be certified by the manufacturer or by an Engineer Licensed by the State of California.

D. All installations shall conform to the requirements of the latest adopted version of the National Electrical Code, adopted by the Town of Yucca Valley.

E. The compatibility of the tower structure with the rotors and others components of the WECS shall be certified by the manufacturer or by an Engineer Licensed by the State of California.

F. All WECS towers or facilities shall either have tower climbing apparatus located not closer than twelve (12) feet to the ground or be un-climbable by design for the first twelve (12) feet.

G. WECS sited on top of, or attached to and extending above the roof line of, an existing structure shall comply with all applicable provisions of the latest version of the Uniform Building Code, as adopted buy the Town of Yucca Valley. Certification by an Engineer Licensed by the State of California shall be required. Any device located in such a manner shall be subject to the height limitations of the underlying zoning.

H. No part of a WECS tower or facility shall be located upon, within or extend over a drainage, utility or other established easement(s). No portion or part of the WECS shall be located on or over any property line(s). The base of any WECS or the guy wire anchors of a guyed WECS tower shall not be located in any required minimum front, side or rear setback area. No such WECS shall be located between the main structure on site and any existing or planned public right-of-way.

I. Clearance between any WECS and existing or planned electrical lines shall be in compliance with the requirements of the most recently adopted edition of the National Electrical Safety Code.

J. Efforts should be made to site WECS to reduce the likelihood of blocking or reflecting television or other communications signals and from blocking established views. If signal interference occurs, the WECS owner shall make all reasonable efforts to resolve the problem. If the problem(s) cannot be eliminated or reduced to an acceptable level by the individual experiencing the interference, then the WECS owner shall shut down and remove the source of interference within thirty (30) days from the date of receiving official notice from the Town of Yucca Valley.

K. Nothing within this Chapter shall be construed to allow the infringement of the enjoyment rights of a property owner by another by the installation, maintenance or use of a WECS.

L. The owner of any WECS shall provide, as part of the submission for review by the Planning Commission of a Land Use Compliance Review, proof of liability insurance that specifically addresses the installation, use and maintenance of the WECS.

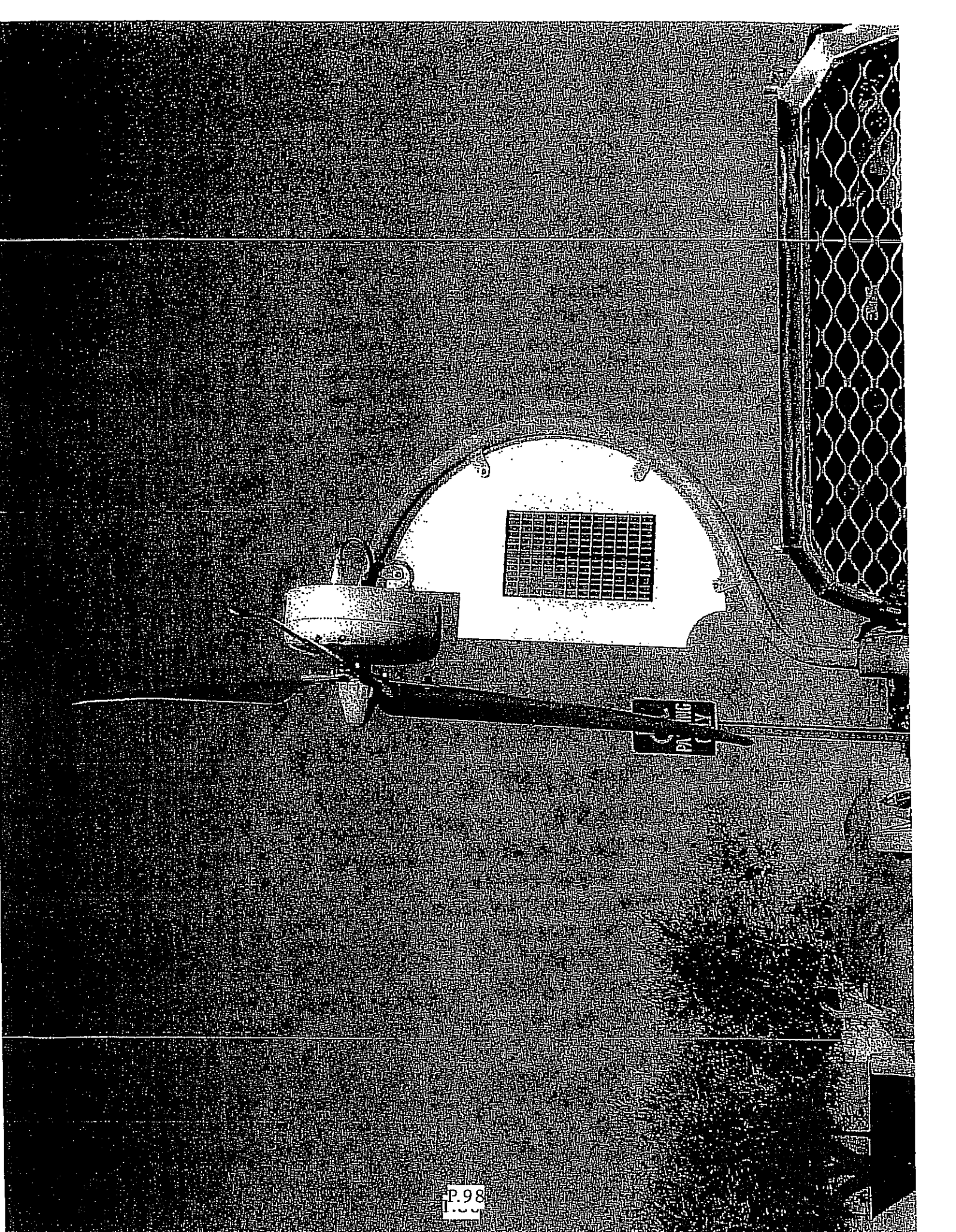
M. Homebuilt, experimental and prototype WECS shall be allowed provided they comply with all applicable regulations detailed within this Chapter.

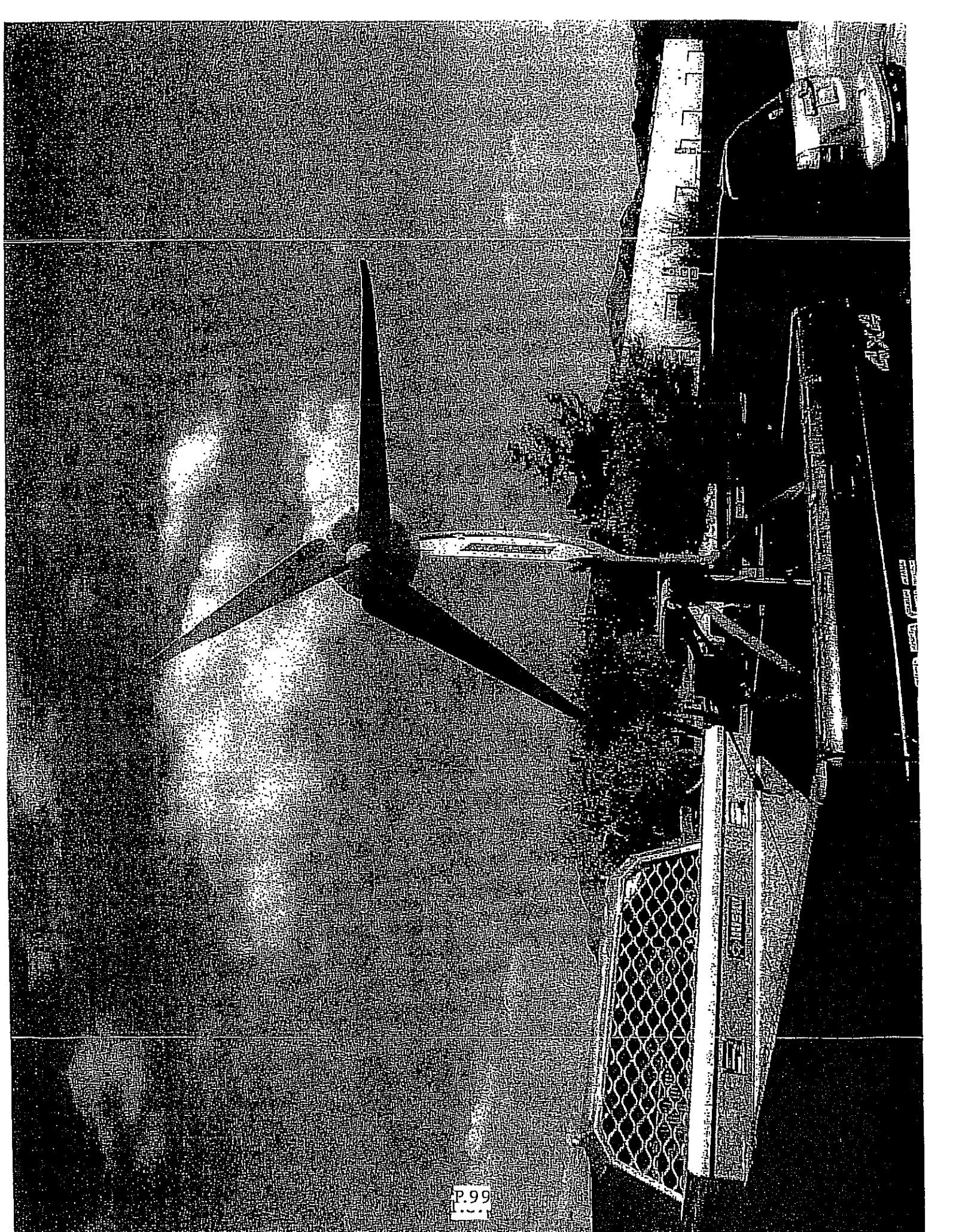
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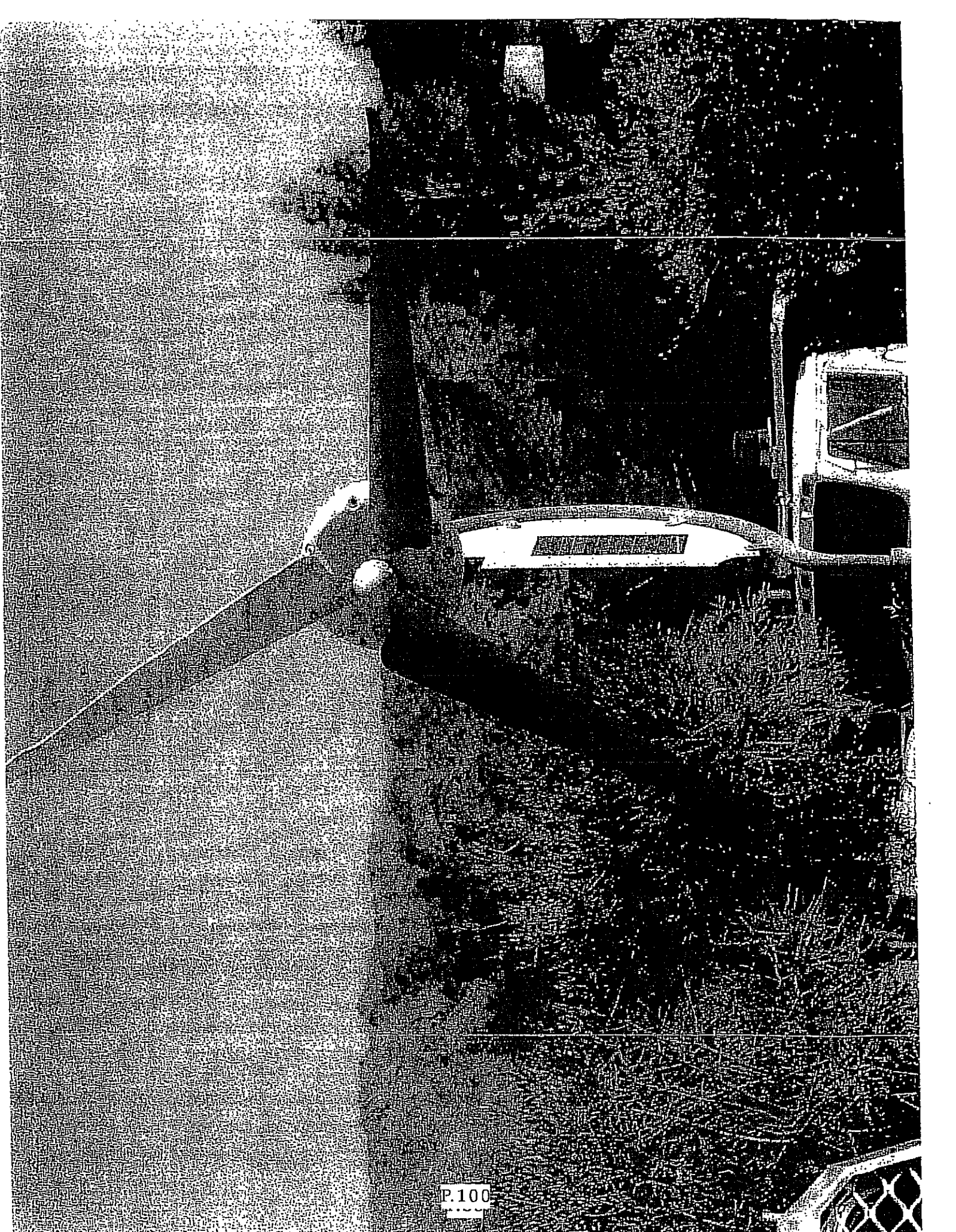
O. The interconnections between a wind turbine and the electric utility shall be in compliance to the most recently adopted edition of the National Electrical Safety Code and all Federal regulations. Certification shall be submitted in writing by the owner that the WECS will automatically disconnect from the utility when there is no power input from the utility.

P. Battery storage units associated with a WECS shall be in compliance with the latest adopted edition of the National Electric Code or other applicable Codes and shall be inspected by an inspector for the Town of Yucca Valley.

Q. The safety of structural components of reconstructed or reconditioned WECS, and the compatibility of the rotors of reconstructed or reconditioned WECS, shall be certified by an Engineer Licensed by the State of California. The safety of electrical components of reconstructed or reconditioned WECS shall be certified by an Engineer Licensed by the State of California. The safety of all modifications to any WECS shall be certified by an Engineer Licensed by the State of California. Certification of safety is required before any Building Permit for a WECS is issued for modifications made prior to installation. Certification of the safety of modifications made after the WECS has been installed shall also be subject to the requirements of a Building Permit. Failure to have the safety of any modifications certified either prior to installation, or prior to use of a system modified after installation, shall result in the revocation of the Building Permit and any discretionary approvals granted for the WECS until such certification has been obtained and provided to the Town of Yucca Valley.



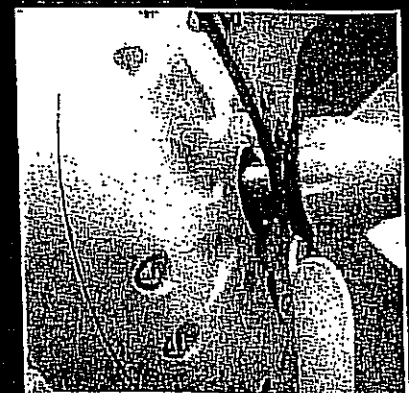
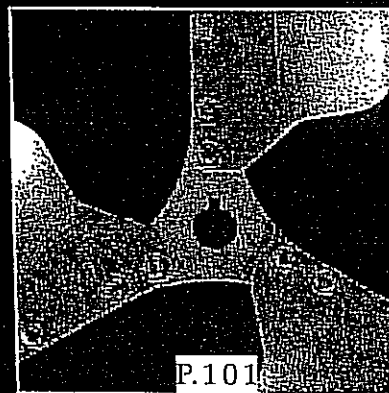
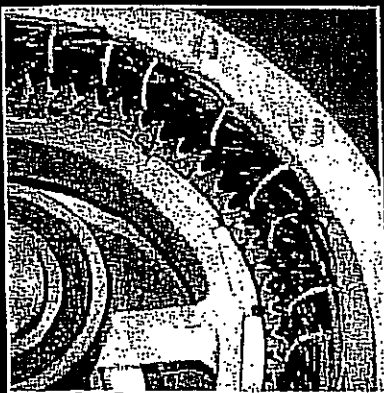
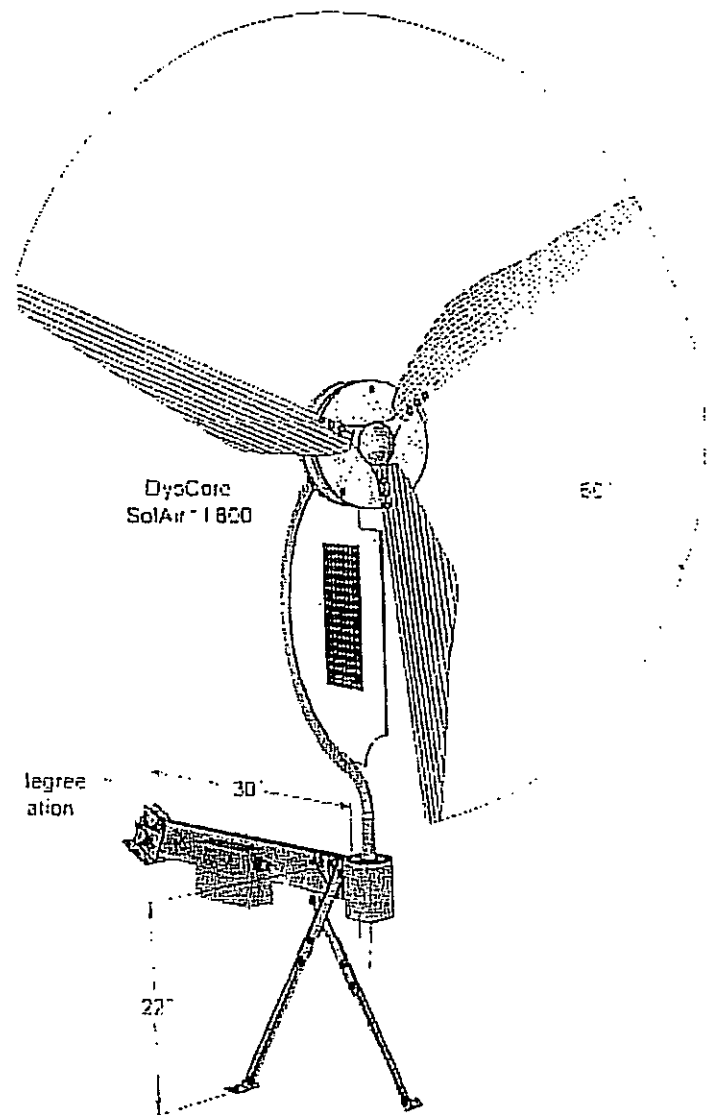




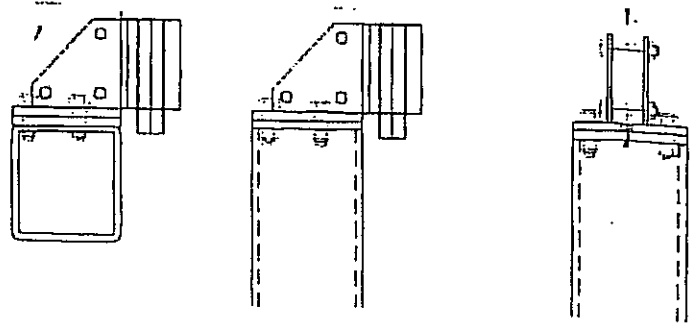
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TECHNICAL SPECS

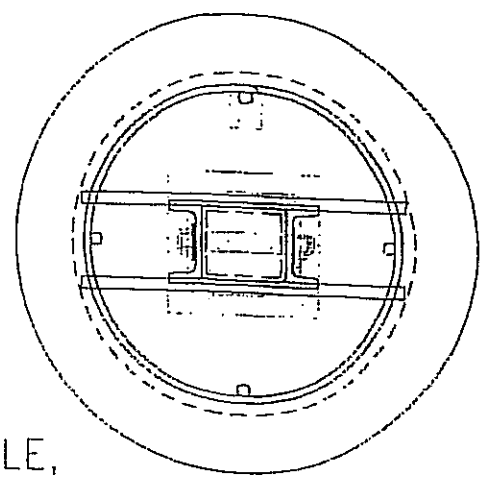
- Residential / Light Commercial surface mount
- On-grid or off-grid – combined DC solar/wind output for simple plug and play
- No maintenance / 5 year warranty
- Easy installation
- Weighs 69lbs., fully assembled with rectifier box
- Height of SolAir™ from it's mount bracket surface to the blade at it s highest point is only 67"
- Blade diameter is 60"
- Number of blades - 3 (Aluminum)
- Maximum output is approximately 2.2kW (26 – 30mph winds)
- Average power is approximately 400watts (12 – 14mph winds)
- It's whisper quiet, with no vibration
- Optimal install height is along the roofline or approximately 20'
- SolAir™ units can be stacked when more energy generation/storage power is needed
- CEC Approved and Listed:
1.6kW at 18mph
- Federal 30% tax credit



--- 1" PLATE ---



SLOT WELD --- ---



14'-8"

10'-8"

20'-0" POLE,
TS 4x4x1/4

C4x7.25 POLE SUPPORTS (2)
SET INTO CONCRETE BASE

3 #3 TIES IN TOP 5"
OF CONCRETE BASE

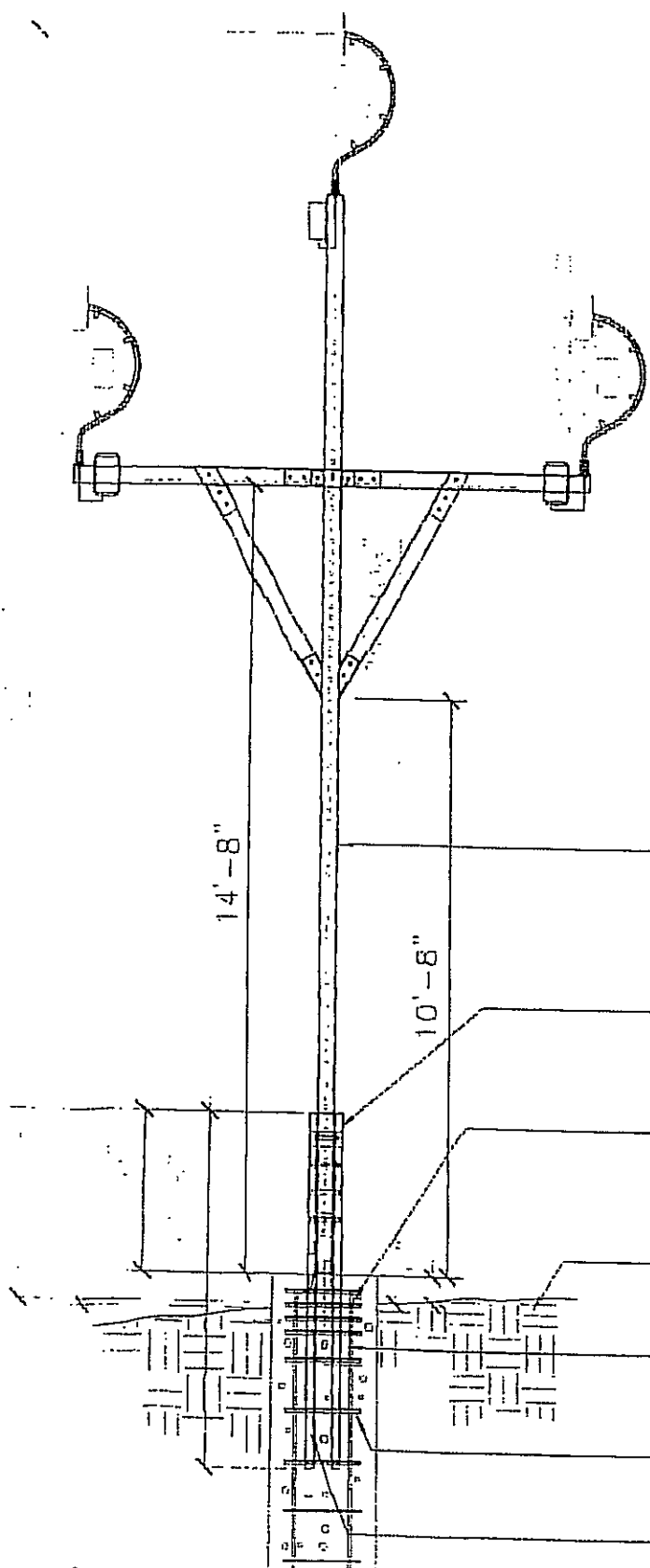
TOP OF FINISH GRADE

4 #5 BARS EQUALLY SPACED

#3 TIES @ 12" o.c.

P.102

24"Ø CONCRETE
POST FOOTING



65891.8. *(Added by Stats. 2000, Ch. 80; Amended by Stats. 2003, Ch. 501; Repealed January 1, 2009 by terms of Section 65791.12)*

65891.9. *(Added by Stats. 2000, Ch. 80; Repealed January 1, 2009 by terms of Section 65791.12)*

65891.10. *(Added by Stats. 2000, Ch. 80; Repealed January 1, 2009 by terms of Section 65791.12)*

65891.11. *(Added by Stats. 2000, Ch. 80; Repealed January 1, 2009 by terms of Section 65791.12)*

65891.12. *(Amended by Stats. 2003, Ch. 501; Repealed January 1, 2009 by its own terms.)*

65892.13. *(Added by Stats. 2001, Ch. 562; Added by Stats. 2002, (Title 7, Div. 11, Ch. 4, Art. 2.11, heading (Sec. 65892.13 et seq.)) Ch. 664; Amended by Stats. 2002, Ch. 328; Amended by Stats. 2002, Ch. 664; Inoperative July 1, 2005, Repealed January 1, 2006; Heading Repealed January 1, 2010 by Stats. 2009, Ch. 404.)*

Article 2.11 Wind Energy

(The heading of Article 2.11, commencing with Section 65892.13 is Repealed. Article 2.11, commencing with Section 65893 is Added by Stats. 2009, Ch. 404.)

65893. Findings and declarations

(a) The Legislature finds and declares all of the following:

(1) Wind energy is an abundant, renewable, and nonpolluting energy resource.

(2) Wind energy, when converted to electricity, reduces our dependence on nonrenewable energy resources, reduces air and water pollution that result from conventional sources burning fossil fuels, and reduces emissions of greenhouse gases.

(3) Distributed generation small wind energy systems also enhance the reliability and quality of electricity delivered by the electrical grid, reduce peak power demands, increase in-state electricity generation, diversify the state's energy supply portfolio, and make the electricity supply market more competitive by promoting consumer choice.

(4) Small wind energy systems designed for onsite home, farm, and small commercial use are recognized by the Legislature and the State Energy Resources Conservation and Development Commission as an excellent technology to help achieve the goals of increased in-state electricity generation, reduced demand on the state electrical grid, increased consumer energy independence, and nonpolluting electricity generation.

(5) It is the intent of the Legislature to encourage local agencies to support the state's ambitious renewable energy procurement requirements by developing and adopting

ordinances that facilitate the installation of small wind energy systems and do not unreasonably restrict the ability of homeowners, farms, and small businesses to install small wind energy systems in zones in which they are authorized by local ordinance.

(6) It is the intent of the Legislature to facilitate the implementation of consistent statewide standards to achieve the timely and cost-effective installation of small wind energy systems.

(Added by Stats. 2009, Ch. 404.)

65894. Definitions

For purposes of this article, the following terms shall have the following meanings:

(1) "Energy Commission" means the State Energy Resources Conservation and Development Commission.

(2) "Small wind energy system" means a wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics that has a rated capacity of not more than 50 kilowatts per customer site, consistent with the requirements of paragraph (3) of subdivision (b) of Section 25744 of the Public Resources Code, and that will be used primarily to reduce onsite consumption of utility power.

(3) "System height" means the higher of either the height of the tower and the system measured to the top of the blade at the highest point of the system extended above the existing grade when being operated.

(4) "Tower height" means the height above grade of the fixed portion of the tower, excluding the wind turbine.

(5) "Urbanized area" means either of the following:

(A) An urbanized area as defined in paragraph (2) of subdivision (d) of Section 65944.

(B) A city as defined in Section 56023.

(Added by Stats. 2009, Ch. 404.)

65895. Ordinances passed before January 1, 2011

(a) A county that has not adopted an ordinance providing for the installation of small wind energy systems located outside an urbanized area, but within the county's jurisdiction, by January 1, 2011, may adopt such an ordinance at a later date, but the ordinance shall be in accordance with Section 65896. Ordinances adopted prior to January 1, 2011, are exempt from this article.

(b) A county may establish a process for the issuance of conditional use permits for small wind energy systems located outside an urbanized area, subject to all of the following conditions:

(1) A county shall review an application for a small wind energy system pursuant to the timelines established in the Permit Streamlining Act (Chapter 4.5 (commencing with Section 65920)).

(2) Fees charged by a county to review an application for a small wind energy system shall be determined in accordance with Sections 66014 and 66016.

(3) An application for the installation of a small wind energy system submitted between January 1, 2011, and the date of the county's adoption of an ordinance that meets the requirements and conditions of subdivision (b) of Section 65896 shall be approved through a ministerial permit by the county meeting the requirements and conditions of subdivision (b) of Section 65896.

(Added by Stats. 2009, Ch. 404.)

65896. Small wind energy ordinance

(a) A county may adopt an ordinance that provides for the installation of small wind energy systems outside an urbanized area, but within the county's jurisdiction.

(b) The ordinance may impose conditions on the installation of small wind energy systems that include, but are not limited to, notice, tower height, setback, view protection, aesthetics, aviation, and design-safety requirements. However, the ordinance shall not require conditions on notice, tower height, setback, noise level, visual effects, turbine approval, tower drawings, and engineering analysis, or line drawings that are more restrictive than the following requirements and conditions:

(1) The parcel where the system is located shall be at least one acre in size and located outside an urbanized area.

(2) Tower heights of not more than 80 feet shall be allowed on parcels between one and five acres. Tower heights of not more than 100 feet shall be allowed on parcels above five acres. All tower heights shall not exceed the applicable limits established by the Federal Aviation Administration. An application shall include evidence that the proposed height of a tower does not exceed the height recommended by the manufacturer or distributor of the system.

(3) Minimum setbacks for the system tower shall be no farther from the property line than the system height, unless a greater setback is needed to comply with applicable fire setback requirements set forth in Section 4290 of the Public Resources Code.

(4) Decibel levels for the system shall not exceed the lesser of 60 decibels (dBA), or any existing maximum noise levels applied pursuant to the noise element of a general plan for the applicable zoning classification in a jurisdiction or applicable noise regulations, as measured at the nearest property line, except during short-term events, such as utility outages and severe windstorms.

(5) Notice of an application for installation of a small wind energy system shall be provided to property owners within 300 feet of the property on which the system is to be located, except that the county may, if it deems it necessary due to circumstances specific to the proposed installation, require the applicant to provide notice by placing a display advertisement of at least one-eighth of a page in at least one newspaper of general circulation within the county in which the installation is proposed.

(6) The system shall not substantially obstruct views of adjacent property owners and shall be placed or constructed below any major ridge line when visible from any scenic

highway corridor designated pursuant to Article 2.5 (commencing with Section 260) of Chapter 2 of Division 1 of the Streets and Highways Code or any scenic highway corridor designated by a county in its general plan.

(7) The system shall use a wind turbine that has been approved by the Energy Commission as qualifying under its Emerging Renewables Program pursuant to Section 25744 of the Public Resources Code or has been certified by a national program recognized and approved by the commission.

(8) The application shall include standard drawings and an engineering analysis of the system's tower, showing compliance with the current version of the California Building Standards Code and certification by a professional mechanical, structural, or civil engineer licensed by this state. A wet stamp, however, shall not be required if the application demonstrates that the system is designed to meet the most stringent wind requirements (Uniform Building Code wind exposure D), the requirements for the worst seismic class (Seismic 4), and the weakest soil class, with a soil strength of not more than 1,000 pounds per square foot, or other relevant conditions normally required by a county.

(9) The system shall comply with all applicable Federal Aviation Administration requirements, including Subpart B (commencing with Section 77.11) of Part 77 of Title 14 of the Code of Federal Regulations regarding installations close to airports, and the State Aeronautics Act (Part 1 (commencing with Section 21001) of Division 9 of the Public Utilities Code). A system that complies with this subdivision shall be deemed to meet the applicable health and safety requirements regarding civil aviation.

(10) The application shall include a line drawing of the electrical components of the system in sufficient detail to allow for a determination that the manner of installation conforms to the National Electric Code.

(11) If required by the county, the applicant shall provide information demonstrating the system will be used primarily to reduce onsite consumption of electricity. The county may also require the application to include evidence, unless the applicant does not plan to connect the system to the electricity grid, that the electric utility service provider that serves the proposed site has been informed of the applicant's intent to install an interconnected customer-owned electricity generator.

(12) If a county receives an application to install a small wind energy system on a site that is within 1,000 feet of a military installation, within special use airspace, or beneath a low-level flight path as defined by Section 21098 of the Public Resources Code, then the county shall promptly comply with Section 65944. If the governing authority of any military installation, special use airspace, or low-level flight path provides written comments regarding that application, the county shall consider those comments before acting on the application.

(13) If a small wind energy system is proposed to be sited in an agricultural area that may have aircraft operating at low altitudes, the county shall take reasonable steps, concurrent

with other notices issued pursuant to this subdivision, to notify pest control aircraft pilots registered to operate in the county pursuant to Section 11921 of the Food and Agricultural Code.

(14) Tower structure lighting shall be prohibited unless otherwise required by another provision of law or pursuant to paragraph (13).

(15) No climbing apparatus attached to the system shall be located less than 12 feet above the ground, and the system shall be designed to prevent climbing within the first 12 feet.

(16) No sign shall be attached to the system if visible from a public road, except for signs that identify the manufacturer, installer, or owner of the system, or public health and safety signs applicable to the installed system, but the signs shall neither be larger than four square feet, unless approved by the county, nor located at the base of the system within 10 feet of the ground surface.

(17) A small wind energy system shall not be allowed where otherwise prohibited by any of the following:

(A) A local coastal program and any implementing regulations adopted pursuant to the California Coastal Act (Division 20 (commencing with Section 30000) of the Public Resources Code).

(B) The California Coastal Commission, pursuant to the California Coastal Act (Division 20 (commencing with Section 30000) of the Public Resources Code).

(C) The regional plan and any implementing regulations adopted by the Tahoe Regional Planning Agency pursuant to the Tahoe Regional Planning Compact (Title 7.4 (commencing with Section 66800)).

(D) The San Francisco Bay Plan and any implementing regulations adopted by the San Francisco Bay Conservation and Development Commission pursuant to the McAteer-Petris Act (Title 7.2 (commencing with Section 66600)).

(E) A comprehensive land use plan and any implementing regulations adopted by an airport land use commission pursuant to Article 3.5 (commencing with Section 21670) of Chapter 4 of Division 9 of Part 1 of the Public Utilities Code.

(F) The Alquist-Priolo Earthquake Fault Zoning Act (Chapter 7.5 (commencing with Section 2621) of Division 2 of the Public Resources Code).

(G) A local ordinance to protect the scenic appearance of the scenic highway corridor designated pursuant to Article 2.5 (commencing with Section 260) of Chapter 2 of Division 1 of the Streets and Highways Code or pursuant to scenic highways designated in the local general plan.

(H) The terms of a conservation easement entered into pursuant to Chapter 4 (commencing with Section 815) of Division 2 of Part 2 of the Civil Code.

(I) The terms of an open-space easement entered into pursuant to the Open-Space Easement Act of 1974 (Chapter 6.6 (commencing with Section 51070) of Division 1 of Title 5).

(J) The terms of an agricultural conservation easement entered into pursuant to the California Farmland Conservancy Program Act (Division 10.2 (commencing with Section 10200) of the Public Resources Code).

(K) The terms of a contract entered into pursuant to the Williamson Act (Chapter 7 (commencing with Section 51200) of Division 1 of Title 5).

(L) The listing of the proposed site in the National Register of Historic Places or the California Register of Historical Resources pursuant to Section 5024.1 of the Public Resources Code.

(c) A county may impose, as a condition of approval, a requirement that a small wind energy system be removed if it remains inoperable for 12 consecutive months, and at that time the small wind energy system shall be subject to nuisance codes and code enforcement action.

(d) (1) Nothing in this article interferes with or prevents the exercise of authority by a county to carry out its programs, projects, or responsibilities.

(2) Nothing in this article affects requirements imposed under any other law.

(Added by Stats. 2009, Ch. 404.)

65897. State policy for use of distributed renewable energy systems

It is the policy of the state to promote and encourage the use of distributed renewable energy systems and to limit obstacles to their use, and it is the intent of the Legislature that local agencies encourage the installation of distributed renewable energy systems by removing obstacles to, and minimizing costs of, permitting distributed renewable energy systems.

(Added by Stats. 2009, Ch. 404.)

65898. Reporting

On or before January 1, 2016, the State Energy Resources Conservation and Development Commission shall submit to the Assembly Committee on Local Government, the Senate Committee on Local Government, and the Assembly Committee on Utilities and Commerce a report that contains all of the following:

(a) The number of ordinances adopted on or after January 1, 2011, by counties pursuant to Section 65895.

(b) The number of applications to install small wind energy systems received by those counties on or after January 1, 2011.

(c) The number of applications to install small wind energy systems approved by those counties on or after January 1, 2011.

(d) The tower heights, system heights, parcel sizes, and generating capacities of the small wind energy systems approved by those counties on or after January 1, 2011.

(e) Any recommendations to the Legislature by the State Energy Resources Conservation and Development

Commission for the continuation, modification, or termination of this article.

(Added by Stats. 2009, Ch. 404.)

65899. Repealer

This article shall remain in effect only until January 1, 2017, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2017, deletes or extends that date.

(Added by Stats. 2009, Ch. 404.)

Article 3. Administration

65900. Creation of administrative body

The legislative body of a city or county may, by ordinance, create and establish either a board of zoning adjustment, or the office of zoning administrator or both. It may also, by ordinance, create and establish a board of appeals. Members of a board of zoning adjustment and members of a board of appeals may receive compensation for their attendance at each meeting of their respective boards in a sum to be fixed by the legislative body by which they are appointed. In addition, they may also receive reasonable traveling expenses to and from the usual place of business of such board to any place of meeting of the board within the county or city.

(Added by Stats. 1965, Ch. 1880.)

65901. Powers

(a) The board of zoning adjustment or zoning administrator shall hear and decide applications for conditional uses or other permits when the zoning ordinance provides therefore and establishes criteria for determining those matters, and applications for variances from the terms of the zoning ordinance. The board of zoning adjustment or the zoning administrator may also exercise any other powers granted by local ordinance, and may adopt all rules and procedures necessary or convenient for the conduct of the board's or administrator's business.

(b) In accordance with the requirements for variances specified in Section 65906, the legislative body of the city or county may, by ordinance, authorize the board of zoning adjustment or zoning administrator to decide applications for variance from the terms of the zoning ordinance without a public hearing on the application. That ordinance shall specify the kinds of variances which may be granted by the board of zoning adjustment or zoning administrator, and the extent of variation which the board of zoning adjustment or zoning administrator may allow.

(Amended by Stats. 1984, Ch. 1009; Amended by Stats. 1985, Ch. 1199.)

65902. Administration by planning commission

In the event that neither a board of zoning adjustment or the office of a zoning administrator has been created and established, the planning commission shall exercise all of the functions and duties of said board or said administrator.

The legislative body of a county may provide that an area planning commission shall exercise all of the functions and duties of a board of zoning adjustment or a zoning administrator in a prescribed portion of the county.

(Amended by Stats. 1971, Ch. 462.)

65903. Board of appeals

A board of appeals, if one has been created and established by local ordinance, shall hear and determine appeals from the decisions of the board of zoning adjustment or the zoning administrator, as the case may be. Procedures for such appeals shall be as provided by local ordinance. Such board may reverse or affirm, wholly or partly, or may modify the order, requirement, decision or determination appealed from, and may make such order, requirement, decision, or determination as should be made, and such action shall be final.

(Added by Stats. 1965, Ch. 1880.)

65904. Appeals to legislative body

If a board of appeals has not been created and established the local legislative body shall exercise all of the functions and duties of the board of appeals in the same manner and to the same effect as provided in Section 65903.

(Added by Stats. 1965, Ch. 1880.)

65905. Public hearing: Use permits, variances, or equivalent

(a) Except as otherwise provided by this article, a public hearing shall be held on an application for a variance from the requirements of a zoning ordinance, an application for a conditional use permit or equivalent development permit, a proposed revocation or modification of a variance or use permit or equivalent development permit, or an appeal from the action taken on any of those applications.

(b) Notice of a hearing held pursuant to subdivision (a) shall be given pursuant to Section 65091.

(Repealed and Added by Stats. 1984, Ch. 1009.)

65906. Variances

Variances from the terms of the zoning ordinances shall be granted only when, because of special circumstances applicable to the property, including size, shape, topography, location or surroundings, the strict application of the zoning ordinance deprives such property of privileges enjoyed by other property in the vicinity and under identical zoning classification.

Any variance granted shall be subject to such conditions as will assure that the adjustment thereby authorized shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zone in which such property is situated.

A variance shall not be granted for a parcel of property which authorizes a use or activity which is not otherwise expressly authorized by the zone regulation governing the parcel of property.

CHAPTER 9.78 WIND ENERGY CONVERSION SYSTEMS (WECS)

SECTIONS:

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9.78.010 PURPOSE (*Amended Ord. 403*)

This Chapter is intended to establish regulations and procedures for the review of any WECS proposed for installation within the Town of Apple Valley that are not otherwise permitted or regulated in this Development Code. It is intended to provide a mechanism to take advantage of renewable, green energy while minimizing potential adverse effects on surrounding properties and infrastructure or on the public health, safety and welfare.

9.78.020 APPLICABILITY

No WECS shall be erected, placed, displayed, or maintained in any district within the Town of Apple Valley, except as specifically allowed in this Chapter. The number, design, type and size of such WECS, as outlined in this Chapter, are intended to be minimum standards which do not necessarily ensure compatibility with building architecture, the neighborhood, and community appearance. Therefore, in addition to these standards, consideration shall be given to a WECS relationship to the overall appearance of the subject property as well as the surrounding community. Compatible design, simplicity and effectiveness, and conformance to the design guidelines provided by Chapters 9.31 "Residential Design Standards", 9.37 "Commercial and Office District Design Standards" and 9.47 "Industrial Design Standards" of this Code, are to be used in determining approvals.

A Development Permit approved by the Planning Commission, as provided in Chapter 9.17 "Development Permits" of this Code shall be required prior to the installation of any and all WECS. The Commission may approve, conditionally approve, modify or deny requests for the installation of WECS. The Commission may establish conditions and limitations necessary to minimize detrimental effects on surrounding property and/or the general public.

A Development Permit allows for the architectural/aesthetic review of structures permitted by this Code for the various zoning districts. A Development Permit is not required if a Conditional Use Permit has been submitted and approved where the Commission has addressed the aesthetics and site design issues required under a Development Permit.

9.78.030 ADMINISTRATION

A. Administration. The Director is authorized by the Town Council to administer and enforce the provisions of this Chapter, unless otherwise provided in this Chapter. The Director may designate a representative to act in his/her place.

B. Interpretation

1. This Chapter shall be interpreted in a manner which best fulfills the intent of its provisions.
2. Questions arising from the application of the Chapter shall be interpreted by the Director. If any inconsistency still exists in the interpretation, an appeal application shall be referred to the Planning Commission for its determination.

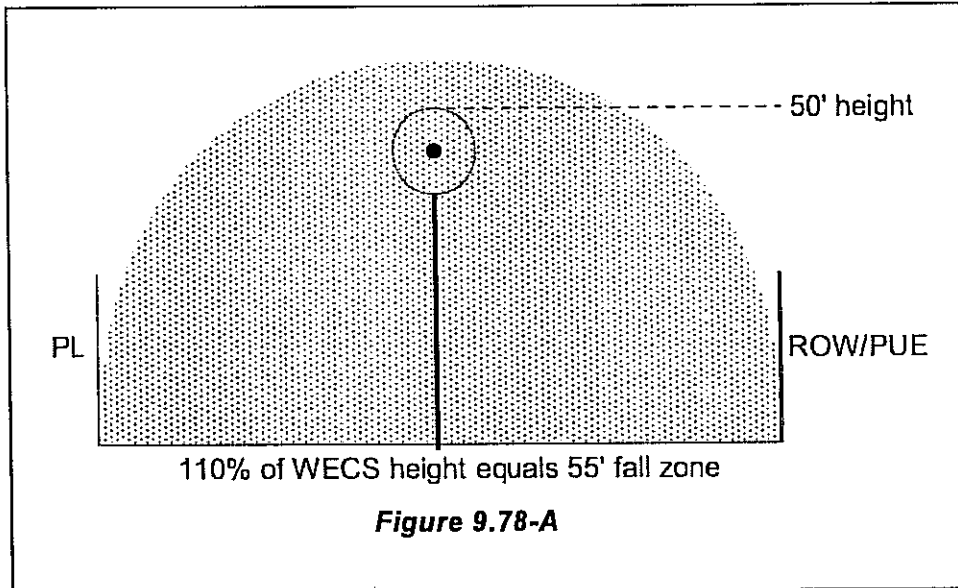
C. Appeals

1. Any decision or determination by the Director may be appealed to the Planning Commission in accordance with the provisions of this Development Code.

2. Any decision of the Planning Commission may be appealed to the Town Council in accordance with the provisions of this Development Code.

9.78.040 DEFINITIONS (Amended Ord. 403)

Fall Zone. The potential fall area for the wind energy conversion system. The fall area is measured by using 110 percent of the total height as the radius around the center point of the base of the tower. (Figure 9.78-A)



Height. The vertical distance from ground level to the top of the WECS, including the blade when at its highest point.

Net-Metering Service. A service to an electric consumer under which electric energy generated by that electric consumer from an eligible on-site generating facility and delivered to the local distribution facilities may be used to offset electric energy provided by the electric utility to the electric consumer during the applicable billing period. Net Metering does not allow the sale of power back to the electric company or into the wholesale electricity market.

Overspeed Control. A mechanism used to limit the speed of blade rotation to below the safe design limits of the WECS.

Private, Non-Commercial WECS. A single WECS installed on a developed property for the purposes of providing energy for on-site consumption.

Wind Energy conversion System (WECS). A device designed or used for the purpose of converting wind energy into electrical or mechanical power, including all interconnection and auxiliary equipment.

Windfarm. Multiple WECS installed at a single property or area for the purpose of generating larger quantities of electrical or mechanical power for transmission to a public or private utility.

9.78.050 PRIVATE, NON-COMMERCIAL, WECS (Amended Ord. 403)

The installation of a private, non-commercial, WECS is permitted as an accessory use within any zoning designation upon approval of a Development Permit by the Planning Commission. The Development Permit review process grants the Planning Commission authority to modify these requirements based upon neighborhood compatibility.

- A. **Lot Size.** WECS shall not be installed upon a lot or recorded parcel of less than two (2) net acres in size.

B. Setback Requirements.

1. WECS must be located behind the rear of the primary structure.
2. WECS shall be setback a distance equal to the fall zone from any property line, overhead utility lines, utility easement or right-of-way.

C. Height. Roof-top mounted WECS are subject to the maximum height permitted within the applicable zoning designation. There is no maximum height for a free-standing WECS, provided that the structure meets the minimum setback requirements.

D. Noise. No WECS shall generate a sound level in excess of 50 dBA, as measured at the nearest property line, during the hours of 7:00 a.m. to 10:00 p.m., nor a level in excess of 40 dBA during the hours of 10:00 p.m. to 7:00 a.m. except during extreme weather conditions.

E. Design Standards.

1. During the Development Permit review process, each WECS shall be reviewed by the Planning Commission to ensure the WECS are installed in a manner that will not significantly detract from existing views.
2. WECS must consist of non-reflective materials.
3. Monopole mounted WECS are preferred.
4. WECS requiring the use of guyed wires are discouraged; however, guyed wires may be permitted based upon neighborhood compatibility.

F. Net-Metering. Private, noncommercial WECS may be net-metered with written authorization provided by the utility company.

G. Only one (1) WECS shall be permitted per developed lot. Any additional WECS, or any WECS located on a vacant parcel, will be considered a "windfarm" and subject to the Planning Commission's review and approval of a Conditional Use Permit.

H. Each WECS shall be operated and maintained in sound working order in conformance with the manufacturer's specifications at all times. This maintenance shall include the physical appearance of the device so it does not present an unsightly appearance. A copy of the manufacturer's specifications and use instructions shall be submitted with any application for review by the Planning Commission and/or Town Council and shall be retained within the public hearing record/file for that application.

I. Any WECS that is not operated for a continuous period of six (6) months shall be considered abandoned, and the owner of such WECS shall remove the same within thirty (30) days of receipt of written notice from the Town notifying the owner of such abandonment. If the owner does not remove the equipment, along with all associated and ancillary equipment, devices, structures or support for that WECS, or does not request a hearing before the Planning Commission on the issue of whether the equipment is abandoned and subject to removal, the Town may remove the equipment and store it in a secure location. The owner shall have fourteen (14) days from the date the Town provides the owner with written notice of removal of the equipment, and notification of the current location of equipment, to reclaim the equipment. If the equipment is not reclaimed in accordance with this section, the Town may dispose of the equipment in accordance with the Town's existing policy for disposal of abandoned or lost property.

Failure to remove an abandoned WECS within said thirty (30) days shall be grounds to remove the device at the owner's expense.

J. A Building Permit, issued by the Town of Apple Valley, shall be obtained prior to the installation of a WECS system.

K. Every WECS shall be installed strictly per the Manufacturer's Installation specifications, or as modified and certified by an Engineer licensed by the State of California.

- L.* The Commission may impose Conditions of Approval that are necessary to address health, safety, community welfare and community aesthetic issues or concerns raised during the Development Permit review.
- M.* Noticing of the Development Permit shall include all properties within 1,000 feet of the site requesting the installation of a WECS.
- N.* No WECS, or associated and ancillary equipment, batteries, devices, structures or support(s) shall be located within any required front, side or rear yard setback area.
- O.* No wiring between a WECS and the main or accessory structure on site, or any associated and ancillary equipment, batteries, devices, structures or support(s) for any WECS, shall be located above ground level.
- P.* When a WECS system is removed from a site, all associated and ancillary equipment, batteries, devices, structures or support(s) for that system shall also be removed.

9.78.070 GENERAL REQUIREMENTS FOR THE INSTALLATION OF ANY WECS

- A.* The safety of the design and construction of all WECS, including towers and associated equipment, shall be certified by the manufacturer or by an Engineer Licensed by the State of California.
- B.* Safety wires shall be installed on the turnbuckles on guy wires of guyed WECS towers.
- C.* All WECS towers shall be equipped with manual and automatic over-speed controls. The rotor and over-speed control design and fabrication shall conform with good engineering practices and shall be certified by the manufacturer or by an Engineer Licensed by the State of California.
- D.* All installations shall conform to the requirements of the latest adopted version of the National Electrical Code, adopted by the Town of Apple valley.
- E.* The compatibility of the tower structure with the rotors and others components of the WECS shall be certified by the manufacturer or by an Engineer Licensed by the State of California.
- F.* All WECS towers or facilities shall either have tower climbing apparatus located not closer than twelve (12) feet to the ground or be un-climbable by design for the first twelve (12) feet.
- G.* WECS sited on top of, or attached to and extending above the roof line of, an existing structure shall comply with all applicable provisions of the latest version of the Uniform Building Code, as adopted by the Town of Apple Valley. Certification by an Engineer Licensed by the State of California shall be required. Any device located in such a manner shall be subject to the height limitations of the underlying zoning.
- H.* No part of a WECS tower or facility shall be located upon, within or extend over a drainage, utility or other established easement(s). No portion or part of the WECS shall be located on or over any property line(s). The base of any WECS or the guy wire anchors of a guyed WECS tower shall not be located in any required minimum front, side or rear setback area. No such WECS shall be located between the main structure on site and any existing or planned public right-of-way.
- I.* Clearance between any WECS and existing or planned electrical lines shall be in compliance with the requirements of the most recently adopted edition of the National Electrical Safety Code.
- J.* Efforts should be made to site WECS to reduce the likelihood of blocking or reflecting television or other communications signals and from blocking established views. If signal interference occurs, the WECS owner shall make all reasonable efforts to resolve the problem. If the problem(s) cannot be eliminated or reduced to an acceptable level by the individual experiencing the interference, then the WECS owner shall shut down and remove the source of interference within thirty (30) days from the date of receiving official notice from the Town of Apple Valley.
- K.* Nothing within this Chapter shall be construed to allow the infringement of the enjoyment rights of a property owner by another by the installation, maintenance or use of a WECS.

- L.* The owner of any WECS shall provide, as part of the submission for review by the Planning Commission of a Development Permit, proof of liability insurance that specifically addresses the installation, use and maintenance of the WECS.
- M.* Homebuilt, experimental and prototype WECS shall be allowed provided they comply with all applicable regulations detailed within this Chapter.
- N.* Intentionally left blank.
- O.* The interconnections between a wind turbine and the electric utility shall be in compliance to the most recently adopted edition of the National Electrical Safety Code and all Federal regulations. Certification shall be submitted in writing by the owner that the WECS will automatically disconnect from the utility when there is no power input from the utility.
- P.* Battery storage units associated with a WECS shall be in compliance with the latest adopted edition of the National Electric Code or other applicable Codes and shall be inspected by an inspector for the Town of Apple Valley.
- Q.* The safety of structural components of reconstructed or reconditioned WECS, and the compatibility of the rotors of reconstructed or reconditioned WECS, shall be certified by an Engineer Licensed by the State of California. The safety of electrical components of reconstructed or reconditioned WECS shall be certified by an Engineer Licensed by the State of California. The safety of all modifications to any WECS shall be certified by an Engineer Licensed by the State of California. Certification of safety is required before any Building Permit for a WECS is issued for modifications made prior to installation. Certification of the safety of modifications made after the WECS has been installed shall also be subject to the requirements of a Building Permit. Failure to have the safety of any modifications certified either prior to installation, or prior to use of a system modified after installation, shall result in the revocation of the Building Permit and any discretionary approvals granted for the WECS until such certification has been obtained and provided to the Town of Apple Valley.

| Use | RS-4 | RS -3 | RS-2 | RS-1 | RS-E | Notes |
|--|------|-------|------|------|------|--|
| | P | P | P | P | P | Subject to permits and requirements specified in Chapter 19.36 <i>Home Occupations</i> . |
| Second units | P | P | P | P | P | Pursuant to the requirements specified in Chapter 19.53, <i>Second Units</i> . |
| Windmills and solar energy collectors, non commercial, up to thirty-five (35) feet in height. | P/M* | P/M* | P/M* | P/M* | P/M* | Structures shall be set back from all property lines at least 1 1/4 times the height of the structure, measured to the highest element of the structure. * One windmill Permitted per parcel. Minor Use Permit required for additional windmills. |
| Up to a fifty percent (50%) increase, to 52 ½ feet, may be approved subject to Minor Use Permit. | M | M | M | M | P | |
| <u>C. Institutional Uses</u> All institutional uses shall be accessible from an Expressway, Arterial or Collector Street, or have an adequate, improved private drive. | | | | | | |
| Cemeteries | C | C | C | C | C | |
| Churches, synagogues, temples, and other religious facilities | C | C | C | C | C | |
| Conference centers and organizational camps | C | C | C | C | C | |
| Governmental facilities | C | C | C | C | C | Including public service facilities, such as libraries, museums, parks, recreation facilities, and civic uses. |
| Hospitals | C | C | C | C | C | |
| Schools | C | C | C | C | C | |
| <u>E. Cultural Activities</u> | | | | | | |
| Art Galleries and studios | M | M | M | M | M | |
| <u>F. Transient Lodging Facilities</u> | | | | | | |
| Bed and Breakfast Uses | C | C | C | C | C | Subject to the limitations, regulations and standards in Chapter 19.54, <i>Bed and Breakfast Inns</i> . |
| <u>G. Transportation and Communication Facilities, and Utilities</u> | | | | | | |

- c. The reasonable possibility of locating the facility on an existing structure,
 - d. The reasonable possibility of designing the facility to conceal its intended purpose,
 - e. The facility to the greatest extent feasible shall be designed so that it is aesthetically and architecturally compatible with the surrounding use,
 - f. A facility mounted on a building or structure shall be aesthetically and architecturally compatible with the building or structure or shall be screened with materials that are aesthetically and architecturally compatible with the building,
 - g. The facility shall have subdued colors and be covered with non-reflective materials,
 - h. The facility as proposed shall have been approved by the Federal Communications Commission, California Public Utilities Commission or other governmental agency having jurisdiction over the facility and the facility shall be consistent in matters with such approvals, and
 - i. The availability of alternate sites proposed to be located within the same land use district within which the facility is proposed to be located and the availability of reasonably and functionally equivalent alternate sites located in land use districts other than that within which the facility is proposed to be located.
- E. In the event a facility is abandoned, the holder of the conditional use permit for the facility shall remove the facility at its sole cost and expense. A facility shall be considered abandoned if it ceases to be used as allowed in the conditional use permit for more than one hundred eighty (180) consecutive days.
- F. In the event the planning commission denies an application for a conditional use permit for a facility, it shall render its decision in writing and shall support its decision by substantial evidence in the written record.

(Ord. 290 § 4 (Exh. A), 2000)

16.16.063 - Alternative energy technology standards.

- A. Windmills as defined by Section 16.08.890 shall be permitted in accordance with Section 16.16.064 and subject to the provisions as provided herein.
1. The structure and all appurtenant equipment for all tower-mounted windmills shall be located behind the primary building, not within the front or street side yard, and a minimum of 1.1 times the overall structure height from the side and rear property lines. Guy wires may encroach into the minimum setbacks, but shall not encroach over property lines.
 2. The structure may need to be farther from the property lines based upon the required specifications regarding noise identified in Section 16.16.063(A)(3).
 3. Specifications on the noise produced by the windmill shall be submitted for windmills within all zone districts, identifying the distance from the structure to the property line to meet the city's noise ordinance. The setback shall be increased should the manufacturers' specifications evidence that the windmill would exceed the evening noise standard at any property line.
 4. Tower-mounted windmills shall not exceed the height limitation of the zone district in conjunction with the special height increases of Section 16.20.060. The height shall be measured to the top of the blades or rotors or any other portion of the windmill, which extends farthest above ground level. The blades and rotors of the windmill shall be a minimum of fifteen (15) feet above ground level at the lowest point to ensure the safety of persons and property beneath. Approval of additional height beyond the special height increases within Section 16.20.060 shall require approval of a variance.
 5. Multiple tower-mounted windmills are allowed subject to compliance with the minimum setback and accessory structure lot coverage limitations as well as in conformance with the noise ordinance. The area of a windmill is defined as the circular area measured horizontally at the farthest spread of the rotors/blades of the windmill from the pole in determining accessory structure lot coverage.
 6. Roof-mounted windmills shall not exceed fifty (50) feet or the height regulation of the zone district, whichever is greater. Approval of a minor exception is needed to exceed the height restriction by up to ten percent and approval of a variance shall be required to exceed the allowed height beyond ten percent. Roof-mounted windmills do not qualify for the special height increases of Section 16.20.060. The height shall be measured from the ground to the top of the blade/rotor or any other portion of the windmill.
 7. Specifications on the noise produced by the windmill shall be submitted pursuant to Section 16.16.063(A)(3), identifying the distance from the structure to the property line necessary to meet the city's noise ordinance. The windmill shall be located so that it does not exceed the evening noise standard at any property line.
 8. All windmills shall be a light gray, white, or other city-approved non-reflective color to minimize visual disruption of the area. Use of conspicuous colors is prohibited. Windmills shall not contain signs or be illuminated, unless required by state or federal law.

9. Nothing in this development code amendment shall be construed to affect the structural requirements for any windmill, as enforced by the building and safety division. All windmills shall require issuance of a building permit prior to installation.
 10. All mechanical equipment associated with the windmill located outdoors shall be secured by a minimum five-foot high fence to prevent unauthorized access. Ladders or step bolts on the side of towers shall be a minimum of nine feet above ground level or shall be equipped with an approved method to prevent unauthorized access.
 11. Windmills shall be equipped with manual and automatic controls to limit the operational speed of the blades/rotor to the design limits of the windmill. An automatic braking, governing or feathering system shall also be provided to prevent uncontrolled rotation.
 12. No windmill shall cause any electromagnetic interference.
 13. Windmills shall be kept in good working order and shall be maintained in an aesthetic state. All windmills which are in a nonoperational state for one hundred eighty (180) consecutive days or more shall be considered abandoned and shall be dismantled and removed from the property at the owner's expense.
 14. Wind farms shall be allowed in rural residential, agricultural, institutional, and industrial zone districts with approval of a conditional use permit.
 15. All references to wind machines within the current development code shall be eliminated.
- B. Solar energy systems as defined by Section 16.08.770 shall be permitted in accordance with Section 16.16.064 and subject to the provisions as provided herein.
1. Solar systems are subject to compliance with the minimum setback and accessory structure lot coverage limitations. The area of a solar system is defined as the rectangular area of the solar panels for the purpose of determining accessory structure lot coverage.
 2. Solar systems shall be kept in good working order and shall be maintained in an aesthetic state. All solar systems which are in a nonoperational state for one hundred eighty consecutive days or more shall be considered abandoned and shall be dismantled and removed from the property at the owner's expense.

(Ord. No. 2009-12, § 3, 2-16-10)

16.16.064 - Alternative energy permitting requirements.

| Alternative Energy Technology | Zone District | | | |
|-----------------------------------|---|---|---|--|
| | Single-family residential, rural residential and agricultural districts ¹ | Multiple-family residential districts | Commercial districts ² | Industrial and institutional districts ³ |
| Tower-mounted windmill | Allowed as an accessory structure on developed 15,000 square foot and larger lots. | Allowed as an accessory structure on a developed lot if approved by a Revised Site Plan Review application. | Allowed as an accessory structure on a developed lot if approved by a Revised Site Plan Review application. | Allowed as an accessory structure on developed lots. |
| Roof-mounted windmill | Not permitted. | Not permitted. | Allowed as an accessory structure on a developed lot if approved by a Revised Site Plan Review application. | |
| Roof-mounted solar energy systems | Allowed as an accessory structure on a developed lot. Roof-mounted solar systems shall not face a street unless the solar system is designed approximately parallel to the roof plane or integral to the roof material. A revised site plan review application shall be approved to allow roof-mounted solar systems to face a street. Approval of a Revised Site | | Allowed as an accessory structure on a developed lot if approved by a Revised Site Plan Review application. | |

| | | |
|-------------------------------------|---|---|
| Ground-mounted solar energy systems | Plan Review shall be based upon the location of buildings, orientation of the roof planes, tree locations, or other factors which negatively affect system efficiency, preventing the system from being situated on a roof plane not facing a street. | Allowed as an accessory structure on a developed lot if approved by a Revised Site Plan Review application. |
| | Allowed as an accessory structure within the rear yard on a developed lot if approved by a Revised Site Plan Review application. Approval shall be subject to the determination that the configuration and location of buildings, orientation of the roof planes, tree locations, or other factors which negatively affect system efficiency, prevent installation on the roof. | |

¹This includes rural residential, as well as single-family residential, rural residential and agricultural districts within Specific Plan and Planned Development districts.

²This includes similar commercial districts within Specific Plan and Planned Development districts.

³This includes similar industrial and institutional districts within Specific Plan and Planned Development districts.

(Ord. No. 2009-12, § 3(Exh. A), 2-16-10)

16.16.065 - Bed and breakfast uses.

- A. Bed and breakfast uses as defined in Section 16.08.080, shall be permitted in all residential zone/land use districts and all zone/land use districts where residential uses are permitted.
- B. Requirements.
 - 1. Only one family dwelling structure, including habitable accessory structures shall be considered for bed and breakfast uses.
 - 2. This use shall be conducted as an accessory use only; the residential structure shall serve as the primary residence of the owner. If a corporation is the owner, a majority shareholder of the corporation shall reside in the residential structure where the said use is proposed.
 - 3. Permits—Taxes.
 - a. All bed and breakfast uses shall be subject to:
 - i. Special use permit as specified in Chapter 16.12. The special use permit is renewable annually;
 - ii. Health permit as required by county and state requirements; and
 - iii. Transient occupancy tax (bed tax).
 - b. Application for a permit shall be made by the resident property owner or his legal agent having power of attorney to make such application.
 - 4. Where deemed appropriate by the building official, owners/operators of bed and breakfast uses shall be required to sign and record a certificate of land use compliance and abide by the provisions outlined therein.
- C. Findings. Prior to acting upon an application for a special use permit for a bed and breakfast use, the reviewing authority shall find that all the following are true:
 - 1. That the site upon which the bed and breakfast use is to be established, shall conform to all standards of the zone/land use district in which it is located, and that the site for the proposed use is adequate in size and shape to accommodate said use and all yards, building coverage, setbacks, parking areas and other applicable requirements of the code;
 - 2. That the residential character of the neighborhood in which the use is located shall be maintained and preserved and that the issuance of the permit shall not be significantly detrimental to the public health, safety and welfare or injurious to the vicinity and district in which the use is located.
- D. Conditions.
 - 1. Structural Features.
 - a.

CHAPTER 9 ARTICLE 99
RENEWABLE ENERGY

City of Palmdale

ARTICLE 99 RENEWABLE ENERGY

(Zoning Ordinance Amendment 09-02, adopted by City Council November 4, 2009.)

Section 99.01 Co-located Small Wind Energy Systems (CSWES)

A. Purpose and intent

It is the intent of these regulations to permit Co-located Small Wind Energy Systems (CSWES) as an accessory use in the C-2 (Office Commercial), C-3 (General Commercial), C-4 (Commercial Center), C-5 (Service Commercial), M-1 (Light Industrial), M-2 (General Industrial), M-3 (Airport Industrial), and M-4 (Planned Industrial) zone districts. It is the purpose of these regulations to ensure that alternative energy systems are available in the City of Palmdale, and that they are installed and co-located in a manner that avoids hazards to public health and safety, minimizes adverse aesthetic impacts, and ensures compatibility with the surrounding neighborhood.

B. Definitions

Co-located Small Wind Energy System (CSWES) shall mean a wind energy conversion system that is located on a pole with site lighting below the turbine, which has a rated capacity of 8kW or less.

Temporary Meteorological Tower (met tower) shall mean a temporary structure which includes the tower, base plate, anchors, guy cables and hardware, anemometers, (wind speed indicators), wind direction vanes, booms to hold equipment anemometers and vanes, data logger, instrument wiring, and any telemetry devices that are used to monitor or transmit wind speed and wind flow characteristics over a period of time for either instantaneous wind information or to characterize the wind resource at any given location.

Co-Located Wind Energy System Height shall mean the vertical distance from ground level to the tip of the wind generator blade when it is at its highest point.

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C. Development Standards

Installation of Co-located Small Wind Energy Systems (CSWES) where permitted as an accessory use subject to administrative review by a Minor Modification application, shall be constructed in the following manner:

1. Minimum parcel size. Developments of a minimum of 20 acres or more with parking lot light fixtures at a minimum of 25 feet in height.
2. Setbacks. Co-located Small Wind Energy Systems shall meet the following setbacks:
 - a. A distance equal to the tower height from any abutting private properties that are not part of the development.
 - b. A distance equal to the tower height from any overhead utility lines, unless written permission is granted by the affected utility.
 - c. A distance equal to 150 feet from any property that is residentially used or designated.
3. Noise. Co-located Small Wind Energy Systems shall meet the following criteria with respect to noise:
 - a. A site-specific noise study or the manufacture's engineered sound studies shall be submitted for review and the decibel level shall comply with the Noise Element of the General Plan.
 - b. Decibel levels for each unit shall not exceed 65 decibels (dBA) as measured at the property line except during short-term events such as utility outages and severe windstorms.

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RENEWABLE ENERGY**

4. **Aesthetics.** Co-located Small Wind Energy Systems shall meet the following criteria with respect to aesthetics:
 - a. All proposed replacement poles for a CSWES system shall be of the same design, shape and color as the remaining light poles throughout the parking lot.
 - b. The wind turbine housing and the blades of the CSWES system shall not be brightly colored. The turbine housing should be white, sky colored, or should coordinate with the color palette approved for the project buildings.
 - c. The physical size of the turbine shall not extend beyond 36 inches from the center of the pole.
 - d. The maximum diameter of the blades shall not exceed 16 feet.

5. **Access.**
 - a. All ground mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.
 - b. The pole shall be designed and installed so as to not provide step bolts or a ladder.

6. **Lighting.**
 - a. A Co-located Small Wind Energy System (CSWES) shall not be illuminated unless such lighting is required by the Federal Aviation Administration. A light temporarily used to inspect a turbine, tower and associated equipment is permissible, providing said light is only used for inspection purposes and not left on for an extended period of time. All sites that are part of a CSWES shall comply with Section 86.03.
 - b. The height of the light fixture on the structure itself shall not be altered from its original height as previously permitted or as permitted by the reviewing authority when co-locating a CSWES in a parking lot.

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RENEWABLE ENERGY**

- c. All light fixture poles, including collocated poles, shall be consistent in design and color throughout the development.
 - d. A revised photometric plan shall be submitted for review for compliance with Section 86.03(K) of the Zoning Ordinance when modifications to existing site lighting is proposed.
7. Height. Co-located Small Wind Energy Systems shall meet the following criteria with respect to height:
- a. The maximum CSWES Height shall be sixty (60) feet at the highest point with one of the blades at its highest vertical point.
 - b. The maximum height of the center of the turbine shall not exceed 53 feet.
 - c. The maximum diameter of the blades from the lowest point to the highest point shall not exceed 16 feet.
8. Temporary meteorological (Met) towers shall be permitted under the same standards as those for a CSWES facility. Approval for a temporary met tower shall be valid for a maximum of 30 days.
9. Signs. All signs, other than the manufacturer's or installer's identification, appropriate warning signs shall be prohibited.
10. Building Permit. Applicable building permits shall be required for a CSWES.
11. The system shall comply with all applicable Federal Aviation Administration requirements, including but not limited to Subpart B (commencing with Section 77.11) of Part 77 of Title 14 of the Code of Federal Regulations regarding installations close to airports. These regulations apply to any installation within 20,000 feet of an airport and exceeding specific heights based on specific FAA and airport parameters.

**CHAPTER 9 ARTICLE 99
RENEWABLE ENERGY**

12. If the CSWES use has been determined by the Planning Director or his or her designee to be inoperative or abandoned for a period of six (6) months, the CSWES shall be removed, unless a new application to re-establish the use is filed with the City. The City may remove an abandoned facility, repair any and all damage to the premises caused by such removal, and otherwise restore the premises as in appropriate to be in compliance with applicable code at any time: 1) after ninety (90) days following a notice of abandonment, or 2) following a notice of decision by the Director of Planning, subject to the owner/operator's right of appeal under the City of Palmdale Municipal Code. The City may, but shall not be required to, store the removed facility, or any part thereof. The owner of the premises upon which the abandoned facility was located, and all prior operators of the facility, shall be jointly liable for the entire cost of such removal, repair, restoration and storage, and shall remit payment to the City promptly after demand therefore is made. The City may, in lieu of storing the removed facility, convert it to the City's use, sell it, or dispose of it in any manner deemed by the City to be appropriate.

D. Review Process

Co-located Small Wind Energy Systems (CSWES) shall be permitted as an Accessory Use when permitted in the zoning district subject to Administrative Approval pursuant to Zoning Ordinance Section 26.04, Minor Modification or as permitted by the reviewing authority when co-locating a CSWES in a parking lot.

A temporary meteorological tower shall be permitted subject to Administrative Approval pursuant to Zoning Ordinance Section 26.04, Minor Modification for a period not to exceed 30 days as stated in Section 99.01 (C) 7.

E. Submittal Requirements

The applicant shall submit the information required by the appropriate application form, including but not limited to the following information.

**CHAPTER 9 ARTICLE 99
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Applications for a CSWES shall include the following items:

1. Site Plan
 - a. Property lines and physical dimensions of the subject property;
 - b. Location, dimensions, and types of existing major structures on the property;
 - c. Location of the proposed CSWES units including, foundations and associated equipment;
 - d. Proposed CSWES elevation drawings,
 - e. The right-of-way of any public road that is contiguous with the property;
 - f. Any overhead utility lines;
 - g. A site specific noise study; and
 - h. A photometric plan if existing lighting is being modified.
2. A perspective rendering from any abutting public way if the CSWES is visible from said public way.
3. Specifications of the CSWES including manufacturer and model, rotor diameter, and proposed pole height.
4. Typical pole foundation specifications or drawings from the wind turbine manufacturer.

ORDINANCE NO. 954

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LANCASTER, CALIFORNIA, AMENDING TITLE 17 OF THE MUNICIPAL CODE, TO MODIFY THE REQUIREMENTS FOR CERTAIN WIND ENERGY SYSTEMS IN THE RURAL RESIDENTIAL (RR-1 AND RR-2.5) ZONES

WHEREAS, the City Council of the City of Lancaster, finds that it is necessary to amend Title 17 of the Municipal Code (Zoning Ordinance) based on increasing energy demands facing California and a desire to encourage the use of renewable energy by allowing Non-Commercial Wind Energy Systems (NC-WES) in Rural Residential Zones (RR-1 and RR-2.5 only) with a more efficient review and approval process; and

WHEREAS, the amendment to Title 17 of the Lancaster Municipal Code will modify the current requirements by requiring a Director's Review application (Category "B"), to regulate NC-WES in Rural Residential Zones (RR-1 and RR-2.5 only) in lieu of the current requirement for a Conditional Use Permit, and thereby would reduce applicable fees and time necessary for approval; and

WHEREAS, the establishment of the proposed regulations for wind energy systems would streamline the process, and make it easier and less expensive for property owners to use this form of alternative renewable energy; and

WHEREAS, the City Council finds that small wind energy systems, designed for non-commercial residential use, are recognized by the State Energy Resources Conservation and Development Commission as an excellent technology to help achieve the goals of increased in-state electricity generation, reduced demand on the state electric grid, increased consumer energy independence, and nonpolluting electricity generation; and

WHEREAS, wind energy is an abundant, renewable, and nonpolluting energy resource, and when converted to electricity, reduces dependence on nonrenewable energy resources and reduces air and water pollution that results from conventional energy sources; and

WHEREAS, small wind energy systems enhance the reliability and electrical generation quality of the power grid, reduce peak power demands, increase in-state electricity generation, diversify the City of Lancaster's energy supply portfolio, and provide a competitive supply market by promoting consumer choice; and

WHEREAS, the City Council finds that the Legislature of the State of California recognized the need to promote all feasible adoption of clean, renewable, and distributed energy sources by enacting the Reliable Electric Service Investments Act (Article 15 (commencing with Section 399) of Chapter 2.3 of Part 1 of Division 1 of the Public Utilities Code); and

WHEREAS, The City Council hereby makes the following findings in support of the Ordinance:

1. The proposed Zoning Ordinance amendment is consistent with General Plan Policy No. 3.6.6 which states: "Consider and promote the use of alternative energy such as wind energy and solar energy", and it will not alter the land use patterns and requirements established by the General Plan; and
2. The proposed amendments to the Lancaster Municipal Code will not adversely affect the public health, peace, comfort or welfare, because amending the application process would not affect the existing land use and still allow for a public notification/comment process; and
3. The modification to the Lancaster Municipal Code would not cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat because the proposed procedural modification and would not alter land; and
4. The Council hereby finds the environmental findings adopted by the City Council Resolution No. 09-52 on July 14, 2009, are valid for the amendment because the project is consistent with the General Plan. Therefore, no further environmental review is required pursuant to Section 15162 of the State CEQA Guidelines.
5. A uniform and comprehensive set of standards, conditions, and procedures for the placement of Non Commercial – Wind Energy Systems (NC-WES) is necessary to encourage the generation electricity for on-site use, increasing the use of renewable energy within the City.

THE CITY COUNCIL OF THE CITY OF LANCASTER, CALIFORNIA, DOES HEREBY ORDAIN AS FOLLOWS:

Section 1. Delete and Replace under Section 17.04.240: "Wind energy conversion system" to read as follows:

Wind energy conversion system "means a mechanism which is designed to utilize the natural movement of air as a means of generating electricity." The following terminology as it pertains to wind energy conversion systems is listed below:

"**AWEA** means American Wind Energy Association."

"**FAA** means Federal Aviation Administration."

"**Guy Wires** means wires or cables used in tension to support a tower."

“Non-Commercial Wind Energy System (“NC-WES”) means a small wind energy system suitable for Rural Residential Zone (RR-1 and RR-2.5 only) meeting the requirements of Section 17.08.337, consisting of a wind turbine, tower, blades, associated controls and conversion electronics, which has a rated capacity that does not exceed the allowable rated capacity under the Emerging Renewables Fund of the Renewables Investment Plan administered by the California Energy Commission and which will be used primarily to reduce on-site consumption of utility power by converting mechanical energy into electricity.”

“Tower means the portion of the NC-WES upon which the wind turbine is mounted.”

“Tower Height means the height above grade of the fixed portion of the tower measured from the ground to the top of the tower, excluding the wind turbine, blades and wind-measuring devices.”

“USGS means the United States Geological Survey.”

“Vertical Axis Wind Turbine(VAWTS)” means a small scale, non-commercial vertical axis wind turbine system, designed with a vertical axis, suitable for residential zones consisting of a wind turbine, tower, blades, associated controls and conversion electronics, which has a rated capacity that does not exceed the allowable rated capacity under the Emerging Renewables Fund of the Renewables Investment Plan administered by the California Energy Commission and which will be used primarily to reduce on-site consumption of utility power by converting mechanical energy into electricity.”

“Wind Turbine means a non-commercial small wind turbine consisting of a wind turbine generator and rotors, which has a rated capacity of not more than 100 kilowatts (kW) and which converts kinetic energy in wind into mechanical energy.”

Section 2. Add Section: 17.08.060.Z to read as follows:

“Z. Non-Commercial Wind Energy Systems in the Rural Residential Zones (RR-1 and RR-2.5 only) pursuant to the requirements of Section 17.08.337. (See Article V of Chapter 17.08 for standards.)”

Section 3. Amend Section: 17.08.070.DD to read as follows:

“DD. Wind energy conversion systems for private and public use, excluding NC-WES and VAWTS allowed pursuant to Section 17.08.060.Y. and 17.08.060.Z (See Article XI of Chapter 17.40 for standards.)”

Section 4. Amend Section: 17.08.355.C to read as follows:

“C. Definitions. Definitions for the administration of this Section are contained within Section 17.01.240.”

Section 5. Delete Diagram under Section 17.08.335.G and replace with Attachment 1:

Section 6. Add Section 17.08.337 (see Exhibit "A")

Section 7. That the City Clerk shall certify to the passage of this Ordinance and will see that it is published and posted in the manner required by law.

I, Geri K. Bryan, CMC, City Clerk of the City of Lancaster, do hereby certify that the foregoing ordinance was regularly introduced and placed upon its first reading on the 9th day of November, 2010, and placed upon its second reading and adoption at a regular meeting of the City Council on the ____ day of _____, 2010, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST:

APPROVED:

GERI K. BRYAN, CMC
City Clerk
City of Lancaster

R. REX PARRIS
Mayor
City of Lancaster

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ss
CITY OF LANCASTER)

CERTIFICATION OF ORDINANCE
CITY COUNCIL

I, _____, _____ City of Lancaster, California, do hereby certify that this is a true and correct copy of the original Ordinance No. 954, for which the original is on file in my office.

WITNESS MY HAND AND SEAL OF THE CITY OF LANCASTER, on this _____
Day of the _____, _____.

(seal)

“EXHIBIT A”

SECTION 17.08.337 - Non-Commercial Wind Energy System (NC-WES)

- A. **Purpose and Intent.** It is the purpose and intent of this section to promote the safe, effective and efficient construction, and use of NC-WES in the Rural Residential Zones (RR-1 and RR-2.5 only). These regulations are intended to assure that NC-WES are designed and located in a manner that minimizes visual, noise, and safety impacts on the surrounding community.
- B. **Applicability.** These specific standards are applicable for all Non-Commercial Wind Energy Systems in the Rural Residential Zones (RR-1 and RR-2.5 only), and subject to approval of a Director’s Review in accordance with Article VI of Chapter 17.32. The definitions contained in Section 17.04.240 regarding wind energy conversion systems shall apply to this section.
- C. **Development Standards.** An NC-WES shall be subject to all applicable regulations of the Rural Residential Zones (RR-1 and RR-2.5 only) in which it is proposed, except that the following standards shall take precedence over the regulations of the Rural Residential Zones to the extent that they differ.
1. **Accessory Use.** A NC-WES is considered to be an ancillary structure and may only be placed on a parcel already developed with a primary use, or placed on a parcel concurrent with the development of a primary use.
 2. **Minimum Lot Size.** The minimum parcel size shall be 40,000 square feet.
 3. **Location of NC-WES.**
 - a. **Setback.** A NC-WES shall be located:
 - i. Behind the primary building within the buildable area of the parcel (exclusive of required front, side, and rear yard areas),, and located a minimum of 30 feet from any property line. (Note: Setback distances shall not apply to guy wires or anchors).
 - ii. Shall not be located within or over drainage, utility, or other established easements.
 - iii. Each wind turbine shall be setback from the nearest above-ground public communication or electrical line by a distance which is equivalent to the height of the wind turbine.
 4. **Blade Clearance.** No part of an NC-WES blade shall extend within 15 feet of the ground, trees, or any other structure.
 5. **Maximum Tower Height.** Tower Height shall not exceed 65 feet above grade on any parcel of 5 acres or less. Parcels greater than 5 acres in size may have a maximum tower height of 80 feet.
 6. **Maximum Blade Rotor Area Diameter.** The overall diameter of the blade area shall not exceed 24 feet.
 7. **Compliance with Aviation Safety Standards.** The NC-WES shall comply with all applicable Federal Aviation Administration (FAA) requirements, including any necessary approvals for installations within an adopted Airport Land Use Plan, Air Installation Compatibility Use Zone (AICUZ), or other recognized over-flight area.

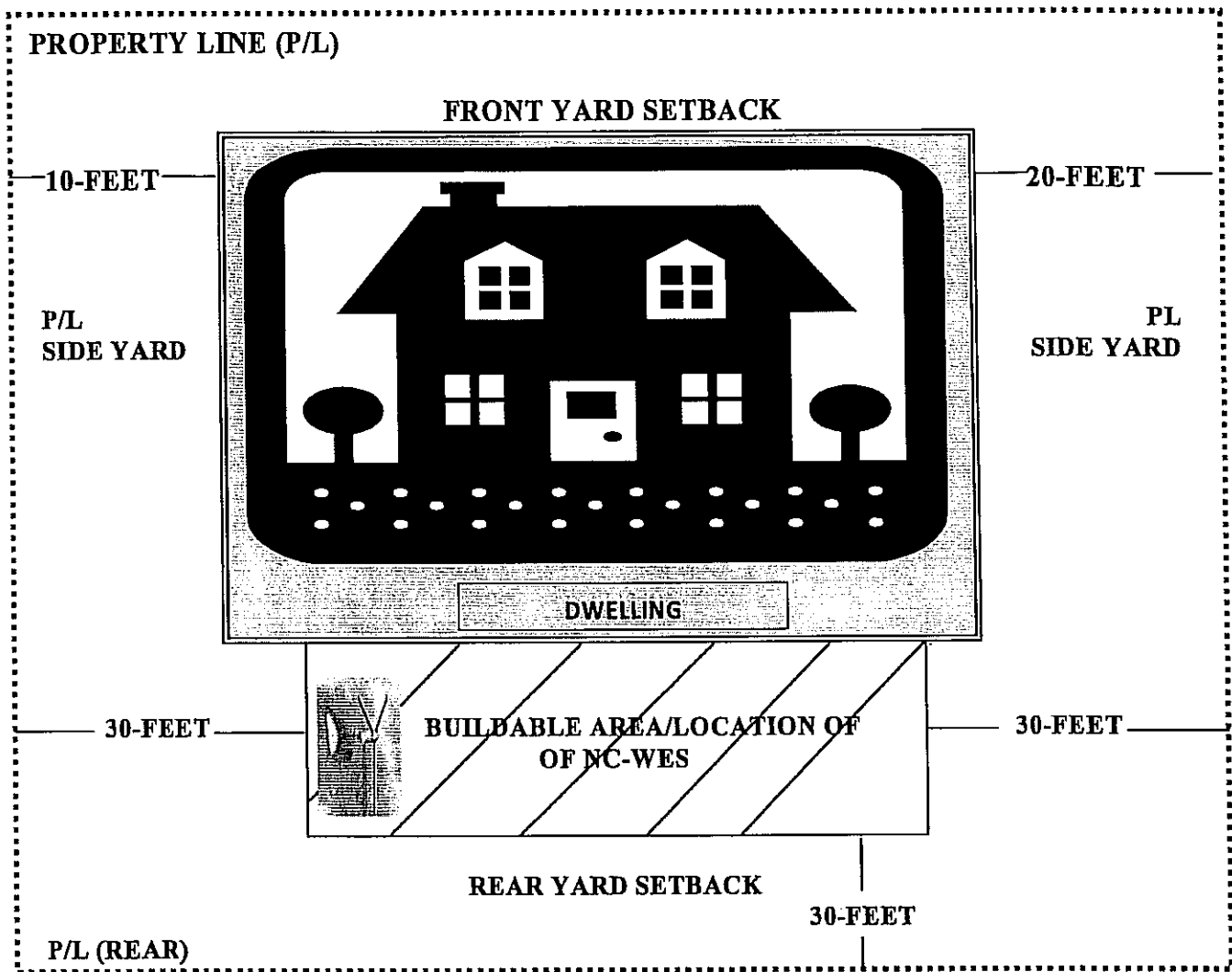
8. **Wind Turbine Approval.** Wind Turbines must be approved under the Emerging Technologies program of the California Energy Commission or any other small wind certification program recognized by the AWEA.
9. **Design.** An NC-WES must be designed and constructed in accordance with the following:
 - a. **Colors.** The colors used in the construction materials or finished surface shall be muted and visually compatible with surrounding development.
 - b. **Lighting.** Lighting of the Tower shall only be permitted if required by, and done in conformance with, the requirements of the FAA.
 - c. **Noise.** Noise from an NC-WES shall not exceed 65 decibels at any property line.
 - d. **Visual Effects.** Any NC-WES that is placed within the view shed of a designated Scenic Highway or vista shall be assessed for its visual effects, and appropriate conditions relating to setting, buffers, and design of the facility.
 - e. **Climbing Apparatus.** All climbing apparatus must be located at least fifteen (15) feet above the ground, and the tower must be designed to prevent climbing within the first fifteen (15) feet.
 - f. **Automatic Overspeed Controls.** An NC-WES shall be equipped with both manual and automatic overspeed controls to limit the blade rotation speed to within the design limits of the NC-WES.
 - g. **Access Doors.** If an NC-WES is equipped with access doors, all access doors shall be lockable.
10. **Signs.** One sign, limited to eighteen (18) inches in length and one (12) inches in height, shall be posted at the base of the Tower. The sign shall include a notice of no trespassing, a warning of high voltage, and the phone number of the property owner to call in the event of an emergency.
11. **Maintenance.** NC-WES shall be maintained in an operational condition that poses no potential safety hazards.
12. **Removal.** Within six (6) months after the operation of an NC-WES has ceased the permittee shall remove the N-WECS, clear the site of all equipment, and restore the site as nearly as practicable to its condition prior to the installation of the N-WECS. Failure to remove such NC-WES as required above shall constitute a public nuisance.

D. **Review and Decision Process.**

1. **Application.** A Director's Review application in accordance with Article VI of Chapter 17.32 shall be filed for a NC-WES meeting the requirements of this Section.
2. **Notice of Application.** The applicant shall submit as part of the Director's Review, a list of all owners of real property as listed on the latest county assessor's equalized assessment roll, located within 300 feet of the boundaries of the parcel on which the NC-WES is proposed. Written notices shall be given by mail to all such owners of the intent to consider the application for a NC-WES at least 10 days prior to a decision on the application.

3. **Consideration by Planning Director.** The Planning Director shall review the application for conformance with the requirements of this section and consider any comments received prior to making a decision on the request. The Planning Director shall approve, approve with conditions, or deny the application. Any decision of the Planning Director may be appealed to the Planning Commission in accordance with Chapter 2.44 of the Lancaster Municipal Code.

DIAGRAM 1
NC-WES
RR-1 and RR-2.5 Zones

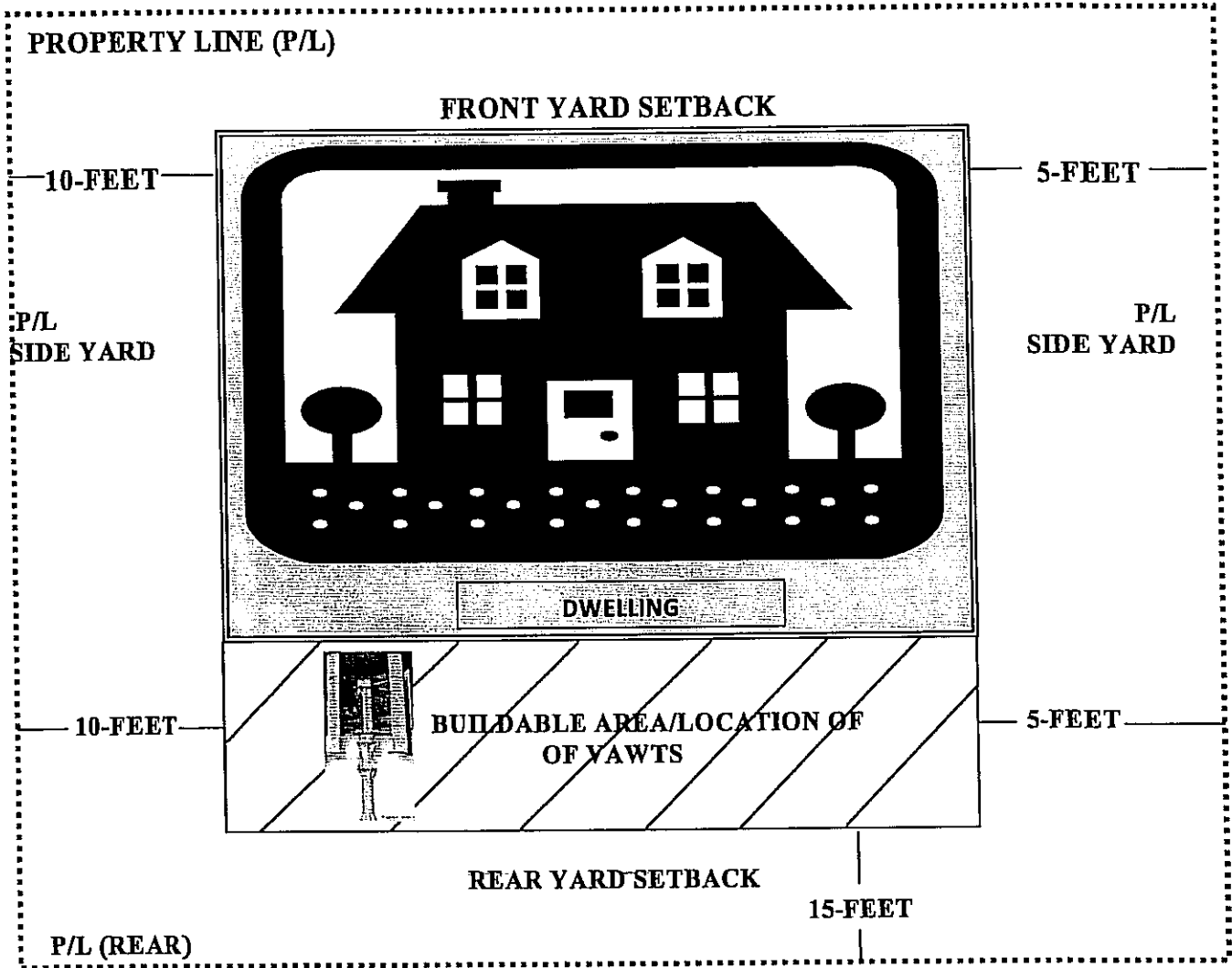


Sample of RR-1 Zone

ATTACHMENT I

DIAGRAM 1 VAWTS

R-7,000, R-10,000 and R-15,000 Zones Only



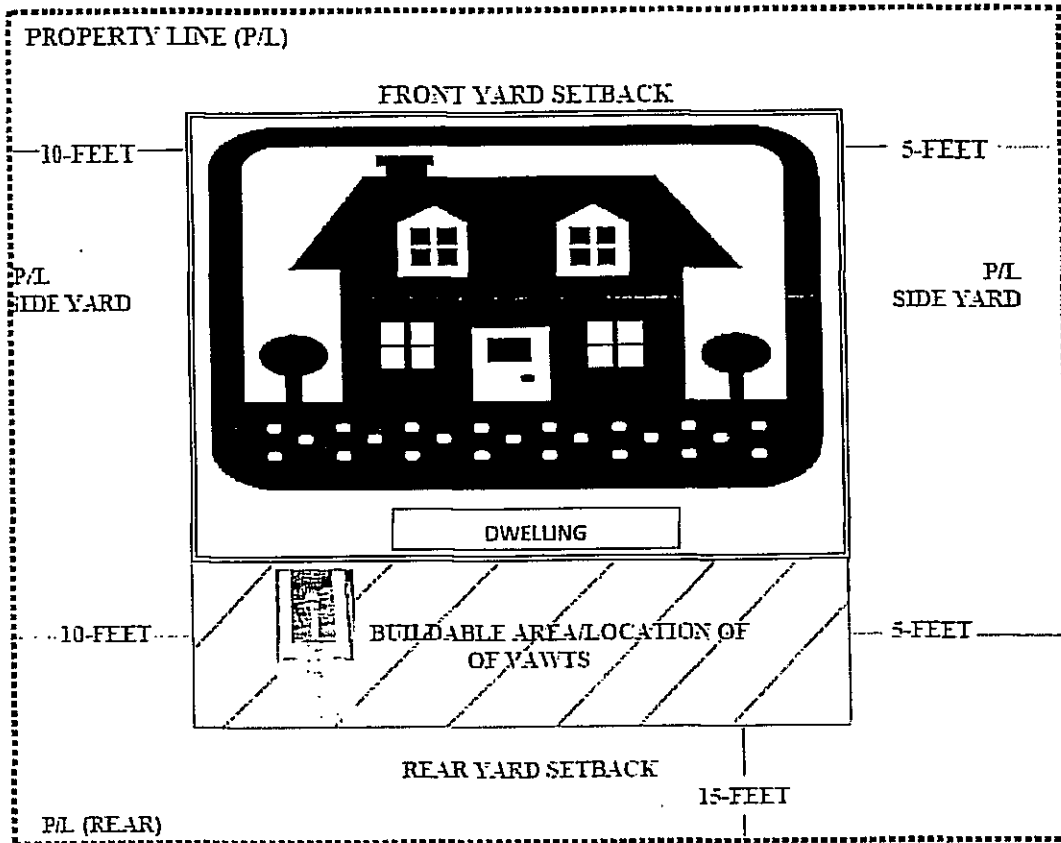
Sample of R-7,000 Zone

(Ord. 711 §§ 10—12, 1995; prior zoning ord. §§ 212.200—212.230)

17.08.335 - Vertical Axis Wind Turbine System (VAWTS).

- A. **Purpose and Intent.** It is the purpose and intent of this section to promote the safe, effective and efficient construction and use of VAWTS on residential lots within the city limits of the City of Lancaster. These regulations are intended to assure that VAWTS are designed and located in a manner that minimizes visual, noise, and safety impacts on the surrounding community. Commercial wind turbines in residential zones are subject to a conditional use permit.
- B. **Applicability.** These specific standards are applicable for all vertical axis wind turbine system in residential zones allowed subject to approval of a director's review in accordance with Article VI of Chapter 17.32
- C. **Definitions.** Definitions for the administration of this Section are contained within Section 17.01.240.
- D. **Restriction on Use of Electricity Generated by VAWTS.** A VAWTS shall be used exclusively to supply electrical power for on-site consumption. Electrical power generated by the VAWTS exceeding on-site consumption may be used by the utility company in exchange for a reduction in the cost of electrical power supplied by that company to the parcel for on-site use, as long as no net revenue is produced by such excess electrical power. VAWTS, as allowed pursuant to this section shall not be used for commercial production or profit.
- E. **Type of Device.** Vertical axis wind turbines system (VAWTS) shall meet the following guidelines. All other noncommercial and commercial wind energy conversions system shall meet the requirements outlined in Article XI, Wind Energy Conversion Systems and shall be subject to a conditional use permit.
- F. **Property Development Regulations.** A VAWTS shall be subject to all applicable regulations of the residential zone in which it is proposed, except that the following standards shall take precedence over the regulations of the residential zones to the extent that they differ. The following shall be deemed to be conditions of approval of every VAWTS unless specifically modified under the director's review and approval process.
1. No part of a VAWTS shall be located within or over drainage, utility, or any other established easements. Each VAWTS shall be setback from the nearest above-ground public communication or electrical line by a distance which is equivalent to the height of the VAWTS.
 2. **Blade Clearance.** No part of a VAWTS blade shall extend within fifteen (15) feet of the ground, trees, or any other structure.
 3. Only one VAWTS shall be allowed per residence.
 4. Devices mounted on a building may require strengthening of the existing structure to bear the additional weight and stress created by the VAWTS for which a building permit shall be obtained.
- G. **Yard Requirements.** The following shall apply for building and ground mounted VAWTS in all residential zones:
1. VAWTS shall be located behind the primary building outside of the front, side and rear yard setbacks (refer to Diagram 1 and Section 17.08.100.B.3).
 2. Tower height shall not exceed the maximum height of the zone in which the VAWTS is located (refer to Section 17.08.100.B.3).

DIAGRAM 1
VAWTS
R-7,000, R-10,000 and R-15,000 Zones Only



Sample of R-7,000 Zone

H. VAWTS Standards.

1. Cage Width. Maximum seventy-eight (78) inches (six and one-half feet).
2. Cage Height. Maximum eighty-four (84) inches (seven feet).
3. California Energy Commission Approval. The equipment shall meet California Energy Commission standards for approved small wind turbines (VAWTS) [www.consumerenergycenter.org].
4. Compliance with Aviation Safety Standards. The VAWTS shall comply with all applicable FAA requirements, including any necessary approvals for installations close to airports and other facilities with flight operations in the vicinity such as Fox Field, and Plant 42.
5. Design. An VAWTS must be designed and constructed in accordance with the following:
 - a. Colors. The colors used in the construction materials or finished surface shall be muted and visually compatible with surrounding development.
 - b. Lighting. If required by FAA requirements, all required lights shall be shielded from adjacent properties, and no other lights shall be placed upon the Tower.
 - c. Noise. Noise from a VAWTS shall conform with normally acceptable noise standards of sixty-five (65) dBA at property line.
 - d. Visual Effects. Any VAWTS that is placed within the viewshed of a designated Scenic Highway or vista shall be assessed for its visual effects, and appropriate conditions relating to setting, buffers, and design of the facility.
 - e. Climbing Apparata. All climbing apparatus for ground-mounted VAWTS must be located at least fifteen (15) feet above the ground, and the structure must be designed to prevent climbing within the first fifteen (15) feet.
 - f. Automatic Overspeed Controls. VAWTS shall be equipped with manual and automatic overspeed controls to limit the blade rotation speed to within the design limits of the VAWTS.
 - g. Access Doors. If a VAWTS is equipped with access doors, all access doors shall be lockable.

6.

Grid interconnection. The renewable energy must be permanently interconnected to the electrical distribution grid of the utility serving the customer's electrical load. The VAWTS shall interconnect to the electricity distribution system and must comply with applicable electrical codes and utility interconnection requirements.

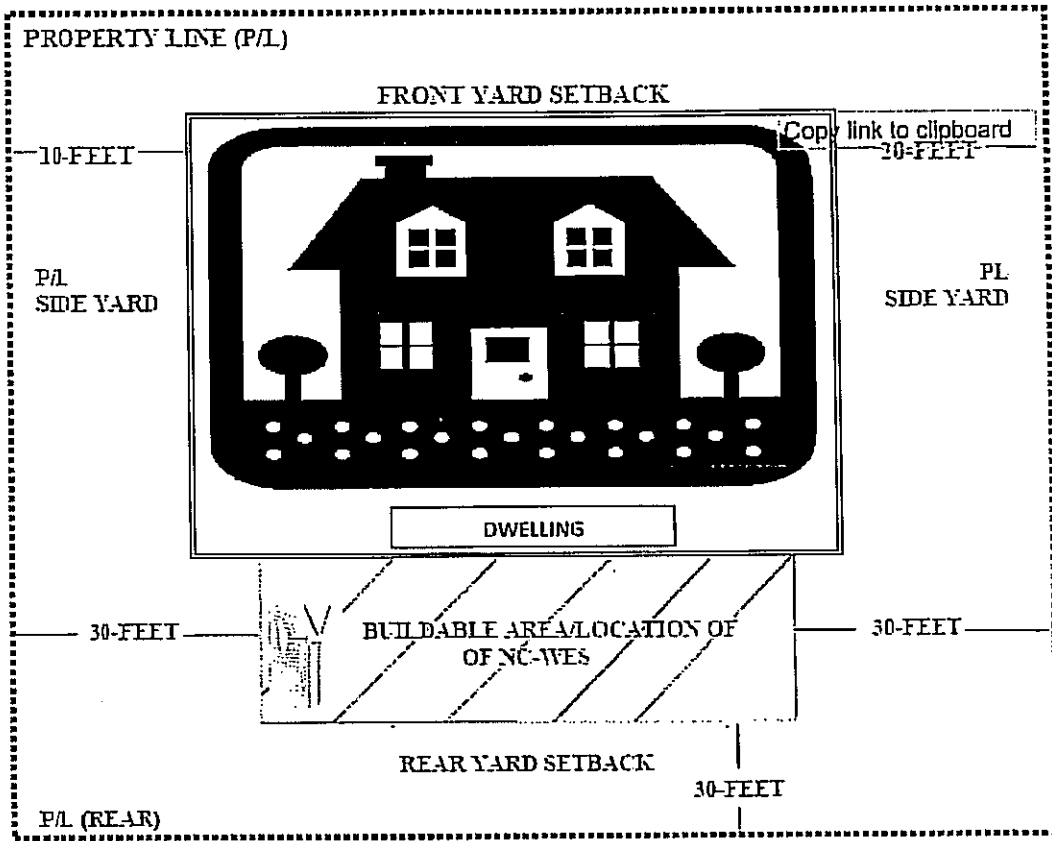
7. Maintenance. VAWTS shall be maintained in an operational condition that poses no potential safety hazards.
 8. Removal. Within six months after the VAWTS has ceased to operate the permittee shall remove the VAWTS, clear the site of all equipment, and restore the site as nearly as practicable to its condition prior to the installation of the VAWTS. Failure to remove such VAWTS shall constitute as a public nuisance.
- I. The Planning Director can require additional design criteria or other information as deemed necessary to integrate the proposed VAWTS with the surrounding area.
(Ord. No. 954, §§ 4, 5, 12-14-2010; Ord. No. 933, § 3, 10-13-2009)

17.08.337 - Non-Commercial Wind Energy System (NC-WES).

- A. Purpose and Intent. It is the purpose and intent of this section to promote the safe, effective and efficient construction, and use of NC-WES in the Rural Residential Zones (RR-1 and RR-2.5 only). These regulations are intended to assure that NC-WES are designed and located in a manner that minimizes visual, noise, and safety impacts on the surrounding community.
- B. Applicability. These specific standards are applicable for all Non-Commercial Wind Energy Systems in the Rural Residential Zones (RR-1 and RR-2.5 only), and subject to approval of a Director's Review in accordance with Article VI of Chapter 17.32. The definitions contained in Section 17.04.240 regarding wind energy conversion systems shall apply to this section.
- C. Development Standards. An NC-WES shall be subject to all applicable regulations of the Rural Residential Zones (RR-1 and RR-2.5 only) in which it is proposed, except that the following standards shall take precedence over the regulations of the Rural Residential Zones to the extent that they differ.
 1. Accessory Use. A NC-WES is considered to be an ancillary structure and may only be placed on a parcel already developed with a primary use, or placed on a parcel concurrent with the development of a primary use.
 2. Minimum Lot Size. The minimum parcel size shall be 40,000 square feet.
 3. Location of NC-WES.
 - a. Setback. A NC-WES shall be located:
 - i. Behind the primary building within the buildable area of the parcel (exclusive of required front, side, and rear yard areas), and located a minimum of 30 feet from any property line. (Note: Setback distances shall not apply to guy wires or anchors).
 - ii. Shall not be located within or over drainage, utility, or other established easements.
 - iii. Each wind turbine shall be setback from the nearest above-ground public communication or electrical line by a distance which is equivalent to the height of the wind turbine.
 4. Blade Clearance. No part of an NC-WES blade shall extend within 15 feet of the ground, trees, or any other structure.
 5. Maximum Tower Height. Tower Height shall not exceed 65 feet above grade on any parcel of 5 acres or less. Parcels greater than 5 acres in size may have a maximum tower height of 80 feet.
 6. Maximum Blade Rotor Area Diameter. The overall diameter of the blade area shall not exceed 24 feet.
 7. Compliance with Aviation Safety Standards. The NC-WES shall comply with all applicable Federal Aviation Administration (FAA) requirements, including any necessary approvals for installations within an adopted Airport Land Use Plan, Air Installation Compatibility Use Zone (AICUZ), or other recognized over-flight area.
 8. Wind Turbine Approval. Wind Turbines must be approved under the Emerging Technologies program of the California Energy Commission or any other small wind certification program recognized by the AWEA.
 9. Design. An NC-WES must be designed and constructed in accordance with the following:
 - a. Colors. The colors used in the construction materials or finished surface shall be muted and visually compatible with surrounding development.
 - b. Lighting. Lighting of the Tower shall only be permitted if required by, and done in conformance with, the requirements of the FAA.
 - c. Noise. Noise from an NC-WES shall not exceed 65 decibels at any property line.

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- d. Visual Effects. Any NC-WES that is placed within the view shed of a designated Scenic Highway or vista shall be assessed for its visual effects, and appropriate conditions relating to setting, buffers, and design of the facility.
 - e. Climbing Apparatus. All climbing apparatus must be located at least fifteen (15) feet above the ground, and the tower must be designed to prevent climbing within the first fifteen (15) feet.
 - f. Automatic Overspeed Controls. An NC-WES shall be equipped with both manual and automatic overspeed controls to limit the blade rotation speed to within the design limits of the NC-WES.
 - g. Access Doors. If an NC-WES is equipped with access doors, all access doors shall be lockable.
10. Signs. One sign, limited to eighteen (18) inches in length and one (12) inches in height, shall be posted at the base of the Tower. The sign shall include a notice of no trespassing, a warning of high voltage, and the phone number of the property owner to call in the event of an emergency.
 11. Maintenance. NC-WES shall be maintained in an operational condition that poses no potential safety hazards.
 12. Removal. Within six (6) months after the operation of an NC-WES has ceased the permittee shall remove the N-WECS, clear the site of all equipment, and restore the site as nearly as practicable to its condition prior to the installation of the N-WECS. Failure to remove such NC-WES as required above shall constitute a public nuisance.
- D. Review and Decision Process.
1. Application. A Director's Review application in accordance with Article VI of Chapter 17.32 shall be filed for a NC-WES meeting the requirements of this Section.
 2. Notice of Application. The applicant shall submit as part of the Director's Review, a list of all owners of real property as listed on the latest county assessor's equalized assessment roll, located within 300 feet of the boundaries of the parcel on which the NC-WES is proposed. Written notices shall be given by mail to all such owners of the intent to consider the application for a NC-WES at least 10 days prior to a decision on the application.
 3. Consideration by Planning Director. The Planning Director shall review the application for conformance with the requirements of this section and consider any comments received prior to making a decision on the request. The Planning Director shall approve, approve with conditions, or deny the application. Any decision of the Planning Director may be appealed to the Planning Commission in accordance with Chapter 2.44 of the Lancaster Municipal Code.

DIAGRAM 1
NC-WES
RR-1 and RR-2.5 Zones



Sample of RR-1 Zone

(Ord. No. 954, § 6, 12-14-2010)