

**TOWN OF
APPLE VALLEY, CALIFORNIA**

AGENDA MATTER

Subject Item:

A REQUEST TO MODIFY THE PROVISIONS OF THE DEVELOPMENT CODE BY AMENDING SECTION 9.78 “WIND TURBINES” OF TITLE 9 “DEVELOPMENT CODE” OF THE APPLE VALLEY MUNICIPAL CODE AS IT RELATES TO SITE DEVELOPMENT STANDARDS FOR ALL WIND ENERGY CONVERSION SYSTEMS LOCATED WITHIN THE TOWN OF APPLE VALLEY.

Recommended Action:

**Move to open the public hearing and take testimony.
Close the public hearing. Then:**

1. **Determine** that, pursuant to Section 15061(b)(3) of the State Guidelines to Implement the California Environmental Quality Act (CEQA), the project is exempt from environmental review because the activity is covered by the general rule that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question, the proposed Code Amendment, may have a significant effect on the environment, the activity is not subject to CEQA.
2. **Find** the facts presented within the staff report support the required Findings for approval of an amendment to the Development Code, and adopt the Findings.
3. **Find** that the proposed Town Council Ordinance is consistent with the Goals and Objectives of the adopted Town of Apple Valley General Plan and that it is necessary to preserve the health, safety and general welfare of the citizens of Apple Valley.
4. **Move** to waive the reading of Ordinance No. 403 in its entirety and read by title only.
5. **Introduce** Ordinance No. 403, amending Title 9 “Development Code” of the Town of Apple Valley Municipal Code by amending Section 9.78 “Wind Turbines” of Title 9 “Development Code” of the Apple Valley Municipal Code as it relates to site development standards for all wind energy conversion systems located within the Town of Apple Valley.
6. **Direct** staff to file a Notice of Exemption.

Proposed by: Planning Division

Item Number _____

Town Manager Approval: _____ **Budgeted Item** Yes No N/A

Town Council Meeting: January 26, 2010

Summary Statement:

It is the Town's desire to promote the use of alternative energies. At the July 28, 2009 Town Council meeting, the Council initiated a Development Code Amendment to review existing wind turbine regulations. The existing ordinance was adopted by the Town Council on December 11, 2001. During the past eight years, technological advancements have brought forth new designs that provide consumers with a broader range of options with which to utilize wind generated energy.

Subsequent to the Council's direction, at the September 16, 2009 Planning Commission meeting, staff presented the Commission with a brief overview of the available wind turbine technologies and existing site development standards within Apple Valley. Additionally, the Commission was provided with a matrix that identified wind turbine site development standards adopted by several other communities.

During the regularly scheduled Planning Commission meeting of October 21, 2009, a public workshop was held that provided interested individuals the opportunity to discuss, in an open forum, how the current wind turbine site development standards could be changed to promote the use of wind generated energy. Several individuals associated with the wind turbine industry offered information and comments that assisted the Planning Commission in its discussions.

On December 2, 2009, the Planning Commission held a public hearing for Development Code Amendment No. 2009-006. Staff presented for the Commission's consideration Planning Commission Resolution No. 2009-007, which is a culmination of the discussion and direction provided to staff during the workshop of October 21, 2009. Commission discussion focused primarily upon the issue of lot size. Finding that lot size was one of the most important components to this Development Code Amendment, the Commission had difficulty with its decision. Two Commissioners supported a minimum lot size of one (1) net acre and two Commissioners supported a minimum lot size of two and one-half (2½) acres. After in depth discussion, the Commission compromised on a recommendation for a minimum lot size of two (2) net acres.

The City of Hesperia is currently reviewing its site development standards for the placement of wind turbines. Similar to Apple Valley, Hesperia is also struggling with making a determination relating to lot size requirements. Its Planning Commission recommended a two (2) acre minimum, while staff is providing an alternate proposal for permitting wind turbines on lots with a minimum size of 30,000 square feet. Hesperia is concerned with making the appropriate determination and has scheduled further wind turbine discussions for January 19, 2009.

Wind energy technology is rapidly evolving and, therefore, designs may be developed in the near future that would be more appropriate for lots less than two (2) acres in size. Historically, Apple Valley has taken a conservative approach when deciding upon the relaxation of Development Code standards. Staff recommends that the Council continue with this approach. Should the need arise, further modifications can be brought forth for consideration at a later date.

In summary, the changes recommended by Planning Commission Resolution No. 2009-007 include a reduction to setbacks, an increase to the height restrictions and a reduction to the minimum lot size required for the installation of a wind energy

conversion system. In addition, non-substantive modifications have been incorporated to address current industry standards. Recommended changes to the existing Development Code are provided below. The underline represents new text and the ~~strikeout~~ represents text to be deleted. The Town Council should discuss these possible changes and add to them, delete them or modify them, as appropriate.

CHAPTER 9.78 ~~WIND TURBINES~~ WIND ENERGY CONVERSION SYSTEMS (WECS) (ADDED BY ORD. 241)

9.78.010 PURPOSE

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 in order to 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.

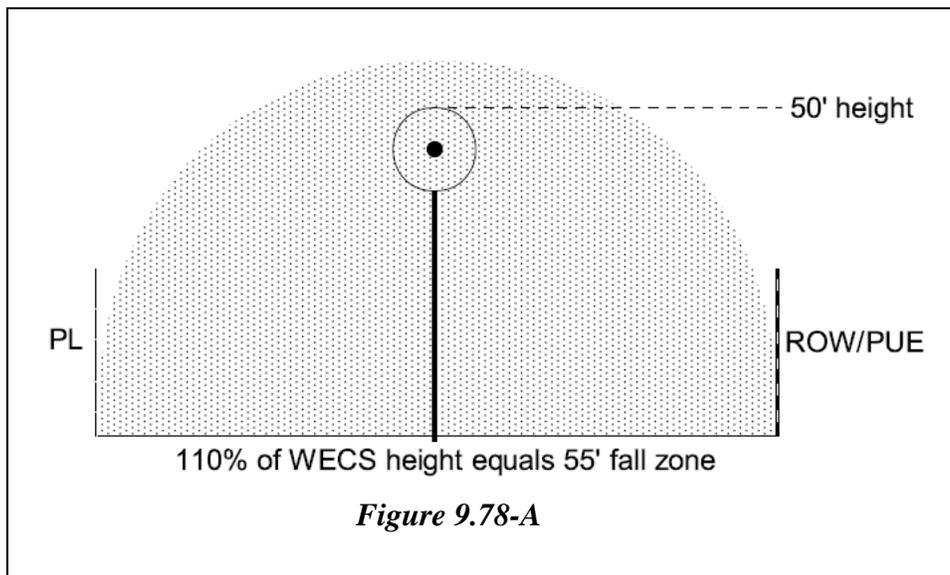
2. Any decision of the Planning Commission may be appealed to the Town Council in accordance with the provisions of this Development Code.

9.78.040 DEFINITIONS

Small Wind Turbine. A wind activated alternative energy generating device with a maximum output of 1,500 Watts, measuring no more than ten (10) feet in length, 100 pounds in weight and using individual blades of no more than six (6) feet in length.

Large Wind Turbine. A wind activated alternative energy generating device with a maximum output of more than 1,500 Watts, measuring more than ten (10) feet in length, 100 pounds in weight and using individual blades of more than six (6) feet in length.

Fall Zone. The potential fall area for wind energy conversion systems (WECS). 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

- A. The installation of a private, non-commercial, WECS is permitted ~~as an accessory use~~ within any ~~Residential, Commercial/Office or Industrial~~ zoning designation upon approval of a Development Permit ~~approved~~ by the Planning Commission. The Development Permit review process grants the Planning Commission authority to modify these requirements based upon neighborhood compatibility.
1. **Lot Size.** WECS shall not be installed upon a lot or recorded parcel less than ~~five (5) acres~~ two (2) net acres in size.
 2. **Setback Requirements.**
 - a. WECS must be located behind the rear of the primary structure.
 - b. WECS shall be setback a distance equal to the fall zone from any property line, overhead utility lines, utility easement or right-of-way.
 3. **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.
- ~~A Small WECS shall not be installed or located within one hundred (100) feet from any property line.~~
3. ~~A Small WECS shall not be installed within fifty (50) feet of another structure on site, unless directly mounted upon that structure.~~
 4. ~~A Small WECS shall not be located within 250 feet of a residential structure located upon an adjoining lot or recorded parcel.~~
 5. ~~No portion of a Small WECS, including any blade, guy wire or supporting structure, shall exceed a height of thirty-five (35) feet.~~
 4. **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.
 5. **Design Standards.**
 - a. 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.
 - b. WECS must consist of non-reflective materials.
 - c. Monopole mounted WECS are preferred.
 - d. WECS requiring the use of guyed wires are discouraged; however, guyed wires may be permitted based upon neighborhood compatibility.
 6. **Net-Metering.** Private, noncommercial WECS may be net-metered with written authorization provided by the utility company.
 7. 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.
 7. ~~Each Wind Turbine shall be screened from view of any public right of way and adjoining property, as determined by the Planning Commission during Development Permit review.~~
 8. 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.

9. 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.

10. A Building Permit, issued by the Town of Apple Valley, shall be obtained prior to the installation of a WECS system.
11. 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.
12. 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.
13. Noticing of the Development Permit shall include all properties within 1,000 feet of the site requesting the installation of a WECS.
14. 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.
15. No wiring between a WECS and ~~another WECS~~, or 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.
16. 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.

~~**B.** The installation of a private, non-commercial, Large WECS is expressly prohibited within the R-LD, Low Density Residential, R-E, Estate Residential, R-EQ, Equestrian Residential, R-SF, Single Family Residential, and R-M, Multiple Family Residential, Zoning Districts and is permitted within the R-VLD, Very Low Density Residential, R-A, Residential Agriculture, and PRD, Planned Residential Districts, and any Commercial/Office or Industrial Zoning District upon approval, by the Planning Commission, of a Development Permit, subject to the following:~~

- ~~1. A Large WECS shall not be installed upon a lot or recorded parcel of less than ten (10) acres in size.~~
- ~~2. A Large WECS shall not be installed or located within three hundred (300) feet from any property line.~~
- ~~3. A Large WECS shall not be installed within one hundred, fifty (150) feet of another structure on site, unless directly mounted upon that structure.~~
- ~~4. A Large WECS shall not be located within 500 feet of a residential structure located upon an adjoining lot or recorded parcel.~~
- ~~5. No portion of a Large WECS, including any blade, guy wire or supporting structure, shall exceed a height of seventy five (75) feet.~~
- ~~6. No Large 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.~~

- ~~7. Each Large WECS shall be screened from view of any public right of way and adjoining property, as determined by the Planning Commission during Development Permit review.~~
- ~~8. Each Large 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 devices so that 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.~~
- ~~9. Any Large 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 Large WECS within said thirty (30) days shall be grounds to remove the device at the owner's expense.~~
- ~~10. A Building Permit, issued by the Town of Apple Valley, shall be obtained prior to the installation of a Large WECS system.~~
- ~~11. Every Large WECS shall be installed strictly per the Manufacturer's Installation specification, or as modified and certified by an Engineer licensed by the State of California.~~
- ~~12. 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.~~
- ~~13. Noticing of the Development Permit shall include all properties within 1,500 feet of the site requesting the installation of a Large WECS.~~
- ~~14. No Large 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.~~
- ~~15. No wiring between a Large WECS and another WECS, or 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.~~
- ~~16. When a Large 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.~~

9.78.060 BUFFERING AND SCREENING OF PRIVATE, NON-COMMERCIAL, WIND TURBINES

A. General

- ~~1. Buffers such as landscaping, earth berms and decorative architecturally treated walls, shall be used to minimize impacts to adjacent properties.~~
- ~~2. Where screening is required, a combination of elements shall be used, including solid masonry wall, berms and landscaping.~~

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 buy 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 wine 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.

FINDINGS:

Prior to the approval of any Amendment to the Development Code, the Council, based upon the advice of the Planning Commission, must make specific "Findings" as listed within the Code. Code Section 9.06.060 "Required Findings" of Chapter 9.06 "Amendments to Zoning Provisions" specifies that two (2) Findings must be made in a positive manner to approve an Amendment. These Findings, along with a comment to address each, are presented below.

9.06.060 "Required Findings

A. The proposed amendment is consistent with the General Plan; and

Comment: The General Plan provides the basic framework for land development within the Town of Apple Valley, with the Development Code furthering the intent and guidance of the General Plan by establishing the land uses permitted within the various land use districts, as well as the procedures the specific land use processes which fulfill the Plan's Goals and Policies. The General Plan specifically identifies programs and policies addressing the Town's desire to encourage the use of clean and/or renewable alternative energy sources.

B. The proposed amendment will not be detrimental to the public health, safety or welfare of the Town or its residents.

Comment: Amending the Code as proposed under Amendment No. 2009-006 will modify the Town's Development Code by expanding the number of properties eligible to receive approvals for the use of wind energy conversion systems. Expanding the use of renewable energy opportunities is beneficial to the public health by reducing hazardous carbon emissions; therefore, Development Code Amendment No. 2009-006 will not be detrimental to the public health, safety or welfare.

NOTICING

Development Code Amendment No. 2009-006 was advertised as a public hearing in the Apple Valley News newspaper on January 15, 2010 as required under Development Code Section 9.13.030 "Notice of Public Hearings".

RECOMMENDATION

Following receipt of public input and discussion by the Council, it is recommended that the Council move to introduce Ordinance No. ____ amending Title 9 "Development Code" of the Town of Apple Valley Municipal Code Section 9.78 "Wind Turbines" as it relates to modifying the site development standards for all wind energy conversion systems located within the Town of Apple Valley.

Attachments:

- Planning Commission Staff Report and Minutes for September 16th, October 21st and December 2, 2009
- Planning Commission Resolution No. 2009-007
- Draft Ordinance No. ____

ORDINANCE NO. 403

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF APPLE VALLEY, CALIFORNIA, AMENDING TITLE 9 “DEVELOPMENT CODE” OF THE TOWN OF APPLE VALLEY MUNICIPAL CODE, BY AMENDING TITLE 9 “DEVELOPMENT CODE” OF THE TOWN OF APPLE VALLEY MUNICIPAL CODE, BY AMENDING SECTION 9.78 “WIND TURBINES” OF TITLE 9 “DEVELOPMENT CODE” OF THE APPLE VALLEY MUNICIPAL CODE AS IT RELATES TO SITE DEVELOPMENT STANDARDS FOR ALL WIND ENERGY CONVERSION SYSTEMS LOCATED WITHIN THE TOWN OF APPLE VALLEY.

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

Section 1. Recitals

- (i) Title 9 “Development Code” of the Municipal Code of the Town of Apple Valley was adopted by the Town Council on October 24, 2000; and
- (ii) Title 9 “Development Code” of the Municipal Code of the Town of Apple Valley has been previously modified by the Town Council on the recommendation of the Planning Commission; and
- (iii) Specific changes to Title 9 “Development Code” of the Town of Apple Valley Municipal Code include amending Section 9.78 “Wind Turbines” of Title 9 “Development Code” of the Apple Valley Municipal Code as it relates to modifying the site development standards for all wind energy conversion systems located within the Town of Apple Valley; and
- (iv) On January 15, 2010, Development Code Amendment No. 2009-006 was duly noticed in the Apple valley News, a newspaper of general circulation within the Town of Apple Valley; and
- (v) The project is not subject to the California Environmental Quality Act (CEQA) pursuant to Section 15061(b)(3) of the State Guidelines to Implement CEQA, which states that the activity is covered by the general rule that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question, the proposed Code Amendment, may have a significant effect on the environment, the activity is not subject to CEQA; and
- (vi) On December 2, 2009, the Planning Commission of the Town of Apple Valley conducted a duly noticed and advertised public hearing on Development Code Amendment No. 2009-006, receiving testimony from the public and adopted Planning Commission Resolution No. 2009-007 recommending adoption of this Ordinance; and
- (viii) Development Code Amendment No. 2009-006 is consistent with Title 9 “Development Code” of the Municipal Code of the Town of Apple Valley and shall promote the health, safety, and general welfare of the citizens of the Town of Apple Valley.

Section 2. Findings

(i) Find that the changes proposed by Development Code Amendment No. 2009-006 are consistent with the Goals and Policies of the Town of Apple Valley adopted General Plan.

(ii) Pursuant to the State Guidelines to Implement the California Environmental Quality Act (CEQA), specifically Section 15061(b)(3), the activity is covered by the general rule that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment; the activity is exempt from, and not subject to, CEQA.

Section 3. Amend Section 9.78 "Wind Turbines" of the Development Code to read as follows:

"CHAPTER 9.78 WIND ENERGY CONVERSION SYSTEMS (WECS)

9.78.010 PURPOSE

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

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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

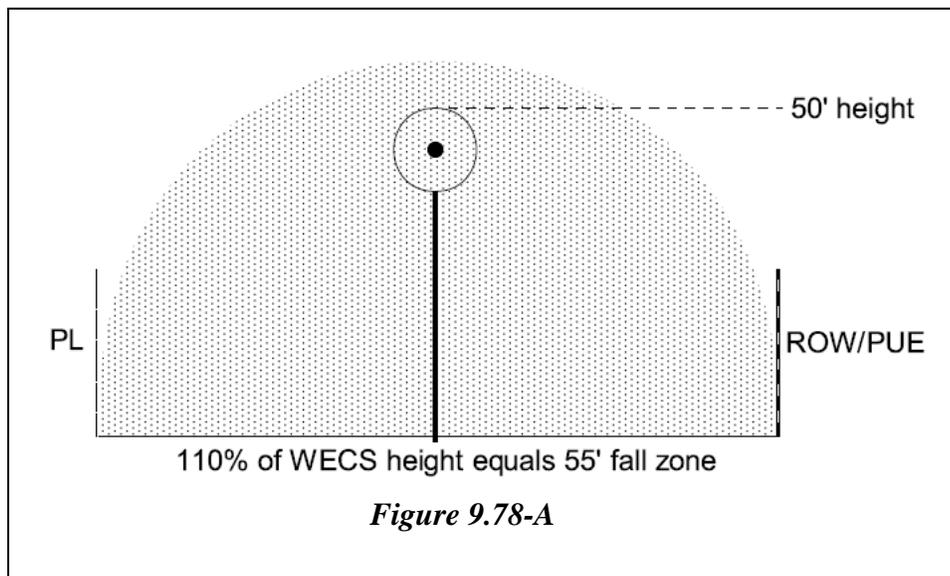
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2. Any decision of the Planning Commission may be appealed to the Town Council in accordance with the provisions of this Development Code.

9.78.040 DEFINITIONS

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

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 wine 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.”

Section 8. Invalidation. The amendment by this Ordinance of Title 9 “Development Code” of the Town of Apple Valley Municipal Code as previously in effect, or of any other prior enactment, shall not be construed to invalidate any entitlement exercised or proceeding taken pursuant to such Title or other enactment while the same was in effect.

Section 9. Notice of Adoption. The Town Clerk of the Town of Apple Valley shall certify to the adoption of this ordinance and cause publication to occur in a newspaper of general circulation and published and circulated in the Town in a manner permitted under Section 36933 of the Government Code of the State of California.

Section 10. Effective Date. The Ordinance shall become effective thirty (30) days after the date of its adoption.

Section 11. Severability. If any provision of this Ordinance, or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications and, to this end, the provision of the Ordinance are declared to be severable.

Adopted by the Town Council and signed by the Mayor and attested by the Town Clerk
this 26th day of January, 2010.

Honorable Peter Allan, Mayor

ATTEST:

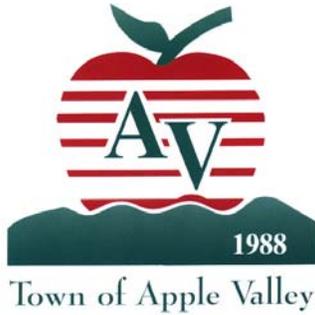
Ms. La Vonda M-Pearson, Town Clerk

Approved as to form:

Mr. John Brown, Town Attorney

Approved as to content:

Mr. Frank Robinson, Town Manager



TOWN OF APPLE VALLEY PLANNING COMMISSION

Staff Report

AGENDA DATE:	December 2, 2009
CASE NUMBER:	Development Code Amendment No. 2009-006
APPLICANT:	Town of Apple Valley
PROPOSAL:	A request to consider an amendment to Title 9 "Development Code" of the Town of Apple Valley Municipal Code amending Section 9.78 "Wind Turbines" of the Code relating to site development standards for all wind energy conversion systems located within the Town of Apple Valley.
LOCATION:	Town-wide
EXISTING GENERAL PLAN DESIGNATIONS:	All Land Use Designations.
EXISTING ZONING:	All Zoning Designations.
ENVIRONMENTAL DETERMINATION:	Staff has determined that the project is not subject to the California Environmental Quality Act (CEQA) pursuant to Section 15061(b)(3) of the State Guidelines to Implement CEQA, which states that the activity is covered by the general rule that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question, the proposed Code Amendment, may have a significant effect on the environment, the activity is not subject to CEQA.
PROJECT PLANNER:	Ms. Pam Cupp, Associate Planner
RECOMMENDATION:	Adopt Planning Commission Resolution No. 2009-007

BACKGROUND

It is the Town's desire to promote the use of alternative energies. At the July 28, 2009 Town Council meeting, the Council initiated a Development Code Amendment to review existing wind turbine regulations. The existing ordinance was adopted by the Town Council on December 11, 2001. During the past eight years, the wind turbine industry has advanced technologically. These advancements have brought forth new designs that provide consumers with a broader range of options with which to utilize wind generated energy.

At the September 16, 2009 Planning Commission meeting, staff presented the Commission with a brief overview of current conditions in Apple Valley and available technologies. In addition, the Commission received comparative data relating to wind turbine regulations adopted by other jurisdictions. Several comments were received from members of the public. Following its discussion, the Planning Commission concluded that, a workshop should be held to gather community and industry input on this subject.

On October 21, 2009, the Planning Commission conducted a Workshop during its regularly scheduled meeting. A staff report was received followed by public comments and recommendations from members of the wind turbine industry. Subsequent Commission discussion resulted with suggested modifications to the existing site development standards for wind turbines located within the Town of Apple Valley.

DISCUSSION

Staff was directed to modify the site development standards relative to setbacks, tower height and minimum lot size. Staff is offering for the Commission's consideration, the following amended language as identified by strike through and underlined text for the Commission's consideration.

CHAPTER 9.78 ~~WIND TURBINES~~ WIND ENERGY CONVERSION SYSTEMS (WECS) (ADDED BY ORD. 241)

9.78.010 PURPOSE

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 in order to 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

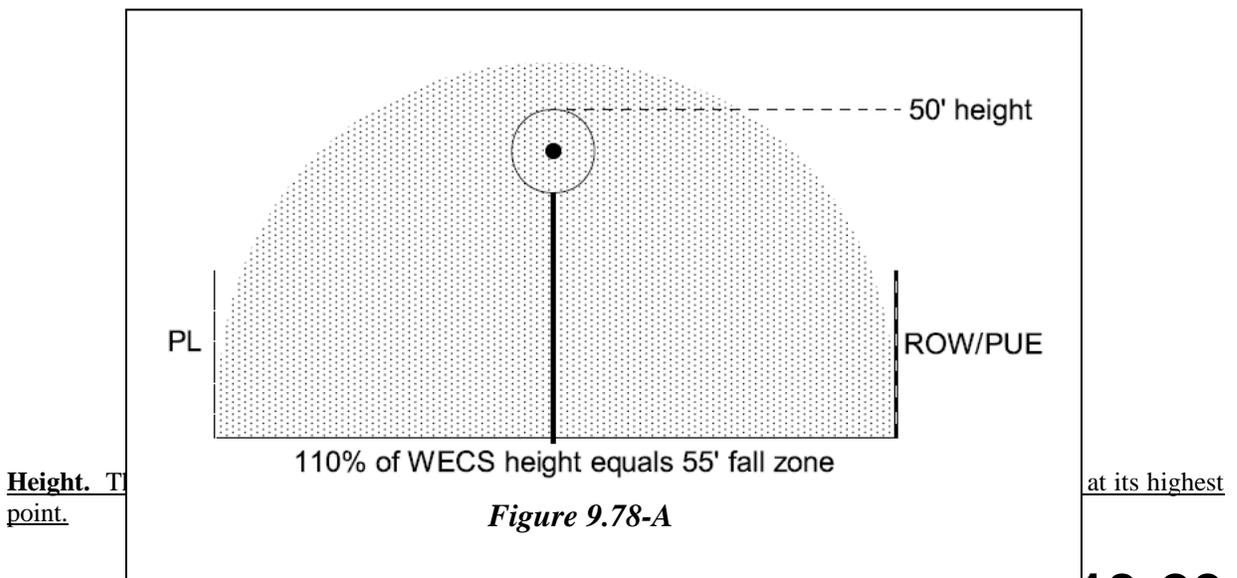
1. Any decision or determination by the Director may be appealed to the Planning Commission in accordance with the provisions of this Development Code.
2. Any decision of the Planning Commission may be appealed to the Town Council in accordance with the provisions of this Development Code.

9.78.040 DEFINITIONS

~~**Small Wind Turbine.** A wind activated alternative energy generating device with a maximum output of 1,500 Watts, measuring no more than ten (10) feet in length, 100 pounds in weight and using individual blades of no more than six (6) feet in length.~~

~~**Large Wind Turbine.** A wind activated alternative energy generating device with a maximum output of more than 1,500 Watts, measuring more than ten (10) feet in length, 100 pounds in weight and using individual blades of more than six (6) feet in length.~~

Fall Zone. The potential fall area for wind energy conversion systems (WECS). 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)



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

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

1. **Lot Size.** WECS shall not be installed upon a lot or recorded parcel of less than ~~five (5) acres~~ one (1) acre in size.
2. **Setback Requirements.**
 - a. WECS must be located behind the rear of the primary structure.
 - b. WECS shall be setback a distance equal to the fall zone from any property line, overhead utility lines, utility easement or right-of-way.
3. **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.

~~A Small WECS shall not be installed or located within one hundred (100) feet from any property line.~~

- ~~3. A Small WECS shall not be installed within fifty (50) feet of another structure on site, unless directly mounted upon that structure.~~
- ~~4. A Small WECS shall not be located within 250 feet of a residential structure located upon an adjoining lot or recorded parcel.~~
- ~~5. No portion of a Small WECS, including any blade, guy wire or supporting structure, shall exceed a height of thirty five (35) feet.~~
4. **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.

5. **Design Standards.**

- a. 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.
- b. WECS must consist of non-reflective materials.
- c. WECS consisting of monopole construction may be permitted on any developed parcel one (1) net acre or more in size.

- d. WECS requiring the use of guyed wires may only be permitted upon developed parcels two and one-half (2 ½) acres or more in size.
- 6. Net-Metering.** Private, noncommercial WECS may be net-metered with written authorization provided by the utility company.
7. 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.
- ~~7. Each Wind Turbine shall be screened from view of any public right of way and adjoining property, as determined by the Planning Commission during Development Permit review.~~
8. 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.
9. 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.
10. A Building Permit, issued by the Town of Apple Valley, shall be obtained prior to the installation of a WECS system.
11. 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.
12. 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.
13. Noticing of the Development Permit shall include all properties within 1,000 feet of the site requesting the installation of a WECS.
14. 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.
15. No wiring between a WECS and ~~another WECS~~, or 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.
16. 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.
- ~~**B.** The installation of a private, non-commercial, Large WECS is expressly prohibited within the R-LD, Low Density Residential, R-E, Estate Residential, R-EQ, Equestrian Residential, R-SF, Single Family Residential, and R-M, Multiple Family Residential, Zoning Districts and is permitted within the R-VLD, Very Low Density Residential, R-A, Residential Agriculture, and PRD, Planned Residential Districts, and any Commercial/Office or Industrial Zoning District upon approval, by the Planning Commission, of a Development Permit, subject to the following:~~

- ~~1. A Large WECS shall not be installed upon a lot or recorded parcel of less than ten (10) acres in size.~~
- ~~2. A Large WECS shall not be installed or located within three hundred (300) feet from any property line.~~
- ~~3. A Large WECS shall not be installed within one hundred, fifty (150) feet of another structure on site, unless directly mounted upon that structure.~~
- ~~4. A Large WECS shall not be located within 500 feet of a residential structure located upon an adjoining lot or recorded parcel.~~
- ~~5. No portion of a Large WECS, including any blade, guy wire or supporting structure, shall exceed a height of seventy five (75) feet.~~
- ~~6. No Large 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.~~
- ~~7. Each Large WECS shall be screened from view of any public right of way and adjoining property, as determined by the Planning Commission during Development Permit review.~~
- ~~8. Each Large 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 devices so that 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.~~
- ~~9. Any Large 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 Large WECS within said thirty (30) days shall be grounds to remove the device at the owner's expense.~~
- ~~10. A Building Permit, issued by the Town of Apple Valley, shall be obtained prior to the installation of a Large WECS system.~~
- ~~11. Every Large WECS shall be installed strictly per the Manufacturer's Installation specification, or as modified and certified by an Engineer licensed by the State of California.~~
- ~~12. 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.~~
- ~~13. Noticing of the Development Permit shall include all properties within 1,500 feet of the site requesting the installation of a Large WECS.~~
- ~~14. No Large 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.~~

- ~~15. No wiring between a Large WECS and another WECS, or 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.~~
- ~~16. When a Large 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.~~

~~9.78.060 BUFFERING AND SCREENING OF PRIVATE, NON-COMMERCIAL, WIND TURBINES~~

~~A. General~~

- ~~1. Buffers such as landscaping, earth berms and decorative architecturally treated walls, shall be used to minimize impacts to adjacent properties.~~
- ~~2. Where screening is required, a combination of elements shall be used, including solid masonry wall, berms and landscaping.~~

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 buy 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 wine 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.

The attached Planning Commission Resolution 2009-007 contains those modifications as recommended by the Planning Commission.

FINDINGS:

An amendment to the Development Code requires that the Planning Commission address two (2) required "Findings", as listed within Development Code Section 9.06.060. As presented within past staff reports, the required Findings are listed below, along with a comment addressing each, for Commission consideration. If the Commission concurs with these comments, they may be adopted and forwarded to the Council for its consideration of the Development Code Amendment. If the Commission wishes modifications to the offered comments after considering input and public testimony at the public hearing, modifications to the Findings and Code Amendment recommendations can be included into the information forwarded to the Council for consideration.

9.06.060 "Required Findings

- A. The proposed amendment is consistent with the General Plan; and

Comment: The General Plan provides the basic framework for land development within the Town of Apple Valley, with the Development Code furthering the intent and guidance of the General Plan by establishing the land uses permitted within the various land use districts, as well as the procedures the specific

land use processes which fulfill the Plan's Goals and Policies. The General Plan specifically identifies programs and policies addressing the Town's desire to encourage the use of clean and/or renewable alternative energy sources.

- B. The proposed amendment will not be detrimental to the public health, safety or welfare of the Town or its residents.

Comment: Amending the Code as proposed under Amendment No. 2009-006 will modify the Town's Development Code by expanding the number of properties eligible to receive approvals for the use of wind energy conversion systems. Expanding the use of renewable energy opportunities is beneficial to the public health by reducing hazardous carbon emissions; therefore, Development Code Amendment No. 2009-006 will not be detrimental to the public health, safety or welfare.

NOTICING

Development Code Amendment No. 2009-006 was advertised as a public hearing in the Apple Valley News newspaper on November 20, 2009.

ENVIRONMENTAL REVIEW

Staff has determined that the project is not subject to the California Environmental Quality Act (CEQA) pursuant to Section 15061(b)(3) of the State Guidelines to Implement CEQA, which states that the activity is covered by the general rule that CEQA applies only to projects that have the potential for causing a significant effect on the environment. As with the proposed amendment that shall only result in a minor change to the Code, eliminating the Minor CUP process, where it can be seen with certainty that there is no possibility that the activity in question, the proposed Code Amendment, may have a significant effect on the environment, the activity is not subject to CEQA.

RECOMMENDATION

Following receipt of public input and discussion by the Commission, it is recommended that the Commission move to approve Planning Commission Resolution No. 2009-007, forwarding a recommendation that the Town Council amend Title 9 "Development Code" of the Town of Apple Valley Municipal Code amending Section 9.78 "Wind Turbines."

Prepared By:

Reviewed By:

Pam Cupp
Associate Planner

Lori Lamson
Assistant Director of Community Development

Attachment: October 21, 2009 Staff Report and Minutes
 September 16, 2009 Staff Report and Minutes
 Planning Commission Resolution No. 2009-007



TOWN OF APPLE VALLEY PLANNING COMMISSION

Staff Report

AGENDA DATE:	October 21, 2009 – Workshop Item
CASE NUMBER:	Wind Energy Conversion Systems
APPLICANT:	Town of Apple Valley
PROPOSAL:	Workshop - Discussion of development standards and permitting requirements for Wind Energy Conversion Systems (WECS) within the Town of Apple Valley.
LOCATION:	Town-wide
EXISTING GENERAL PLAN DESIGNATIONS:	All Land Use Designations.
EXISTING ZONING:	All Zoning Designations.
ENVIRONMENTAL DETERMINATION:	Staff has determined that the project is not subject to the California Environmental Quality Act (CEQA) pursuant to Section 15061(b)(3) of the State Guidelines to Implement CEQA, which states that the activity is covered by the general rule that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question, the proposed Code Amendment, may have a significant effect on the environment, the activity is not subject to CEQA.
PROJECT PLANNER:	Ms. Pam Cupp, Associate Planner
RECOMMENDATION:	Discuss the information presented and provide direction to staff.

BACKGROUND

It is the Town's desire to promote the use of alternative energies. At the July 28, 2009 Town Council meeting, the Council initiated a Development Code Amendment to review existing wind turbine regulations. The existing ordinance was adopted by the Town Council on December 11, 2001. During the past eight years, the wind turbine industry has advanced technologically. These advancements have brought forth new designs that provide consumers with a broader range of options with which to utilize wind generated energy.

At the September 16, 2009 Planning Commission meeting, staff presented the Commission with a brief overview of current conditions in Apple Valley and available technologies. Several comments were received from members of the public. Following its discussion, the Planning Commission concluded that, a workshop should be held to gather community and industry input on this subject.

DISCUSSION

In order to facilitate a productive and organized discussion, staff has provided a list of items for the Planning Commission's consideration.

Definitions – The current Development Code contains the following definitions relative to wind turbines:

“Small Wind Turbine. A wind activated alternative energy generating device with a maximum output of 1,500 Watts, measuring no more than ten (10) feet in length, 100 pounds in weight and using individual blades of no more than six (6) feet in length.

Large Wind Turbine. A wind activated alternative energy generating device with a maximum output of more than 1,500 Watts, measuring more than ten (10) feet in length, 100 pounds in weight and using individual blades of more than six (6) feet in length.”

The above definitions have become obsolete and describe only one specific model type. Based upon workshop discussions, staff will bring forth related definitions for the Commission's consideration.

For the purposes of these discussions, staff has focused upon the existing development standards identified for “small wind turbines.” Staff recommends that the Commission consider more definitive terms relative to WECS.

Minimum Lot Size Requirements - The Commission may wish to consider reducing the minimum lot size from the existing five (5)-acre minimum to a two and one-half (2-1/2)-acre minimum. On October 8, 2009, the City of Hesperia Planning Commission forwarded a recommendation to its City Council that tower mounted wind turbines be permitted on any residentially zoned or agriculturally zoned property with a minimum lot size of two (2) acres. The Commission may wish to consider associating minimum lot sizes to tower design and height.

Setback Requirements – The existing Code requires a fifty (50)-foot setback from any other structure on the site, unless directly mounted upon the structure. In addition, a minimum setback of 100 feet from any property line and 250 feet from any structure on an adjoining lot is required. The Commission may wish to consider removing the minimum setback requirement to existing structures upon the project site and applying the standard six (6)-foot separation requirement for on-site detached, accessory structures. The Commission may

also wish to consider reducing the minimum setback to 110% of the WECS height. It should be noted that the City of Hesperia Planning Commission is recommending to its Council a minimum setback of 110%. Staff has researched other ordinances which require a minimum setback of 220% of the WECS height when an adjacent landowner disapproves of the proposed WECS. Additional consideration should be given to the distance necessary to meet the noise standard for the applicable zoning designation.

Height Allowances – The Development Code allows a small wind turbine to have a maximum height of thirty-five (35) feet. In residential zones, the Code permits a maximum height of thirty-five (35) feet and provides for fifteen (15) additional feet for certain mechanical and architectural elements, which, if permitted, would allow for a maximum WECS height of fifty (50) feet. For maximum efficiency, the American Wind Energy Association recommends that a turbine be 20 to 30 feet higher than the highest nearby object, such as a tree or a house. Therefore, the Commission may wish to consider allowing additional height as long as the required setbacks, as determined by the Planning Commission, can be met. It should be noted that the City of Hesperia Planning Commission is recommending to its Council a maximum height equal to fifty (50) percent above that permitted within the applicable zoning designation. This would permit a maximum height of fifty-two and one-half (52½) feet in most zoning designations.

Design/Screening Guidelines – The current Development Code requires all WECS to be completely screened from public or private view, as determined by the Planning Commission. The Commission may wish to discuss specific design standards based upon zoning designations/entitlement processes. Design criteria to consider may include color, blade length (swept area), the use of guyed wires, roof-top versus tower mount, etc. Staff recommends that the Commission consider permitting the installation of roof-top WECS with the staff level review and approval of a Special Use Permit. It is further recommended that the Commission permit only one (1) WECS per lot, unless power generation is the intended primary use of the property.

Noise Standards - The Development Code addresses the noise generated from small WECS as follows:

“No Small Wind Turbine 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.”

The commission may wish to consider including an exception that excludes noise generation during short-term events such as severe wind storms. As part of a project submittal, the applicant should be required to provide a noise analysis applicable to the proposed WECS.

Entitlement Processes – A small wind energy conversion system is described by the industry as having a maximum blade length of fifteen (15) feet and generating less than fifty (50) kilowatts of power for an individual property for the purpose of reducing on-site energy consumption. The Development Code requires the review and approval of a Development Permit prior to the installation of any small wind energy conversion system. With the exception of the roof-top WECS, staff is recommending that the entitlement process for small WECS remain unchanged.

Large wind energy conversion systems are described by the industry as those with blades over fifteen (15) feet in length and generate over fifty (50) kilowatts of power. Large WECS

are typically used by companies for the sole purpose of generating electricity to sell to a public utility. The installation of Large WECS currently requires the review and approval of a Conditional Use Permit. Staff is recommending that the entitlement process remain unchanged; however, the Commission should consider what zoning designations should permit the installation and operation of large WECS and incorporate the appropriate language into a future resolution. If it is the Commission's desire to incorporate development standards for wind farms, staff will formulate specific standards for the Commission's consideration.

RECOMMENDATION

Following receipt of staff comments, any public comments and discussion by the Commission, it is recommended that the Commission, by consensus, provide guidance to staff to create appropriate language to be offered within a draft Planning Commission Resolution. Staff will then schedule a public hearing and return to the Planning Commission with a resolution for consideration. After Planning Commission adoption of the Resolution, it would then be forwarded to the Council for consideration and final action.

Prepared By:

Reviewed By:

Pam Cupp
Associate Planner

Lori Lamson
Assistant Director of Community Development

Attachment: September 16, 2009 WECS Staff Report
Under Separate Cover - October 21, 2009 memo with site addresses for
existing wind turbine installations



TOWN OF APPLE VALLEY PLANNING COMMISSION

Staff Report

AGENDA DATE:	September 16, 2009
CASE NUMBER:	Discussion of Future Development Code Amendment
APPLICANT:	Town of Apple Valley
PROPOSAL:	Discussion of development standards and permitting requirements for Wind Energy Conversion Systems (WECS) within the Town of Apple Valley.
LOCATION:	Town-wide
EXISTING GENERAL PLAN DESIGNATIONS:	All Land Use Designations.
EXISTING ZONING:	All Zoning Designations.
ENVIRONMENTAL DETERMINATION:	Staff has determined that the project is not subject to the California Environmental Quality Act (CEQA) pursuant to Section 15061(b)(3) of the State Guidelines to Implement CEQA, which states that the activity is covered by the general rule that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question, the proposed Code Amendment, may have a significant effect on the environment, the activity is not subject to CEQA.
PROJECT PLANNER:	Ms. Pam Cupp, Associate Planner
RECOMMENDATION:	Discuss the information presented and provide direction to staff.

BACKGROUND

It is the Town's desire to promote the use of alternative energies. At the July 28, 2009 Town Council meeting, the Council initiated a Development Code Amendment to review existing wind turbine regulations. The existing ordinance was adopted by the Town Council on December 11, 2001. During the past eight years, the wind turbine industry has advanced technologically. These advancements have brought forth new designs that provide consumers with a broader range of options with which to utilize wind generated energy.

DISCUSSION

In order to facilitate organized discussion, staff begins this report with a brief overview of current conditions in Apple Valley and available technologies. Potential impacts will be discussed, followed by a review of Development Code Section 9.78 "Wind Turbines".

The Code currently permits small Wind Energy Conversion Systems (WECS) to be installed on any property five (5) acres or more in size with a maximum height of thirty-five (35) feet and subject to the approval of a Development Permit. There are currently 1,341 properties that are five (5) acres or more in size within Apple Valley. This figure includes properties within all zoning designations. By reducing the minimum lot size to two and one-half (2-1/2) acres, an additional 1,297 properties would have the opportunity to apply for installation. The Commission may wish to consider the available technologies when considering eligible lot sizes.

Large wind turbines are permitted on lots of ten (10) acres or more within the Residential Very Low Density (RVLD), Agricultural Residential (RA), Planned Residential Districts (PRD), Commercial/Office and Industrial Zones with a maximum height of seventy-five (75) feet and subject to the approval of a Development Permit. Based upon current technology, large wind turbines have a minimum output rating of fifty (50) kilowatts and are best described as those units located on wind farms.

Small wind, as the industry refers to it, is defined as a WECS that will generate less than 100 Kilowatts (KW) of power. For the purposes of this report, staff is suggesting the reference as provided by the California Energy Commission that categorizes small wind turbines as those generating less than fifty (50) kilowatts be used in this discussion. These turbines may be roof mounted, or tower mounted, and include a vast range of sizes and shapes. The small wind technology is intended to be compatible with urban development and to fit into a variety of settings. Staff has provided for the Commission's review, some of the available types of WECS.

1.8 kw turbine - The turbine shown below is on a fifty-six (56) foot tall monopole tower with a blade diameter of twelve (12) feet. It will generate 1.8 kw of power, which will supply the average residential home with ten (10) to twenty (20) percent of its annual power needs. These turbines can be located on a tower of any height based on a number of factors, including, the cost of the tower, monopole tower versus lattice tower with guy wires, and the needed height to take advantage of prevailing winds which requires getting above the tree line.



5 kw turbine – The 5 kw turbine shown in the picture below is on a sixty-four (64) foot tall tower with guy wires and a blade diameter of eighteen (18) feet. If the turbine operates at its maximum efficiency, it will generate over half of the annual electrical usage of a single family home. These turbines are designed for commercial or agricultural uses.



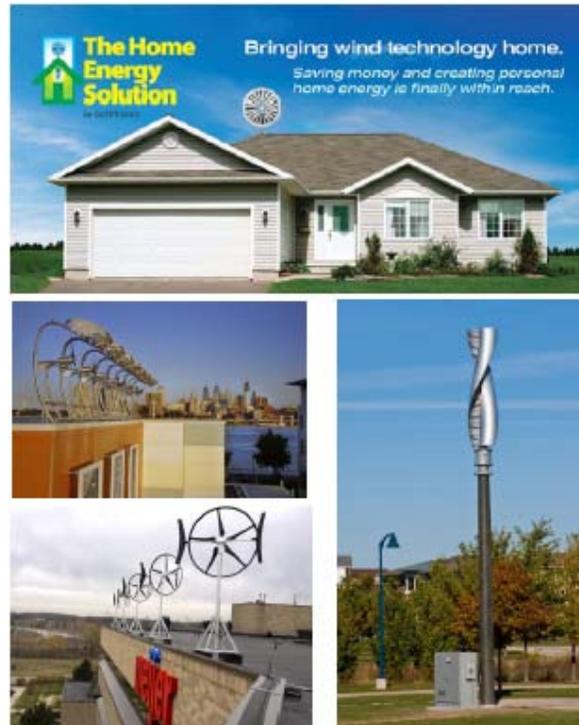
10 kw turbine- the 10 kw turbine shown below has blades with a twenty-two (22) foot diameter. This turbine is mounted on a 100 ft. lattice tower with guy wires. A 10 kilo-watt tower will typically generate enough energy to power a single family home. These are typically used for agricultural properties.



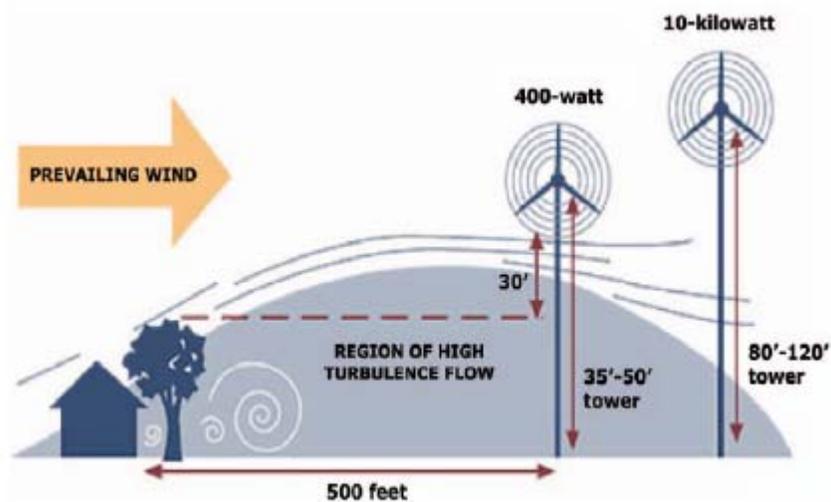
100 kw turbine – The turbine in the picture below is considered a large WECS and has an eighty (80)-foot blade diameter, and it is shown on a sixty-six (66) foot tower. This turbine will power ten (10) to fifteen (15) homes, and can also be used to power institutional, commercial, and industrial land uses.



Roof mounted turbines – There is a wide assortment of roof mounted wind turbines designed for residential, commercial, and industrial uses. Below are some photos showing examples of roof mounted wind turbines. The units vary in the amount of energy generated; however, they are typically less than 1.5 kw. The model depicted upon the roof of the single-family home will be available to purchase in select hardware stores this year.

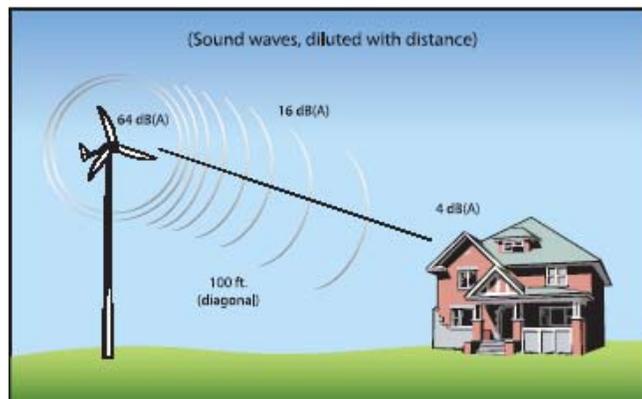


Height - The effectiveness and efficiency of a turbine is significantly impacted by its location and how it is sited on a lot. If there are any objects blocking the wind or creating wind turbulence the efficiency of the turbine will be reduced. The higher the turbine can be located in the air, the more effective it will be because generally speaking, prevailing winds are more consistent higher up in the air. The American Wind Energy Association recommends that a turbine be twenty (20) to thirty (30) feet higher than the highest nearby object, such as a tree or a house.



Potential Impacts - Small wind energy conversion systems are generally designed for urban settings, but they still may have negative impacts on neighboring properties. Some of the areas of impact that should be regulated include:

Noise – With the larger wind turbines used in rural areas there have been reports of some nearby residents being impacted by low frequency noise. Small wind turbines also generate some level of noise, but because they have been designed for urban areas, efforts have been taken in the design to minimize their noise impacts. Representatives from the Wind Turbine industry have said a limit of 55 decibels is a reasonable maximum level of noise allowed to be generated by a wind turbine. Most outdoor air conditioning units are 76 decibels or louder. A typical lawn mower is 107 decibels, and a normal conversation is 60 – 70 decibels.



Aesthetics – The aesthetics of the wind turbine may be a concern to some. In particular, the height of the turbines make them visible off-site and some might find them unattractive. However, for the turbines to operate at their highest efficiency, they need to be higher in the air than any wind obstructions to take advantage of the stronger winds. Most of the smaller units tend to have a relatively low impact on views, similar to utility lines or television antennas. Additionally, the color of a turbine can impact the perceived aesthetics. Most turbines are designed in neutral colors to blend into the environment.

Setbacks – The Code currently has a minimum setback of 250 feet from any residential structure located upon an adjoining lot or recorded parcel. With today's technology, this may be more restrictive than necessary. Staff researched existing ordinances for other southern California communities and found that most municipalities require a minimum setback equal to the overall height of the WECs. Since the typical single-family residential lot in Apple Valley is approximately 100 feet wide, this would give the opportunity to most Apple Valley residents to install WECS not to exceed fifty (50) feet in height.

Abandonment – If a turbine is not in use or it is not generating electricity for the property owner, it may be considered abandoned. Many municipalities make the property owners take down an inoperable turbine after a certain period of time. The Code gives a maximum non-operational period of six (6) months. Staff does not recommend any changes to the existing regulations for abandonment.

Shadow Flicker – Shadow flicker is created by a wind turbine creating a flickering shadow with the spinning blades. This impact can irritate people, as the shadow spins

across the property. The impact of shadow flicker is smaller for smaller turbines, and considered negligible in most studies.

Birds – The most common, and most exaggerated, misconception about both large and small turbines is that they are disproportionately harmful to bird and bat populations. The National Academy of Sciences in 2007 completed a study entitled “Environmental Impacts of Wind-Energy Project.” The study found the large, utility-scale wind farms that are grouped closely in large arrays account for less than 0.003% of all human-caused bird deaths. House cats and glass windows, by comparison, cause 10,000 times more bird deaths than do wind turbines. No study has been performed specifically to address avian effects of small wind turbines, but because of their dispersed nature and small size, it can be inferred that they have an even smaller impact than their larger counterparts.

The purpose of this report is to facilitate Commission discussion to ensure that modern technology, as well as, the recent move to produce clean energy, is considered and encouraged by the Town. Development Code Section 9.78 “Wind Turbines”, is presented below. Research has been conducted to learn of the development standards applied to wind energy conversion systems in other jurisdictions. Staff is offering for the Commission’s consideration, significant changes to the existing development standards relating to minimum lot size, height limitations and setbacks. Staff has incorporated amended language as identified by strike through and underlined text for the Commission’s consideration. Staff comments are included as bold italics.

Chapter 9.78 ~~Wind Turbines~~ Wind Energy Conversion Systems (Discussion: Wind Energy Conversion Systems is the proper term describing all types of devices that convert kinetic energy (wind) into electricity. If accepted by the Commission, this modification will change throughout the Chapter.)

9.78.010 Purpose

This Chapter is intended to establish regulations and procedures for the review of any ~~Wind Turbines~~ Wind Energy Conversion Systems (WECS) located 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, ~~in order to~~ minimizing potential adverse effects on surrounding properties and infrastructure or on the public health, safety and welfare.

9.78.020 Applicability

No ~~Wind Turbine(s)~~ Wind Energy Conversion System (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 Wind Turbine(s), 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 Wind Turbine's~~ the 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

Wind Turbines. The Commission may approve, conditionally approve, modify or deny requests for the installation of Wind Turbines. 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.

(Discussion: Staff is recommending that the standards contained within this section remain unchanged unless the Commission consensus is to permit some WECS by right of zone.)

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.

(Discussion: Staff recommends that this section remain unchanged.)

9.78.040 Definitions

~~Small Wind Turbine. A wind activated alternative energy generating device with a maximum output of 1,500 Watts, measuring no more than ten (10) feet in length, 100 pounds in weight and using individual blades of no more than six (6) feet in length.~~

~~Large Wind Turbine. A wind activated alternative energy generating device with a maximum output of more than 1,500 Watts, measuring more than ten (10) feet in length, 100 pounds in weight and using individual blades of more than six (6) feet in length.~~

Discussion: The above definitions have become obsolete. The definition describes only one specific model type. In addition, very few systems produce less than 1.5 kilowatts [1,500 watts]. Staff would like to offer the following definitions for inclusion into this chapter:

Small Wind Energy Conversion Systems. A wind energy conversion system which has a maximum blade length of fifteen (15) feet and generates less than fifty (50) kilowatts of power for an individual property for the purpose of reducing on-site energy consumption. (The Commission may wish to reduce the maximum blade length under this definition.)

Large Wind Energy Conversion System. A wind energy conversion system, with blades greater than fifteen (15) feet in length, capable of generating over fifty (50) kilowatts of power.

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

Fall Zone. The potential fall area for the small wind energy system. The fall area is measured by using 110% of the total height as the radius around the center point of the base of the tower.

9.78.050 ~~Private, Non-commercial, Wind Turbines~~ Small Wind Energy Conversion Systems

A. The installation of a ~~private, non-commercial, Small Wind Turbine~~ small wind energy conversion system (WECS) is permitted within any Residential, Commercial/Office or Industrial Zoning District upon approval of a Development Permit by the Planning Commission, subject to the following: ***(Discussion: The Commission may wish to consider incorporating specific design standards into this Code section.)***

1. A Small Wind Turbine shall not be installed upon a lot or recorded parcel of less than five (5) acres in size.

(Discussion: The Commission may wish to consider reducing the minimum lot size to two and one-half (2-1/2) acres. A second alternative would be to permit a WECS on any parcel that can meet the minimum setback and noise requirements.)

2. ~~A Small Wind Turbine shall not be installed or located within one hundred (100) feet from any property line.~~ A small WECS shall be setback a distance equal to fall zone of the WECS.
3. ~~A Small Wind Turbine shall not be installed within fifty (50) feet of another structure on site, unless directly mounted upon that structure.~~ ***(Discussion: Staff recommends removal of this requirement based upon merit. These regulations would further hinder some property owner's ability to install WECS.)***
3. A maximum of one (1) small WECS per recorded parcel may be installed as an accessory use, subject to the provisions of this Chapter.
4. ~~A Small Wind Turbine shall not be located within 250 feet of a residential structure located upon an adjoining lot or recorded parcel.~~ ***(Discussion: The Commission may wish to consider reducing the minimum setback to 110% of the WECS height. Staff has researched other ordinances which require a minimum setback of 220% of the WECS height when an adjacent landowner disapproves of the proposed WECS. Additional consideration should be given to the distance necessary to meet the noise standard for a residential or commercial zone.) Staff suggests the following language for consideration:***
4. Setback Requirements. Small WECS shall be set back a distance equal 110% of the total height from:
 - a) Any public road right-of way, unless written permission is granted by the governmental entity with jurisdiction over the road.
 - b) Any overhead utility lines.
 - c) All property lines, unless the affected land owner provides written permission through a recorded easement allowing the small WECS fall zone to overlap with the abutting property.

d) Any travel ways to include, but not be limited to driveways, parking lots, bicycle paths, equestrian trails and sidewalks.

5. No portion of a Small Wind Turbine, including any blade, guy wire or supporting structure, shall exceed a height of thirty-five (35) feet. ***(Discussion: As previously discussed, for maximum efficiency, the American Wind Energy Association recommends that a turbine be 20 to 30 feet higher than the highest nearby object, such as a tree or a house. The Commission may wish to consider allowing additional height as long as the required setbacks can be met. Staff suggests that the Commission consider a maximum height of eighty (80) feet where applicable. The Commission should consider the impacts and possibly recommend that WECS be permitted by right of zone in all zoning designations when it is apparent that the unit meets the maximum height, setbacks and noise standards within the applicable zoning district. Additional height would require Planning Commission review of a Development Permit.)***
6. No Small Wind Turbine 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 wind or weather conditions. ***(Discussion: Staff would like to recommend that an exception be added to exclude noise generation during short-term events such as severe wind storms. As part of a project submittal, the applicant should be required to provide a noise analysis applicable to the proposed WECS.)***
7. During the Development Permit review process, each Small Wind Turbine shall be reviewed by the Planning Commission to ensure the WECS is sited in a manner that will not significantly detract from existing views. screened from view of any public right-of-way and adjoining property, as determined by the Planning Commission during Development Permit review. ***(Discussion: This requirement, in most cases, would make it impossible to install a WECS on any property; therefore, staff is recommending amended language.)***
8. Each small ~~Wind Turbine~~ 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, use instructions and noise analysis 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.
9. Any small ~~Wind Turbine~~ WECS that is not operated for a continuous period of six (6) months shall be considered abandoned, and the owner of such Wind Turbine 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 wind turbine, 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 small ~~Wind Turbine~~ WECS within said thirty (30) days shall be grounds to remove the device at the owner's expense.

10. A Building Permit, issued by the Town of Apple Valley, shall be obtained prior to the installation of a small ~~Wind Turbine system~~ WECS.
 11. Every small ~~Wind Turbine~~ 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.
 12. 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.
 13. Noticing of the Development Permit shall include all properties within 1,000 feet of the site requesting the installation of a small ~~Wind Turbine~~ WECS.
 14. No small ~~Wind Turbine~~ 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.
 15. No wiring between a small ~~Wind Turbine~~ WECS and ~~another Wind Turbine~~, or the main or accessory structure on site, or any associated and ancillary equipment, batteries, devices, structures or support(s) for any wind turbine, shall be located above ground level.
 16. When a small ~~Wind Turbine system~~ WECS is removed from a site, all associated and ancillary equipment, batteries, devices, structures or support(s) for that system shall also be removed.
- B. ~~The installation of a private, non-commercial, any large Wind Turbine WECS is permitted within any commercial or industrial zone, subject to the review and approval of a Conditional Use Permit. the R-LD, Low Density Residential, R-E, Estate Residential, R-EQ, Equestrian Residential, R-SF, Single Family Residential, and R-M, Multiple Family Residential, Zoning Districts and is permitted within the R-VLD, Very Low Density Residential, R-A, Residential Agriculture, and PRD, Planned Residential Districts, and any Commercial/Office or Industrial Zoning District upon approval, by the Planning Commission, of a Development Permit, subject to the following:~~
(Discussion: Large WECS are described as those used by companies for the sole purpose of generating electricity to sell to a public utility. Language can be added if it is the Commissions desire to incorporate development standards for wind farms.)
- ~~1. A Large Wind Turbine shall not be installed upon a lot or recorded parcel of less than ten (10) acres in size.~~
 - ~~2. A Large Wind Turbine shall not be installed or located within three hundred (300) feet from any property line.~~
 - ~~3. A Large Wind Turbine shall not be installed within one hundred, fifty (150) feet of another structure on site, unless directly mounted upon that structure.~~
 - ~~4. A Large Wind Turbine shall not be located within 500 feet of a residential structure located upon an adjoining lot or recorded parcel.~~

- ~~5. No portion of a Large Wind Turbine, including any blade, guy wire or supporting structure, shall exceed a height of seventy-five (75) feet.~~
- ~~6. No Large Wind Turbine 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.~~
- ~~7. Each Large Wind Turbine shall be screened from view of any public right-of-way and adjoining property, as determined by the Planning Commission during Development Permit review.~~
- ~~8. Each Large Wind Turbine 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 devices so that 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.~~
- ~~9. Any Large Wind Turbine that is not operated for a continuous period of six (6) months shall be considered abandoned, and the owner of such Wind Turbine 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 wind turbine, 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 Large Wind Turbine within said thirty (30) days shall be grounds to remove the device at the owner's expense.~~
- ~~10. A Building Permit, issued by the Town of Apple Valley, shall be obtained prior to the installation of a Large Wind Turbine system.~~
- ~~11. Every Large Wind Turbine shall be installed strictly per the Manufacturer's Installation specification, or as modified and certified by an Engineer licensed by the State of California.~~
- ~~12. 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.~~
- ~~13. Noticing of the Development Permit shall include all properties within 1,500 feet of the site requesting the installation of a Large Wind Turbine.~~
- ~~14. No Large Wind Turbine, or associated and ancillary equipment, batteries, devices, structures or support(s) shall be located within any required front, side or rear yard setback area.~~
- ~~15. No wiring between a Large Wind Turbine and another Wind Turbine, or the main or accessory structure on site, or any associated and ancillary equipment, batteries,~~

~~devices, structures or support(s) for any wind turbine, shall be located above ground level.~~

- ~~16. When a Large Wind Turbine system is removed from a site, all associated and ancillary equipment, batteries, devices, structures or support(s) for that system shall also be removed.~~

~~9.78.060 Buffering and Screening of Private, Non-commercial, Wind Turbines~~

~~A. General~~

- ~~1. Buffers such as landscaping, earth berms and decorative architecturally treated walls, shall be used to minimize impacts to adjacent properties.~~
- ~~2. Where screening is required, a combination of elements shall be used, including solid masonry wall, berms and landscaping. **(Discussion: As discussed previously, it is virtually impossible to screen a small WECS. It is suggested that, during the Development Permit review process, the Commission review the aesthetic impacts of each WECS proposal separately.)**~~

9.78.070 General Requirements for the Installation of any Wind Turbines.

- A. The safety of the design and construction of all ~~Wind Turbines~~ small 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 wind turbine towers.
- C. All ~~wind turbine towers~~ small WECS 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 wind turbine shall be certified by the manufacturer or by an Engineer Licensed by the State of California.
- F. All wind turbine 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. ~~Wind Turbines~~ Small 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 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 and setback requirements of this Chapter.
- ~~H. No part of a wind turbine 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 wind turbine shall be located on or over any property line(s). The base of any wind turbine or the guy wire anchors of a guyed wind turbine tower shall not be located in any required minimum front, side or rear setback area. No such wind turbine shall be~~

~~located between the main structure on site and any existing or planned public right-of-way. (**Discussion: This requirement is addressed under required setbacks.**)~~

- H. No portion of the small WECS shall be artificially light, except as required by the Federal Aviation Administration (FAA). (*Staff recommended language.*)
- I. Clearance between any wind turbine 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 ~~wind turbines~~ WECS to reduce the likelihood of blocking or reflecting television or other communications signals and from blocking established views. If signal interference occurs, the wind turbine 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 wind turbine 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 wind turbine.
- L. The owner of any wind turbine 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 wind turbine.
- M. Homebuilt, experimental and prototype wind turbines 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 with 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 wind turbine will automatically disconnect from the utility when there is no power input from the utility.
- P. Battery storage units associated with a wind turbine 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 Wind Turbines, and the compatibility of the rotors of reconstructed or reconditioned Wind Turbines, shall be certified by an Engineer Licensed by the State of California. The safety of electrical components of reconstructed or reconditioned Wind Turbines shall be certified by an Engineer Licensed by the State of California. The safety of all modifications to any wind turbine shall be certified by an Engineer Licensed by the State of California. Certification of safety is required before any Building Permit for a wind turbine is issued for modifications made prior to installation. Certification of the safety of modifications made after the wind turbine 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 wind turbine until such certification has been obtained and provided to the Town of Apple Valley.

SUMMARY

The Town of Apple Valley General Plan contains specific policies promoting the use of alternative energy. Amending the Development Code will increase the number of properties eligible to install wind energy conversion systems. The Commission is being asked to consider modifications to the lot size and setback requirements. Staff has also attached a map illustrating developed and undeveloped parcels two and one-half (2-1/2) acres in size and larger. Based upon the types of WEC available, the Commission may also wish to consider the addition of design standards correlated to zoning designations. For comparison purposes, staff has attached a matrix of WECS standards for other communities. It should be noted that, although not a part of the attached matrix, Hesperia has indicated that its Planning Commission is considering a two and one-half (2½)-acre minimum lot size, and setbacks similar to staff's recommendation, for WECS installation.

RECOMMENDATION

Following receipt of staff comments, any public comments and discussion by the Commission, it is recommended that the Commission, by consensus, provide guidance to staff to create appropriate language to be offered within a draft Planning Commission Resolution to be presented for review at a duly noticed, Planning Commission public hearing. After Planning Commission adoption of the Resolution, it would then be forwarded to the Council for consideration and final action.

Prepared By:

Reviewed By:

Pam Cupp
Associate Planner

Lori Lamson
Assistant Director of Community Development

ATTACHMENTS:

1. Development Standards Comparison Matrix
2. Illustrative Parcel Size Map

	Zoning Ordinance	Permitted Land Use Districts	Permits Required	Size	Height	Setbacks	Maximum Sound Level DbA
City of Lafayette, CA	6-14 Wind Energy Conversion Systems	All Districts	Land Use Permit	Swept area of 500 sq. ft. or less diameter of blade shall be no greater than 25 ft. In no case shall the lowest reach of the propellor blade be less than 20ft from the ground.	100 ft or the distance of the tower base to any adjacent property line.	As prescribed in the zoning ordinance	Residential.....45 Multifamily.....50 All other districts.....55
City of Orinda, CA	Mechanical Equipment 17.3.3	All Districts	Use Permit	Unspecified	Unspecified	Equipment shall be installed closer to the habitable structure on the property it serves than to a habitable structure on adjacent properties.	45
City of Lancaster, CA	Article XI, Section 17.40	All Districts	Permitted or CUP	Unspecified	1-5 Acres 65 Ft. 5 plus acres 80 ft	Outside of front or sideyard setback	80 dBA at closest neighboring habitable dwelling
City of Pittsburg, CA	Accessory Structures 18.84.005 18.84.010 18.84.015	R C, I, OS, GQ PD	Ministerial Permit Admin. D.R. Admin. D.R.	n/a	n/a	Must be located behind front yard property line.	Unspecified
County of Riverside	Article 2, Section 17.224	All Districts	Accessory WEC Permit	Unspecified	Unspecified	300% of height from lot containing habitable dwelling, 125% of height all other lots.	80 dBA at closest neighboring habitable dwelling
County of San Bernardino	84.26 Wind Energy Systems	All Districts	Permitted	Unspecified	Between 52.5 Ft. and 120 Ft, dependant upon Land Use Designation	Height of Structure	In accordance with existing noise standards for district with exception to short-term events.
Town of Apple Valley, CA	Wind Turbines Chapter 9.78	Small wind turbines allowed in: All districts with a parcel size of 5 acres or more Large wind turbines allowed on parcels of 10 acres + in following zoning districts: R-VLD, R-A, PRD, and any commercial/office or Industrial Zoning District with P.C. approval	Development Permit	n/a	Small wind turbine max hieght 35 ft. Large wind turbine max hieght 75 ft.	A small wind turbine shall not be located: 100 ft. from any property line, shall not be installed within 50 ft of another structure on site unless directly mounted upon that structure, within 250 ft. of a residential structure upon an adjoining lot or parcel. A large wind turbine shall not be located within 300 ft. of any property line, be installed 150 ft from any structure on site unless directly mounted upon that structure, be located within 500 of a residential structure located upon an adjoining parcel or lot.	50 dba 7:am-10:00pm 40 dba 10:00pm-7:00am

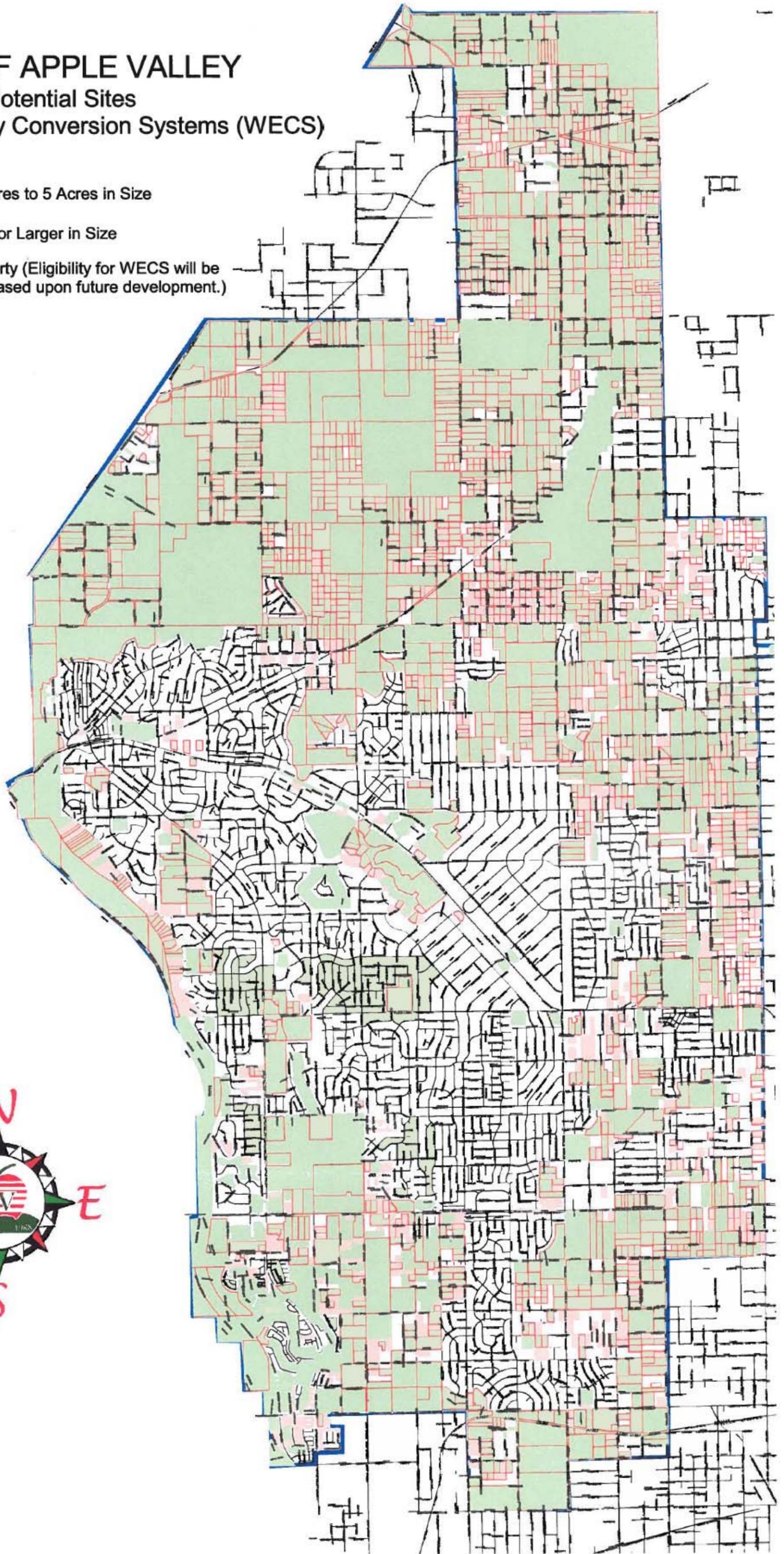
	Zoning Ordinance	Permitted Land Use Districts	Permits Required	Size	Height	Setbacks	Maximum Sound Level DbA
Twenty-nine Palms, CA	19.07 Rural Living Districts 19.08 Single Family Residential 19.09 Multi-Family 19.14 Open Space Residential	All districts	35 ft Bldg Permit over 35 ft minor use permit	n/a	35 ft max, 50% increase with a minor use permit	125% of structure height	not specified
City of Murrieta, CA	Non-commercial wind energy conversion systems 16.44.220	Allowed in districts with a min. lot sizes of 2.5 acres	CUP	No part of a N-WECS blade shall extend 20ft. of the ground trees or any other structure. Rotors shall be 23 inches to 21ft. in diameter.	Max. height 40ft. above grade.	The minimum distance between the N-WECS and the property line or road right-of-way shall be equal to the height of the turbine or 20ft- whichever is further.	See chapter 16.30 Noise Standards Table 3-6
City of Fairfield, CA	Wind Energy Conversion Systems Section 25.32.11	Allowed in all districts	unknown	Rotor to ground clearance 15ft.	n/a	Downwind property lines 5x rotor diameter All other property lines 2.5x rotor diameter From other structures 10ft.	Noise level must comply with the Health and Safety Element of the General Plan.
City of Victorville	Wind Energy Conversion Systems Section 15.18	Allowed in all districts Minimum Lot 1-acre	CUP	Swept area of 500 sq ft	30 feet above maximum height for zoning district	Height of structure	Between 60 dBA and 30 dBA Dependent upon frequency range
City of Casper, WY	Accessory Use 17.13.040	All districts	Plan Check	No part of the blade shall extend 20ft within ground level.	70ft. 20,000sq. ft-1 acre 100ft 1.01 acre +	Setbacks shall be equal to the height of the tower. No part of the tower shall be closer than 10ft from the property line.	60
Rockingham, NH	RSA 674:62	All districts	CUP Site plan review		150ft max.	Shall be setback a distance equal to 110% of total height of tower.	60
St. Mary's County, MD	Accessory Standards 50.4 51.3	All districts	unknown	The blade tip of any wind turbine shall, at its lowest point, have ground clearance of no less than 15ft.	85ft <1 acre 150ft >1acre+	The tower of a small wind turbine shall be setback a distance equal to its total height which is a (1:1) ratio.	unknown
City of Saco, ME	Small Wind Energy Systems Section 730	All districts	Building Permit	n/a	Max. height 100ft. Except for parcels which are exempt from height requirements.	All elements of an SWES shall be setback 100% of the distance from the ground to the center of of the turbine from all boundary lines of the applicant's property or shall adhere to the sideyard or rearyard setbacks, whichever is greater.	Industrial Districts: Day...85 Night...80 Commercial Districts: Day...60 Night...50 Residential/Conservation Districts: Day...55 Night...45

TOWN OF APPLE VALLEY

Potential Sites

Small Wind Energy Conversion Systems (WECS)

-  Lots 2 1/2 Acres to 5 Acres in Size
-  Lots 5 Acres or Larger in Size
-  Vacant Property (Eligibility for WECS will be determined based upon future development.)



MINUTES EXCERPT
TOWN OF APPLE VALLEY
PLANNING COMMISSION
Regular Meeting
Wednesday, December 2, 2009

CALL TO ORDER

At 6:01 p.m., the Regular meeting of the Planning Commission of the Town of Apple Valley for December 2, 2009, was called to order by Chairman Kallen.

ROLL CALL

Roll call was taken with the following members present: Commissioner Larry Cusack, Commissioner David Hernandez, Commissioner John Putko, and Chairman Bruce Kallen. Absent: Vice-Chairman B.R. "Bob" Tinsley

STAFF PRESENT

Lori Lamson, Assistant Director of Community Development; Pam Cupp, Associate Planner, and Patty Hevle, Planning Commission Secretary.

PUBLIC HEARING ITEMS

2. Development Code Amendment No. 2009-006.

Applicant: Town of Apple Valley
Location: Town-wide

Chairman Kallen opened the public hearing at 6:05 p.m.

Ms. Pam Cupp, Associate Planner, presented the staff report as filed by the Planning Division.

Commissioner Hernandez commented on adding the 2½-acre limitation.

Chairman Kallen stated he was hoping there would be more information forthcoming in roof-top models.

Ms. Cupp stated that roof-top models are fairly new and there are limits for heights of single-family residences. She stated that anyone who wanted a roof-top model would need to come before the Commission under a Development Permit review process.

Chairman Kallen also stated he preferred the brown, rather than the white, painted turbines because they are less noticeable in the desert.

Ms. Cupp stated the proposed colors could be reviewed on a case-by-case basis.

Mr. Mark Smith and Mr. George Stanford presented the Commission with some photographs of various wind turbines. Mr. Stanford commented on the necessity for energy conservation due to the increasing population. Mr. Stanford spoke of the need for cities to reduce the minimum lot size required for wind turbines so that more turbines could be allowed.

Chairman Kallen requested to know the height of the "Falcon" units.

Mr. Smith stated they were eighteen (18) feet in height and the turbine part measured six (6) by seven (7) feet. He further commented that these turbines emit less noise than the traditional ones. He further stated that the colors were impregnated, not painted, into the fiberglass.

Ms. Donna Griffin, Apple Valley, stated that a wind turbine would make a big difference in saving money on her energy usage.

Mr. Tom Piper, Apple Valley, spoke in favor of allowing the wind turbines.

Since there was no one else in the audience requesting to speak to this item, Chairman Kallen closed the public hearing at 6:30 p.m.

Commissioner Cusack requested to know the size of Ms. Griffin's property. Ms. Griffin stated it was one-half (1/2) acre in size.

Discussion ensued regarding the allowable lot size for wind turbines.

Chairman Kallen and Commissioner Cusack felt the lot size should be 2-½ acres at this time, and if the need arose, the Commission could revisit the issue at a later date.

Commissioners Hernandez and Putko felt that one (1) acre would be sufficient, especially with the fast-changing technology associated with wind turbines.

Chairman Kallen expressed concerns about an influx of thirty (30)-foot tall wind turbines being installed on smaller lots. He stated they are not something that would be replaced often because of their expense and, if newer technology came out in the meantime, the Town would still have an over abundance of out-dated thirty (30)-foot tall wind turbines.

Commissioner Hernandez was concerned about excluding residents who had less than 2-½ acre properties.

Ms. Lori Lamson, Assistant Director of Community Development, stated the Codes have been too restrictive on wind energy. She stated that staff had originally suggested 2-½ acres but, after workshop discussions, thought the Commission was leaning toward one (1)-acre lots. However, the technology is changing quickly and the Code can be re-evaluated to determine if the standards should be modified further.

Ms. Lamson further stated that, if the Commission desired, they could postpone the item until Vice-Chairman Tinsley returned and there was a full Commission.

Discussion ensued on the issue of the acreage.

Commissioners Cusack and Hernandez agreed they could leave it at 2-½ acres at this time, while moving it forward to Council and making the Council aware of its conflict with the acreage.

Ms. Lamson stated that the Development Code could be revised after evaluating the turbines that are approved for a larger lot, such as 2-½ acres, and determining if they would be aesthetically appropriate for a smaller lot.

MOTION:

Motion by Chairman Kallen, seconded by Commissioner Hernandez, to approve Planning Commission Resolution No. 2009-007 changing the lot size to 2-½ acres.

After some discussion concerning guy wires as opposed to monopoles, as well as net acreage vs. gross acreage, Chairman Kallen amended his motion.

AMENDED MOTION:

Motion by Chairman Kallen seconded by Commissioner Hernandez, that the Planning Commission move to approve Planning Commission Resolution No. 2009-007, amending lot size to two (2) acres net with monopoles preferred and forwarding a recommendation that the Town Council amend Title 9 "Development Code" of the Town of Apple Valley Municipal Code amending Section 9.78 "Wind Turbines."

ROLL CALL VOTE:

Ayes: Commissioner Cusack
 Commissioner Hernandez
 Commissioner Putko
 Chairman Kallen

Noes: None

Abstain: None

Absent: Vice-Chairman Tinsley

The motion carried by a 4-0-0-1 vote

MINUTES EXCERPT

TOWN OF APPLE VALLEY PLANNING COMMISSION Regular Meeting Wednesday, October 21, 2009

CALL TO ORDER

At 6:00 p.m., the Regular Meeting of the Planning Commission of the Town of Apple Valley for October 21, 2009, was called to order by Chairman Kallen.

ROLL CALL

Roll call was taken with the following members present: Commissioner Larry Cusack, Commissioner David Hernandez, Commissioner John Putko, Vice-Chairman B.R. "Bob" Tinsley, and Chairman Bruce Kallen.

STAFF PRESENT

Lori Lamson, Assistant Director of Community Development; Pam Cupp, Associate Planner, and Patty Hevle, Planning Commission Secretary.

4. Workshop – Discussion of development standards and permitting requirements for Wind Energy Conservation Systems (WECS) within the Town of Apple Valley. Staff is seeking the Commission's guidance to create appropriate language to be offered within a draft Planning Commission Resolution.

Ms. Pam Cupp, Associate Planner, presented the staff report as filed by the Planning Division. Ms. Cupp presented a slide presentation of various turbines installed in the High Desert area. She stated the towers are between fifty (50) and 100 feet in height and Hesperia allows them on two (2)-acre lots. The presentation included recent developments in wind turbines, including a roof-mounted model. She stated the current Development Code has no provisions for roof-mounted wind turbines. Ms. Cupp did state that Hesperia also allows for roof-mounted wind turbines.

Mr. Tom Piper, of Apple Valley, stated there is no longer an issue of noise with the newer wind turbines, and he would like to see Apple Valley be more flexible in allowing them.

Mr. Joe Guasti, Oak Hills, a wind turbine installer, stated he was pleased that Apple Valley was reviewing the Code concerning wind turbines.

Mr. Guasti commented on guy wire towers and monopole towers. He stated that the guy wire towers are cheaper than the monopole towers.

Mr. Guasti further stated that heights do matter and that lower tower heights do not work as well. He stated that excessive restrictions could limit the availability of wind turbines. Mr. Guasti commented that lower towers do not function as well as the higher ones. He also commented on the quietness of the newer turbines.

Commissioner Putko requested to know why the roof-mounted turbines are not efficient.

Mr. Guasti responded they were not high enough to operate efficiently and sometimes cause vibrations.

Chairman Kallen had questions concerning the guy wires.

Commissioner Hernandez requested to know the radius for guy wires on a 100-foot tower.

Mr. Guasti responded it would be fifty (50) feet and would be triangular in shape, not circular. He further stated he has installed towers on lots less than one (1)-acre in size, but would recommend at least an acre.

Mr. George Stanford, Hesperia, presented the Commission with some suggested guidelines for wind energy systems.

Chairman Kallen requested to know staff's recommendations for lot size and for roof-mounted units.

Ms. Cupp responded that staff would recommend allowing turbines on two and one-half (2-½) acres, or the Commission may want to consider Mr. Guasti's suggestion of allowing turbines if setback requirements can be met. She stated that staff's suggestion for roof-mounted units would be to allow them with a Special Use Permit application and restrict the height to thirty-five (35) feet.

Vice-Chairman Tinsley expressed concerns regarding making final decisions concerning lot sizes at this time, especially since the industry is always changing.

Ms. Cupp commented the Commission may wish to consider discretionary review, allowing them with certain setbacks, until the Commission becomes more knowledgeable of the different types and styles of wind turbines.

Ms. Lamson, Assistant Director of Community Development, commented that the Development Code can be amended in the future if the need arises. She

suggested the Planning Commission consider a 110% setback from all property lines and structures.

Vice-Chairman Tinsley agreed that the minimum five (5)-acre lot be reduced.

Chairman Kallen agreed with Vice-Chairman Tinsley, stating that, if projects were proposed on less than two (2) acres, they may want to look at those on a case-by-case basis. He further commented on obtaining more information before determining a lot size.

Vice-Chairman Tinsley felt the Commission needed more time to review the information received before making any decisions on regulations.

Commissioner Putko agreed, especially since the industry is changing so rapidly.

Commissioner Hernandez stated he felt the Commission should consider the following acreage requirements: two and one-half (2-½) acres in size for towers requiring guy wires; one (1) acre, if the property meets the setback requirements for monopole towers, and roof-top models must meet the height requirement for the zone, with a Special Use Permit, as well as the project being noticed.

Commission discussion ensued.

Ms. Lamson suggested a reduction in the acreage requirements for small wind turbines to two and one-half (2-1/2) for monopoles and guy wires and maintaining the existing small wind turbine permitting process. She also suggested that monopoles proposed on property one (1) acre or greater be reviewed by the Planning Commission through a Special Use Permit. Guy wires would be prohibited on property less than two and one-half (2-1/2) acres in size. All roof-mounted turbines, on any property size, must complete a Special Use Permit and be reviewed by the Commission.

Ms. Lamson stated the new regulations will be a learning process, and the Development Code can be amended should the need arise.

It was the consensus of the Commission that staff prepare a report with the suggested guidelines.

Ms. Lamson stated the item would be brought back to the Commission as a public hearing.

MINUTES EXCERPT
TOWN OF APPLE VALLEY
PLANNING COMMISSION
Regular Meeting
Wednesday, September 16, 2009

CALL TO ORDER

At 6:00 p.m., the Regular Meeting of the Planning Commission of the Town of Apple Valley for September 16, 2009, was called to order by Chairman Kallen.

ROLL CALL

Roll call was taken with the following members present: Commissioner Larry Cusack, Commissioner David Hernandez, Commissioner John Putko, Vice-Chairman B.R. "Bob" Tinsley, and Chairman Bruce Kallen.

STAFF PRESENT

Lori Lamson, Assistant Director of Community Development; Becky Reynolds, Principal Planner; Carol Miller, Senior Planner; Pam Cupp, Associate Planner; and Patty Hevle, Planning Commission Secretary.

OTHER BUSINESS

3. Discuss and provide direction to staff for a future Development Code Amendment regarding development standards and permitting requirements for Wind Energy Conversion Systems (WECS) within the Town of Apple Valley.

Ms. Pam Cupp, Associate Planner, presented the staff report as filed by the Planning Division.

Commissioner Hernandez requested to know if the roof top models would fall under the Development Code.

Ms. Cupp stated that they would, and currently, a Development Permit is required for any wind turbine.

Vice-Chairman Tinsley commented on having a workshop to review all the new types of wind turbines that are currently on the market.

Commissioner Hernandez requested to know if the Commission could hear a sample of the noise the new turbines generate.

Ms. Lori Lamson, Assistant Director of Community Development, stated she could furnish the Commission with an address they could visit to hear the noise generated from the wind turbine.

Chairman Kallen agreed the Commission should have a workshop before making recommendations concerning design standards per zoning destinations.

Mr. Tom Piper, Apple Valley, commented on wind turbines and the restrictions imposed by the Town's Development Code.. Mr. Piper stated he had considered putting a wind turbine that is about four (4)-feet tall on his roof ; however, the Development Code does not allow it at this time. He stated that, should the Commission conduct a workshop, he would like to attend.

Mr. George Stanford, of Apple Valley, presented photos to the Commission of various wind turbines and commented on the new designs. He felt they should be allowed on half (½)-acre lots.

Chairman Kallen requested to know how tall the turbine was in the photograph presented, and what would be the energy production of such a turbine.

Mr. Stanford responded that the turbine was thirty-three (33)-feet tall and, depending on the size of the home, it would provide fifty (50) to 100 percent of the home's needed energy supply. Mr. Stanford also commented that Southern California Edison cannot keep up with the energy use and encouraged these types of wind turbines.

Commissioner Hernandez questioned the price comparison between turbines and solar panels.

Mr. Stanford responded that turbines are about half(1/2) the price of solar panels; therefore, making them much more affordable.

Vice-Chairman Tinsley commented on the importance of changing the Development Code to accommodate new products for wind energy.

Ms Lamson stated she would set a date for a workshop, and if anyone in the audience wanted to be notified of the date, she requested they fill out a "request to speak" card with their name and address on it. She further stated she would provide some addresses that have existing wind turbines that the Commission could observe.

PLANNING COMMISSION RESOLUTION No. 2009-007

A RESOLUTION OF THE PLANNING COMMISSION OF THE TOWN OF APPLE VALLEY, CALIFORNIA, RECOMMENDING THAT THE TOWN COUNCIL FIND THAT DEVELOPMENT CODE AMENDMENT NO. 2009-007 IS EXEMPT FROM ENVIRONMENTAL REVIEW AND AMEND TITLE 9 “DEVELOPMENT CODE” OF THE TOWN OF APPLE VALLEY MUNICIPAL CODE BY AMENDING SECTION 9.78 “WIND TURBINES” OF THE CODE AS IT RELATES TO THE SITE DEVELOPMENT STANDARDS FOR ALL WIND ENERGY CONVERSION SYSTEMS LOCATED WITHIN THE TOWN OF APPLE VALLEY.

WHEREAS, Title 9 “Development Code” of the Municipal Code of the Town of Apple Valley was adopted by the Town Council on October 24, 2000; and

WHEREAS, Title 9 “Development Code” of the Municipal Code of the Town of Apple Valley has been previously modified by the Town Council on the recommendation of the Planning Commission; and

WHEREAS, specific changes are proposed to Title 9 “Development Code” of the Town of Apple Valley Municipal Code by amending Section 9.78 “Wind Turbines” of the Code as it relate to site development standards for all wind energy conversion systems located within the Town of Apple Valley; and

WHEREAS, on November 20, 2009, Development Code Amendment No. 2009-006 was duly noticed in the Apple Valley News, a newspaper of general circulation within the Town of Apple Valley; and

WHEREAS, pursuant to Section 15061(b)(3) of the State Guidelines to Implement the California Environmental Quality Act (CEQA), it can be determined that the activity is covered by the general rule that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is EXEMPT from further CEQA review; and

WHEREAS, on December 2, 2009, the Planning Commission of the Town of Apple Valley conducted a duly noticed and advertised public hearing on Development Code Amendment No. 2009-006, receiving testimony from the public; and

WHEREAS, Development Code Amendment No. 2009-006 is consistent with Title 9 “Development Code” of the Municipal Code of the Town of Apple Valley and shall promote the health, safety and general welfare of the citizens of the Town of Apple Valley.

NOW, THEREFORE, BE IT RESOLVED that in consideration of the evidence presented at the public hearing, and for the reasons discussed by the Commissioners at said

hearing, the Planning Commission of the Town of Apple Valley, California, does hereby resolve, order and determine as follows and recommends that the Town Council make the following findings and take the following actions:

Section 1. Find that the changes proposed by Development Code Amendment No. 2009-006 are consistent with the Goals and Policies of the Town of Apple Valley adopted General Plan.

Section 2. Pursuant to Section 15061(b)(3) of the State Guidelines to Implement the California Environmental Quality Act (CEQA), it can be determined that the Code amendment is covered by the general rule that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty, as with the proposed Code Amendment, that there is no possibility that the proposal approved under Development Code Amendment No. 2009-006 will have a significant effect on the environment and, therefore, the Amendment is EXEMPT from further environmental review.

Section 3. Amend Section 9.78 "Wind Turbines" of the Town of Apple Valley Development Code to read as follows:

CHAPTER 9.78 WIND ENERGY CONVERSION SYSTEMS (WECS)

9.78.010 PURPOSE

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

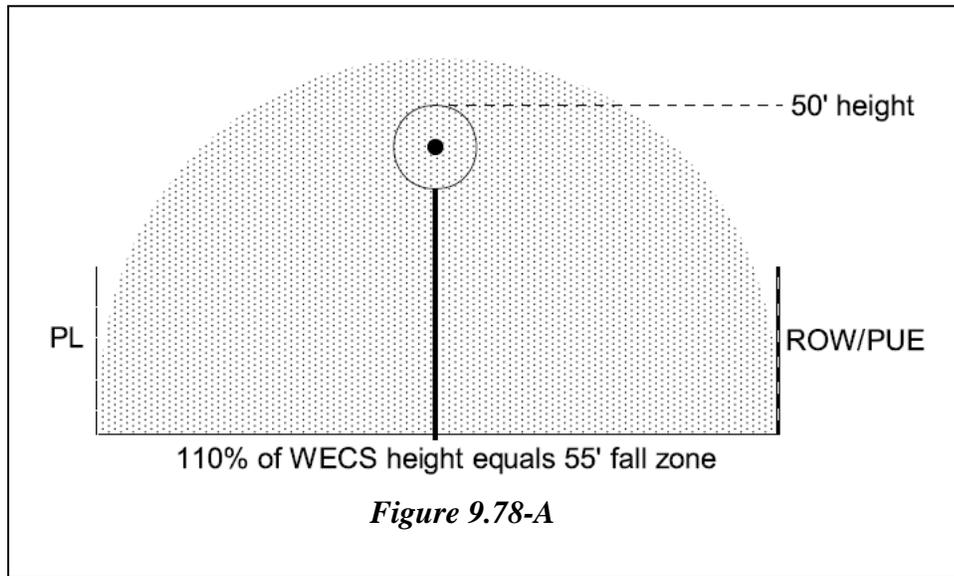
1. This Chapter shall be interpreted in a manner which best fulfills the intent of its provisions.
2. Questions arising from the application of the Chapter shall be interpreted by the Director. If any inconsistency still exists in the interpretation, an appeal application shall be referred to the Planning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

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

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 one (1) acre 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.** WECS consisting of monopole construction may be permitted on any developed parcel one (1) net acre or more in size.
 - 4.** WECS requiring the use of guyed wires may only be permitted upon developed parcels two and one-half (2 ½) acres or more in size.
- 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 ~~another WECS~~, or 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 buy 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 wine 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.

Approved and Adopted by the Planning Commission of the Town of Apple Valley this 2nd day of December, 2009.

Bruce Kallen, Chairman

ATTEST:

I, Patty Hevle, Secretary to the Planning Commission of the Town of Apple Valley, California, do hereby certify that the foregoing Planning Commission Resolution No. 2009-007 was duly and regularly adopted by the Planning Commission at a regular meeting thereof, held on the 2nd day of December, 2009, by the following vote, to-wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

Patty Hevle, Planning Commission Secretary