

ORDINANCE NO. 8-2012

AN ORDINANCE AMENDING CHAPTER 23, "PLANNING AND COMMUNITY DEVELOPMENT," SUBPART B, "LAND DEVELOPMENT CODE," OF THE ABILENE MUNICIPAL CODE, BY AMENDING CERTAIN SECTIONS AS SET OUT BELOW; PROVIDING A SEVERABILITY CLAUSE; DECLARING A PENALTY AND CALLING A PUBLIC HEARING.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

PART 1: That Chapter 23, Subpart B, "Land Development Code," of the Abilene Municipal Code be amended as set out in Exhibit "A," attached hereto and made a part of this ordinance for all purposes.

PART 2: That if any provision or any section of this ordinance shall be held to be void or unconstitutional, such holding shall in no way affect the validity of the remaining provisions or sections of this ordinance, which shall remain in full force and effect.

PART 3: That any person, firm or corporation violating any of the provisions of this chapter shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine of not more than Five Hundred Dollars (\$500.00). Each day such violation shall continue or be permitted to continue, shall be deemed a separate offense.

PASSED ON FIRST READING this 15th day of December A.D. 2011.

A notice of the time and place, where and when said ordinance would be given a public hearing and considered for final passage, was published in the Abilene Reporter-News, a daily newspaper of general circulation in the City of Abilene, said publication being on the 16th day of November, 2011, the same being more than fifteen (15) days prior to a public hearing to be held in the Council Chamber of the City Hall in Abilene, Texas, at 8:30 a.m., on the 12th day of January, 2012, to permit the public to be heard prior to final consideration of this ordinance. Said ordinance, being a penal ordinance, becomes effective ten (10) days after its publication in the newspaper, as provided by Section 19 of the Charter of the City of Abilene.

PASSED ON SECOND AND FINAL READING THIS 12th day of January, A.D. 2012.

ATTEST:


CITY SECRETARY


MAYOR

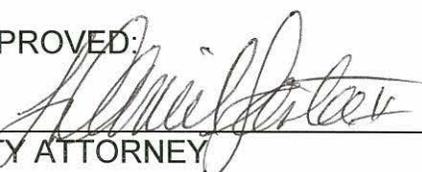
APPROVED:

CITY ATTORNEY

EXHIBIT "A"

AMEND: Section 2.4.7 Wind Energy Conversion Systems (WEC)

REPLACE: Replace with the following.

Division 7 WIND ENERGY CONVERSION SYSTEMS (WEC)

Section 2.4.7.1 Purpose

It is the purpose of these regulations to foster the development and use of Wind Energy Conversion systems, enhance both energy production and security, as well as enhance the choices for clean, reliable, and affordable energy to the residents of the City of Abilene while providing minimum protective measures to mitigate against negative impacts to nearby residents and properties that might limit the use and enjoyment of same.

Section 2.4.7.2 Definitions

- a. **Wind Energy Conversion System (WEC):** A wind energy conversion system consisting of a wind turbine/rotor (blades), a tower (freestanding, engineered, monopole structure only upon which the wind turbine/generator is mounted-no lattice-type or guyed tower structures allowed), and associated control or conversion electronics, that has a rated capacity of not more than 100kW output at any given time, and that is intended for on-site production of electricity in order to reduce consumption of commercial utility power.
- b. **Wind Energy Conversion System, Large (LWEC):** A wind energy conversion system that has a rated capacity of more than 10kW, but not more than 100kW, output at any given time, and that is intended for on-site production of electricity for a residence, agricultural structure or business.
- c. **Wind Energy Conversion System, Small (SWEC):** A wind energy conversion system that has a rated capacity of not more than 10kW output at any given time, and that is intended for on-site production of electricity for a residence, agricultural structure, or small business.
- d. **Wind Energy Tower Height:** The height above grade of the fixed portion of the tower (i.e., to the center of the hub), excluding the wind turbine itself.
- e. **Wind Energy Turbine/Generator:** The blades and associated mechanical and electrical conversion components mounted on top of the tower.
- f. **Fall Radius:** The Wind Energy Tower Height (d above) plus the blade length.

Section 2.4.7.3 Requirements

- a. **WEC Systems Allowed with Building Permit (By Right):** One SWEC system per lot shall be allowed with the approval of a building permit as an accessory use when **ALL** of the following apply:
 - 1) When a SWEC system is certified by the Small Wind Certification Council (SWCC) for noise generation of no more than 45 decibels (Db) when the wind energy turbine/generator will be less than 300' from an adjacent property or no more than 50 decibels (Db) if 300' or greater.

- 2) When a SWEC system is setback a minimum of 105% of the fall radius from any habitable structure, right-of-way, overhead utility line or other tower structure.
 - 3) When a SWEC system is located outside of any floodplain or drainage way.
- b. Wind energy conversion systems not qualifying under 2.4.7.3 a (above) shall require a Special Exception.
- c. **Minimum lot size:** There shall be no minimum lot size required for a small wind energy conversion system (SWECS.) Large wind energy systems (LWECS) shall be located on a lot having a minimum lot size of five (5.0) acres.
- d. **Application Requirements.** An accurately drawn-to-scale survey/site plan is required with a Special Exception application and shall include the following:
- (1) Applicant, landowner and operator name, address and telephone number.
 - (2) Property lines and physical dimensions of the property,
 - (3) Location, dimensions, setbacks and types of existing major structures on the property,
 - (4) Location of the proposed wind system tower, and setbacks/dimensions from all existing structures on-site, from all property lines, and from structures on adjacent properties,
 - (5) Locations and dimensions/setbacks from all public rights-of-way that are contiguous with the property,
 - (6) Overhead utility lines, and approximate locations/canopy coverage of large existing trees on the property,
 - (7) Wind system specifications, including manufacturer and model, rotor diameter, tower height, tower type, rated kW output, noise certifications from SWCC or, an equivalent manufacturer's noise certification detailing the unit's noise performance at various operating speeds. (8) Tower foundation blueprints or drawings,
 - (9) Tower blueprint or drawing,
 - (10) Elevation drawings showing the design and height of the proposed energy system, and any screening that will be provided to screen the system/tower from public view.
- e. **Floodplain.** Wind towers and generators proposed to be installed within the 100-year floodplain shall also have approval of the City's Engineer and, where applicable, the U.S. Army Corps of Engineers. Such tower sites shall take such measures, as required by the City's Engineer, to protect the sites from damage from potential flooding. The City's Engineer shall require a floodplain permit and a licensed engineer's certification that the tower/generator will not pose a threat or safety hazard due to flood conditions.
- f. **Location.** No portion of a wind energy system, including the tower, shall be located within any required front, side or rear yard otherwise specified in the Special Exception standards. The tower and all its appurtenances shall be located behind (i.e., not in front of) the main building. No portion of a system may protrude over a property line without acquisition of an easement for the encroachment from the adjacent property owner(s). No portion of a system may protrude over an easement without proper written release from the utility provider or entity that owns or controls such easement.
- g. **Accessory Use.** A wind energy system may exist only as an accessory use, and it may not be constructed/installed until a primary structure exists on a property. A wind energy system may only supply power to structures on the lot/parcel where the system is located This provision is

not intended to prevent "net metering" or "aggregate billing" whereby a property owner feeds energy back into the grid and receives a credit or compensation for said production.

- h. **Height.** For property sizes less than or equal to five (5.0) acres in area, the tower height shall be a maximum of sixty-five (65.0) feet. For property sizes greater than five (5.0) acres in area, the tower height shall not exceed one hundred (100.0) feet. Blade clearance shall be a minimum of twenty (20.0) feet above the ground.
- i. Wind energy conversion systems must comply with applicable Federal Aviation Administration (FAA) regulations, including any necessary approvals for installations close to airports, the City's Airport Zoning regulations in Section 2.4.5.1, and must also comply with applicable ASHTO engineering standards.
- j. **Controls and Brakes.**
 - (1) All wind energy conversion systems shall be designed with an automatic over speed control to render the system inoperable when winds are blowing in excess of the speeds for which the machine is designed.
 - (2) All wind energy conversions systems shall have a manually operable or electrically dynamic method to render the system inoperable in the event of a structural or mechanical failure of any part of the system including the automatic over speed control.
- k. **Safety and Security Measures.**
 - (1) A clearly visible warning sign that states "Caution, High Voltage" must be placed at the base of all pad-mounted transformers and substations.
 - (2) All ground-mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.
 - (3) The tower shall be designed and installed so as to not provide step bolts or a ladder readily accessible to the public for a minimum height of 12 feet from the ground.
 - (4) All towers shall be of a monopole design without lattice work or guy wires (5) All access doors to wind energy systems and their appurtenances (e.g., cabinets, junction boxes, etc.) shall be locked or fenced, as appropriate, to prevent entry by non-authorized persons.
 - (5) All electrical wires associated with a wind energy system, other than wires necessary to connect the wind generator to the tower wiring, the tower wiring to the disconnect junction box, and the grounding wires shall be located underground.
- l. **Noise and Vibration.** Except during short term events such as severe storms, power outages and severe wind events, wind energy conversion systems shall be required to comply with Performance Standards and requirements contained within the City's Land Development Code, Chapter 4, Division 9.
- m. **Visual Appearance.**
 - (1) A wind tower and generator shall not be artificially lighted unless such lighting is required by the Federal Aviation Administration.
 - (2) The wind tower and generator shall remain painted or finished in the neutral white, light grey or silver non-reflective color applied by the manufacturer. Refurbished blades and parts must meet the manufacturer's specifications as applicable.
 - (3) All signs, other than the manufacturer's or installer's identification, appropriate warning signs, or owner identification on a wind generator, tower, building, or other structure associated with a wind energy system, shall be prohibited. Such signs as described above shall be no larger than four (4.0) square feet in size, and shall be located near the base of the tower.

- (4) No flags, pennants, banners or similar materials may be displayed on or attached to any portion of a wind energy system, including its tower.

n. **Nuisance Prevention.**

- (1) **Shadow Flicker and Blade Glint.** Wind energy systems shall be sited, to the greatest extent practical, to minimize the impact of shadow flicker or blade glint upon any inhabited structures (except for the owner's) or public roadways. Systems found to be a nuisance or a traffic hazard shall be shut down until the flicker or glint problem is remedied.
 - (2) **Signal Interference.** Wind energy systems shall comply with all applicable Federal Communications Commission (FCC) rules, and shall not cause static noise interference with other individuals' television reception or with private or public telecommunications (e.g., public safety communications, 911 dispatch, etc.).
- o. **Roof-Mounted System.** No wind energy system shall be placed or constructed on the roof of any existing structure unless such structure is/was designed and constructed to structurally accommodate and support a roof-mounted wind energy system. Certification by a structural engineer shall be required for any roof-mounted system. No roof-mounted WEC shall exceed a maximum tower height of sixty-five (65.0) feet, as measured from the lowest ground level elevation point of the structure or when applicable, 25' above the building roofline when the building exceeds 40' in height.

Section 2.4.7.4 Building Permit Required

- a. A building permit shall be required for the installation of a wind energy system:
- (1) The owner shall submit an application to the Building Official. The application shall be accompanied by standard drawings of the wind turbine structure, a line drawing of the electrical components, and two copies of the site plan for the wind energy system, and any fee the City requires for an accessory use or building.
 - (2) No permit for a wind energy system shall be issued until evidence of written approval has been given to the City that the utility company has been informed of the customer's intent to install an interconnected customer-owned generator, and the utility company has expressed written approval for the system. Off-grid systems shall be exempt from this requirement.
 - (3) Building permit applications for wind energy systems shall be accompanied by standard drawings of the wind turbine structure, including the tower, base and footings. An engineering analysis of the tower showing compliance with the City's Building Code, and certified by a licensed professional engineer, shall also be submitted. This analysis is frequently supplied by the manufacturer.
 - (4) Building permit applications for wind energy systems shall be accompanied by a line drawing of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the City's Electrical Code. This information is frequently supplied by the manufacturer.
 - (5) A building permit issued for a wind energy system shall expire if the system is not installed, functioning and passed City inspection within six (6) months (i.e., 180 calendar days) following the date the permit is issued.

Section 2.4.7.5 Maintenance and Abandonment

a. **Required Maintenance.**

The owner and operator of a wind energy unit must maintain the unit to manufacturer's standards at all times and ensure the unit complies with City's performance measures for noise,

structural integrity and other performance standards. All required periodic maintenance must be performed as recommended by the manufacturer.

b. Abandonment.

- (1) A wind energy system that is out-of-service for a continuous 6-month (i.e., 180 calendar days) period will be deemed to be abandoned. Nonfunction or lack of operation may be proven by reports from the interconnected utility or other site related information. The owner/operator and successors shall make available to the administrative officer all reports to and from the purchaser of energy from the wind energy conversion system if requested. The Building Official (or designee) shall issue a written notice to the owner(s) of a wind energy system that is deemed to have been abandoned. The owner(s) shall have the right to respond to the notice within 30 calendar days from the date it was mailed to the owner. The Building Official (or designee) shall cease abandonment proceedings if within 30 days the owner provides sufficient information in writing demonstrating the wind energy system has not been abandoned, that it is operational, and that it is in compliance with the City's regulations for WECs.
- (2) If the wind energy system is determined to be abandoned, the owner of the wind energy system shall remove the wind generator and tower structure (including all its appurtenances) from the property at the owner's sole expense within 120 calendar days after the notice of abandonment was sent to the owner. If the owner fails to completely remove the wind generator, tower and any associated appurtenances, the Building Official (or designee) may pursue a legal action to have the wind generator and tower structure removed at the owner's expense. Failure to remove an abandoned wind energy system shall be a violation of this ordinance with each day being considered a separate offence.
- (3) **Right of Entrance:** By the acceptance of a special exception or building permit the owner/operator grants permission to the City of Abilene to enter the property to remove the wind energy conversion system pursuant to the terms of the special exception and to assure compliance with the other conditions set forth in the permit.

Section 2.4.7.6 Subdivision

- a. Future subdivision of any property upon which a wind energy system is located shall only be allowed if the WEC is a legally conforming use/structure, and if all setback, height and other requirements for WECs (as such exist at the time of such future subdivision) remain in compliance.

AMEND: Section 1.4.4.1 Special Exceptions

CHANGE: Add item #14 to the list of Special Exceptions.

Section 1.4.4.1 Special Exceptions.

(d) Special Exceptions Outlined (Add the following)

- (14) Installation of a small wind energy conversion system (SWEC) not qualifying by right in conformance with Section 2.4.7.3.a or installation of a large wind energy conversion system (LWEC).

AMEND: Section 2.4.2.1 Land Use Matrix

CHANGE: Amend Chart for ‘Wind Energy Conversion Systems’ as shown below.

LEGEND: P-Permitted, Blank-Not Permitted, C-Conditional Use Permit, TP-Requires a Temporary Permit, ☑-Conditions Apply See Ch.2 Art.5 Div.3

Permitted Uses	Agricultural Open Space	Rural Residential RR-5 & RR1	Residential Single-Family	Residential Single-Family Patio Home	Residential Townhouse	Residential Medium Density	Residential Multi-Family	Manufactured/Mobile Home	College & University	Neighborhood Office	Office	Neighborhood Retail	General Retail	Medical Use	Central Business	Mixed Use	General Commercial	Heavy Commercial	Light Industrial	Heavy Industrial	Parking Requirements (also refer to Chapter 4, Article 2, Division 1)
	AO	RR	RS	PH	TH	MD	MF	MH	CU	NO	O	NR	GR	MU	CB	MX	GC	HC	LI	HI	
Accessory & Incidental Uses																					
Wind Energy Conversion Systems	☑	P/SE	P/SE	P/SE	P/SE	P/SE	P/SE	P/SE	P/SE	P/SE	P/SE	P/SE	P/SE	P/SE	P/SE	P/SE	P/SE	P/SE	P/SE	P/SE	

-END-