

ORDINANCE

AMENDING THE CORPUS CHRISTI ZONING ORDINANCE BY ADDING NEW DEFINITIONS IN SECTIONS 3-1, BY REDESIGNATING SUBSECTION 3-1.64.1 AS SUBSECTION 3-1.64.2, BY REDESIGNATING AND REVISING SUBSECTION 3.1.67.3 AS SUBSECTION 3.1.67.4, BY REVISING SUBSECTIONS 3-1.65.2 AND 3-1.65.5, BY ADDING A NEW ARTICLE 27D, AND REVISING SECTION 29-3.13, RELATING TO THE USE, REGULATIONS, AND REVIEW STANDARDS FOR THE INSTALLATION AND SITING OF WIND ENERGY CONVERSION UNITS WITHIN THE CITY LIMITS; AMENDING CONFLICTING PROVISIONS OF THE CITY'S COMPREHENSIVE PLAN; REPEALING CONFLICTING ORDINANCES; PROVIDING FOR SEVERENCE; PROVIDING FOR PENALTIES; PROVIDING FOR PUBLICATION; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the development and use of renewable energy sources and investments in energy efficiency will enhance energy productivity and security; offer clean, reliable, and affordable energy technologies, and increase choices available to the City of Corpus Christi residents;

WHEREAS, with proper notice to the public, a public hearing was held on Wednesday, December 10, 2008, August 5, 2009, September 30, 2009, and October 14, 2009, during meetings of the Planning Commission, and on Tuesday, October 27, 2009, during a meeting of the City Council, in the Council Chambers, at City Hall, in the City of Corpus Christi, during which all interested persons were allowed to appear and be heard; and

WHEREAS, the City Council has determined that the adoption of this ordinance best serves the general welfare of the City and its citizens by providing a regulatory base for the construction and operation of wind energy units in the City of Corpus Christi, subject to reasonable restrictions, which will preserve the public health and safety;

WHEREAS, the City of Corpus Christi will coordinate planning for wind energy projects with public and privately-owned electric utility companies, with independent developers and with state and federal agencies, including but not limited to, the Texas Public Utilities Commission, Texas General Land Office, Texas Parks and Wildlife Department, U.S. Fish and Wildlife Service, Army Corps of Engineers, and the Texas Natural Resource Conservation Commission among others;

NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CORPUS CHRISTI:

SECTION 1. Section 3-1 of the Corpus Christi Zoning Ordinance is amended by redesignating subsection 3-1.64.1 as subsection 3-1.64.2, redesignating and revising subsection 3-1.67.3 as subsection 3-1.67.4; adding new subsections 3-1.10.1, 3-1.23.1,

3-1.32.1, 3-1.36.1, 3-1.48.1, 3-1.52.2, 3-1.58.4, 3-1.64.1, 3-1.64.7, and 3-1.67.3; and revising subsections 3-1.65.2 and 3-1.65.5, to read as follows:

ARTICLE 3. DEFINITIONS

Section 3-1 Words used in the present tense include the future, words in singular number include the plural number, and words in the plural number include the singular; the word “building” includes the word “structure;” the word “shall” is mandatory and not directory. In the interpretation of this Ordinance only, and no other certain terms and words are hereby defined as follows:

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3-1.10.1 Building/Structurally-Mounted Wind Energy Unit. A small wind energy unit for permanent mounting and operating on a building or other structure. Building or structurally-mounted units may not exceed 10 kW in manufacturer rated power.

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3-1.23.1 Fall Radius. The fall area for a wind energy unit is measured by using the total height of the tower as the radius around the center point of the base of the tower.

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3-1.32.1 Grid System. The transmission and distribution system created to deliver the supply and demand of electricity for consumers.

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3-1.36.1 Horizontal Axis Wind Energy Unit. A wind energy unit that utilizes a generator shaft that is horizontal (parallel) to the ground.

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3-1.48.1 Medium Wind Energy Unit. A wind energy conversion unit consisting of one wind turbine and designed to supplement other electricity sources for existing buildings or facilities, from which the power generated is used for on-site consumption. A medium wind energy conversion unit has a total rated capacity of 20 kW to 100 kW.

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3-1.52.2 Rated Capacity. The maximum rated output of electric power production equipment. This output is typically specified by the manufacturer with a “nameplate” on the equipment.

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3-1.58.4 Small Wind Energy Unit. A wind energy conversion unit designed to supplement other electricity sources for existing buildings or facilities, from which the power generated is used for on-site consumption. A small wind energy conversion unit has a total rated capacity of up to 20 kW.

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3-1.64.1 Survival Wind Speed. The maximum wind speed, as designated by the wind energy unit manufacturer, at which a unit, in unattended operation (not necessarily producing power) is designed to survive, without damage to any structural equipment or components of the system, or loss of the ability to function normally.

~~3-1.64.1~~ **3-1.64.2 Taverns, Lounges, or Bars.** A use engaged in the retail sale of alcoholic beverage, for on-premise consumption provided the establishment derives more than 75 percent of the establishment's gross revenue from the on-premise sale of alcoholic beverages. A tavern, lounge, or bar may include entertainment providing such entertainment is enclosed within the building structure.

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3-1.64.7 Total Unit Height. The distance from the grade to the highest point on the unit or tower, including the vertical length of any extensions, such as the rotor blade:

- a. For horizontal axis wind energy units, the distance between the ground and the highest point of the rotor blade in its vertical, upright position;
- b. For vertical axis wind energy units, the distance between the ground and the highest point of the shaft

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3-1.65.2 Tower / Turbine, Guyed. Any telecommunications tower or wind energy unit supported in whole or in part by cables anchored to the ground.

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3-1.65.5 Tower, Self-supporting Lattice. A telecommunications or wind energy unit which consists of an open network of metal braces forming a tower which is usually triangular or square in cross-section.

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~~**3-1.67.3 Wind Energy System.** A wind energy conversion system or similar product consisting of a wind turbine, tower, and associated control or conversion electronics that will be used primarily to reduce on-site consumption of utility power.~~

~~(1) Height, Total System. The height above grade of the system, including the generating unit and the highest vertical extension of any blades or rotors.~~

3-1.67.3 Vertical Axis Wind Energy Unit. A wind energy unit that utilizes a generator and shaft that is positioned vertical (perpendicular) to the ground.

3-1.67.4 Wind Energy Unit. A shaft, gearing belt, or coupling utilized to convert the rotation of the surface area into a form suitable for driving a generator, alternator, or other electricity producing device to convert the mechanical energy of the surface area into electrical energy, and the associated, tower, pylon, or other supporting structure, and rotor blades or other device. Wind energy units may consist of several units forming a wind energy system.

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SECTION 2. The Corpus Christi Zoning Ordinance is amended by adding a new Article 27D to read as follows:

ARTICLE 27D. WIND ENERGY CONVERSION UNITS

27D-1 Purpose. The purpose of this article is to facilitate the siting, installation, and construction of small and medium wind energy conversion units within the City of Corpus Christi, subject to reasonable restrictions, which will preserve the health and safety of the public, ensure compatibility with surrounding land uses, and provide guidelines in the protection of listed species.

27D-2 Applicability.

27D-2.1 The requirements of this article apply within the City of Corpus Christi where all wind energy conversion units used to generate electricity or perform work that may be connected to a utility grid, serve as an independent source of energy, or serve as a hybrid system.

27D-2.2 Wind energy units in place prior to November 16, 2009 are not required to meet the requirements of this article.

27D-2.3 However, any pre-existing wind energy unit that is not producing energy for a continuous period of 6 months must meet the requirements of this article prior to recommencing production of energy.

- 27D-2.4** Any physical modification to an existing and permitted wind energy unit that materially alters the size, type, power output, or number of wind energy units, or other equipment, requires a permit modification from the City.
- 27D-2.5** **Accessory Use.** Accessory use for this article refers to the stipulation that the energy generated by a wind energy unit must be used onsite and any additional energy produced above the total onsite demand can only be sold to an electrical utility that normally provides electrical power to the property.
- 27D-2.6** **Wind Energy Farms.** The leasing of land or establishment of wind energy units on land for the commercial sale of wind energy is prohibited within the City limits.
- 27D-3** **Requirements for all Wind Energy Units.**
- 27D-3.1** **Certification.** All wind energy units must be approved under an Emerging Technology program, such as the California Energy Commission, IEC, or any other small and medium wind certification program recognized by the American Wind Energy Association (AWEA) or the U.S. Department of Energy.
- 27D-3.2** **Permits.** All wind energy units require a Building Permit, Electrical Permit, and Development Services review by the City.
- 27D-3.3** **Inspection.** All wind energy units must be inspected by the City's Building and Electrical Inspectors.
- 27D-3.4** **Permit Issuance.** The Development Services review must be performed, and the Building Permit, Electrical Permit, and if applicable, Special Use Exception Permit, must be issued prior to the mounting, pouring of a concrete pad, or construction and assembly of the wind energy unit.
- 27D-3.5** **Agency Review.** All wind energy units are subject to permit review and consultation with all applicable State and Federal agencies having jurisdiction and listed under Section 27D-6.
- 27D-3.6** **Survival Wind Speed.** All wind energy units and associated components, including, but not limited to, generator, rotor blades, or other components and covers, must be constructed of materials and be installed to meet or exceed the minimum wind resistant construction standards of the Texas State Department of Insurance Wind Load Factors for the Corpus Christi area and the Corpus Christi Building Code.

27D-3.7 Setbacks.

- (A) All required setbacks are measured from the property line or utility easement, if present and applicable, and subject to Section 27D-4.4.
- (B) If an Applicant is able to present evidence that the proposed wind energy system has been engineered with a break-point along the tower, the City may determine that the measurement of the length of the longest segment following a break at the break-point can be used in determining the fall radius and setback.

27D-3.8 Controls and brakes. All wind energy units must have automatic and manual braking systems that engage at the maximum wind speeds allowable as designated for the type of wind energy unit installed, to prevent uncontrolled rotation and excessive pressure on the tower structure, rotor blades, turbine components, or supporting and mounting structures.

27D-3.9 Maintenance. The owner and operator of a wind energy unit must maintain the unit to manufacturer standards. All required periodic maintenance must be performed as recommended by the manufacturer.

27D-3.10 Appearance. All wind energy units must maintain a non-reflective finish.

27D-3.11 Signs. Advertising or identification of any kind on wind energy conversion units is prohibited.

27D-3.12 Wiring.

- (A) **Storage.** All electrical wires associated with a freestanding wind energy conversion unit must be located on or within the tower or supporting structure in a manner that minimizes their visibility, and must be installed in compliance with the Corpus Christi Electrical Code.
- (B) **Installation.** All transmission wires must be installed underground and comply with the City of Corpus Christi's Electrical Code.

27D-3.13 Lighting. Wind energy units may not be artificially lighted, unless requested or required by the Federal Aviation Administration.

27D-3.14 Restrictive Covenants and Easements. Wind energy units may not be located in violation of any restrictive covenants and private restrictions on the properties where they are located.

27D-3.15 Flood Elevations. All electrical and mechanical equipment associated with a wind energy unit must meet the Base Flood Elevation requirements of the “Flood Hazard Prevention Code” under the City's Chapter 14, Development Services Code.

27D-4 Uses, Lot Size Allowances, Heights, Setbacks, and Required Permits.

27D-4.1 Permitted Use/By Right.

(A) All applications for wind energy units as a Permitted/By Right use are subject to permit review and the requirements of Sections 27D-2, 27D-3, 27-D4.1, 27D-4.3, 27D-4.4, 27D-5, 27D-6, 27D-7, 27D-8, and 27D-9.

(B) Wind energy units are allowed as an accessory use to a building or structure requiring energy and as a Permitted/By-Right use on platted lots as follows:

1) Single-Family, Two-Family, and Townhouse Residential Use Districts. The following standards apply to the single-family, two-family, and townhouse residential uses in zoning districts RE, RA, R-1A, R-1B, R-1C, R-TH, R-2, A-1, A-1A, A-2, AB, B-1, B-1A, B-2, B-2A, B-4, or BD:

a) One building or structurally-mounted unit is permitted for every 1,500 sq. ft. of a building requiring energy, not to exceed a height of 15 feet above the highest point of the structure, excluding chimneys, with a fall radius that falls within the property lines.

b) In addition to building or structurally-mounted units, one small free-standing unit is permitted on any lot originally platted as one acre (43,560 sq. ft.) in size or greater, the total unit height of which may not exceed 55 feet above the natural grade, with a fall radius that falls within the property lines.

2) Multiple-family Residential Use Districts. The following standards apply to the multiple-family residential uses in zoning districts A-1, A-1A, A-2, AT, AB, B-1, B-1A, B-2, B-2A, B-4, or BD:

a) One building or structurally-mounted unit is permitted for every 20,000 sq. ft. of a building requiring energy, not to exceed a height of 15 feet above the highest point of the structure, excluding chimneys, with a fall radius that falls within the property lines, and clears all other structures onsite.

- b) In addition to building or structurally-mounted units, one small free-standing unit is permitted on a platted lot, the total unit height of which may not exceed 55 feet above the natural grade, with a fall radius that falls within the property lines, and clears all other structures onsite.
- 3) Neighborhood Business and Light-Industrial Use Districts. The following standards apply to the neighborhood business and light-industrial uses in zoning districts AB, B-1, B-1A, B-2, B-2A, B-3, I-1, or I-2:
- a) One building or structurally-mounted unit is permitted for every 20,000 sq. ft. of a building requiring energy, not to exceed a height of 15 feet above the highest point of the structure, excluding chimneys, with a fall radius that falls within the property lines, and clears all other structures onsite.
 - b) In addition to building or structurally-mounted units, one small free-standing unit is permitted on a platted lot, the total unit height of which may not exceed 55 feet above the natural grade, with a fall radius that falls within the property lines, and clears all other structures onsite.
- 4) Primary Business and Heavy-Industrial Use Districts. The following standards apply to the general business, heavy-industrial, and agricultural uses in zoning districts B-4, B-5, B-6, or I-3:
- a) One building or structurally-mounted unit is permitted for every 20,000 sq. ft. of a building requiring energy, not to exceed a height of 35 feet above the highest point of the structure, excluding chimneys, with a fall radius that falls within the property lines, and clears all other structures onsite.
 - b) In addition to building or structurally-mounted units, one small free-standing unit is permitted on a platted lot, the total unit height of which may not exceed 85 feet above the natural grade, with a fall radius that falls within the property lines, and clears all other structures onsite.
- 5) Agricultural Use Districts. The following standards apply to the agricultural uses in zoning district F-R:

- a) One building or structurally-mounted unit is permitted for every 1,500 sq. ft. of a building requiring energy, not to exceed a height of 35 feet above the highest point of the structure, excluding chimneys, with a fall radius that falls within the property lines, and clears all other structures onsite. Each building that is at least 1,500 sq. feet that requires energy may have a building or structurally-mounted unit.
- b) In addition to building or structurally-mounted units, two small free-standing units are permitted on a platted lot, the total unit height of which may not exceed 85 feet above the natural grade, with a fall radius that falls within the property lines, and clears all other structures onsite.

27D-4.2 Special Use Exception Permit.

- (A) All applications for wind energy units under a Special Use Exception Permit are subject to permit review and the requirements of Sections 27D-2, 27D-3, 27-D4.2, 27D-4.3, 27D-4.4, 27D-5, 27D-6, 27D-7, 27D-8, 27D-9, and 29-3.13.
- (B) All Special Use Exception Permits issued for a wind energy unit are for the life of the system, and with the exception of the replacement of parts for the repair of an existing unit, any replacement in the model, height, or power output of the unit requires an amendment to the existing Special Use Exception Permit.
- (C) Wind energy units, which are in addition to any wind energy units allowed by right under 27D-4.1, are allowed as an accessory use to a building requiring energy on platted lots under a Special Use Exception Permit as follows:
 - 1) **Single-Family, Two-Family, and Townhouse Residential Use Districts.** One small free-standing unit is permitted on any lot platted as less than one acre (43,560 sq. ft.) in size, provided that the total unit height may not exceed 55 feet above the natural grade and the unit will fall within the property lines, in the following zoning districts RE, RA, R-1A, R-1B, R-1C, R-TH, R-2, A-1, A-1A, A-2, AB, B-1, B-1A, B-2, B-2A, B-4, or BD, when the property is being used for single-family, two-family, or townhouse residential uses.

- 2) **Multiple-family Residential, Neighborhood Business, and Light-Industrial Use Districts.** One medium free-standing unit is permitted on any lot platted as four or more acres in size, provided that the total unit height may not exceed 55 feet above the natural grade and the unit will fall within the property lines, in the following zoning districts A-1, A-1A, A-2, AT, AB, B-1, B-1A, B-2, B-2A, B-3, BD, I-1, or I-2, when the property is used for multiple-family residential uses, neighborhood business, and light-industrial uses.

- 3) **Primary Business and Heavy Industrial Use Districts.** One medium free-standing unit is permitted on any lot platted as four or more acres in size, provided that the total unit height may not exceed 85 feet above the natural grade and the unit will fall within the property lines, in the following zoning districts B-4, B-5, B-6, or I-3, when the property is used for general business or heavy-industrial uses.

- 4) **Agricultural Use Districts.** Two medium free-standing units are permitted on any lot platted, provided that the total unit height may not exceed 85 feet above the natural grade and the unit will fall within the property lines, in the following zoning districts F-R, when the property is used for agricultural uses.

27D-4.3 Additional Unit Allowances. Additional wind energy units are permitted on platted lots in the districts listed below through the Special Use Exception permitting process. The Zoning Board of Adjustment shall apply the following additional standards during their review:

- (A) Requests for additional small or medium wind energy units on a site above what is permitted in Sections 27D-4.1 and 27D-4.2 above, can be considered as an accessory use by the City's Zoning Board of Adjustment in the:
 - 1) F-R, B-5, B-6, and I-3 Zoning Districts.

 - 2) A Planned Unit Development (PUD) with at least four acres. The Assistant City Manager, Development Services, or designee, shall submit a recommendation on whether the application is consistent with the plans for the PUD.

 - 3) A platted development with at least four acres of common areas, subject to the standards established for the uses and underlying zoning districts under Sections 27D-4.1 and 27D-4.2.

- (B) For all requests made for additional units for the uses and the zoning districts listed under this section, the applicant must be able to show that the additional unit or units are required to power the buildings or facilities that the additional units are being requested for, and the energy production of the additional units does not exceed the building or facility electrical power demand onsite by more than 50% of the peak annual demand.
- (C) Additional units can be approved for the districts listed in Section 27D-4.3(A), except F-R, at a ratio of one additional small or medium unit for every additional four acres, and one additional small or medium unit for every additional five acres for agricultural uses in an F-R district.
- (D) Additional units granted by the Board of Adjustments must meet the standards of this Article, and the review standards of Section 29-3.13.

27D-4.4 Additional Setbacks, Clearance, and Height Requirements. All wind energy units must be located under the following setback and clearance requirements, measured from the center of the supporting structure base:

- (A) **Yards.** No wind energy unit may be located in any required front yard, located between a principal building and a required front yard, or located in front of the front building line of the principal residential, commercial, agricultural, rural, or industrial building on the lot served by the wind energy unit.
- (B) **Vertical Ground Clearance.** The blade tip of any wind energy unit at its lowest point, must have a ground clearance of no less than 12 feet for a vertical axis wind energy unit, and 25 feet for a horizontal axis wind energy unit, as measured at the lowest point of the turbine unit for a vertical axis unit, or lowest point of the arc of the blades for a horizontal axis unit.
- (C) **Communication and Electrical Lines.** Each wind energy unit must be set back a minimum distance of 100% of the total unit height from any right-of-way, or public or private easement where above ground structures or utility lines exist, or are likely to exist, without proof of the lawful consent of the easement owners.
- (D) **Professional Engineer Certification.** The maximum height of any structurally-mounted or freestanding wind energy unit will be dependent upon the results of the structural engineering plans, performed by a registered Texas State Engineer.

- (E) **All Maximum Heights.** Maximum heights for all wind energy units may not exceed the manufacturer's height recommendations for the unit.

27D-5 Prohibitions and Nuisance Abatement.

- (A) **Prohibited Models.** The following wind energy units are prohibited in all zoning districts:

- (1) Guyed or latticed towers for small or medium wind energy units;
- (2) Experimental, homebuilt, prototype models, or any model not listed on the City's list of approved manufacturers and models.

- (B) **Signal Interference.**

- (1) **Prevention.** The manufacturer or wind energy unit representative must take into consideration the proposed location of the wind energy unit and certify that the siting of the wind energy unit will not interfere with any of the following:

- (a) Existing microwave communications links.
- (b) Existing fixed broadcast, retransmission, or reception antenna (including residential reception antenna) for radio, television, wireless phone, or other personal communication systems.
- (c) Military or civil navigational or defense radar signals.

- (2) **Military Base Facilities.** Wind energy units are prohibited in areas deemed critical as navigational and defense radar sensitive areas by any military facility or installation.

- (3) **Mitigation.** Operation of wind energy units must be discontinued if such interference occurs after the construction, until such time as the interference is mitigated for or eliminated.

- (C) **Sound Emissions.**

- (1) The sound levels emitted by all wind energy units at all the neighboring property lines may not exceed the sound levels, or be in violation of, any of the standards established under the City's Chapter 31 "Noise" Ordinance.

- (2) **Sound Level Complaints.** All noise nuisance complaints will be processed by the City in accordance with the standards and requirements of the City's Chapter 31 "Noise" Ordinance and may require the owner of the wind energy unit to cease operation of the unit until the complaint has been resolved and the unit has been brought into compliance.

(D) Security.

- (1) **Ground Clearance.** The bottom of a freestanding tower or mounting structure, measured from ground level to 15 feet above ground level, must be designed in a manner to discourage unauthorized climbing.
- (2) **Access.** All access doors to wind turbine towers and electrical equipment must be lockable.

(E) Enforcement.

- (1) **Safety.** Any wind energy unit found to be unsafe by the local Building Official must be repaired by the owner within 60 days of the Building Official's notice to meet Federal, State, Local and manufacturer safety standards, and the standards of this section.
- (2) **Notice.** If any wind energy unit is not operated for at least a continuous period of 6 months due to operational difficulties or abandonment, the landowner shall provide the City the reasons for the operational difficulty or abandonment and provide a reasonable timetable for corrective action, or removal of the wind energy unit as outlined under Section 27D-7.
- (3) **Resolution.** If the Assistant City Manager, Development Services or designee deems the timetable for corrective action as unreasonable, the Assistant City Manager, Development Services or designee, may notify the landowner or operator, who shall remove the wind energy unit within 6 months of receipt of notice from the Assistant City Manager, Development Services or the designee.

27D-6 Agency Cooperation, Review, and Compliance. All proposed wind energy units are subject to the following agency reviews during the siting, application, site plan review, and permitting processes:

- (A) **Federal Aviation Administration (F.A.A.) Requirements.** All proposed wind energy units are subject to the F.A.A.'s requirements.

- (B) **Naval Air Station (NAS) & Military Bases and Airports.** Wind energy units proposed within military Accident Potential Zones, Air Installation Compatibility Use Zones, or that may interfere with military or civilian Navaid or defense radar systems will require review by the Federal Aviation Administration.
- (C) **State and Federally Protected Species and Wetlands.** All proposed wind energy units are subject to review by State and Federal agencies responsible for the protection of listed species, migratory bird species, wetlands, and state waters. Permit review may require proof of consultation with jurisdictional agencies and additional biological assessments may have to be performed on the proposed site if it is determined by the reviewing agency that protected species are likely to be impacted on the site.
- (1) **Sanctuaries.** Any wind energy unit proposed within one mile from designated Bird Sanctuaries, Preserves, Wildlife State or Federal Parks, or Wildlife Resource or Management Areas, require consultation and review by the Texas Parks and Wildlife Department and the U.S. Fish and Wildlife Service and may require mitigation or permitting measures by the applicant.
 - (2) **Protected Species.** Any wind energy unit proposed within an area inhabited by a protected species or their associated rookeries, leks, breeding, or foraging grounds, require consultation and review by the Texas Parks and Wildlife Department and the U.S. Fish and Wildlife Service and may require mitigation or permitting measures by the applicant.
 - (3) **Wetlands.** Wind energy units proposed within the boundaries of any jurisdictional wetlands/waters require consultation and review by the Army Corp of Engineers and the Texas General Land Office.
 - (4) **Utility Notification.** No wind energy unit that has the ability to be connected to a power grid may be installed until the applicant has provided evidence of compliance with all State laws and provides a copy of the “Application for Interconnection and Parallel Operation of Distributed Generation”, as may be amended or replaced in the future, that has been fully executed and approved by the electric utility company.

- (5) **Permit Issuance.** The applicant must show consideration of, and proof of compliance with these agencies if required, prior to receiving a Building Permit, Electrical Permit, or Special Use Exception Permit for the wind energy unit from the City.

27D-7 Decommissioning.

27D-7.1 Useful Life. The wind energy unit is presumed to be at the end of its useful life if no electricity is generated for a continuous period of 12 months.

27D-7.2 Responsibility. The property owner or operator shall, at their sole expense, complete decommissioning of the wind energy unit within 6 months from the time it is determined that the wind energy unit has met the end of its useful life as outlined in 27D-7.1.

27D-7.3 Required Action. Decommissioning must include removal of the entire wind energy unit, including buildings, cabling, electrical components, and any other associated facilities.

27D-7.4 Remediation. Disturbed earth must be graded and re-seeded.

27D-8 Application Requirements.

27D-8.1 An application for approval of a wind energy unit must include plans and specifications sufficient to show that the proposed wind energy unit complies with the standards under this article. An application may not be deemed complete unless it includes the following items:

(A) Permit Application: Original signatures are required for the applicant and all co-applicants applying for the Special Use Exception Permit, Building Permit, and Electrical Permit. If the applicant or co-applicant is represented by an agent, the original signature of the property owner authorizing the agent to represent the applicant and/or co-applicant is required. The following information must be included on the application under the project description:

- (1)** An estimate of the total on-site electrical demands and the approximate generating capacity of the wind energy unit.
- (2)** The name of the certified manufacturer and model proposed for use from the City's list of certified manufacturers and models.
- (3)** The height of the wind energy unit to be constructed.

- (4) The phone number and name of a responsible person for the public to contact with inquiries and complaints throughout the life of the project.
- (B) **Site Plan.** Two copies of a site plan submitted for a small or medium wind energy unit submitted on a minimum size of 8½" X 14" sheets, with the requirement that all of the submittal requirements listed under this section are included on additional site plan sheets. The site plan must include the following information:
- (1) Legal description, including lot and block, metes and bounds, and address of the project site.
 - (2) Adjacent land uses and zoning designations.
 - (3) The locations of all easements, rights-of-way, building, front, side, and rear zoning lot setback lines, locations of all existing buildings, fences, and overhead utility lines on the property.
 - (4) The exact location and orientation of each wind energy unit within the site and the direction of the prevailing winds.
- (C) **System Design Drawings.** Certified and sealed engineered drawings prepared by a professional Engineer registered in the State of Texas are required, and must include the following information:
- (1) Engineering design specifications of the wind energy unit, including the tower and supporting structure, base, footings, and the unit components, showing compliance with the City's Building Code.
 - (2) Drawings that indicate the total finished wind energy unit heights from the grade level prior to any modifications, including any engineered break points along the tower.
 - (3) The wind survival speed of the entire unit and supporting structure, including turbine, rotor blades, covers, and other components.
 - (4) Data pertaining to the tower or supporting structure's safety and stability, including any safety results from test facilities.
 - (5) A copy of the manufacturer's installation instructions.
 - (6) Building or Structurally-Mounted Systems.

- (a) The certified and sealed engineering plans prepared by a professional Engineer registered in the State of Texas must show how the wind energy unit will be installed for the portions of the structure proposed for use in the mounting of the unit.
 - (b) The engineering plans must state and show that the proposed wind energy unit is compatible with the portions of the mounting structure proposed for use.
- (D) Written Statements and Additional Documentation.** In addition to the site plan, applications for all wind energy units must include proof of the following in the form of written statements:

 - (1) A statement verifying that the small or medium wind energy conversion unit will be used solely for on-site consumption of electricity, and any additional energy produced above the total onsite demand can only be sold to an electrical utility that normally provides electrical power to the property.
 - (2) A statement indicating what safety precautions and emergency plan the applicant proposes to utilize in a storm event greater than Category I (74 mph winds).
 - (3) A statement from any architectural review board, property owners', or homeowners' association that the proposed unit complies with association requirements and restrictions if applicable.
 - (4) A statement that the project site is, or is not, within a protected area surrounding an airport or air installation where air traffic may be a consideration affecting the installation of the unit, if required. (The applicant shall provide evidence of compliance with any applicable aviation regulatory requirements).
 - (5) Copies of any City, State, Federal, or Military reviews, permits, licenses, biological opinions, biological/environmental assessments, records of decision, memoranda of understanding, exemption, variance, or other authorization or approval related to the proposed wind energy project, if required.
 - (6) Copy of the manufacturer's scheduled maintenance requirements for the proposed unit.

- (E) **Grid-tied systems.** For wind energy units that will be connected to an electrical grid, a copy of the fully executed “Application for Interconnection and Parallel Operation of Distributed Generation” is required, as described in 27D-6(C)(4) above, approved by the electric utility service provider that serves the proposed site indicating that the applicant has been approved for the installation of a wind energy conversion unit.

27D-9 Review Standards.

27D-9.1 The applicant's submittal for a Building Permit, Electrical Permit, and Special Use Exception Permit must demonstrate compliance with the following standards under this section, in addition to the Special Use Exception Permit review standards under Section 29-3.13(C)(3).

- (A) **Public Safety.** The proposed wind energy unit must be designed and operated to protect public safety by measures that may include, but are not limited to, the following:
 - (1) The proposed wind energy unit must be designed, constructed, and operated so the public cannot come within close proximity to turbine blades and electrical equipment.
 - (2) The proposed wind energy unit must be designed, sited, constructed, operated, and maintained to prevent the structural failure of the system or blades that could endanger the public's safety.
- (B) **Other Properties.** The wind energy unit may not adversely affect the uses of adjoining and adjacent properties.
- (C) **State, Federal, Military, and Civil Requirements.** The proposed wind energy unit has been designed, sited, and will operate in compliance with the regulations, codes, statutes, and laws of all Local Government, Military, State, and Federal agencies.

SECTION 3. Section 29-3.13, Corpus Christi Zoning Ordinance is revised to read as follows:

~~**29-3.13** Wind energy systems are applicable in any zoning district providing the minimum following criteria is met:~~

- ~~(1) Wind energy systems shall be located on a parcel that is, at a minimum, one and a half (1 ½) acres in size. Additional wind energy systems shall be permitted on the same parcel at a ratio of one (1) for every one and a half (1 ½) acres of property.~~

~~(2) The total system height of a wind energy system may not exceed a maximum height of one hundred and ten (110) feet measured at the top of the blade.~~

~~(3) Each wind energy system shall be set back a distance equal to one hundred and fifty percent (150%) of the height of the total system (including blade length) from all property lines.~~

~~(4) The minimum distance between the ground and any protruding blades utilized on a wind energy system shall be twenty-five (25) feet, as measured at the lowest point of the arc of the blades.~~

~~(5) If more than one wind energy system is located on a site, there must be a one hundred and ten (110) foot separation between each, measured at the base of the structure.~~

~~(6) Wind energy systems may not exceed sixty (60) decibels, as measured at the closest property line.~~

~~(7) The minimum survival wind speed for the wind energy system must be one hundred (140) mph.~~

~~(8) Roof-top mounted wind generators are prohibited.~~

~~(9) The wind energy system will not adversely affect the uses of adjacent and neighboring properties. (Ordinance 027008, 09/26/06)~~

29-3.13 Wind Energy Conversion Units. The review process for a Special Use Exception for a wind energy unit is as follows:

(A) Concurrent Site Plan Submittal.

- (1) The application for a Special Use Exception for a wind energy unit must include a site plan as outlined under Section 27D-8.1.
- (2) The Board of Adjustment may not approve, approve with conditions, or deny a Special Use Exception application until after the site plan has been reviewed by the City's Development Services Department.

(B) Development Services Review.

- (1) The City's Development Services Department must review the application and, considering the review criteria under this article, make a recommendation to the Board of Adjustment.

- (2) The Assistant City Manager, Development Services or designee shall be responsible for making a recommendation in the event an agreement on a recommendation from the development review committee cannot be reached.

(C) Board of Adjustment Action.

- (1) The Board of Adjustment must take final action on the Special Use Exception for a wind energy unit within 45 days from the date the recommendation of the Director of Development Services is made.
- (2) In the event the Board of Adjustment fails to act within 45 days, the application for the Special Use Exception for a wind energy unit shall be deemed, in all things, denied.
- (3) Review Standards for a Wind Energy Unit Special Use Exception. In determining whether to approve, approve with conditions, or disapprove a Special Use Exception for a wind energy unit, the Board of Adjustment must consider and make a specific finding on each of the following criteria:
 - (a) The use conforms in all respects to the regulations and standards found in the City's Zoning and Platting Ordinances.
 - (b) The impact of the use on public infrastructure, such as roads, natural gas, water, storm water, and wastewater systems, and on public services, such as police and fire protection and solid waste collection, can be minimized without negatively impacting existing uses in the area and in the City.
 - (c) The physical appearance, hours of operation, and conduct of the use does not generate excessive noise, dust, smoke, glare, spillover lighting, or other forms of environmental or visual pollution, or otherwise detrimentally affect the residential character of the area or adjacent areas.
 - (d) The use takes adequate measures to control or eliminate smoke, dust, gas, glare, hazardous materials, noise, or vibration caused by operations.
 - (e) The use complements and is compatible with the surrounding uses and community facilities.

- (f) The use does not substantially affect adversely the uses of adjacent and neighboring property.
- (g) The use is not detrimental to the public's health, safety, or general welfare.

SECTION 4. That the Corpus Christi Zoning Ordinance, approved on the 27th day of August, 1973, as amended from time to time, except as changed by this ordinance and any other ordinances adopted on this date, remain in full force and effect.

SECTION 5. That to the extent that this amendment to the Corpus Christi Zoning Ordinance represents a deviation from the Comprehensive Plan, the Comprehensive Plan is amended to conform to the Corpus Christi Zoning Ordinance, as amended by this ordinance.

SECTION 6. That any ordinance or part of any ordinance in conflict with this ordinance is expressly repealed by this ordinance.

SECTION 7. If for any reason any section, paragraph, subdivision, clause, phrase, word or provision of this ordinance shall be held invalid or unconstitutional by final judgment of a court of competent jurisdiction, it may not affect any other section, paragraph, subdivision, clause, phrase, word or provision of this ordinance, for it is the definite intent of this City Council that every section, paragraph, subdivision, clause, phrase, word or provision hereof be given full force and effect for its purpose.

SECTION 8. A violation of this ordinance or requirements implemented under this ordinance constitutes an offense punishable under Section 35-3, Corpus Christi Zoning Ordinance.

SECTION 9. Publication shall be made in the official publication of the City of Corpus Christi as required by the City Charter of the City of Corpus Christi.

SECTION 10. This Ordinance shall take effect upon and after publication of this Ordinance.

That the foregoing ordinance was read for the first time and passed to its second reading on this the _____ day of _____, 2009, by the following vote:

Joe Adame	_____	Priscilla Leal	_____
Chris N. Adler	_____	John E. Marez	_____
Brent Chesney	_____	Nelda Martinez	_____
Larry R. Elizondo, Sr.	_____	Mark Scott	_____
Kevin Kieschnick	_____		

That the foregoing ordinance was read for the second time and passed finally on this the _____ day of _____, 2009, by the following vote:

Joe Adame	_____	Priscilla Leal	_____
Chris N. Adler	_____	John E. Marez	_____
Brent Chesney	_____	Nelda Martinez	_____
Larry R. Elizondo, Sr.	_____	Mark Scott	_____
Kevin Kieschnick	_____		

PASSED AND APPROVED this the _____ day of _____, 2009.

ATTEST:

_____	_____
Armando Chapa	Joe Adame
City Secretary	Mayor

APPROVED: _____ day of October, 2009:

R. Jay Reining
First Assistant City Attorney
For City Attorney