

**AN ORDINANCE  
OF THE  
CITY OF MINNEAPOLIS**

By Gordon

Amending Title 20, Chapter 535 of the Minneapolis Code of Ordinances relating to Zoning Code: Regulations of General Applicability

Section 1. That Section 535.110 of the above titled ordinance be amended to read as follows:

**535.110. Light poles, and flag poles and ~~windmills.~~** (a) *Light poles.* Light poles accessory to single or two-family dwellings and cluster developments and multiple-family dwellings of three (3) or four (4) units shall be limited to eight (8) feet in height. Light poles accessory to all other uses shall be limited to thirty-five (35) feet in height, except that light poles designed or intended to illuminate walkways shall be limited to fifteen (15) feet in height.

(b) *Flag poles.* Flag poles shall be limited to thirty-five (35) feet in height.

~~(c) *Windmills.* Windmills shall be prohibited in all districts except the industrial districts and shall be limited to thirty-five (35) feet in height.~~

Section 2. That the above titled ordinance be amended by adding thereto a new article to read as follows:

**ARTICLE X. WIND ENERGY CONVERSION SYSTEMS**

**535.690. Purpose.** Regulations governing wind energy conversion systems are established to provide for appropriate locations for wind energy conversion systems, to ensure compatibility with surrounding uses, and to promote safe, effective and efficient use of wind energy conversion systems to increase opportunities for generation of renewable energy.

**535.700. Definitions.** As used in this article, the following words shall mean:

*Institutional use.* Educational facilities, golf courses, sports arenas, religious institutions, athletic fields and publicly owned property. For the purpose of this section, parks and cemeteries, whether publicly or privately owned, shall not be included in this definition.

*Publicly owned property.* Land, buildings or structures owned by any governmental body or public agency including city, county, state or federally owned properties, other than public rights-of-way.

*Tower, monopole.* A wind energy conversion system tower consisting of a single pole, constructed without guyed wires and anchors.

*Wind energy conversion system.* Any device, such as a wind charger, windmill, or wind turbine, and associated facilities including the support structure of the system such as a tower, that converts wind energy to electrical energy.

*Wind energy conversion system, building mounted.* A wind energy conversion system located on a building.

*Wind energy conversion system height.* The height of a freestanding wind energy conversion system shall be measured as the distance from ground level to the highest point on the tower, including the vertical length of any extensions such as the rotor blade. The height of a building mounted wind energy conversion system shall be measured as the distance from the point where the base of the system is attached to the building or to the lowest point on the wind energy conversion system, whichever is closer to the ground, to the highest point on the wind energy conversion system, including the vertical length of any extensions such as the rotor blade.

**535.710. Permitted uses subject to administrative review and approval.**

Notwithstanding the height limitations of the zoning district, building mounted wind energy conversion systems shall be permitted in all zoning districts, subject to administrative review and approval by the zoning administrator, as specified in section 535.720, and shall comply with the standards of section 535.750 and the following:

- (1) Building mounted wind energy conversion systems shall not exceed fifteen (15) feet in height.
- (2) Building mounted wind energy conversion systems shall be prohibited on residential structures less than four (4) stories and forty-two (42) feet in height.
- (3) On nonresidential buildings less than four (4) stories and forty-two (42) feet in height, building mounted wind energy conversion systems shall be setback at least ten (10) feet from the front, side and rear walls of the structure upon which it would be mounted.
- (4) Building mounted wind energy conversion systems on structures over four (4) stories and forty-two (42) feet in height shall be installed above the fourth story.
- (5) The structure upon which the proposed wind energy conversion system is to be mounted shall have the structural integrity to carry the weight and wind loads of the wind energy conversion system and have minimal vibration impacts on the structure.

**535.720. Administrative review process.** (a) *In general.* The zoning administrator, in consultation with the planning director, shall have up to fifteen (15) working days following the submittal of a complete application to approve or deny such application. The zoning administrator may impose such conditions and require such guarantees deemed reasonable and necessary to protect the public interest and to ensure compliance with the standards and purposes of this zoning ordinance and policies of the comprehensive plan.

(b) *Submittal requirements.* In addition to the general application requirements of Chapter 525, Administration and Enforcement, the applicant shall submit the following:

- (1) Scaled schematic drawings and photographic perspectives showing the structure and the placement of the wind energy conversion system.
- (2) A written certification from a licensed structural engineer that the structure has the structural integrity to carry the weight and wind loads of the wind energy conversion system and have minimal vibration impacts on the structure.
- (3) An analysis from a licensed engineer showing how the wind energy conversion system shall be designed, constructed and operated in compliance with all applicable federal, state, and local laws, codes, standards and ordinances.
- (4) A written certification from a licensed engineer confirming that the wind energy conversion system is designed to not cause electrical, radio frequency, television and other communication signal interference.

- (5) Sufficient information demonstrating that the wind energy conversion system shall be used primarily to reduce on-site consumption of electricity, including but not limited to a complete listing of on-site electrical demands.
- (6) Written evidence that the electric utility service provider that serves the proposed site has been informed of the applicant's intent to install a wind energy conversion system, unless the applicant does not plan, and so states so in the application, to connect the system to the electricity grid.

(c) *Appeals.* Notwithstanding the provisions of Chapter 525, Administration and Enforcement, decisions of the zoning administrator regarding the administrative review of permitted wind energy conversion systems shall be subject to appeal to the city planning commission.

**535.730. Conditional uses.** Freestanding wind energy conversion systems may be allowed as a conditional use, subject to the provisions of Chapter 525, Administration and Enforcement, sections 535.740 and 535.750, and the following location and lot size restrictions:

- (1) *Residence and office residence districts.* Freestanding wind energy conversion systems in the residence and office residence districts shall only be located on institutional use sites.
- (2) *Downtown area.* Freestanding wind energy conversion systems shall be prohibited in the downtown area including all downtown districts and the area bounded by the Mississippi River, I-35W, I-94, I-394, and 3rd Avenue North (extended to the river).
- (3) *Minimum lot area.* No freestanding wind energy conversion system shall be established on a zoning lot less than one (1) acre in area. A maximum of one wind energy conversion system per acre of lot area shall be allowed.

**535.740. Specific standards for conditional uses.** All wind energy conversion systems requiring a conditional use permit shall be subject to the provisions of Chapter 525, Administration and Enforcement, and the submittal requirements of section 535.720(b). In addition, the applicant shall comply with the following standards and submit written documentation indicating such compliance:

- (1) *Tower type.* Towers shall be of a monopole design. The city planning commission may consider the substitution of alternative tower types in cases where structural and design considerations, and location suggests a tower other than a monopole.
- (2) *Height of freestanding wind energy conversion systems.*
  - a. *Residence, office residence and commercial districts.* The height of freestanding wind energy conversion systems located in the residence, office residence and commercial districts shall be no more than sixty (60) feet on zoning lots between one (1) and five (5) acres and shall be no more than one hundred (100) feet on zoning lots of more than five (5) acres in area.
  - b. *Industrial districts.* The height of freestanding wind energy conversion systems located in the industrial districts shall not exceed one hundred (100) feet.
  - c. *Minimum height.* The minimum distance between the ground and the vertical length of any extensions such as the rotor blades shall be fifteen (15) feet.
  - d. *Excess height.* The city planning commission may increase the height of freestanding wind energy conversion systems, provided that in the residence,

office residence and commercial districts such increase shall not exceed the maximum height by more than fifty (50) percent. The applicant shall demonstrate to the satisfaction of the city planning commission the following:

1. The surrounding topography, structures, vegetation and other factors make a tower that complies with the district height regulations impractical.
- (3) *Encroachments and setbacks.*
  - a. The base of the tower shall maintain a minimum distance from the nearest residential structure and from any overhead utility lines equal to twice the height of the tower. For the purposes of this article, residential structures shall also include any parking structure attached to a principal residential structure.
  - b. The support structure, including any guy wires, shall not be located in any required front, side or rear yard, nor shall they be located between a principal building and a required front or side yard.
- (4) *Security.* All sites shall be reasonably protected against unauthorized climbing. The bottom of the tower, measured from ground level to twelve (12) feet above ground level, shall be designed in a manner to discourage unauthorized climbing.
- (5) *Electrical wires.* All electrical wires associated with a freestanding wind energy conversion system shall be located within the tower and underground.

**535.750. Development standards for all permitted and conditional wind energy conversion systems.** In addition to the standards of sections 535.710, 535.720, 535.730 and 535.740 above, all wind energy conversion systems shall be subject to the following standards:

- (1) *Maximum capacity.* Wind energy conversion systems shall have a rated capacity of not more than one hundred (100) kilowatts.
- (2) *Shoreland and Mississippi River Critical Area Overlay Districts.* Freestanding and building mounted wind energy conversion systems shall be prohibited in the Shoreland and Mississippi River Critical Area Overlay Districts.
- (3) *Encroachments and setbacks.*
  - a. Wind energy conversion systems shall comply with applicable regulations as established by the Federal Aviation Administration.
  - b. Wind energy conversion systems shall comply with the minimum yard requirements of the district in which they are located.
  - c. No part of any wind energy conversion system shall extend across or over any part of a public right-of-way.
- (4) *Compatibility with nearby properties.* Wind energy conversion systems shall utilize building materials, colors and textures that are compatible with the existing principal structure and that effectively blend the system facilities into the surrounding setting and environment to the greatest extent possible. Rotor blades shall be non-metallic to prevent communication signal interference. Metal towers shall be constructed of, or treated with, corrosive resistant material. Outside of the industrial districts, unpainted, galvanized metal, or similar towers shall be prohibited, unless a self-weathering tower is determined to be more compatible with the surrounding area.
- (5) *Controls and brakes.* All systems shall contain an internal governor or braking device which engages at wind speeds in excess of forty (40) miles per hour and minimizes the potential for wind damage to the equipment.

- (6) *Signage.* Advertising or identification of any kind on wind energy conversion systems shall be prohibited, except for applicable warning and equipment information signage required by the manufacturer or by federal, state or local regulations.
- (7) *Lighting.* Wind energy conversion systems shall not be illuminated by artificial means, except where the illumination is specifically required by the Federal Aviation Administration or other federal, state or local regulations.
- (8) *Noise.* Wind energy conversion systems shall comply with the standards governing noise contained in Chapter 389 of the Minneapolis Code of Ordinances, Noise, and with all other applicable regulations.
- (9) *Heritage Preservation Ordinance compliance.* Wind energy conversion systems proposed for any locally designated historic structures or locally designated historic districts shall be subject to all requirements of the city's Heritage Preservation Ordinance.
- (10) *Maintenance required.* All wind energy conversion systems shall be kept in good repair and free from rust, damaged supports, framework or other components.

**535.760. Abandoned or unused towers.** All abandoned or unused wind energy conversion systems shall be removed within twelve (12) months of the cessation of operations unless an extension is approved by the city planning commission. If an extension is not approved, such wind energy conversion system shall be deemed a nuisance, and the city may act to abate such nuisance and require its removal at the property owner's expense. After the wind energy conversion system is removed, the owner or operator of the site shall restore the site to its original, or to an improved, condition.