

**PREPARED BY:  
CITY OF NAPERVILLE  
LEGAL DEPARTMENT  
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**RETURN TO:  
CITY OF NAPERVILLE  
CITY CLERK'S OFFICE  
P.O. BOX 3020  
400 SOUTH EAGLE STREET  
NAPERVILLE, IL 60566-7020**

**ORDINANCE NO. 10 - 159**

**AN ORDINANCE AMENDING  
TITLE 6 (ZONING REGULATIONS) OF THE  
NAPERVILLE MUNICIPAL CODE TO ADD  
CHAPTER 15: SMALL WIND AND SOLAR RENEWABLE ENERGY SYSTEMS**

**WHEREAS**, the City of Naperville is a home rule municipality pursuant to Article 7, section 6 of the Illinois Constitution, and

**WHEREAS**, the City of Naperville has an Environmental Sustainability Plan, and

**WHEREAS**, the City of Naperville has identified the need to provide zoning regulations to guide the installation and operation of Small Wind and Solar Renewable Energy Systems in the City of Naperville, and

**WHEREAS**, the City of Naperville intends to accommodate sustainable energy production from renewable energy sources.

**NOW, THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF NAPERVILLE, DUPAGE AND WILL COUNTIES, ILLINOIS, acting in its home rule authority, as follows:**

**SECTION 1:** Title 6 (Zoning Regulations) of the Naperville Municipal Code, is hereby amended by adding Chapter 15: Small Wind and Solar Renewable Energy Systems as follows:

## Chapter 15

### SMALL WIND AND SOLAR RENEWABLE ENERGY SYSTEMS

#### SECTION:

- 6-15-1: Purposes
- 6-15-2: Definitions
- 6-15-3: General Requirements
- 6-15-4: Small Wind Energy Systems
- 6-15-5: Solar Energy Systems
- 6-15-6: Conditional Uses
- 6-15-7: Maintenance
- 6-15-8: Severability
- 6-15-9: Conflicts Resolved

6-15-1: **PURPOSES:** The purposes of this chapter are to:

1. Provide zoning regulations to guide the installation and operation of Small Wind and Solar Renewable Energy Systems in City of Naperville.
2. Accommodate sustainable energy production from renewable energy sources.
3. Preserve the aesthetics of the zoning districts in the interest of property values, public health, and welfare.

6-15-2: **DEFINITIONS:** As used in this chapter, the following terms shall have the meanings indicated:

LARGE WIND ENERGY SYSTEM: A wind energy conversion system consisting of a wind turbine, a tower or mounting, and associated control or conversion electronics, which is intended primarily to generate utility power at a commercial scale.

NET METERING: An arrangement by which excess energy generated by a Renewable Energy System is distributed back to the electrical utility grid.

RENEWABLE ENERGY SYSTEM: A system that generates energy from natural resources such as sunlight, wind, and geothermal heat. As used herein, the term "Renewable Energy System" refers to Small Wind Energy Systems and Solar Energy Systems only.

SMALL WIND ENERGY SYSTEM: A wind energy conversion system consisting of a wind turbine, a tower or mounting, and associated control or conversion electronics, which is intended primarily to reduce on-site consumption of utility power.

SMALL WIND ENERGY SYSTEM, GROUND-MOUNTED: A Small Wind Energy System that is not attached to another structure and is affixed to the ground, or that is attached to an antenna, light pole or other utility facility.

SMALL WIND ENERGY SYSTEM, ROOF-MOUNTED: A Small Wind Energy System affixed to the roof of a principal structure.

SOLAR ENERGY SYSTEM: A system that uses the power of the sun to capture, distribute and/or store energy for on-site consumption of utility power.

SOLAR ENERGY SYSTEM, BUILDING INTEGRATED: A solar energy system that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural or structural component of a building.

SOLAR ENERGY SYSTEM, BUILDING-MOUNTED: A Solar Energy System affixed to either the principal or accessory structure.

SOLAR ENERGY SYSTEM, GROUND-MOUNTED: A Solar Energy System that is not attached to another structure and is affixed to the ground, or that is attached to an antenna, light pole or other utility facility.

TOTAL SYSTEM HEIGHT: The total height of the tower and the wind turbine of a Small Wind Energy System, as measured from the average grade at the base of the system to the top of the blade or rotor.

6-15-3: **GENERAL REQUIREMENTS:** The requirements set forth in this Section shall govern the construction and/or installation of all Renewable Energy Systems governed by this Chapter.

1. Applicability: The provisions of this ordinance are intended to establish zoning parameters by which Solar and Small Wind Energy Systems may be installed in the City of Naperville. Large Wind Energy Systems are not permitted. Additional renewable energy installations not addressed explicitly herein may be authorized subject to compliance with the applicable codes and standards of the City of Naperville.
2. Use: Except as authorized by the City Council for public utility purposes, a Renewable Energy System shall be accessory to the principal permitted use of a site.
3. Approvals: Approval granted to an individual property owner for a Renewable Energy System under the provisions of this ordinance shall not be construed to bar owners or tenants of any adjacent property from ordinary or permitted building, landscaping or other accessory improvements, even if such improvements may diminish the function of said Renewable Energy System.
4. Permitting and Installation:

- 4.1 Unless otherwise exempted by the Director of Transportation, Engineering and Development, a City of Naperville building permit is required prior to the installation of any Renewable Energy System.
- 4.2 Renewable Energy Systems that do not require a building permit in accordance with Section 6-15-3:4.1 shall not be subject to the requirements of this Chapter.
- 4.3 The owner of a Renewable Energy System shall ensure that it is installed and maintained in compliance with applicable building and safety codes adopted by the City and any other state or Federal agency of competent jurisdiction.
- 4.4 All Small Wind Energy Systems shall be equipped with manual and/or automatic controls to limit rotation of blades to a speed within the manufacturers designed limits.
- 4.5 All wiring associated with a Renewable Energy System shall be underground or contained within a raceway that complements the building materials of the principal structure.
5. Interconnection with Department of Public Utilities – Electric:
  - 5.1. Energy produced by a Renewable Energy System shall be utilized on-site, except for Net Metering as authorized by the Department of Public Utilities and other appropriate regulatory agencies required by law.
  - 5.2. The interconnection of any Renewable Energy System to the City of Naperville Department of Public Utilities – Electric distribution grid shall be in accordance with the Department’s Service Rules and Policies, including standard practices as may be amended from time to time.
6. Illumination of a Renewable Energy System shall be prohibited, except to accommodate co-installation of parking lot lighting luminaries in accordance with the provisions of Section 6-14 (Performance Standards) of this Title or as required by the Federal Aviation Administration (FAA) or other state or Federal agency of competent jurisdiction.
7. Signage: No commercial signage or attention-getting device is permitted on any Renewable Energy System
  - 7.1. A sign of a plain white background with black lettering not exceeding four (4) square feet in size shall be provided on each Small Wind Energy System which indicates the emergency contact information of the property owner or operator.
8. Screening: There shall be no required mechanical screening for Renewable Energy Systems.

9. Historic Structure: Renewable Energy Systems shall comply with Chapter 6-11 (Historic Preservation) of this Title.

**6-15-4: SMALL WIND ENERGY SYSTEMS**

1. Authorization of Use

- 1.1. Roof-Mounted Small Wind Energy System:

- 1.1.1. Permitted Use: Roof-Mounted Small Wind Energy Systems may be authorized administratively in all Business Districts listed in Chapter 7 and Industrial Districts listed in Chapter 8 in accordance with the requirements of this Title and subject to approval by the Director of Public Utilities and the Director of Transportation, Engineering and Development, or their designees.
    - 1.1.2. Conditional Use: Roof-Mounted Small Wind Energy Systems may be authorized as a conditional use in any Residence District listed in Chapter 6 in accordance with the procedures established in Section 6-3-8 (Conditional Use) of this Title and the provisions of Section 6-15-6 of this Chapter.

- 1.2. Ground-Mounted Small Wind Energy System:

- 1.2.1. Permitted Use: Ground-Mounted Small Wind Energy Systems may be authorized administratively in the I (Industrial), ORI (Office, Research and Light Industrial), RD (Research and Development) and BP (Business Park) Districts up to a height of 100' in accordance with the requirements of this Chapter and subject to approval by the Director of Public Utilities and the Director of Transportation, Engineering and Development, or their designees.

- 1.2.2. Conditional Use:

- 1.2.2.1. A Ground-Mounted Small Wind Energy System may be authorized as a conditional use in any Residence District listed in Chapter 6 or in any Business District listed in Chapter 7 except the BP (Business Park) District in accordance with the procedures established in Section 6-3-8 (Conditional Use) of this Title and the provisions of Section 6-15-6 of this Chapter.
      - 1.2.2.2. A Ground-Mounted Small Wind Energy System may be authorized as a conditional use in the I (Industrial), ORI (Office, Research and Light Industrial), RD (Research and Development) and BP (Business Park) Districts when greater than 100' in height.

1.3. Number: Only one (1) Ground Mounted Small Wind Energy System or one (1) Roof-Mounted Small Wind Energy System shall be permitted per lot in accordance with the provisions of this Chapter.

2. Height:

2.1 Roof-Mounted Small Wind Energy System: The total height of a Roof-Mounted Small Wind Energy System shall not exceed ten feet (10') above the peak roof height or ten feet (10') above the maximum permitted height of the zoning district, whichever is less.

2.2 Ground-Mounted Small Wind Energy System:

2.2.1 In all Business Districts listed in Chapter 7, except BP (Business Park), and for any institutional, utility or non-residential use in any Residence District listed in Chapter 7, Ground-Mounted Small Wind Energy Systems shall be limited to a maximum Total System Height of sixty feet (60').

2.2.2 In the I (Industrial), ORI (Office, Research and Light Industrial), RD (Research and Development) and BP (Business Park) Districts, Ground-Mounted Small Wind Energy Systems shall be limited to a maximum Total System Height of one-hundred fifty feet (150').

2.2.3 In all zoning districts, the minimum clearance between the lowest tip of the rotor or blade and the ground shall be fifteen feet (15').

2.2.4 Any Small Wind Energy System that exceeds the height limitations defined in this Section shall be required to obtain approval of a zoning variance in accordance with Section 6-3-5 (Variances) of this Title.

2.3 Roof-Mounted and Ground-Mounted Small Wind Energy Systems accessory to a residential use in a Residence District listed in Chapter 6 shall have a maximum height limitation as determined through the conditional process in accordance with the procedures established in Section 6-3-8 (Conditional Uses) of this Title and the standards provided in Section 6-15-6.3 of this Chapter.

3. Location:

3.1. Roof-Mounted Small Wind Energy Systems:

3.1.1. Roof-Mounted Small Wind Energy Systems shall be affixed to the roof deck of a flat roof or to the ridge or slope of a pitched roof and may not be affixed to the parapet or chimney of any structure.

3.1.2. Such systems must be set back a minimum of five feet (5') from the edge or eave of the roof.

### 3.2. Ground-Mounted Small Wind Energy Systems:

- 3.2.1. Ground-Mounted Small Wind Energy Systems, including all appurtenances and anchoring equipment, shall not be located within the required front yard or corner side yard or in any utility, water, sewer, or other type of public easement.
- 3.2.2. Ground-Mounted Small Wind Energy Systems, including all appurtenances and anchoring equipment, shall be set back a distance equal to 1.1 times the system height, from the base to all property lines, third party transmission lines, Ground-Mounted Small Wind Energy Systems, overhead electric distribution systems and communication towers.
4. Noise: Sound levels for any Small Wind Energy System shall not exceed the maximum decibels established in Chapter 14 (Performance Standards) of this Title. The city may, at its discretion, require a professional sound measurement by a third party expert at the expense of the property owner, to confirm performance of the wind energy system, in accordance with the Performance Standards, as measured from the ground level at the nearest property line.
5. Color: Small Wind Energy Systems may remain finished in the color originally applied by the manufacturer, unless otherwise authorized by the building permit. Finishes shall be non-reflective, neutral and monochromatic in color and shall minimize visual disruption to the surrounding area. Ground equipment, such as cabinets and associated facilities, shall be factory finished to match or complement the color of other structures on the lot.
6. Unauthorized Access: Ground-Mounted Small Wind Energy Systems and all components thereof shall be protected against unauthorized access by the public. No climbing ladder, foot pegs or rungs shall be permanently attached below a height of twelve feet (12') above grade.

### 6-15-5: SOLAR ENERGY SYSTEMS

#### 1. Authorization of Use:

##### 1.1. Permitted Use:

- 1.1.1. Building Integrated Solar Energy Systems may be authorized administratively in all zoning districts in accordance with the requirements of this Chapter and subject to approval by the Director of Public Utilities and the Director of Transportation, Engineering and Development, or their designees.
- 1.1.2. Building-Mounted and Ground-Mounted Solar Energy Systems may be authorized administratively in all Business Districts listed in Chapter 7 and all

Industrial Districts listed in Chapter 8 in accordance with the requirements of this Chapter and subject to approval by the Director of Public Utilities and the Director of Transportation, Engineering and Development, or their designees.

1.2. Conditional Use:

1.2.1. A Building-Mounted or Ground-Mounted Solar Energy System that is accessory to a residential use or any principal institutional, utilities or non-residential use may be authorized as a conditional use in any Residence District in accordance with the procedures established in Section 6-3-8 (Conditional Use) of this Title and the provisions of Section 6-15-6 of this Chapter.

2. Height:

2.1. Building-Mounted Solar Energy System: A Building-Mounted Solar Energy System may not extend above the peak roof height of the building which the Solar Energy Systems is affixed to.

2.2. Ground-Mounted Solar Energy System: The maximum height of a Ground-Mounted Solar Energy System shall be six feet (6') as measured from the average grade at the base of the pole to the highest edge of the system.

3. Location:

3.1. Ground-Mounted Solar Energy Systems:

3.1.1. Ground-Mounted Solar Energy Systems shall not be located within the required front yard or corner side yard or in any utility, water, sewer, or other type of public easement.

3.2. All parts of any Ground-Mounted Solar Energy System shall be set back at least five feet (5') from the interior side and rear property lines.

6-15-6: **CONDITIONAL USES**

1. Application: A petition for a conditional use permit for a Renewable Energy System shall be initiated by application in accordance with the provisions of this Section, and may be issued in accordance with this Section.

2. Issuance: The City Council may issue or deny a conditional use permit pursuant to this Chapter and the procedures described in Section 6-3-8 of this Title.

3. Standards for Granting a Conditional Use:

- 3.1. The City Council shall determine that the application has met all of the general requirements of this Chapter, except those for which a variance has been specifically granted or sought; and
- 3.2. The proposed energy system shall further the intent of this Chapter and provide renewable energy to the property on which it is proposed; and
- 3.3. The proposed Renewable Energy System is located in such a manner as to minimize intrusions on adjacent residential uses through siting on the lot, selection of appropriate equipment, and other applicable means; and
- 3.4. The proposed Renewable Energy System complies with the service rules and policies of City of Naperville's Department of Public Utilities – Electric as may be amended from time to time; and
- 3.5. The establishment of the proposed Renewable Energy System will not prevent the normal and orderly use, development or improvement of the adjacent property for uses permitted in the district.

**6-15-7: MAINTENANCE AND REMOVAL OF RENEWABLE ENERGY SYSTEMS**

1. Renewable Energy Systems must be maintained in good repair and operable condition at all times, including compliance with all standards in applicable building and technical codes to ensure structural and technical integrity of such facilities, except for maintenance and repair outages. If a system becomes inoperable or damaged, operations must cease and be promptly remedied.
2. If the City determines that a Renewable Energy System fails to comply with the applicable provisions of this Code, the City shall provide written notification to the property owner. The property owner shall have a period of ninety (90) days from the date of notification to either restore the Renewable Energy System to operation or remove the system.
3. In the event such Renewable Energy System is not brought into compliance with this Code within the specified time period, the City may remove or cause the removal of said facility at the property owner's expense.
4. The City may pursue any and all available legal remedies to ensure that a Renewable Energy System which fails to comply with this Code or which constitutes a danger to persons or property is brought into compliance or removed.
5. Any delay by the City in taking enforcement action against the owner of a Renewable Energy System and the owner of the property if such owner is different from the owner of such facility, shall not waive the City's right to take any action at a later time.

6. The City may seek to have the Renewable Energy System removed regardless of the owner's or operator's intent to said facility, and regardless of any permits that may have been issued or granted.
7. After the Renewable Energy System is removed, the owner of the Subject Property shall promptly restore the Subject Property to a condition consistent with the property's condition prior to the installation of the system.

6-15-8: **SEVERABILITY:** If any section, subsection, sentence, clause, phrase or portion of this Chapter is held invalid or unconstitutional for any reason by a court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such judgment shall not affect the validity of the remaining portions hereof.

6-15-9: **CONFLICTS RESOLVED:** This Chapter supersedes all chapters or parts of ordinances adopted prior hereto which are in conflict herewith, to the extent of such conflict.

**SECTION 2:** This Ordinance shall be in full force and effect from and after its passage and approval.

PASSED this 21ST day of DECEMBER, 2010.

AYES: MILLER, WEHRLI, PRADEL, BRODHEAD, KRAUSE

NAYS: BOYAJIAN, FURSTENAU, HINTERLONG

ABSENT: NONE

APPROVED this 22ND day of \_\_\_\_\_, 2010.

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A. George Pradel  
Mayor

ATTEST:

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Pam LaFeber, Ph.D.  
City Clerk