

**AN ORDINANCE TO PERMIT CERTAIN WIND AND SOLAR
ENERGY SYSTEMS AND ESTABLISHING STANDARDS**

WHEREAS, it is the purpose of this ordinance to promote the safe, effective and efficient use of small wind and solar energy systems to reduce the on-site consumption of utility-supplied electricity; and

WHEREAS, New Jersey's Renewable Portfolio Standards (RPS) require each supplier/provider, as defined at N.J.A.C. 14:8-1.2, that sells electricity to retail customers in New Jersey to provide a percentage of their retail electricity sales from renewable energy sources, beginning at 3.5 percent in 2004 and increasing to 22.5 percent by 2021; and

WHEREAS, the Municipal Land Use Law (N.J.S.A. 40:55D-2n) provides that to promote utilization of renewable energy resources is a purpose of zoning; and

WHEREAS, on November 20, 2009, the Governor signed P.L.2009, c.146, clarifying that a wind, solar or photovoltaic energy facility or structure should be considered an "inherently beneficial" use under the Municipal Land Use Law's analysis of positive criteria for the grant of a "d variance" under N.J.S.A.40:55D-70, regardless of whether the facility or structure is a principal use, a part of the principal use, or an accessory use or structure; and

WHEREAS, on April 4, 2010, Governor Chris Christie signed P.L. 2010, c. 4 exempting solar panels from being counted in calculations utilized to determine impervious coverage in land use applications under the Municipal Land Use Law; and

WHEREAS, existing local zoning regulations in the Borough of Washington do not address wind or solar power, which while not intended to discourage the installation of small wind turbines or solar panels, can substantially increase the time and costs required to obtain necessary local land-use permits; and

WHEREAS, the Borough Council finds that it is necessary to standardize and streamline the requirements for small wind and solar energy systems so that this clean, renewable energy resource can be utilized in a cost-effective and timely manner in our municipality; and

NOW, THEREFORE, BE IT ORDAINED by the Borough Council of the Borough of Washington in the County of Warren, State of New Jersey, that the Land Use Regulations of the Borough of Washington be amended and supplemented to include the following:

Section 1: Article III. Section 94-5 Definitions shall be amended to include the following additional definitions:

110% PRODUCTION – means that an energy system produces up to 110% of the energy that the principal use consumes on average in a year.

GROUND MOUNTED SOLAR ARRAY - means a solar energy system, as defined herein that is mounted on armatures anchored to the ground with ground cover beneath.

ROOFTOP SOLAR ARRAY – means a solar energy system, as defined herein that is mounted to roof of a building or structure.

SMALL SOLAR ENERGY SYSTEM – means a solar energy system, as defined herein that is used to generate electricity; and has a nameplate capacity of 100 kilowatts or less.

SMALL WIND ENERGY SYSTEM – means a wind energy system, as defined herein that is used to generate electricity; and has a nameplate capacity of 100 kilowatts or less.

SOLAR ENERGY SYSTEM – means a solar energy system and all associated equipment which converts solar energy into a usable electrical energy, heats water or produces hot air or other similar function through the use of solar panels.

SOLAR PANELS – a structure containing one or more receptive cells, the purpose of which is to convert solar energy into usable electrical energy by way of a solar energy system.

WIND ENERGY SYSTEM – means a wind turbine and all associated equipment, including any base, blade, foundation, nacelle, rotor, tower, transformer, vane, wire, inverter, batteries or other component necessary to fully utilize the wind generator.

WIND TURBINE – means equipment that converts energy from the wind into electricity. This term includes base, blade, foundation, nacelle, rotor, blades, tower, transformer, vane, wire, inverter, batteries or other components to store and/or transfer energy.

Section 2: Article VII. Section 94-86.1 WIND AND SOLAR ENERGY AND PRODUCTION SYSTEMS – this section shall be created and state the following:

A. Purpose. The purposes of this section regulating Small Wind and Solar Energy Systems (110% Production) are as follows:

- (1) The primary purpose of a small wind energy system and small solar energy system will be to provide power for the principal use of the property whereon said system is to be located and shall not be for the generation of power for commercial purposes, although this provision shall not be interpreted to prohibit the sale of excess power generated from a small solar energy system to a supplier/provider. For the purposes of this ordinance, the generation of power shall be limited to 110% of the average annual energy consumed for the principal use of the subject property.
- (2) Small wind energy systems and small solar energy systems are permitted as an accessory use on the same lot as the principal use. All small wind and solar energy systems require approval from the zoning officer prior to installation. Applications for an energy system shall include information demonstrating compliance with the provisions of this

ordinance. In the event that the zoning officer does not believe the provisions of this ordinance will be satisfied an applicant may request a variance. Applicants within the Route 57 Scenic Corridor must demonstrate compliance with the requirements of the Scenic Corridor and may require outside agency approval.

- (3) All applications for small wind and solar energy systems are to be submitted for site plan and/or variance and waiver review to the Planning Board or the Zoning Board, as necessary, when variance(s) and/or waiver(s) are requested.

B. Use Regulations

- (1) Rooftop Solar Arrays for Small Solar Energy Systems are permitted as an accessory use in all zones.
- (2) Ground Mounted Solar Arrays for Small Solar Energy Systems are permitted as an accessory use in all zones.
- (3) Small Wind Energy Systems are permitted as an accessory use in the I Industrial zone.

C. Small Solar Energy Systems (110% production).

- (1) Rooftop Solar Arrays for Small Solar Energy Systems are permitted as an accessory use in all zones subject to the following requirements.
 - (a) Rooftop Solar Arrays shall not exceed a height of twelve (12) inches from the existing roof surface of a peaked roof and not exceed a height of four (4) feet from the existing roof surface of a flat roof
 - (b) In no event shall the placement of the solar arrays result in an overall height in excess of that permitted for the principle structure in the Zone District in which the principle structure is located.
- (2) Ground Mounted Solar Arrays for Small Solar Energy Systems are permitted as an accessory use in all zones subject to the following requirements.
 - (a) Maximum size: no more than 10% of a lot may be devoted to a ground mounted solar energy system, however in no case shall a ground, mounted solar energy system exceed 2,500 square feet.
 - (b) Minimum setback: All ground mounted solar energy systems shall have a distance of ten (10) feet from all property lines in residential zoning districts or twenty-five (25) feet from any property line in commercial zoning districts.
 - (c) Ground mounted solar energy systems shall not exceed a height of eight (8) feet as measured from the grade plane to the highest point of the mounting equipment and/or panel(s), whichever is higher.
 - (d) Ground mounted solar energy systems shall not be permitted in any front yard.
 - (e) Ground mounted solar energy systems are permitted in the rear yard.
 - (f) Ground mounted solar energy systems are permitted in side yards, if screened from the street and adjacent properties by evergreen landscaping to create a continuous buffer.
 - (g) Ground arrays shall not contribute to impervious surface calculations, unless installed above an impervious surface.

D. Small Wind Energy Systems (110% production).

- (1) Small Wind Energy Systems are permitted as an accessory use in the I-Industrial zones subject to the following requirements.
 - (a) Maximum Density: maximum density of wind turbines shall not exceed one (1) turbine per five (5) acres. More than one wind energy systems may be permitted per property provided the overall density of one (1) turbine per five (5) acres is maintained.
 - (b) Maximum height: System height shall not exceed 125 feet, measured from the grade plane to the height of the blades at its highest point.
 - (c) Minimum setbacks: all wind energy systems shall be setback from all property lines a distance equal to 150% of the system height including the blades of the turbine at their highest point.
 - (d) Separation distance: all wind energy systems shall be setback from all other wind energy systems a distance equal to 100% of the system height including the blades of the turbine at their highest point
 - (e) Wind energy systems shall not be permitted in any front yard.
 - (f) Wind energy systems shall not be permitted as a rooftop installation.
 - (g) All moving parts of the wind energy systems shall be a minimum of thirty (30) feet above ground level.
 - (h) Any 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 eight (8) feet above the ground.
 - (i) All guy wires or any part of the wind energy system shall be located on the same lot as the wind energy system.
- (2) Noise: All wind energy systems shall comply with the following requirements.
 - (a) Adjacent to a residential use or zone sound levels of the wind energy system shall not exceed 55 dBA at a common property line and 50 dBA to the closest occupied structure.
 - (b) In all other cases at a common property line sound levels of the wind energy system shall not exceed 65 dBA.

E. Abandonment.

- (1) In the case that any small wind or small solar energy system as defined herein is out of service for a continuous 12-month period will be deemed to have been abandoned.
- (2) The zoning officer or other enforcement official of the Borough may issue a "Notice of Abandonment" to the owner. The notice shall be sent via regular and certified mail return receipt requested to the owner of record.
- (3) Any abandoned small wind or solar energy system as defined herein shall be removed at the owner's sole expense within six months after the owner receives the "Notice of Abandonment" from the municipality. If the system is not removed within six months of

receipt of notice from the Borough notifying the owner of such abandonment, the Borough may remove the system as set forth below.

- (4) When an owner of a small energy system as defined herein has been notified to remove same and has not done six months after receiving said notice, then the Borough may remove such system and place a lien upon the property for the cost of the removal and restoration. If removed by the owner, a demolition permit shall be obtained and the facility shall be removed. Upon removal, the site shall be cleaned, restored and revegetated to blend with the existing surrounding vegetation at the time of abandonment.

F. Design and Improvement Standards. Standards specifically regulating Wind and Solar Energy and Production Systems are detailed in section 94-69.1.

Section 3: Article VI. Section 94-69.1 WIND AND SOLAR ENERGY SYSTEMS - Design and Improvement Standards – this section shall be created and state the following:

A. All wind and solar energy systems shall comply with the following.

- (1) Systems shall not be used for displaying any advertising except for reasonable identification of the manufacture or operator of the system. In no case shall any identification be visible from a property line.
- (2) Systems shall not significantly impair a scenic vista or scenic corridor as identified in the Borough's master plan or other published source.
- (3) The natural grade of the lot shall not be changed to increase the elevation of any wind turbine or solar array.
- (4) Wires, cables and transmission lines running between an energy system and any other structure shall be installed underground.
- (5) All ground mounted electrical and control equipment shall be secured to prevent unauthorized access.
- (6) The design shall, to the extent reasonably possible, use materials, colors, textures, screening and landscaping that will blend the facility into the natural setting and existing environment.
- (7) Installation shall conform to the National Electric Code as adopted by the NJ Department of Community Affairs.
- (8) Installation is subject to all local Electric Company requirements for interconnection.
- (9) The following requirements are applicable to small wind energy systems:
 - (a) Wind energy systems shall not be artificially lit, except to the extent required by the FAA or other applicable authority.
 - (b) Wind turbines shall be designed with an automatic brake or other similar device to prevent over-speeding and excessive pressure on the tower structure.
 - (c) The blades on the wind turbine shall be constructed of a corrosive resistant material.

Section 4: Article VI. Section 94-37 ACCESSORY BUILDINGS shall be amended and state the following:

E. Towers are regulated under 94-69.1 and 94-86.1 and this 94-37 shall not apply to same.

Section 5: Article VI. Section 94-68 YARDS AND TOWERS shall be amended such that Item B shall be deleted and the Section shall be renamed YARDS.

Section 6: Any and all Ordinances inconsistent with this ordinance are hereby repealed to the extent of any such inconsistency.

Section 7: Should any section, part or provision of this ordinance be deemed invalid or unconstitutional, such decision shall not affect the validity of the remaining terms of this ordinance as a whole or any part thereof, other than section, part or provision so held invalid or unconstitutional.

Section 8: This ordinance shall take effect on its final passage and publication as provided by law.