

## **BOROUGH OF NEW PROVIDENCE**

### **Ordinance 2011-14**

#### **AN ORDINANCE OF THE BOROUGH OF NEW PROVIDENCE AMENDING AND SUPPLEMENTING THE ZONING PROVISIONS OF THE BOROUGH CODE TO ESTABLISH A SMALL WIND ENERGY SYSTEMS ORDINANCE**

BE IT ORDAINED by the governing body of the Borough of New Providence, Union County, New Jersey, that the Zoning Ordinance of the of the Borough of New Providence is hereby amended to include provisions for small wind energy systems.

WHEREAS, the Borough has found that regulating wind energy systems promotes the public health, safety and general welfare by requiring that adequate standards be established for residential and commercial uses;

NOW, WHEREFORE, IT IS HEREBY ORDAINED by the Governing Body of the Borough of New Providence as follows:

#### **Definitions**

“Meteorological Tower or Met Tower” means a structure designed to support the gathering of wind energy resource data, and includes the tower, base plate, anchors, guy cables and hardware, anemometers (wind speed indicators), wind direction vanes, booms to hold equipment anemometers and vanes, data logger, instrument wiring, and any telemetry devices that are used to monitor or transmit wind speed and wind flow characteristics over a period of time for either instantaneous wind information or to characterize the wind resource at a given location.

“Owner” means an individual or entity that intends to own and operate the small wind energy system in accordance with this section.

“Rotor diameter” means the cross-sectional dimension of the circle swept by the rotating blades of a wind-powered energy generator.

“Small Energy System” means wind energy system, that is used to generate electricity; has a nameplate capacity of 100 kilowatts or less;

“Total Height” in relation to a wind energy system means the vertical distance from the ground to the tip of a wind generator blade when the tip is at its highest point.

“Total Roof Mounted Structure Height” means the highest point above the main roof structure, not including architectural features such as a chimney, cupola and similar type features, reached by a rotor blade in the vertical position, or any other part of the structure.

“Tower” means a monopole, freestanding, or guyed structure that supports a wind generator.

“Wind Energy System” means a wind generator 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 Generator” means equipment that converts energy from the wind into electricity. This term includes the rotor, blades and associated mechanical and electrical conversion components necessary to generate, store and/or transfer energy.

**Purpose; requirements; applicability**

A small wind energy system shall be permitted as a conditional use in all the zones in the Borough of New Providence in accordance with the following standards:

(A) Residential Zones

- (1) Ground-mounted wind energy systems are not permitted in any residential zones.
- (2) Roof-mounted wind energy systems, whose primary purpose is to provide power for the principal use of the property whereon the said system is to be located and shall not be for the generation of power for commercial purposes for resale, can be located in residential zones in accordance with the following:
  - (a) The minimum distance between a roof-mounted wind energy system and a property line shall be equal or greater than the minimum front, side or rear yard setback applicable to the main building.
  - (b) The total height of the roof mounted structure shall not exceed five (5) feet above the ridge of the roof. The said system shall not be placed on top of any architectural features such as cupola, chimney etc.

- (c) Wind energy system shall not be artificially lighted.
  - (d) No portion of the roof mounted wind energy system shall extend beyond the edge of the building to which it is attached.
- (3) Small decorative wind turbines: Small wind turbines less than one meter in diameter that use direct current solely for decorative or yard lighting are exempt from the above-mentioned requirements.

(B) Non-residential Zones

- (1) Minimum Lot Size. The minimum lot size for a small wind energy system shall be 5 acres.
  - (2) Setbacks. A wind tower for a small wind energy system shall not be located within any front yard, easements or utility line, and shall maintain a setback of the underlying zone. No portion of the wind generator shall extend beyond the setback line, or into the following:
    - (a) Any public road right-of-way.
    - (b) Any overhead utility lines, unless written permission is granted by the utility that owns and/or controls the lines.
  - (3) Pole mounted wind towers shall not be higher than 25 feet from existing grade.
  - (4) Access.
    - (a) All ground mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.
    - (b) The tower shall be designed and installed so as to not provide step bolts, a ladder, or other publicly accessible means of climbing the tower, for a minimum height of eight feet above the ground.
- (C) Electrical Wires. All wires associated with a small wind energy system, other than wires necessary to connect the wind generator to the tower wiring, the tower wiring to the disconnect junction box, and the grounding wires shall be located underground.

- (D) Lighting. A wind tower and generator shall not be artificially lighted unless such lighting is required by the Federal Aviation Administration, and is subject to Planning Board and Board of Adjustment approval as part of the site plan process.
- (E) Appearance, Color and Finish. The wind generator and tower shall be non-obtrusive and shall be painted or finished so as to minimize their visual impact on the surrounding landscape.
- (F) Signs. All signs, other than the manufacturer's or installer's identification, appropriate warning signs, or owner identification on a wind generator, tower building, or other structure associated with a small wind energy system visible from any public road shall be prohibited. Small wind energy systems shall not be used for displaying any advertising except for small and reasonable identification of the manufacturer or operator of the system. In no case shall any identification sign be visible from a property line.
- (G) Code Compliance. A small wind energy system including tower shall comply with all applicable construction and electrical codes, and the National Electrical Code.
- (H) Utility notification and interconnection. Small wind energy systems that connect to the electric utility shall comply with the New Jersey's Net Metering and Interconnection Standards for Class I Renewable Energy Systems.
- (I) Met towers shall be permitted under the same standards, permit requirements, restoration requirements and permit procedures as a small wind energy system.
- (J) For wind speeds in the range of 0-25 mph, the noise level of any small wind energy system shall not
  - (1) Exceed 60 dBA measured from any property line; or
  - (2) Be in the excess of 5 dBA above the background noise, whichever is greater, as measured at the closest neighboring inhabited dwelling. The measurement will be taken downwind of the turbine to account for the cancelling effect of the sound of the wind itself. The provisions within this section shall not be applicable to the increased sound levels during the occurrence of short-term events such as storms and utility outages.
- (K) Approval Requirements.

- (1) Site Plan Approval. Site Plan approval from the Planning Board or Board of Adjustment, as appropriate, shall be required for the installation of a small wind energy system.
- (2) Documents. The Site Plan application shall be accompanied by a plot plan, which includes the following:
  - (a) Property lines and physical dimensions of the property;
  - (b) Location, dimensions and types of existing structures on the property;
  - (c) Location of the proposed small wind energy system;
  - (d) The right-of-way of any public road that is contiguous with the property;
  - (e) Any overhead utility lines;
  - (f) Small wind energy system specifications, including manufacturer and model, rotor diameter, tower height, tower type;
  - (g) Stamped, engineered tower and tower foundation drawings;
  - (h) Noise levels of the proposed wind energy system at all property lines and at the closest neighboring inhabited dwelling.
  - (i) A visual site distance analysis must be submitted, including all photos of the subject property, that graphically simulates the appearance of any proposed small wind energy system and indicating its view from at least five (5) locations around and within one (1) mile of the proposed tower.
- (L) Expiration. A permit issued for an application approved by the Planning Board or Zoning Board of Adjustment, if appropriate, shall expire if:
  - (1) The small wind energy system is not installed and functioning within 24 months from the date the permit is issued; or
  - (2) The small wind energy system is out of service or otherwise unused for a continuous 12 month period.

(M) Abandonment

- (1) A small wind energy system that is out of service for a continuous 18-month period will be deemed to have been abandoned.
- (2) The Administrative Officer may issue a Notice of Abandonment to the owner of a small wind energy system that is deemed to have been abandoned. The notice shall be sent return receipt requested.
- (3) The Owner shall have the right to respond to the Notice of Abandonment within 30 days from Notice receipt date.
- (4) If the owner provides information that demonstrates the small wind energy system has not been abandoned, the Administrative Officer shall withdraw the Notice of Abandonment and notify the owner that the Notice has been withdrawn.
- (5) If the Administrative Officer determines that the small wind energy system has been abandoned, the Owner of the small wind energy system shall remove the wind generator from the tower at the Owner's sole expense within six (6) months after the Owner receives the Notice of Abandonment.
- (6) If the Owner fails to remove the wind generator from the tower in the time allowed under (e) above, the Administrative Officer may pursue legal action to have the wind generator removed at the Owner's expense.

(N) Violations. It is unlawful for any person to construct, install, or operate a small wind energy system that is not in compliance with this ordinance.

(O) Administration and Enforcement.

- (1) This ordinance shall be administered by the Administrative Officer or other official as designated.
- (2) The Administrative Officer may enter any property for which a permit has been issued under this ordinance to conduct an inspection to determine whether the conditions stated in the permit have been met.
- (3) The Administrative Officer may issue orders to abate any violation of this ordinance.

- (4) The Administrative Officer may issue a citation for any violation of this ordinance.
- (5) The Administrative Officer may refer any violation of this ordinance to legal counsel for enforcement.

(P) Penalties.

- (1) Any person who fails to comply with any provision of this ordinance shall be subject to enforcement and penalties as stipulated in chapter and section of the appropriate zoning code.
- (2) Nothing in this section shall be construed to prevent the appropriate Borough of New Providence Board from using any other lawful means to enforce this ordinance.

(Q) Severability. The provisions of this ordinance are severable, and the invalidity of any section, subdivision, paragraph, or other part of this ordinance shall not affect the validity or effectiveness of the remainder of the ordinance.

INTRODUCTION: May 9, 2011  
PUBLIC HEARING: June 13, 2011  
ADOPTION: June 13, 2011

BOROUGH OF NEW PROVIDENCE  
COUNTY OF UNION  
STATE OF NEW JERSEY

---

J. Brooke Hern, Mayor

Attest:

---

Wendi B. Barry, Borough Clerk