

Amendment to the Zoning Code Regarding Wind Energy Systems

Delete Section 273-88 and substitute the following;

273-88. Wind Energy Systems

- A. Purpose . Wind energy is an abundant, renewable, and nonpolluting energy resource. It is the purpose of this regulation to promote the safe, effective and efficient use of wind energy systems subject to reasonable conditions that will protect the public health, safety and welfare.
- B. Applicability. This section applies to all proposals to construct wind energy facilities except those facilities regulated by the Connecticut Siting Council, as set forth in Conn. Gen. Stat. Sec. 16-50i(a)(3), as the same may be amended from time to time.
- C. Definitions
 - Wind Energy Systems – All equipment, machinery and structures utilized in connection with the conversion of wind to electricity. This includes but is not limited to, transmission lines and support structures, storage, collection and supply equipment, substations, transformer, service and access roads and one or more wind turbines.
 - Wind Turbine – A device that converts kinetic wind energy into rotational energy that drives an electrical generator. A wind turbine typically consists of a tower, accelerator platform, and one or more rotors with two or more blades for each rotor.
 - Height – The vertical distance from the average natural ground level at the main tower edges to the highest point of the structure, including any blade, lightning rod or antenna. If a blade extends above the tower at any point in its arc, then the tip of the rotor blade at its highest point shall be used.
 - Rated Nameplate Capacity – The maximum rated output of electric power production equipment. This output is typically specified by the manufacturer with a “nameplate” on the equipment.

- Wind Monitoring or Meteorological Tower – A temporary tower equipped with devices to measure wind speeds and direction, used to determine how much wind power a site can be expected to generate.

D. General Requirements. No wind energy system shall be erected, constructed, installed or modified so as to change its bulk or height, without first obtaining a Special Permit in accordance with Article X of this Code and this section. Wind energy systems shall be allowed in all zones, subject to the issuance of a Special Permit. No Special Permit shall be granted unless the Commission finds in writing that;

- The specific site in an appropriate location for such use.
- No material adverse effect on the neighborhood has been shown.
- No serious hazard to pedestrians or vehicles has been shown
- No nuisance will be created by operation of the use.
- Adequate and appropriate facilities will be provided for the proper operation of the use.
- The application conforms to all other standards of Article X.

The Commission may impose reasonable conditions, safeguards and limitation on time and use, and may require the applicant to implement all reasonable measures to mitigate adverse impacts of the facility.

E. Wind Monitoring or Meteorological Towers shall be permitted subject to issuance of a building permit for a temporary structure provided that such structures not exceed 2 feet tower face width and 200 feet in height.

F. General Siting Standards For Wind Energy Systems

1. Height – Wind energy systems shall be no higher than 400 feet in height as defined in 273-88C.
2. Setbacks – Wind turbines shall be setback, as measured from the center of the tower; (a) from the nearest existing habitable structure, a distance equal to 1.5 times the overall blade tip height for a wind turbine that has exposed blades and 1.1 times the overall height for a wind turbine that has shrouded blades and (b) 100 feet from the nearest property line or public right of way. The Commission may increase or reduce the minimum setback distance as appropriate based on site-specific considerations if the project satisfies all other criteria for the granting of a Special Permit under the provisions of this section.
3. Color and Finish – Wind turbines shall be a neutral, non –reflective color that blends with the surrounding environment.

4. Lighting- Wind turbines shall be lighted only if required by the Federal Aviation Administration. Lighting of other parts of the facility shall be limited to that required for safety and operational purposes.
5. Signage – Signs on the facility shall comply with this Code’s requirements for signs and shall be limited to those necessary to identify the owner and manufacturer, provide for emergencies or as otherwise required by State or Federal law. No advertising signs shall be allowed.
6. Appurtenant Structures – Structures appurtenant to the facility shall comply with applicable standards of this Code. Such structures shall be architecturally compatible with each other and the surroundings and shall be landscaped and screened from surrounding properties.
7. Support Towers – Monopole towers are the only permissible support towers for wind energy systems.
8. Shadow/Flicker – Wind energy facilities shall be sited in a manner that minimizes shadowing or flicker impacts. The applicant has the burden of proving that this effect does not have significant adverse impact on neighboring or adjacent uses through either siting or mitigation.
9. Scenic Vistas and Historic Areas – The development of wind energy systems shall not significantly impair scenic vistas nor have an adverse impact on historic areas or properties. Scenic vistas are as described in the *Plan of Conservation and Development 2002*, Section 2.2 Policy A: Preserve Guilford’s Character and Cultural Landscape (as it may be revised). Historic areas or properties are as listed in the National Register of Historic Districts or Properties or as Local Historic Districts as approved by the Town of Guilford.

G. Abandonment

Any wind facility which has reached the end of its useful life, or has been abandoned, shall be removed. This shall include physical removal of all above ground structures and equipment, disposal of all solid and hazardous wastes, and restoration of the site to its pre-development condition. The Commission may require the applicant for a wind energy system to provide a form of surety, either through an escrow account, bond or otherwise to cover the cost of removal in the event the Town must remove the facility. A Special Permit for a wind energy system shall be valid for 25 years, unless extended or renewed by the Commission pursuant to this section.

F. Application Requirements

In addition to the requirements of Article X, the following materials shall be submitted as part of a Wind Energy System Special Permit application;

- Visualizations – View representations shall be provided from sites selected by the Commission including from populated areas, public streets, or areas of public use. These representations may include balloon tests, photographs, computer simulations or other methods of visualization as may be required by the Commission.
- Landscape Plan – A plan of landscaping the facility shall be submitted.
- Operation and Maintenance Plan – The applicant shall submit a plan for maintenance of access roads and storm water controls, as well as general procedures for operation maintenance of the wind energy system.