



TOWNSHIP OF GALLOWAY
DEPARTMENT OF COMMUNITY DEVELOPMENT
PLANNING BOARD ZONING BOARD OF ADJUSTMENT

300 E. JIMMIE LEEDS ROAD, GALLOWAY, NJ 08205
(609) 652-3700 EXT. 315 FAX: (609) 652-5259

Tiffany A. CuvIELLO, PP, AICP
PLANNER

MEETING DATE: ***ADOPTED ON EARTH DAY: APRIL 22, 2008***

AGENDA ITEM COMMENTARY

TITLE: AN ORDINANCE AMENDING CHAPTER 233, LAND
MANAGEMENT, OF THE GALLOWAY CODE TO PERMIT WIND ENERGY
SYSTEMS AND SOLAR ENERGY SYSTEMS AS ACCESSORY USES.

STAFF SOURCE: Tiffany A. CuvIELLO, PP, AICP, Township Planner

DISCUSSION: The ordinance adds small wind energy systems and solar energy
systems as a permitted accessory use in all districts. The purpose of the ordinance is to
recognize and advance alternative energy sources. Currently the Township ordinance
does not provide any regulations guiding the appropriate development and placement of
small wind or solar energy systems.

EXHIBITS: A copy of the Ordinance Amendment.

RECOMMENDATIONS: Amend the Ordinance as proposed.

ORDINANCE NO. _____ OF 2008
AN ORDINANCE AMENDING CHAPTER 233, LAND MANAGEMENT, OF
THE GALLOWAY CODE TO PERMIT WIND ENERGY SYSTEMS AND
SOLAR ENERGY SYSTEMS AS ACCESSORY USES.

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

WHEREAS, the Governing Body of the Township of Galloway has determined the following:

1. Wind and solar energy are an abundant, renewable, and nonpolluting energy resource.
2. Converting wind and solar rays to electricity will reduce our dependence on nonrenewable energy resources, and decrease air and water pollution that results from the use of conventional energy sources.
3. Distributed small wind energy systems will also enhance the reliability and power quality of the power grid, reduce peak power demands, and help diversify the State's energy supply portfolio.
4. Small wind energy systems and solar energy systems make the electricity supply market more competitive by promoting customer choice.

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 (NJSA 40:55D-2.n) provides that to promote utilization of renewable energy resources is a purpose of zoning; and

WHEREAS, existing local zoning regulations 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 Governing Body finds that it is necessary to standardize and streamline the requirements for small wind energy systems and solar energy systems so that this clean, renewable energy resource can be utilized in a cost-effective and timely manner in our municipality.

WHEREAS, the Galloway Township Planning Board adopted a Master Plan Reexamination Report and Master Plan Update on March 22, 2007; and

WHEREAS, the Master Plan Reexamination Report and Master Plan Update recommended that the ordinance should be updated to reflect changing trends and

conditions and other similar items and the creation of an ordinance governing alternative energy sources is a reflection of changing trends.

NOW THEREFORE, BE IT ORDAINED by the Governing Body for the Township of Galloway, County of Atlantic and State of New Jersey, that Chapter 233, Land Management and the Zoning Map is hereby amended as follows:

SECTION 1. Add the following definitions under Section 233-4 in alphabetical order:

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 convert 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.

SECTION 2. Add the following permitted accessory structures and uses under Section 233-8E:

(12). Small Wind Energy Systems and Solar Energy Systems in accordance with the standards in subsection H. below.

SECTION 3. Add the following new subsection under 233-8 as follows:

H. Small Wind Energy Systems and Solar Energy Systems.

- (1) The primary purpose of a wind or 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 time to time from a wind or solar energy system designed to meet the energy needs of the principal use. For the purposes of this ordinance, the sale of excess power shall be limited so that in no event an energy system is generating more energy for sale than what is otherwise necessary to power the principle use on the

property.

(2) Wind and solar energy systems shall only be permitted as an accessory use on the same lot as the principle use. All energy systems require approval from the zoning officer and construction office 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 or construction office does not believe the provisions of this ordinance will be satisfied an applicant may request a variance.

(3) All applications for wind energy systems shall be presented to the Development Review Committee for administrative approval.

(4) Small Wind Energy Systems.

(a) Wind Turbines are permitted in all residential, agricultural, forest and preservation districts subject to the following requirements:

- [1] Minimum lot size: one (1) acre provided the lot size and conforms to the height requirements below.
- [2] Minimum setbacks: All wind turbines shall be setback from all property lines a distance equal to 100% of the height of the structure including the blades.
- [3] Wind turbines shall not be permitted in any front yard.
- [4] Maximum Height. Freestanding wind turbines shall not exceed a height of 80 feet on lots between one (1) acre and three (3) acres. On lots of three (3) acres or more a maximum height of 150 feet is permitted. The maximum height shall include the height of the blades at its highest point.
- [5] No more than one wind turbine shall be permitted per property.
- [6] Wind turbines shall not be permitted as a rooftop installation.
- [7] Wind turbines on residential properties shall have a nameplate capacity of 10 kilowatts or less.

(b) Wind turbines shall be permitted in a non-residential zoning district subject to the bulk requirements for that district and the following:

- [1] The maximum height for a wind turbine shall not exceed 150 feet, including the height of the blades at its highest point.
- [2] Minimum setbacks: All wind turbines shall be setback from all property lines a distance equal to 100% of the height of the structure including the blades.
- [3] Wind turbines shall not be permitted in a front yard.
- [4] No more than one wind turbine shall be permitted per property.
- [5] Wind turbines shall not be permitted as a rooftop installation.

(c) Noise: All wind energy systems shall comply with the following:

- [1] Between a residential use or zone sound levels of the wind energy system shall not exceed 55 dBA at a common property line or 50 dBA to the closest occupied structure.
- [2] In all other cases at a common property line sound levels of the wind energy system shall not exceed 65 dBA.
- [3] These levels may be exceeded during short-term events such as utility outages and/or severe windstorms.

- (d) Wind turbines shall be designed with an automatic brake or other similar device to prevent over-speeding and excessive pressure on the tower structure.
- (e) Wind energy systems shall not be artificially lighted, except to the extent required by the FAA or other applicable authority.
- (f) All ground-mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.
- (g) The tower shall be designed and installed so as not to provide step bolts, a ladder, or other publicly accessible means of climbing the tower, for a minimum height of eight feet above the ground.
- (h) All moving parts of the wind energy system shall be a minimum of ten (10) feet above ground level.
- (i) The blades on the wind energy system shall be constructed of a corrosive resistant material.
- (j) All guy wires or any part of the wind energy system shall be located on the same lot as the energy system.

(4) Solar Energy Systems.

- (a) Solar Panels shall be permitted as a rooftop installation in any zoning district. The solar panels shall not exceed a height of eight inches from the rooftop. In no event shall the placement of the solar panels result in a total height including building and panels than what is permitted in the zoning district which they are located for the principle building.
- (b) Solar Panels shall be permitted as ground arrays in accordance with the following:
 - [1] All ground arrays shall be setback a distance of 20 feet from all property lines in a residential zoning district or in conformance with the bulk standards for accessory structures in commercial districts as provided herein.
 - [2] Ground arrays shall not be permitted in a front yard.
 - [3] Ground arrays shall be located so that any glare is directed away from an adjoining property.
 - [4] Ground arrays shall not exceed a height of fifteen feet.

- (5) Wind and solar energy 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.
- (6) The design of wind or solar energy systems 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) All applications for a wind or solar energy system shall conform to the provisions of Section 233-52 with respect to tree removal. For the purposes of this section, tree removal shall be permitted as exempted under Section 233-52E(3) and (4). Any trees to be removed in excess of that permitted under the exemptions of the tree removal and protection ordinance shall be accompanied by a plan demonstrating the need to remove the trees and replacement of the trees in accordance with the provisions of Section 233-52G of the ordinance. An applicant shall locate a wind or solar energy system so that tree removal is not required to the extent practical.
- (8) The installation of a wind or solar energy system shall conform to the National Electric Code as adopted by the NJ Department of Community Affairs.
- (9) The installation of a wind or solar energy system is subject to all Atlantic City Electric Company requirements for interconnection.
- (10) The provisions of Section 233-7E shall not apply to wind and solar energy systems with regard to height. Wind and solar energy systems shall conform to the height restrictions provided in this subsection.
- (11) Abandonment.
 - (a) A small wind energy system or solar energy system that is out of service for a continuous 12-month period will be deemed to have been abandoned.
 - (b) The zoning officer 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.
 - (c) Any abandoned system 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 Township notifying the owner of such abandonment, the Township may remove the system as set forth below.
 - (d) When an owner of a wind or solar energy system has been notified to remove same and has not done six months after receiving said notice, then the Township may remove such system and place a lien upon the property for the cost of the removal. 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.

NOW THEREFORE, BE IT FURTHER ORDAINED by the Governing Body for the Township of Galloway, County of Atlantic and State of New Jersey, that a certified copy of this ordinance is forwarded to the Pinelands Commission for certification.

NOTICE IS HEREBY GIVEN that the foregoing Ordinance was introduced and passed the first reading at a meeting of the Township Council of the Township of Galloway, County of Atlantic and State of New Jersey, held on _____, 2008, and said Ordinance will be further considered for final passage and adoption at a public hearing to be held at the Municipal Complex located at 300 East Jim Leeds Road, Galloway, New Jersey 08205, on _____, 2008, at 6:30 p.m. or as soon thereafter as the matter may be reached.

**BY ORDER OF THE MUNICIPAL COUNCIL OF THE TOWNSHIP OF
GALLOWAY**

Lisa Tilton, Acting Township Clerk