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ORDINANCE 2008-02

An amendment to Ordinance 2005-01 adding a section regulating Wind Energy Facilities (wind farms).

709 Wind Energy Facilities

709.1 Purpose

The purpose of this Section is to provide for the development, construction, operation and decommissioning of Wind Energy Facilities in the County, subject to reasonable conditions that will protect the public health, safety and welfare.

709.2 Definitions Specific to Wind Energy Facilities

FACILITY OWNER - the entity or entities having an equity interest in the Wind Energy facility, including their respective successors and assign

OPERATOR - the entity responsible for the day-to-day operation and maintenance of the Wind Energy Facility.

HUB HEIGHT - the distance measured from the surface of the tower foundation to the height of the Wind Turbine hub, to which the blade is attached.

OCCUPIED BUILDING - a residence, school, hospital, church, public library or other building used for public gathering that is occupied or in use when the land development application is submitted.

TURBINE HEIGHT - the distance measured from the surface of the tower foundation to the highest point of the turbine rotor plane.

WIND TURBINE - a wind energy conversion system that converts wind energy into electricity through the use of a wind turbine generator, and includes the nacelle, rotor, tower, and pad transformer, if any.

WIND ENERGY FACILITY - an electric generating facility, whose main purpose is to supply electricity, consisting of one or more Wind Turbines and other accessory structures and buildings, including substations, meteorological towers, electrical infrastructure, transmission lines and other appurtenant structures and facilities.

NON-PARTICIPATING LANDOWNER - any landowner except those on whose property all or a portion of a Wind Energy Facility is located pursuant to an agreement with the Facility Owner or Operator.

709.3 Applicability

This Section applies to all land development plans which provide for Wind Energy Facilities to be constructed after the effective date of the Ordinance, except that this Section is not intended to apply to stand-alone Wind Turbines constructed primarily for residential or farm use. Wind Energy Facilities constructed prior to the effective date of this Ordinance shall not be required to meet the requirements of this Section; provided that any physical modification to an existing Wind Energy Facility that materially alters the size, type and number of Wind Turbines or other equipment shall comply with the provisions of this Section.

709.4 General Standards

Site plans for all Wind Energy Facilities shall be submitted as a Land Development and shall comply with the following standards and requirements as well as all other applicable provisions of these Regulations not in conflict herewith including the submission of plans in conformity with Articles III, IV, V and VI of these Regulations.

709.5 Plan Requirements

The land development plan shall contain the following, in addition to the other applicable provisions of these regulations.

- A. A narrative describing the proposed Wind Energy Facility, including an overview of the project; the project location; the approximate generating capacity of the Wind Energy Facility; the approximate number, representative types and height or range of heights of Wind Turbines to be constructed, including their generating capacity, dimensions and respective manufacturers, and a description of ancillary facilities.
- B. An affidavit or similar evidence of agreement between the property owner and the Facility Owner or Operator demonstrating that the Facility Owner or Operator has the permission of the property owner to apply for necessary permits for construction and operation of the Wind Energy Facility.
- C. Identification of the properties on which the proposed Wind Energy Facility will be located, and the properties adjacent to where the Wind Energy Facility will be located.
- D. A site plan showing the planned location of each Wind Turbine, property lines, setback lines, access road and turnout locations, substation(s), electrical cabling from the Wind Energy Facility to the substation(s), ancillary equipment, buildings, and structures, including permanent meteorological towers, associated transmission lines, and layout of all structures within the geographical boundaries of any applicable setback.
- E. Documents related to decommissioning, including a schedule for the decommissioning and financing security.
- F. Other relevant studies, reports, certifications and approvals as may be reasonably requested by the Planning Commission to ensure compliance with this Chapter.

709.6 Design and Installation

A. Uniform Construction Code

To the extent applicable, the Wind Energy Facility shall comply with the Pennsylvania Uniform Construction Code, Act 45 of 1999 as amended, and the regulations adopted by the Department of Labor and Industry.

B. Design Safety Certification

The design of the Wind Energy Facility shall conform to applicable industry standards, including those of the American National Standards Institute. The Applicant shall submit certificates of design compliance obtained by the equipment manufacturers from Underwriters Laboratories, Det Norske Veritas, Germanischer Lloyd Wind Energies, or other similar certifying organizations.

C. Controls and Brakes

All Wind Energy Facilities shall be equipped with a redundant braking system. This includes both aerodynamic overspeed controls (including variable pitch, tip, and other similar systems) and mechanical brakes. Mechanical brakes shall be operated in a fail-safe mode. Stall regulation shall not be considered a sufficient braking system for overspeed protection.

D. Electrical Components

All electrical components of the Wind Energy Facility shall conform to relevant and applicable local, state and national codes, and relevant and applicable international standards.

E. Visual Appearance; Power Lines

1. Wind Turbines shall be a non-obtrusive color such as white, off-white or gray.
2. Wind Energy Facilities shall not be artificially lighted, except to the extent required by the Federal Aviation Administration or other applicable authority that regulates air safety.
3. Wind Turbines shall not display advertising, except for reasonable identification of the turbine manufacturer, Facility Owner and Operator.
4. On-site transmission and power lines between Wind Turbines shall, to the maximum extent practicable, be placed underground.

F. Warnings

1. A clearly visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations
2. Visible, reflective, colored objects, such as flags, reflectors, or tape shall be placed on the anchor points of guy wires and along the guy wires up to a height of ten (10) feet from the ground.

G. Climb Prevention/Locks

1. Wind Turbines shall not be climbable up to fifteen (15) feet above ground surface
2. All access doors to Wind Turbines and electrical equipment shall be locked or fenced, as appropriate, to prevent entry by non-authorized persons

709.7 Setbacks

A. Occupied Buildings

1. Wind Turbines shall be set back from the nearest Occupied Building a distance not less than the greater of the maximum setback requirements of any applicable zoning classification where the turbine is located or 1.1 times the Turbine Height, whichever is greater. The setback distance shall be measured from the center of the Wind Turbine base to the nearest point on the foundation of the Occupied Building
2. Wind Turbines shall be set back from the nearest Occupied Building located on a Non-participating Landowner's property a distance of not less than five (5) times the Hub Height, as measured from the center of the Wind Turbine base to the nearest point on the foundation of the Occupied Building.

B. Property lines

All Wind Turbines shall be set back from the nearest property line a distance of not less than the greater of the maximum setback requirements of any applicable zoning classification where the turbine is located or 1.1 times the Turbine Height, whichever is greater. The setback distance shall be measured to the center of the Wind Turbine base.

C. Public roads

All Wind Turbines shall be set back from the nearest public road a distance of not less than 1.1 times the Turbine Height, as measured from the right-of-way line of the nearest public road to the center of the Wind Turbine base.

709.8 Waiver of Setbacks

- A. Upon request, the Planning Commission may grant partial waivers of setback requirements hereunder where it has determined that literal enforcement will exact undue hardship because of peculiar conditions pertaining to the land in question and provided that such waiver will not be contrary to the public interest.
- B. The governing body may take into consideration the support or opposition of adjacent property owners in granting waivers of setback requirements hereunder.

709.9 Use of Public Roads

- A. The Applicant shall identify all state and local public roads to be used within the County to transport equipment and parts for construction, operation or maintenance of the Wind Energy Facility.

B. The Planning Commission's engineer or a qualified third party engineer hired by the Planning Commission and paid for by the Applicant shall document road conditions prior to construction. The engineer shall document road conditions again thirty (30) days after construction is complete or as weather permits.

C. The local municipality may require that the developer bond the road in compliance with state and local regulations.

D. Any road damage caused by the applicant or its contractors shall be promptly repaired at the Applicant's expense.

E. The Applicant shall demonstrate that it has appropriate financial assurance to ensure the prompt repair of damaged roads.

709.10 Local Emergency Services

A. The Applicant shall provide a copy of the project summary and site plan to local emergency services, including paid or volunteer Fire Department(s).

B. Upon request, the Applicant shall cooperate with emergency services to develop and coordinate implementation of an emergency response plan for the Wind Energy Facility.

709.11 Noise and Shadow Flicker

A. Audible sound from a Wind Energy Facility shall not exceed fifty (50) dBA, as measured at the exterior of any Occupied Building on a Non-participating Landowner's property. Methods for measuring and reporting acoustic emissions from Wind Turbines and the Wind Energy Facility shall be equal to or exceed the minimum standards for precision described in AWEA Standard 2.1 - 1989 titled *Procedures for the Measurement and Reporting of Acoustic Emissions from Wind Turbine Generation Systems Volume I: First Tier*. The Planning Commission may grant a partial waiver of such standards where it has determined that literal enforcement will exact undue hardship because of peculiar conditions pertaining to the land in question and provided that such waiver will not be contrary to the public interest.

B. The Facility Owner and Operator shall make reasonable efforts to minimize shadow flicker to any Occupied Building on a Non-participating Landowner's property.

C. The governing body may take into consideration the support or opposition of adjacent property owners on granting waivers of noise and shadow flicker restrictions.

709.12 Signal Interference

The Applicant shall make reasonable efforts to avoid any disruption or loss of radio, telephone, television or similar signals, and shall mitigate any harm caused by the Wind Energy Facility.

709.13 Liability Insurance

There shall be maintained a current general liability policy covering bodily injury and property damage with limits of at least \$1 million per occurrence and \$1 million in the aggregate. Certificates shall be made available to the County upon request.

709.14 Decommissioning

A. The Facility Owner and Operator shall, at its expense, complete decommissioning of the Wind Energy Facility, or individual Wind Turbines, within twelve (12) months after the end of the useful life of the Facility or individual Wind Turbines. The Wind Energy Facility or individual Wind Turbines will presume to be at the end of its useful life if no electricity is generated for a continuous period of twelve (12) months.

B. Decommissioning shall include removal of Wind Turbines, buildings, cabling, electrical components, roads, foundations to a depth of thirty-six (36) inches, and any other associated facilities.

C. Disturbed earth shall be graded and re-seeded, unless the landowner requests in writing that the access roads or other land surface areas not be restored.

D. An independent and certified Professional Engineer shall be retained to estimate the total cost of decommissioning ("Decommissioning Costs") without regard to salvage value of the equipment, and the cost of decommissioning net salvage value of the equipment ("Net Decommissioning Costs"). Said estimates shall be submitted to the Planning Commission after the first year of operation and every fifth year thereafter.

E. The Facility Owner or Operator shall post and maintain Decommissioning Funds in an amount equal to Net Decommissioning Costs; provided, that at no point shall Decommissioning Funds be less than twenty five percent (25%) of Decommissioning Costs. The Decommissioning Funds shall be posted and maintained with a bonding company or Federal or Commonwealth chartered lending institution chosen by the Facility Owner or Operator and participating landowner posting the financial security, provided that the bonding company or lending institution is authorized to conduct such business within the Commonwealth and is approved by the County.

F. Decommissioning Funds may be in the form of a performance bond, surety bond, letter of credit, corporate guarantee or other form of financial assurance as may be acceptable to the County.

G. If the Facility Owner or Operator fails to complete decommissioning within the period prescribed by Section 709.14,A then the landowner shall have six (6) months to complete decommissioning.

H. If neither the Facility Owner or Operator, nor the landowner complete decommissioning within the periods prescribed by Sections 709.14,A and G the County may take such measures as necessary to complete decommissioning. The entry into and submission of evidence of a Participating Landowner agreement to the County shall constitute agreement and consent of the parties to the agreement, their respective heirs, successors and assigns that the County may take such action as necessary to implement the decommissioning plan.

I. The escrow agent shall release the Decommissioning Funds when the Facility Owner or Operator has demonstrated and the municipality concurs that decommissioning has been satisfactorily completed, or upon written approval of the municipality in order to implement the decommissioning plan.

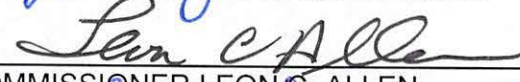
709.15 Public Inquiries and Complaints

A. The Facility Owner and Operator shall maintain a phone number and identify a responsible person for the public to contact with inquiries and complaints throughout the life of the project.

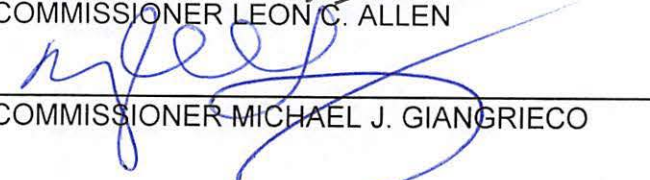
B. The Facility Owner and Operator shall make reasonable efforts to respond to the public's inquiries and complaints.



COMMISSIONER MARYANN WARREN



COMMISSIONER LEON C. ALLEN



COMMISSIONER MICHAEL J. GIANGRIECO

ATTEST:



CHIEF CLERK SYLVIA BEAMER