

## **Appendix F: Wind Energy Ordinances**

Rapid City Municipal Code Chapter 17.50.215, Wind Energy Conversion Systems

Box Elder Ordinance #478 Section 7H: Wind Energy Systems

Meade County's Wind Generator Ordinance 32



**Rapid City Municipal Code Chapter 17.50.215, Wind Energy Conversion Systems**

### **17.50.215 Wind energy conversion systems.**

A. *General.* Wind energy conversion systems shall be allowed as accessory structures as conditional uses in certain zoning districts. In addition to the standards set forth in Chapter 17.54.030 regarding all conditional, all wind energy conversion systems shall also meet all requirements of § 17.50.215 herein.

B. Commercial sale of power prohibited. Any wind energy conversion system shall be used only for the purpose of generating power for the property on which the wind energy conversion system is located, or for the purpose of transmitting power to the electrical grid of an electric utility company through an approved interconnection.

C. Utility interconnections. Any wind energy conversion system shall be constructed and operated, and any interconnection between a wind energy conversion system and an electric utility company shall be allowed only in accordance with all local, state, and federal regulations including regulations issued by the Public Utilities Commission and the Federal Aviation Administration. Additionally, electrical interconnections shall be allowed only in accordance with the applicable standards of the electric utility company.

D. Required setbacks. A minimum setback of one and one-half times the height of the wind energy conversion system shall be maintained between the wind energy conversion system and any property line, structure intended for human occupation, overhead utility line, or other tower support base.

E. Tower height. In no event shall the height of a wind energy conversion system exceed 90 feet as measured from the ground to the rotor hub. Further, there shall be no less than 30 feet between the lowest arc of the rotors of a wind energy conversion system and the ground, any portion of a structure or any tree.

F. Rotor size/operation. The maximum size of the rotors of a wind energy conversion system shall be reviewed upon application for a conditional use. In determining the appropriate size for the rotors, the city shall consider such factors as noise, proximity to surrounding residences, safety and aesthetic issues. All systems shall be equipped with appropriate braking devices or similar protective devices to slow down or stop the rotors if the wind exceeds the capacity of the system.

G. Noise. No wind energy conversion system shall produce more than 60 decibels of sound measured at the closest point on the closest property line from the base of the system. Information from the manufacturer of the wind energy conversion system shall be submitted at the time of the submittal of the conditional use, ensuring

H. Electromagnetic interference. No wind energy conversion system shall produce electromagnetic interference so as to disrupt transmissions such as those from radio, television or microwave towers. At the time of application for the conditional use, the petitioner must submit information from the manufacturer indicating that, once operational, the wind energy conversion system will not adversely affect the transmissions. If necessary, generators and alternators shall be filtered, shielded, or both so as to prevent the emission of radio and television signals.

I. Tower access. Appropriate safety measures must be undertaken to discourage unauthorized climbing of a wind energy conversion system tower. Appropriate measures shall include either:

1. The construction of a 6-foot tall chain link fence with locking gate around the tower;
2. The tower shall be constructed so that the lowest climbing access shall be at least 12 feet above the ground; or
3. A locked anti-climb device shall be installed on the tower.

J. Warning information. Information related to the maximum power output, nominal voltage and maximum current, and emergency shut-down procedures for the wind energy conversion system shall be posted near the base of the tower in a visible location.

K. Lighting. Unless required by a more restrictive regulation, no lighting shall be installed on a wind energy conversion system.

L. Tower design. In reviewing the conditional use for a wind energy conversion system, the city shall consider the design and color of the tower to ensure that no significant adverse impacts are occurring to neighboring property owners, including, but not limited to, infringement into natural and urban viewsheds, historic property, major community entryways, parks, schools, churches, playgrounds, or similar public and recreational uses.

M. Manufacturer warranty/maintenance information. Upon application for a conditional use for a wind energy conversion system, the petitioner shall submit a manufacturer's statement documenting that the system has been successfully and safely operated in atmospheric conditions that are similar to conditions in Rapid City. Further, the petitioner shall provide a copy of the manufacturer's warranty indicating that the system is warranted against any system failures reasonably expected during severe weather conditions. Further, the petitioner shall submit system specifications including maximum power output and a maintenance schedule for the system.

N. Construction standards. Any wind energy conversion system shall be constructed in accordance with all applicable life, safety, building and fire codes including but not limited to the following:

1. An applicant for a building permit for a wind energy conversion system shall submit plans and specifications stamped by a registered engineer.

2. Lightning Protection. Any wind energy conversion system shall have appropriate lightning protection to sufficiently protect all connected and adjacent equipment and structures from damage. The lightning protection system shall effectively discharge lightning energy from the structure to the ground through the application of shielding, lightning arresters and deep earth grounding.

O. Abandonment/removal.

1. Any wind energy conversion system which has not been used for a period of 6 months or more shall be declared abandoned. Upon abandonment of the system, the city shall revoke the conditional use and the system shall be removed at the expense of the property owner. The city shall determine that a wind energy conversion system has not been used if the following criteria apply:

- a. The wind energy conversion system has not been operating for a substantial period of time and the owner of the system is unable to provide documentation demonstrating that the system has produced a minimum of 25% of the power output as stated in the system specifications over the past 6 months;

- b. The wind energy conversion system has fallen into obvious disrepair and/or has been condemned by the City of Rapid City.

- c. The wind energy conversion system has become violative of some other local, state or federal law and the owner of the system has not taken appropriate actions to remedy the problem.

2. If deemed appropriate, the city may stipulate through the conditional use that the wind energy conversion system shall be removed at the owner's expense, upon the rezoning of the subject property to a zoning district classification in which wind energy conversion systems are not allowed as either a permitted use or conditional use.

**Box Elder Ordinance #478 Section 7H: Wind Energy Systems**

CITY OF BOX ELDER ORDINANCE #478  
PLANNING AND ZONING REGULATIONS

H. Wind Energy Systems (WES).

Wind energy systems shall meet the following criteria and standards:

1. The maximum height of a WES shall be less than seventy-five feet (75') above the pre-construction level of the grade adjacent to the tower location. This height shall be an exception to the Zoning District's maximum structure height.
2. The minimum setback distance between each wind turbine tower and all surrounding property lines, overhead utility or transmission lines, other wind turbine towers, electrical substations, public roads, and dwelling units shall be equal to no less than one point one (1.1) times the system height (measured from the grade adjacent to the tower pad to the highest system component, including blades).
3. The vertical distance from the adjacent grade to the tip of the wind turbine blade when the blade is at its lowest point must be at least twenty-five feet (25').
4. The owner of a WES shall take such reasonable steps as are necessary to prevent, mitigate, and eliminate shadow flicker (the shadow cast by the rotating blade of the WES) on an occupied building on adjacent property.
5. The owner of a WES shall minimize or mitigate interference with electromagnetic communications, such as radio, telephone, microwave, or television signals caused by the WES.
6. The building permit application for a WES, in addition to the requirements of Article 7, Section 2 of this Ordinance, shall include structure plans prepared by a PE and a certification by a PE that the structure has been designed to withstand the wind, snow, and ice loads typical of this area.
7. All ground- or pad-mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access. If the WES is located in a Flood Hazard Area, said equipment shall be located more than three feet (3') above the Base Flood Elevation at the site.
8. All signs, other than the manufacturer's or installer's identification, appropriate warning signs, or owner identification on any WES structure that is visible from any public road shall be prohibited.
9. All electrical wires associated with a WES, other than wires necessary to connect the wind turbine to its base and to overhead collection lines must be buried underground.
10. A WES 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 feet (8') above adjacent grade.
11. A WES shall not be artificially lighted unless such lighting is required by the Federal Aviation Administration.
12. A WES shall not generate more than sixty dBA of sound, as measured at the closest portion of the nearest inhabited dwelling when the wind speed is less than twenty (20) miles per hour.
13. A WES shall remain painted or finished in the color or finish that was originally applied by the manufacturer unless otherwise stipulated in the CUP.
14. A WES shall comply with all applicable state and local construction and electrical codes and the National Electrical Code.
15. A WES shall not be installed until evidence has been provided to the Planning Coordinator that the appropriate utility company has been informed of the applicant's intent to install an interconnected WES. Off-grid systems shall be exempt from this requirement.
16. A WES shall not be installed until evidence has been provided to the Planning Coordinator that all communication tower operators within two (2) miles of the proposed WES location have been informed of the applicant's intent to install a WES.

CITY OF BOX ELDER ORDINANCE #478  
PLANNING AND ZONING REGULATIONS

17.A WES that is out-of-service for a continuous twelve (12) month period will be deemed to have been abandoned. An abandoned WES shall be deemed a public nuisance.

SECTION 8 – NONCONFORMING USE OF LAND OR STRUCTURES.

- A. Any otherwise lawful use of land or structure existing at the time of adoption of these regulations may be continued, maintained, and repaired except as otherwise provided.
- B. Except as otherwise required by law, a structure or use legally established prior to the adoption date of this Ordinance may be maintained unchanged. In other than criminal proceedings, the owner, occupant, or user shall have the burden to show that the structure, lot, or use was lawfully established.
- C. Where there are existing recorded lots which do not meet minimum lot size requirements and are under separate ownership, including lot area, lot width and lot length, residential buildings may be constructed as long as side yards are not less than five feet (5') wide and the rear yard is not less than fifteen feet (15') deep. Front yard requirements must be met. However, no recorded lot shall be divided into two or more lots unless the resulting lots conform to all size regulations of the Zoning District in which the lot is located.
- D. Any lot or structure, or portion thereof, occupied by a nonconforming use, which is or hereafter becomes vacant and remains unoccupied by a nonconforming use for a period of six (6) months shall not thereafter be occupied, except by a use that conforms to this Ordinance.
- E. The right to operate and maintain any nonconforming use shall terminate whenever the structure or structures in which the nonconforming use is operated and maintained are damaged, destroyed, or become obsolete or substandard beyond the limits hereinafter established for the termination of nonconforming structures.
- F. Except as provided, any nonconforming use shall not be enlarged or extended. A nonconforming structure in which only permitted uses are operated may be enlarged or extended with approved permits if the enlargement or extension can be made in compliance with all of the provisions of this Ordinance established for structures in the Zoning District in which the nonconforming structure is located.
- G. A nonconforming structure damaged in any manner and from any cause whatsoever to the extent of not more than fifty percent (50%) of its replacement cost may be restored, provided restoration is completed within one (1) year of the date of damage.
- H. Maintenance, repairs, and structural alterations may be permitted to be made to nonconforming structures or to a building housing a nonconforming use with approved permits.



**Meade County's Wind Generator Ordinance 32**



# WIND GENERATOR ORDINANCE 32

## ARTICLE 1 PURPOSE

### PURPOSE

The purpose of the Ordinance is to provide for the construction and permitting of small residential, rural and commercial Wind Generator Facilities in the unincorporated areas of Meade County, subject to reasonable conditions that will protect the public health and safety.

## ARTICLE II DEFINITIONS

**“Applicant”** is the person or entity filing an application under this Ordinance.

**“Hub Height”** means the distance measured from the surface of the tower foundation to the height of the Wind Turbine hub, to which the blade is attached.

**“Commercial Wind Generator Facility”** (Wind Farm) means an electric generating facility, placed on 73 acres or more, 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.

**“Engineering Certification”** – For all commercial wind generators or meteorological towers, the manufacturer’s engineer or another qualified engineer shall certify that the turbine, foundation and tower design of the commercial wind generators or meteorological towers is within accepted professional standards, given local soil and climate conditions.

**“Facility Owner”** means the entity or entities having an equity interest in the Wind Generator Facility, including their respective successors and assigns.

**“Meteorological Tower”**: For the purposes of this Wind Energy Conversion System Ordinance, meteorological towers (temporary or permanent) are those towers which are erected primarily to measure wind speed and directions plus other data relevant to siting or proposed WECS. Meteorological towers do not include towers and equipment used by airports, the South Dakota Department of Transportation, National Weather Service or other similar applications to monitor weather conditions. Meteorological Towers, whether temporary or permanent must meet FAA requirements.

**“Non-Participating Landowner”** means any landowner except those on whose property all or a portion of a Wind Generator Facility is located pursuant to an agreement with the Facility Owner or Operator.

**“Operator”** means the entity responsible for the day-to-day operation and maintenance of the Wind Generator Facility.

**“Occupied Building”** means a residence, school, hospital, church, public library or other building used for public gathering that is occupied or in use when the permit application is submitted.

**“Rural Wind Turbines”** small to medium size wind energy systems installed for on-site use on agricultural property for supplying electricity or other uses, not to exceed 120 feet in height.

**“Small Residential Wind Turbine”** small wind energy systems installed to reduce the on-site consumption of utility supplied electricity. Tower height for property sizes between 3+ acres to 9+ acres the tower height shall be limited to 60 ft. and property sizes of greater than 10 acres up to 39 acres shall have a maximum tower height of 80 ft.

**“Small Wind Turbine System”** A wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity of not more than 10 kW and which is intended to primarily reduce on-site consumption of utility power.

**“Turbine Height”** means the distance measured from the surface of the tower foundation to the highest point of the turbine rotor plane.

**“Tower Height”**: The height above grade of the fixed portion of the tower, excluding the wind turbine itself.

**“Wind Turbine”** means a wind Generator conversion system that converts wind Generator into electricity through the use of a wind turbine generator, and includes the nacelle, rotor, tower, and pad transformer, if any.

**“WECS” - Wind Energy Conversion System:** An electrical generating facility comprised of one or more wind turbines and accessory facilities, including but not limited to: power lines, transformers, substations and meteorological towers that operates by converting the kinetic energy of wind into electrical energy. The energy may be used on-site or distributed into the electrical grid. The term WECS is synonymous for wind turbine or wind generator.

### **ARTICLE III APPLICABILITY**

A. This Ordinance applies to all Wind Generators, Wind Generator Facilities and temporary or permanent Meteorological Towers proposed to be constructed or placed after the effective date of the Ordinance, and also applies to stand-alone Wind Turbines constructed primarily for residential or farm use.

B. Wind Generators and Wind Generator Facilities including Meteorological Towers constructed or placed prior to the effective date of this Ordinance shall not be required to

meet the requirements of this Ordinance; Provided that any physical modification to an existing Wind Generator Facility that materially alters the size, type and number of Wind Turbines or other equipment shall require a permit under this Ordinance.

## **SECTION 1 PERMITTED USE**

A Wind Generator Facility or Meteorological Tower shall be considered a Permitted Use if approved by the Meade County Governing Board with proper ~~permits~~ and documentation required by this Ordinance.

### 1. PERMIT REQUIREMENT

A. No Wind Generator Facility, an addition of a Wind Turbine to an existing Wind Generator Facility or Meteorological Tower shall be constructed or located within the unincorporated boundaries of Meade County unless a permit has been issued to the Facility Owner or Operator approving construction of the facility under this Ordinance.

B. The permit application or amended permit application shall be accompanied with a fee in the amount of \$ ~~85.00~~, \$125.00, for all Commercial Wind Generator Facilities. Rural (non-commercial) Wind Turbines and Small Residential Wind Turbines are exempt from permit fees; however, all wind generators require a building permit for the entire structure and equipment, not to exceed \$1,000 per unit.

C. Any physical modification to an existing and permitted Commercial Wind Generator Facility that materially alters the size, type and number of Wind Turbines or other equipment shall require a permit modification under this Ordinance. Like-kind replacements shall not require a permit modification.

D. Commercial Wind Generator Facilities and Meteorological Towers shall only be placed on agricultural property of 73 acres or more.

### 2. PERMIT APPLICATION

A. The permit application shall demonstrate that the proposed **Commercial Wind Generator Facility, (WCES) or Meteorological Tower**, will comply with this Ordinance.

B. The application shall contain the following:

1. A narrative describing the proposed Commercial Wind Generator Facility or WECS, including an overview of the project; the project location; the approximate generating capacity of the Commercial Wind Generator 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. Meteorological Tower Application must include a

decommissioning time table for data collection. Temporary Meteorological Towers will be permitted for a maximum duration of 5 years.

2. 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 Commercial Wind Generator Facility or a Meteorological Tower.

3. Identification of the properties on which the proposed Commercial Wind Generator Facility or Meteorological Tower will be located, and the properties adjacent to and within 1,000 foot radius where the Commercial Wind Generator Facility will be located.

4. A site plan showing the planned location of each Wind Turbine (or Meteorological Tower), property lines, setback lines, access road and turnout locations, substation(s), electrical cabling from the Commercial Wind Generator Facility to the substation(s), ancillary equipment, buildings, and structures, including meteorological towers, associated transmission lines, and layout of all structures within the geographical boundaries of any applicable setback.

5. Documents related to decommissioning of all equipment.

6. Other relevant studies, reports, certifications and approvals as may be reasonably requested by Meade County to ensure compliance with this Ordinance.

7. Provide a copy of the agreement between the Facility Owner and the affected local power company, (if applicable).

C. Within (30) days after receipt of a permit application, Meade County Director of Equalization & Planning or his or her designee will determine whether the application is complete and advise the applicant accordingly.

D. The applicant must appear before the Governing Board at the regularly scheduled meeting. The applicant shall participate in the hearings and be afforded an opportunity to present the project to the public and the Meade County Governing Board of Commissioners, and answer questions about the project. The public shall be afforded an opportunity to ask questions and provide comment on the proposed project.

1. Neighbors within a 1000 feet of the property of the proposed wind generator or Meteorological Tower must be Notified by certified mail at least 14 calendar days in advance of any Meade County Governing Board of Commissioners Meeting along with a return receipt requested, of the proposed construction which notice shall include a map of the location of the proposed construction and also:

i.) Given the telephone number and address of the facility owner or operator; and

- ii) Informed of his or her right to participate in the Meade County Planning Commission's proceedings and the Meade County Governing Board of Commissioners meeting on the application.
2. A list of the property owners who received the notice, together with copies of the certified receipts for the notice sent to the listed property owners.
- E. Within (30) days after the close of hearing or at the hearing of the Governing Board, Meade County will make a decision whether to issue or deny the permit application.
- F. Throughout the permit process, the Applicant shall promptly notify Meade County of any changes to the information contained in the permit application.
- G. Changes to the pending application that do not materially alter the initial site plan may be adopted without a renewed public hearing.

## **SECTION 2 DESIGN AND INSTALLATION OF COMMERCIAL WIND GENERATOR FACILITIES.**

### A. Design Safety Certification

The design of the Wind Generator Facility shall conform to applicable industry standards, including those of the American National Standards Institute. The Applicant shall submit an Engineering Certification for all commercial wind generators or meteorological towers, the manufacturer's engineer or another qualified engineer shall certify that the turbine, foundation and tower design of the commercial wind generators or meteorological tower is within accepted professional standards, given local soil and climate conditions. ~~certificates of design compliance obtained by the equipment manufacturers from Underwriters Laboratories, Det Norske Veritas, Germanischer Lloyd Wind Energies, or other similar certifying organizations.~~

### B. ~~Uniform~~ 2006 International Building Code

To the extent applicable, the Wind Generator Facility shall comply with the ~~1997 Uniform~~ 2006 International Building Construction Code.

### C. Controls and Brakes

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

### D. Electrical Components

All electrical components of a Commercial Wind Generator Facility, Rural Wind Generator and Small Residential Wind Turbines shall conform to the National Electric

Code and to relevant and applicable local, state and national codes, including the National Electric Code, and relevant and applicable international standards; along with the standards set forth by the affected local power company.

E. Visual Appearance; Power Lines

1. Wind Turbines shall be a non-obtrusive color such as white, off-white or gray.
2. Wind Generator Facilities shall not be artificially lighted, except to the extent required by the Federal Aviation Administration or other applicable authority that regulates air safety, and/or the Meade County Governing Board of Commissioners.
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 feet from the ground.
3. Climb Prevention/Locks
  - a. Wind Turbines and meteorological towers shall not be climbable up to fifteen (15) feet above ground surface.
  - b. All access doors to Wind Turbines and/or meteorological towers and electrical equipment shall be locked or fenced, as appropriate, to prevent entry by non-authorized persons.

G. Decommissioning

Any and all WECS (Wind Generator Systems) or meteorological towers which are not used for twelve successive months shall be deemed abandoned and shall be dismantled, including excavating and removing concrete footings to a depth of 4 feet and all materials must be removed from the property at the expense of the facility owner or property owner.” Facility owners of Commercial Wind Generator Facilities must provide a copy of financial surety and or an insurance certificate which will cover the decommissioning of each WECS at the facility or wind farm, to the Meade County Department of Equalization & Planning. For every Wind Generator System (WECS) and any Meteorological Tower (including Temporary Meteorological Tower) that is

decommissioned or removed within Meade County, the facility or tower operator and/or owner must notify in writing to the Meade County Director of Equalization and Planning their intent to decommission or remove the System or Tower, within 14 calendar days of the date the equipment and/or tower is to be decommissioned or removed by certified mail and must include a copy of the permit along with the written notification.

### **SECTION 3 SETBACKS FOR COMMERCIAL WIND GENERATOR FACILITIES AND METEOROLOGICAL TOWERS.**

#### **A. Occupied Buildings**

1. Wind Turbines shall be set back from the nearest Occupied Building a distance not less than 1.1 times the Turbine Height. 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 or meteorological towers 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, (or in the case of a meteorological tower, the entire 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 normal setback requirements per Ordinance No. 20 or 1.1 times the Turbine Height or the total height of the meteorological tower, whichever is greater. The setback distance shall be measured to the center of the Wind Turbine or the meteorological tower 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 or for meteorological towers, the total height of the tower, as measured from the right-of-way line of the nearest public road to the center of the Wind Turbine or meteorological tower base or the minimum setbacks stated in Ordinance No. 20, whatever is greater.

D. Wind Generator Facilities / Wind Farms and meteorological towers must comply with applicable FAA regulations, including any necessary approvals for installations close to commercial or private airports including Ellsworth Air Force Base.

### **SECTION 4 WAIVER OF SETBACKS FOR COMMERCIAL WIND GENERATOR FACILITIES OR COMMERCIAL WECS.**

A. Agricultural Property owners may waive the setback requirements in 9(A)(2) (Occupied Buildings on Non-participating Landowner's property) by signing a waiver

that sets forth the applicable setback provision(s) and the proposed changes if placed on agricultural property of 73 acres or more.

B. The written waiver shall notify affected property owner(s) of the setback required by this Ordinance, describe how the proposed Commercial Wind Generator Facility or a meteorological tower is not in compliance, and state that consent is granted for the Commercial Wind Generator Facility or meteorological towers to not be setback as required by this Ordinance.

C. Upon application, Meade County may waive the setback requirement for public roads for good cause.

#### **SECTION 5 USE OF PUBLIC ROADS FOR COMMERCIAL WIND GENERATOR FACILITIES.**

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

B. The Meade County Highway Superintendent or a qualified third party engineer hired by Meade County shall document road conditions prior to construction. The Meade County Highway Superintendent or a third party engineer shall document road conditions again thirty (30) days after construction is complete or as weather permits.

C. Meade County Governing Board ~~may~~ will require that the road(s) to be used, be bonded by the applicant.

D. Any road damage caused by the applicant or its contractors shall be promptly repaired at the applicant's expense and repairs must be approved by Meade County Highway Superintendent.

E. The Applicant shall demonstrate that it has appropriate financial assurance to ensure the prompt repair of damaged roads either through a bond or a irrevocable letter of credit.

#### **SECTION 6 LOCAL EMERGENCY SERVICES FOR COMMERCIAL WIND GENERATOR FACILITIES.**

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

B. Upon request, the Applicant shall cooperate with Meade County Emergency Management and other emergency services to develop and coordinate implementation of an emergency response plan for the Commercial Wind Generator Facility or meteorological tower.



## **SECTION 13 REGULATIONS FOR RURAL (NON-COMMERCIAL) AND SMALL RESIDENTIAL WIND TURBINES**

**A. Purpose:** It is the purpose of this regulation to promote the safe, effective and efficient use of small wind energy systems installed to reduce the on-site consumption of utility supplied electricity.

**B. Permitted Use:** Small wind energy systems (WECS) shall be a permitted use on Agricultural land and in Medium and Rural Density subdivision classifications (per Ordinance No. 20) where structures are allowed; subject to certain requirements as set forth below:

- 1 Tower Height: For property sizes between 3+ acres to 9+ acres the tower height shall be limited to 60 ft. and property sizes of greater than 10 acres up to 39 acres shall have a maximum tower height of 80 ft. and property from 40 acres or more for Rural Wind Generators, the maximum tower height is 120 ft.
- 2 Set-back: No part of the wind system structure, including guy wire anchors, may extend closer than 1.1 times the hub height in feet to the property boundaries or structures of the installation site.
- 3 Noise: Small wind energy systems shall not exceed 55 dBA for lot sizes of 3+ to 9+ acres, as measured at the closest neighboring inhabited dwelling. The level, however, may be exceeded during short-term events such as utility outages and/or severe wind storms.
- 4 Approved Wind Turbines: Small wind turbines and rural wind generators must have been approved under the Emerging Technologies program recognized by the American Wind Energy Association.
- 5 Compliance with 1997 Uniform-2006 International Building Code: Building permit applications for small and rural wind energy systems shall be accompanied by standard drawings of the wind turbine structure, including the tower, base, and footings.
- 6 Compliance with FAA Regulations: Small and rural wind energy systems must comply with applicable FAA regulations, including any necessary approvals for installations close to airports.
- 7 Compliance with National Electric Code: Building permit applications for small and rural wind energy systems shall meet the National Electrical Code and the local power companies requirements.
- 8 Utility Notification: No small or rural wind energy system shall be installed until evidence has been given that the utility company has been informed of the customer's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.
- 9 Evidence: that the proposed height of the wind turbine tower does not exceed the height recommended by the manufacturer or distributor of the system.

## **SECTION 14 REMEDIES**

A. It shall be unlawful for any person, firm, or corporation to violate or fail to comply with or take any action which is contrary to the terms of the ordinance, or any permit issued under the ordinance, or cause another to violate or fail to comply, or to take any action which is contrary to the terms of the ordinance or any permit issued under the ordinance.

B. If Meade County determines that a violation of the Ordinance or the permit has occurred; Meade County shall provide written notice to any person, firm, or corporation alleged to be in violation of this Ordinance or permit. If the alleged violation does not pose an immediate threat to public health or safety, Meade County and the parties shall engage in good faith negotiations to resolve the alleged violation. Such negotiations shall be conducted within thirty (30) days of the notice of violation.

C. If after thirty (30) days from the date of the notice of violation Meade County determines, in its discretion, that the parties have not resolved the alleged violation; Meade County may institute civil enforcement proceedings or any other remedy at law to ensure compliance with the Ordinance or permit.

## **ARTICLE IV: VARIANCES**

### **Section 1: VARIANCE PROCEDURE**

The Meade County Board of Commissioners shall hear and decide appeals and requests for variances from the terms of this ordinance. The board shall base its determination on technical justifications, and has the right to attach such conditions to variances as it deems necessary to further the purposes and objectives of this ordinance.

#### **A. Conditions**

In granting variances, modifications, and approvals for the wind generator application, the Governing Board of Commissioners may require such conditions as will, in its judgment, secure substantially the objectives or the standards or requirements so varied, modified, or approved. In granting any variance, the Governing Board of Commissioners shall prescribe conditions that it deems necessary to, or desirable for the public interest. These conditions may include, without being limited to personal, surety, performance, or maintenance bonds, affidavits, covenants, or other legal instruments.

In making its findings, as required herein, the Governing Board of Commissioners shall take into account the nature of the proposed use of

land and the existing use of land in the vicinity, the number of persons to reside or work near the proposed wind generator facility site and the probable effect of the proposed wind generator facility upon living conditions in the vicinity.

That the variance is necessary for the preservation and enjoyment of a substantial property right of the petitioner;

That there are special circumstances or conditions affecting said property such that the strict application of the provisions of this Ordinance would deprive the applicant of the reasonable use of his/her land

#### B. Application Required

Applications for any such variance shall be submitted in writing by the Facility Owner and/or property owner at the time when the wind generator facility application is filed for consideration by the Governing Board of Commissioners stating fully and clearly all facts relied upon by the petitioner and shall be supplemented with maps, plans or other additional data which may aid the Governing Board of Commissioners in the analysis of the proposed wind generator project. The plans for the proposed wind generator or meteorological tower shall include such covenants, restrictions other legal provisions necessary to guarantee the full achievement of the proposed plan.

Applications for variance shall be considered with the wind generator facility application, and the Meade County Governing Board of Commissioners will render its decision at the hearing or no later than thirty (30) days after the hearing at which the preliminary package and request for a variance was submitted. All variances must be approved by the Governing Board.

#### C. Requirements for granting Variance

The Meade County Governing Board shall have the authority to give a Variance, the person claiming the Variance has the burden of showing:

That the granting of the Variance will not be contrary to the public interest;

That the literal enforcement of the Ordinance will result in unnecessary hardship;

That by granting the Variance contrary to the provisions of the Ordinance the spirit of the ordinance will be observed; and

That by granting the Variance, justice will be done.

D. Report to the County Board

For each application for a Variance, the Facility Owner and/or property owner will coordinate with the Administrative Assistant to the Governing Board to set a date and time for a public hearing regarding a variance request.

**Section 2: PENALTIES FOR VIOLATION OF ORDINANCE NO. 32**

A: Violation of this ordinance shall be a Class 2 misdemeanor, and each day's violation shall constitute a separate offense. In addition to the criminal penalty set forth above, the Governing Board of County Commission may immediately suspend all of the permits or the construction activities of a wind generator facility which does not meet the requirements of the Meade County Wind Generator Ordinance. If a suspension occurs, the reasons for such suspension shall be clearly stated by the Governing Board. The suspension on wind generator facility permits or construction activities shall be lifted by the Governing Board upon satisfactory approved that the reasons which led to the suspension have been remedied.

**ARTICLE V: SEVERABILITY AND SEPARABILITY**

Should any Article, Section, Sub-section or Provision of the Wind Generator Ordinance be declared by a court of competent jurisdiction to be invalid or unconstitutional, such decision shall not affect the validity or constitutionality of the Wind Generator Ordinance as a whole or any part thereof other than the part so declared to be invalid or unconstitutional.

## ARTICLE VI: EFFECTIVE DATE

Wind Generator Ordinance No. 32 shall take effect and be in force from and after 20 days from the date of completed publication. Adopted this \_\_\_\_ day of \_\_\_\_\_, 2008.

Dated at Sturgis, South Dakota, this \_\_\_\_ day of \_\_\_\_\_, 2008.

Chairman Bob Mallow \_\_\_\_\_  
Meade County Commissioner

Attested: \_\_\_\_\_

Lisa Schieffer, Meade County Auditor

**First Reading: August 2nd, 2007**  
**Second Reading: October 3<sup>rd</sup>, 2007**  
**Adopted: October 3<sup>rd</sup>, 2007**  
**Published:**  
**Effective date:**

**REVISED**  
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