

**TITLE 35
WIND ENERGY SYSTEMS**

(Title 35 enacted effective July 21, 2010, Ordinance 2010-06)

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**CHAPTER 35.01
GENERAL PROVISIONS**

SECTIONS:

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35.01.01: SCOPE AND PURPOSE

The purpose of this Title is to ensure that the placement, construction and permitting of any Wind Energy System (WES) facility that is within the jurisdictional boundaries of the City of Sturgis, is consistent with the City's land use policies and is subject to reasonable conditions that will protect the public health and safety.

35.01.02: DEFINITIONS

APPLICANT: Any person filing an application under this Title.

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.

COMMERCIAL WIND ENERGY SYSTEM FACILITY (CWES) (WIND FARM): An electric generating facility, placed on 80 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: 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 sitting 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: 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: The entity responsible for the day-to-day operation and maintenance of the Wind Generator Facility.

OCCUPIED BUILDING: 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 zoned property for supplying electricity or other uses, not to exceed 120 feet in height.

SMALL RESIDENTIAL WIND TURBINE/ SMALL WIND ENERGY SYSTEM (SWES): Small wind energy systems installed to reduce the on-site consumption of utility supplied electricity. Tower height for property sizes between 3+ acres to 10 acres the tower height shall be limited to 60 ft. and property sizes of greater than 10 acres up to 40 acres shall have a maximum tower height of 80 ft.

TURBINE: The parts of the WES including the blades, generator and tail.

TURBINE HEIGHT: The distance measured from the surface (grade) 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: 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.

35.01.03: APPLICATION

This Title 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 Title, and also applies to stand-alone Wind Turbines constructed primarily for residential or rural use.

**CHAPTER 35.02
PERMITTED USE****SECTIONS:**

35.02.01: Permitted Use

35.02.01: PERMITTED USE

A Wind Generator Facility or Meteorological Tower shall be considered a Permitted Use if approved by the City of Sturgis Governing Board with proper documentation required by this Title.

**CHAPTER 35.03
PERMITS****SECTIONS:**

35.03.01: Permit Requirement

35.03.02: Permit Application

35.03.01: 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 Jurisdictional Boundaries of the City of Sturgis, 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 \$250.00, for all Commercial Wind Generator Facilities. 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 \$1,500.00 per unit.
- C. Any physical modification to an existing and permitted Wind Energy System or Wind Energy System Facility as defined in this ordinance 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 Energy System Facilities and Meteorological Towers shall only be placed on agricultural zoned property of 40 acres or more.

35.03.02: PERMIT APPLICATION

- A. The permit application shall demonstrate that the proposed Commercial Wind Energy System Facility, (CWES) or Meteorological Tower, will comply with this Title.
- B. The application shall contain the following:
1. A narrative describing the proposed Commercial Wind Energy System Facility or Wind Energy Conversion System, including an overview of the project; the project location; the approximate generating capacity of the Commercial Wind Energy System 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 Energy System Facility or a Meteorological Tower.
 3. Identification of the properties on which the proposed Commercial Wind Energy System Facility or Meteorological Tower will be located, and the properties adjacent to and within 1,000 foot radius where the Commercial Wind Energy System 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 Energy System 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 the City of Sturgis 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, Director of Community Development or his or her designee will determine whether the application is complete and advise the applicant accordingly.
- D. The applicant must appear before the City of Sturgis Common Council 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 City of Sturgis Common Council, 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 City of Sturgis Common Council 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 City of Sturgis Common Council proceedings.
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 City of Sturgis Common Council will make a decision whether to issue or deny the permit application.
- F. Throughout the permit process, the Applicant shall promptly notify City of Sturgis 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.

CHAPTER 35.04

DESIGN AND INSTALLATION OF COMMERCIAL WIND GENERATOR FACILITIES

SECTIONS:

- 35.04.01: Design Safety Certification
- 35.04.02: Construction Code
- 35.04.03: Controls and Brakes
- 35.04.04: Electrical Components
- 35.04.05: Visual Appearance; Power Lines
- 35.04.06: Warnings
- 35.04.07: Climb Prevention/Locks
- 35.04.08: Decommissioning

35.04.01: DESIGN SAFETY CERTIFICATION

The design of the Commercial Wind Energy System 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.

35.04.02: CONSTRUCTION CODE

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

35.04.03: 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.

35.04.04: ELECTRICAL COMPONENTS

All electrical components of a Commercial Wind Energy System 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.

35.04.05: VISUAL APPEARANCE; POWER LINES

Wind Turbines shall be a non-obtrusive color such as white, off-white or gray.

Commercial Wind Energy System 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 City of Sturgis Common Council.

Wind Turbines shall not display advertising, except for reasonable identification of the turbine manufacturer, Facility Owner and Operator.

On-site transmission and power lines between Wind Turbines shall, to the maximum extent practicable, be placed underground.

35.04.06: WARNINGS

A clearly visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.

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.

35.04.07: CLIMB PREVENTION/LOCKS

Wind Turbines and meteorological towers shall not be climbable up to fifteen (15) feet above ground surface.

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.

35.04.08: DECOMMISSIONING

Any and all WES (Wind Energy 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 Energy System 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 City of Sturgis Department of Community Development. For every Wind Energy System Facility (WECS) and any Meteorological Tower (including Temporary Meteorological Tower) that is decommissioned or removed within the jurisdictional boundaries of the City of Sturgis, the facility or tower operator and/or owner must notify in writing to the City of Sturgis Director of Community Development 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.

CHAPTER 35.05 SETBACKS FOR COMMERCIAL WIND ENERGY SYSTEM FACILITIES AND METEOROLOGICAL TOWERS

SECTIONS:

- 35.05.01: Occupied Buildings
- 35.05.02: Property Lines
- 35.05.03: Public Roads
- 35.05.04: Applicable FAA Regulations

35.05.01: OCCUPIED BUILDINGS

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.

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.

35.05.02: 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 Title 18 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.

35.05.03: 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 Title 18, whichever is greater.

35.05.04: APPLICABLE FAA REGULATIONS

Wind Energy System 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 the City of Sturgis.

**CHAPTER 35.06
USE OF PUBLIC ROADS FOR COMMERCIAL
WIND GENERATOR FACILITIES**

SECTIONS:

35.06.01: Use of Public Roads

35.06.01: USE OF PUBLIC ROADS

The Applicant shall identify all state and local public roads to be used within the jurisdictional boundaries of the City of Sturgis to transport equipment and parts for construction, operation or maintenance of the Commercial Wind Energy System Facility.

The City of Sturgis Highway Authority or a qualified third party engineer authorized by the City of Sturgis shall document road conditions prior to construction. The same parties shall document road conditions again thirty (30) days after construction is complete or as weather permits.

The City of Sturgis will require that the road(s) to be used, be bonded by the applicant.

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 the City of Sturgis Highway Authority.

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.

**CHAPTER 35.07
LOCAL EMERGENCY SERVICES FOR COMMERCIAL
WIND GENERATOR FACILITIES**

SECTIONS:

35.07.01: Local Emergency Services

35.07.01: LOCAL EMERGENCY SERVICES

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

Upon request, the Applicant shall cooperate with the City of Sturgis and other emergency services to develop and coordinate implementation of an emergency response plan for the Commercial Energy System Facility or meteorological tower.

CHAPTER 35.08
REGULATIONS FOR RURAL (NON-COMMERCIAL)
AND SMALL RESIDENTIAL WIND TURBINES

SECTIONS:

35.08.01: Purpose

35.08.02: Permitted Use

35.08.01: 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.

35.08.02: PERMITTED USE

Small wind energy systems shall be a permitted use on any lot consisting of at least three (3) acres zoned Agricultural, Commercial or Highway Service per Title 18 and where structures are allowed; subject to certain requirements as set forth below:

1. Tower Height: For property sizes between 3+ acres to 10 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 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 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.
7. 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.

8. Evidence: that the proposed height of the wind turbine tower does not exceed the height recommended by the manufacturer or distributor of the system.

CHAPTER 35.09 REMEDIES

SECTIONS:

35.09.01: Remedies

35.09.01: REMEDIES

No person shall violate or fail to comply with or take any action which is contrary to the terms of the ordinance, or any permit issued under this Title, or cause another to violate or fail to comply, or to take any action which is contrary to the terms of this Title or any permit issued under the Title.

If the City of Sturgis determines that a violation of this Title or the permit has occurred; The City of Sturgis shall provide written notice to any person alleged to be in violation of this Title or permit. If the alleged violation does not pose an immediate threat to public health or safety, the City of Sturgis 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.

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

CHAPTER 35.10 VARIANCES

SECTIONS:

35.10.01: Variance Procedure

35.10.01: VARIANCE PROCEDURE

The City of Sturgis Common Council shall hear and decide appeals and requests for variances from the terms of this ordinance. The Council 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 Title.

A. Conditions

In granting variances, modifications, and approvals for the wind generator application, the City of Sturgis Common Council 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 City of Sturgis Common Council 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 City of Sturgis Common Council 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 City of Sturgis Common Council 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 City of Sturgis Common Council 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 City of Sturgis Common Council 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 City of Sturgis Common Council.

C. Requirements for granting Variance

The City of Sturgis Common Council 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 City of Sturgis Common Council

For each application for a Variance, the Facility Owner and/or property owner will coordinate with the Director of Community Development and City of Sturgis Common Council to set a date and time for a public hearing regarding a variance request.

CHAPTER 35.11 PENALTIES FOR VIOLATION OF ORDINANCE NO. 35

SECTIONS:

35.11.01: Penalties for Violation of Ordinance No. 35

35.11.01: PENALTIES FOR VIOLATION OF ORDINANCE NO. 35

Violation of this Title shall be a Class 2 misdemeanor, and each day's violation shall constitute a separate offense. In addition to the penalty set forth above, the City of Sturgis Common Council may immediately suspend all of the permits or the construction activities of a wind generator facility which does not meet the requirements of the City of Sturgis Title 35: Wind Generator Ordinance. If a suspension occurs, the reasons for such suspension shall be clearly stated by the City of Sturgis Common Council. The suspension on wind generator facility permits or construction activities shall be lifted by the City of Sturgis Common Council upon satisfactory proof that the reasons which led to the suspension have been remedied.

**CHAPTER 35.12
SEVERABILITY AND SEPARABILITY**

SECTIONS:

35.12.01: Severability and Separability

35.12.01: SEVERABILITY AND SEPARABILITY

Should any Article, Section, Sub-section or Provision of the Wind Energy System 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 Energy System Ordinance as a whole or any part thereof other than the part so declared to be invalid or unconstitutional.

(Title 35 enacted effective July 21, 2010, Ordinance 2010-06)