

CHAPTER 23

REGULATE WIND ENERGY SYSTEMS

		Page
23.01	Statutory Authorization	2
23.02	Purpose	2
23.03	Definitions	2
23.04	Licensing	3
23.05	License Application Procedure	4
23.06	Performance Standards for Licensing	7
23.07	Insurance and Indemnification	11
23.08	Repair and Replacement	12
23.09	Amendment or Revocation of License	12
23.10	License Expiration	13
23.11	Abandonment	14
23.12	Severability	14
23.13	Penalties	14

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23.01 STATUTORY AUTHORIZATION. This Chapter is enacted pursuant to '66.0401 of the

Wisconsin Statutes.

23.02 PURPOSE. The purpose of this Chapter is to provide a regulatory scheme for the construction and operation of Wind Energy Facilities in the City of Chilton, whose primary purpose is to supply electricity to off-site customer(s), subject to reasonable restrictions that will preserve the public health and safety or that do not significantly increase the cost of the system or significantly decrease its efficiency. In this regard, the City adopts and incorporates by reference a report issued by the National Research Council entitled *Environmental Impacts of Wind-Energy Projects*, May 2007 ("2007 NRC Report").

23.03 DEFINITIONS.

Applicant: The Person that seeks to secure a license under this Chapter.

City: The City of Chilton.

Council: The Common Council of the City of Chilton.

Decommissioning: The process of use termination and removal of all or part of a Wind Energy System by the Licensee or assigns of a Wind Energy Facility.

Good Utility Practice: Good Utility Practice means any of the practices, methods and acts with respect to the safe operation of a Wind Energy Facility engaged in or approved by a significant portion of the electric utility industry and, in particular, those portions of the industry with experience in the construction, operation and maintenance of Wind Energy Systems during the relevant time period; or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods or acts generally accepted in the region. *Karst Feature*: An area of surficial geologic feature subject to bedrock dissolution so that it is likely to provide a conduit to groundwater, and may include areas with soils less than 60 inches thick over bedrock, caves, enlarged fractures, mine features, exposed bedrock surfaces, sinkholes, springs, seeps, swallets, and depressional areas with no surface drainage.

Landowner: The Person who owns the property on which a Wind Energy System is located.

Licensee: The Applicant and/or successor who has been granted a license under this

Chapter to develop, operate or own a Wind Energy System.

Person: An individual, corporation, limited liability company, partnership or association, or other legal entity.

Plan Commission: The City of Chilton Plan Commission.

Shadow Flicker: The on and off flickering effect of a shadow caused when the sun passes behind the rotor or the blades of a Wind Energy System.

Stray Voltage: Means neutral-to-earth voltage measured from the electrical system neutral and/or any structure bonded to this neutral to earth that adversely affects humans or animals.

Total Height: When referring to a Wind Energy System, the distance measured from ground level to the blade extended at its highest point.

Tower: The monopole, freestanding, or guyed structure that supports a wind generator.

Wind Energy Facility: One or more Wind Energy Systems under common ownership or operating control, and includes substations, cables/wires and other buildings accessory to such facility, whose main purpose is to supply electricity to off-site customer(s).

Wind Energy Siting Permit: A construction and operating permit granted by the Council in accordance with the provisions of this Chapter and Wis. Stats. '66.0401 Or any successor statutes.

Wind Energy System: A wind energy conversion system that converts the energy in the wind into electricity through the use of a wind generator, and includes the Tower, blade, foundation, controller or inverter, and utility interface equipment.

23.04 LICENSING.

- (1) License Required. From and after the effective date of this Chapter, no Wind Energy System shall be operated or maintained in the City without first obtaining a license to operate issued by the City.
- (2) Effect of Other Licenses. The fact that a Person possesses any other valid license or permit required by law, does not exempt that Person from the requirement of obtaining a Wind Energy System license under this Chapter.
- (3) Non-Assignability of Licenses. The license is not assignable or transferable to any other Person, without the express prior written consent of the City, such

consent not to be unreasonably withheld; provided, however, the Licensee may assign the license once to a new entity, upon notice to the City, if the Licensee submits an affidavit demonstrating the following:

- (a) The new entity is wholly owned by the Licensee.
- (b) The new entity is properly formed and authorized to do business in Wisconsin.
- (c) The written assignment requires the new entity to assume all of the Licensee's rights, duties and obligations under the license including but not limited to the letter of credit requirements and the certificate of insurance requirements.

23.05 LICENSE APPLICATION PROCEDURE FOR WIND ENERGY SYSTEMS.

- (1) Any Person desiring to secure a Wind Energy System license shall file an application with the City.
- (2) The application shall be on a form provided by the City.
- (3) The following information shall be required of each Applicant, and must be provided under oath or affirmation:
 - (a) Name, address, and phone number.
 - (b) If the Applicant is a corporation, partnership, limited liability company or limited liability partnership, the application shall include the name of the business entity; the date of incorporation, registration or organization; the state in which the entity was incorporated, registered or organized; the name and address and home numbers of the registered agent where applicable; the names and addresses of all officers and directors; operating or managing partners or general partners; managing members or managers, whichever is applicable for the particular form of business entity.
 - (c) Name and address of any other current or past Wind Energy System operated by the Applicant whether in this state or any other state or district within the United States.
 - (d) Name, address and phone number of an individual who is responsible for the day-to-day operation of the facility and who will be the contact Person for the City.

- (e) A site plan of the Wind Energy Facility, including total acreage occupied by the facility. The application shall also be accompanied by a detailed map of the area showing parcel boundaries, individual Wind Energy System locations and accessory structures such as transmission lines and substations. Said map should include the location of:
- (i) All public roads, including future proposed public roads shown on the City's official map.
 - (ii) Existing buildings and structures within a one-half mile radius, including residences, schools, hospitals, churches, businesses and public libraries.
 - (iii) Karst Features, including sink holes and visible cracks, in the ground or rock surface on the proposed site. (Said Karst information must be provided by a professional geologist, licensed professional engineer, or the Plan Commission's designee.)
 - (iv) All property lines.
 - (v) All communication and electrical lines.
 - (vi) Location of microwave signal paths within a one-half mile radius.

The City reserves the right to require the preparation of a pre-construction noise survey for each proposed Wind Energy System location showing ambient background noise levels over a reasonable period of time prior to final layout and construction, and an environmental study evaluating the impact the project may have on groundwater in the vicinity of the proposed Wind Energy System location.

- (f) A statement from the Applicant that all Wind Energy System(s) will be installed in compliance with manufacturer's specifications, and a copy of those manufacturer's specifications.
- (g) A copy of the lease with the Landowner if the Applicant does not own the land for the proposed Wind Energy Facility, and a statement from the Landowner of the leased site that he/she will abide by all applicable terms and conditions of the Wind Energy Siting Permit.
- (h) A statement indicating what hazardous materials will be used and stored on the site, and how those materials will be stored.
- (i) A statement indicating how the Wind Energy Facility will be lit, if applicable.
- (j) A Decommissioning plan which shall describe how the site shall be

restored when the Wind Energy Facility is no longer in operation in accordance with Section 11.1. The plan shall be updated and resubmitted every 10 years and shall include:

- (i) The anticipated life of the Wind Energy Facility.
 - (ii) The estimated Decommissioning costs in current dollars.
 - (iii) How said estimate was determined.
 - (iv) The method of ensuring that the funds will be available for Decommissioning and restoration.
- (k) A Shadow Flicker model to include a description of the zones where Shadow Flicker will likely be present within the project boundary and a one-half mile radius beyond the project boundary, the expected durations of the Shadow Flicker at these locations, and the calculation of the total number of hours per year of Shadow Flicker at all locations.
- (l) Certificates of insurance complying with Section 7.1.
- (m) The City shall require an irrevocable letter of credit, bond, cash escrow, and/or personal guarantee, held in trust in favor of the City to recover the costs associated with removal of a terminated Wind Energy Facility ("Security"). The amount shall be negotiated by the City prior to permit approval and shall remain in effect until released by the City. The Council will determine which method will be allowed.
- (n) The City may require additional conditions and information to ensure safety and proper land use fit to the surrounding area.
- (4) Each application shall be signed by the Applicant.
- (5) Each application shall be accompanied by payment of a non-refundable application fee to be determined from time to time by separate resolution of the City. Filing of the application does not occur until this fee has been paid.
- (6) No action will be taken on an application until the completed application and all supporting documentation is received by the City.
- (7) The Council may, but shall not be obligated, to refer the application to the Plan Commission for review and recommendation. The Plan Commission or the Council may refer the application to a qualified consulting engineer for further review.

- (8) The Council may, but shall not be obligated to, refer the application to a public hearing for purposes of receiving public comment.
- (9) Following review, the Council shall either grant the license or deny the application after reviewing the application for compliance with the licensing standards found in this Chapter and under state law. A license may be granted with conditions.
- (10) If the license is granted by the Council, then the City shall issue the license on the next business day. The Council for good cause may revoke a license at any time, after first providing the Applicant with a hearing. If substantial construction has not begun within one year of the issuance of the license, the license shall expire and the Applicant shall be required to re-apply for a new license. The preceding one-year deadline may be extended if the Applicant is able to demonstrate that the delay in construction is caused by circumstances beyond the Applicant's reasonable control. However, the Applicant shall not be excused from the preceding deadline if the delay arises from the Applicant's negligence or failure to reasonably anticipate ascertainable events or its failure to utilize commercially reasonable alternate solutions.
- (11) If the Council denies the application for a license, the City shall immediately notify the Applicant in writing of the reasons for denial. Such notice shall be sent to the Applicant within five days of the decision by certified mail, return receipt requested.
- (12) Any Applicant or other person aggrieved by such a decision of the Council, including any resident or owner of property in the City, shall be entitled to immediately appeal the Council's decision in circuit court. Such an appeal must be made within 30 days of the date of the written decision by the Council. The City explicitly elects not to be governed by Chapter 68 of the Wisconsin Statutes, and to provide the review procedures described in this Section.

23.06 PERFORMANCE STANDARDS FOR LICENSING.

- (1) Safety.
 - (a) All wiring between Wind Energy System(s) and the Wind Energy System substation shall be underground.
 - (b) All Wind Energy System(s) shall be reasonably protected from unauthorized access up to 15 feet above ground level and must be located inside the Tower.
 - (c) All access to doors to Wind Energy System(s) and electrical equipment

- shall be secured to prevent unauthorized access. All substations shall be fenced to prevent public access.
- (d) Appropriate warning signage shall be placed on Wind Energy System(s), electrical equipment, and Wind Energy System entrances.
 - (e) No blasting shall occur in connection with the construction of the Wind Energy Facility unless the Licensee has provided prior notification to the Landowner, any abutting property owners, property owners within 1,500 feet of the blasting site, and the City. All blasting shall be done in accordance with all applicable laws and regulations.
 - (f) The Licensee shall ensure that ice from the wind turbine blades does not impact any property beyond the setback.
 - (g) The Licensee shall provide qualified personnel to conduct training sessions to emergency responders when requested by the Council.
 - (h) The Licensee shall provide a representative to accompany the local fire department inspector during site visits. The Licensee shall comply with all applicable laws regarding those inspections.
- (2) Signage and Fencing. The Licensee shall provide reasonable signage at the Wind Energy Facility providing appropriate safety notices and warnings against trespassing. The no trespassing signs shall be posted around the entire premises at an appropriate distance for posting but no less than two conspicuous places for every 10 acres within the Wind Energy Facility. Signs should be sized at a minimum to meet the provisions of ' 943.013(2), Wis. Stats.
- (3) Stray Voltage. The Licensee shall utilize Good Utility Practice to minimize, to the extent practicable, the impact, if any, of Stray Voltage caused by the Wind Energy Facility.
- (4) Signal Interference. The Licensee shall minimize or mitigate any interference with communications such as electromagnetic and microwave, and including radio, telephone, or television signals caused by any Wind Energy System. If the Licensee is a public utility, s. PSC 113.0707, Wisconsin Administrative Code, also applies.
- (5) Noise.
- (a) The noise generated by the operation of a Wind Energy System may not exceed the ambient noise level by more than 50 dBA as measured at any

point on property adjacent to the parcel on which the Wind Energy Facility

is located. The noise level generated by the operation of a Wind Energy Facility will be determined during the investigation of a noise complaint by comparing the sound level measured when the wind generator blades are rotating to the sound level measured when the wind generator blades are stopped.

- (b) In the event audible noise to Wind Energy Facility operations contains a steady, pure tone, such as a whine, screech, or hum, the standards for audible noise set forth in subparagraph (a) of this subsection shall be reduced by 5 dBA. A pure tone is defined to exist if the one-third octave band sound pressure level in the band, including the tone, exceeds the arithmetic average of the sound pressure levels of the two contiguous one-third octave bands by 5 dBA for center frequencies of 500 Hz and above, by 8 dBA for center frequencies between 160 Hz and 400 Hz, or by 15 dBA for center frequencies less than or equal to 125 Hz.
- (c) In the event the ambient noise level (exclusive of the development in question) exceeds the applicable standard given above, the applicable standard shall be adjusted so as to equal the ambient noise level. The ambient noise level shall be expressed in terms of highest whole number sound pressure level in dBA, which is succeeded for more than five minutes per hour. Ambient noise levels shall be measured at the exterior of potentially affected existing residences, schools, hospitals, churches, and public libraries. Ambient noise level measurement techniques shall employ all practical means of reducing the effect of wind-generated noise at the microphone. Ambient noise level measurements may be performed when wind velocities at the proposed project site are sufficient to allow Wind Energy Facility operation, provided that the wind velocity does not exceed 30 mph at the ambient noise measurement location.
- (d) Any noise level falling between two whole decibels shall be the lower of the two.
- (e) In the event the noise levels resulting from the Wind Energy Facility exceed the criteria listed above, a waiver to said levels may be granted by the City provided that the following has been accomplished:
 - (i) Written consent from the affected property owners has been obtained stating that they are aware of the Wind Energy Facility and the noise limitations imposed by this Chapter, and that consent

- is granted to allow noise levels to exceed the maximum limits otherwise allowed; and,
- (ii) If the Applicant wishes the waiver to apply to succeeding property owners, a permanent noise impact easement has been recorded in the Office of the Calumet County Register of Deeds which describes the benefitted and burdened properties and which advises all subsequent owners of the burdened property that noise levels in excess of those permitted by this Chapter may exist on or at the burdened property.
- (f) The burden of proof that a Wind Energy Facility is exceeding the allowed decibel levels shall be the responsibility of the party making such allegations.
- (6) Shadow Flicker. The Licensee must take reasonable steps as are necessary to prevent, mitigate, or eliminate Shadow Flicker on any residence located within one-half mile.
- (7) Minimum Ground Clearance. The blade tip on any Wind Energy System shall, at its lowest point, have a ground clearance of no less than 75 feet.
- (8) Setbacks. The following setbacks shall apply to all Wind Energy Systems. Setbacks shall be measured from the outermost edge of the closest of the circular path of the wind turbine rotor blade. The Council may increase the following minimum setbacks on a case-by-case basis, in order to protect public health and safety.
- (a) Property Line: 1,800 feet from any property line, unless the owner of the adjacent property grants an easement for a lesser setback. The easement must be recorded at the Office of the Calumet County Register of Deeds and may not provide for a setback that is less than 2.0 times the Total Height of the Wind Energy System.
 - (b) Public Roads: 1,800 feet. Public roads shall include any future roads shown on the City's official map at the time the license is granted.
 - (c) Above Ground Power/Telephone Lines: 1,800 feet from the nearest above ground public electric power line or telephone line.
 - (d) Residences & Other Buildings: 1,800 feet from the nearest residence, business, school, daycare facility, church, hospital and other structures that are routinely occupied by individuals.

- (e) Wetlands: 1,800 feet from all sinkholes and wetlands.
 - (f) Water Bodies Setbacks: 1,800 feet from the ordinary high water mark of all navigable water bodies.
 - (g) Parks & Public Property: 1,800 feet from any town, county or state park, property, recreational or rest area.
 - (h) Spacing and Density: Minimum setback distances between turbines shall be two times the Total Height of each Wind Energy System.
- (9) Groundwater Protection. The Licensee shall operate the Wind Energy Facility so as not to cause groundwater contamination in violation of applicable law. Nothing contained in the license is intended to authorize or permit any degradation of the quantity or quality of the groundwater. Furthermore, no wells may be drilled within the boundaries of the Wind Energy Facility site. In addition, the Licensee shall complete a plan for managing surface water runoff to prevent pollution of groundwater through sinkholes and infiltration through the soil and underlying bedrock in the vicinity of each Wind Energy Facility.

23.07 INSURANCE AND INDEMNIFICATION

- (1) Insurance. The Licensee shall maintain the following insurance coverages commencing upon construction of the facility.
- (a) The Licensee shall, at its expense, maintain a broad form comprehensive coverage policy of public liability insurance insuring Licensee against loss or liability caused by Licensee in an amount not less than \$5,000,000 of combined single limit liability coverage per occurrence, accident or incident, which has a commercially reasonable deductible.
 - (b) Worker's compensation coverage in an amount required by Wisconsin law. Licensee shall require subcontractors and others not protected under its insurance to obtain and maintain worker's compensation and employers' liability insurance.
 - (c) Certificates of insurance evidencing compliance with these requirements shall be provided upon request of the City. The insurer will provide notice to the City in the event there is a lapse in coverage exceeding 30 days.
 - (d) All policies other than worker's compensation shall be written on an occurrence and not on a claim-made basis. Each renewal period will

require a copy of the certificate of insurance be provided to the City. An expired insurance certificate or an unacceptable liability coverage amount is grounds for revocation of the permit.

- (2) The Licensee shall defend, indemnify and hold harmless the City and its officials, employees and agents from and against any and all claims, demands, losses, suits, causes of action, damages, injuries, costs, expenses and liabilities whatsoever, including reasonable attorneys' fees (such liabilities together known as "Liability") arising out of Licensee's selection, construction, operation and removal of the Wind Energy System and affiliated equipment including, without limitation, Liability for property or personal injury (including death), whether said Liability is premised on contract or on tort (including without limitation strict liability or negligence). This general indemnification shall not be construed as limiting or qualifying the City's other indemnification rights available under law.

23.08 REPAIR AND REPLACEMENT. The Licensee shall be authorized to repair and replace the Wind Energy System consistent with Good Utility Practice as needed to keep it in good repair and operating condition. However, no such repair or replacement shall entitle the Licensee to any extension of the term of this license, even if it extends the useful life of the Wind Energy System. If the Licensee desires to extend the term of this license in the future, the Licensee shall be required to apply for such extension or amendment of this license in accordance with the terms of this Chapter.

23.09 AMENDMENT OR REVOCATION OF LICENSE.

- (1) Amendment. Following the granting of a license, any Licensee who wishes to materially alter any aspect of the license shall apply to the City for an amendment to the license. The application shall explain the nature of the amendment and the reasons therefore, and include a new non-refundable application fee. The Council shall act on the amendment application consistent with the terms of this Chapter.
- (2) Revocation of License. Each of the following occurrences shall constitute a violation of the terms and conditions of this license (a "Violation") and any such Violation shall be grounds for revocation of this license (whatever the reason for such an event of default and whether it shall be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, order or regulation) after the expiration of the notice and cure period and revocation hearing as set forth below:
 - (a) If the Licensee abandons the Wind Energy System located on the premises for a period of one year or more; or
 - (b) If the Licensee fails to observe or perform any material condition or

provision of this license for a period of 30 days after it has received written notice of such failure from the City; provided, however, that a Violation shall not occur if the Licensee commenced performance of such obligation within such 30-day period and is diligently proceeding to complete such performance; or

- (c) If there is a material failure by the Licensee to comply with any statute, regulation, rule, or license administered by any federal, state or county department, agency, or commission directly related to the operation of the Wind Energy System, and if the Licensee fails to cure the material failure to comply for a period of 30 days after the date Licensee receives written notice of such failure from the City, or the federal, state or local governmental body or agency with jurisdiction; provided, however, that a Violation shall not occur if Licensee commences performance of such obligation within such 30- day period and is diligently proceeding to complete such performance.
- (3) Hearing. The City shall not revoke any license without first providing the Licensee a hearing and the right to respond, including the right to present evidence regarding any defenses or extenuating circumstances (such as Licensee's prompt commencement of remedial measures that cannot reasonably be concluded within 30 days) regarding the alleged Violations.
- (4) Judicial Review. The Licensee shall have the right to appeal any revocation to circuit court within 30 days of the date of the revocation.

23.10 LICENSE EXPIRATION. Unless the Council authorizes a different term based upon analysis of the useful life of the Wind Energy System, every license issued pursuant to this Chapter will terminate upon the expiration of 30 years from the date of issuance.

23.11 ABANDONMENT.

- (1) The Licensee shall notify the City when the Wind Energy System is no longer in operation. Within 12 months of cessation of operations, unless the Council approves a time extension if the Licensee provides good cause, the Licensee shall do the following:
 - (a) All obsolete, damaged, unused, or abandoned Wind Energy Systems and accessory facilities shall be removed; and
 - (b) All foundation, pads, and underground electrical wires shall be removed to

a depth of four feet below the surface of the ground; and

- (c) All hazardous materials shall be removed from the property and disposed of in accordance with federal and state laws.
- (d) Any access roads shall be removed, cleared, and graded by the Licensee, unless the Landowner wants to keep the access road. The City will not be assumed to take ownership of any access road unless through official action of the Council.
- (2) If removal and/or restoration are not completed, the City may order removal utilizing the Security required under Section 5.3(m).

23.12 **SEVERABILITY.** The provisions of this Chapter are severable, and the invalidity of any section, subdivision, paragraph, or other part of this Chapter shall not affect the validity or effectiveness of the remainder of the Chapter.

23.13 **PENALTIES.**

- (1) Any Person who fails to comply with any provision of this Chapter shall be subject to the penalties described in Section 23.06 of the Municipal Code of the City of Chilton. Each day of such failure shall be deemed a separate offense.
- (2) Any Wind Energy System or portion of a Wind Energy Facility built or erected or structurally altered in violation of this Chapter shall be deemed a public nuisance and subject to all applicable nuisance abatement laws.