CHAPTER 13
WIND ENERGY SYSTEMS LICENSE AND REGULATIONS

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CHAPTER 13. WIND ENERGY SYSTEMS LICENSE AND REGULATIONS.  
(repealed and recreated 2012-07)

PART 1: GENERAL PROVISIONS

I. PURPOSE AND INTENT.

It is the intended purpose of the Town to regulate Wind Energy Systems to promote the health, safety, and general welfare of the citizens of the Town and to establish reasonable and uniform regulations for the operation thereof so as to minimize potentially dangerous effects of these Systems on the community, pursuant to the authority granted applicable laws.

II. AMENDMENTS TO APPLICABLE LAWS AND ADMINISTRATIVE RULES INCORPORATED HEREIN.

This ordinance is adopted pursuant to Wisconsin Statutes Sections 66.0401 and 66.0403, the rules of the State of Wisconsin Public Service Commission Chapter PSC 128, and other applicable laws as they exist on the date of adoption of this ordinance. Nothing herein shall be interpreted to be more restrictive than the rules promulgated by the State of Wisconsin Public Service Commission pursuant to Section 196.378(4g)(b), Wisconsin Statutes. In the event said statutes or said PSC Rules are amended from time to time, to the extent that this ordinance adopts identical provisions, this ordinance shall be interpreted to incorporate such amendments as are made to the applicable statutes and PSC Rules from time to time in the future.

PART 2: WIND ENERGY SYSTEM REGULATION

I. SYSTEM REGULATION; EXCLUDING SMALL SYSTEMS.

13.01 Definitions. In this chapter:

(1) “Commercial communications” includes communications used by government and military entities for emergency purposes, licensed amateur radio service, and non-emergency communications used by agricultural, business, government, and military entities including aviation radar, commercial mobile radio service, fixed wireless service, global positioning, line-of-sight, microwave, personal communications service, weather radar, and wireless internet service.

(2) “Commission” means the public service commission.

(4) “Decommissioning” means removal of all of the following:

(a) The above ground portion of a wind energy system, including wind turbines and related facilities, except for access roads if removal has been waived by the property owner.

(b) All below ground facilities, except the following:

1. Underground collector circuit facilities.
2. Those portions of concrete structures 4 feet or more below grade.

(5) “DNR” means the Wisconsin department of natural resources.
(6) “Maximum blade tip height” means the nominal hub height plus the nominal blade length of a wind turbine, as listed in the wind turbine specifications provided by the wind turbine manufacturer. If not listed in the wind turbine specifications, “maximum blade tip height” means the actual hub height plus the blade length.

(7) “Nameplate capacity” means the nominal generating capacity of a wind energy system, as listed in the wind turbine specifications provided by the wind turbine manufacturer.

(8) “Nonparticipating property” means real property that is not a participating property.

(9) “Nonparticipating residence” means a residence located on nonparticipating property.

(10) “Occupied community building” means a school, church or similar place of worship, daycare facility or public library.

(12) “Owner” means:

   (a) A person with a direct ownership interest in a wind energy system, regardless of whether the person was involved in acquiring the necessary rights, permits and approvals or otherwise planning for the construction and operation of a wind energy system.
   (b) At the time a wind energy system is being developed, a person who is acting as a wind energy system developer by acquiring the necessary rights, permits and approvals for or by planning for the construction and operation of a wind energy system, regardless of whether the person will own or operate the wind energy system.

(13) “Participating property” means any of the following:

   (a) A turbine host property.
   (b) Real property that is the subject of an agreement that does all of the following:

      1. Provides for the payment of monetary compensation to the landowner from an owner regardless of whether any part of a wind energy system is constructed on the property.
      2. Specifies in writing any waiver of a requirement or right under this chapter and that the landowner’s acceptance of payment establishes the landowner’s property as a participating property.

(14) “Participating residence” means a residence located on participating property.

(15) “Personal communications” includes wireless telecommunications, personal communications service, radio, television, wireless internet service, and other systems used for personal use purposes.

(16) “Political subdivision” has the meaning given in s. 66.0401 (1e) (c), Stats.

(17) “Residence” means an occupied primary or secondary personal residence including a manufactured home as defined in s. 101.91 (2), Stats., a hospital, community-based residential facility, residential care apartment complex or similar facility, or a nursing home. “Residence”
includes a temporarily unoccupied primary or secondary personal residence. “Residence” does not include any of the following:

(a) A recreational vehicle as defined in s. 340.01 (48r), Stats., notwithstanding the length of the vehicle.

(b) A camping trailer as defined in s. 340.01 (6m), Stats.

(c) A permanently abandoned personal residence.

(19) “Shadow flicker” means a pattern of moving shadows cast on a residence or an occupied community building caused by sunlight shining through moving wind turbine blades resulting in alternating changes in light intensity.

(20) “Small wind energy system” means a wind energy system that has a total installed nameplate capacity of 300 kilowatts or less and that consists of individual wind turbines that have an installed nameplate capacity of not more than 100 kilowatts.

(20.5) “Town” means the Town of Delafield, and when referring to the governing body means the Town Board of the Town of Delafield.

(21) “Turbine host property” means real property on which at least one wind turbine is located.

(22) “Wind access easement” means a written document that creates a legal interest in real property that restricts the use of the property to avoid interference with the wind resource on another property.

(23) “Wind energy system” has the meaning given in s. 66.0403 (1) (m), Stats., and is used to convert wind energy to electrical energy.

(24) “Wind energy system easement” means a written document that creates a legal interest in real property that permits an owner to place, construct or operate a wind turbine or other wind energy system facility on the property.

(25) “Wind energy system emergency” means a condition or situation at a wind energy system that presents a significant threat of physical danger to human life or a significant threat to property or a natural event that causes damage to wind energy system facilities.

(26) “Wind energy system facility” means any component of a wind energy system, such as a wind turbine, collector circuit, access road, electric system interconnection facility or operation and maintenance facility.

(27) “Wind energy system lease” means a written agreement between a landowner and an owner that establishes the terms and conditions associated with the placement, construction or operation of a wind turbine or other wind energy system facility on a landowner’s property.

13.105 Development of a wind energy system; notice requirements.

(1) PRE-APPLICATION NOTICE. At least 90 days before an owner files an application to construct a wind energy system, an owner shall use commercially reasonable methods to provide
written notice of the planned wind energy system to all of the following:

(a) Landowners within one mile of a planned wind turbine host property.

(b) Political subdivisions within which the wind energy system may be located.

(c) Emergency first responders and air ambulance service providers serving a political subdivision within which the wind energy system may be located.

(d) The Wisconsin department of transportation.

(e) The commission.

(f) The DNR.

(g) The Wisconsin department of agriculture, trade and consumer protection.

(h) The office of the deputy undersecretary of the U.S. department of defense.

(1m) ADDITIONAL PRE-APPLICATION NOTICE TO COMMISSION. At least 180 days before filing an application to construct a wind turbine with a maximum blade tip height exceeding 600 feet, or a wind energy system in those portions of Lake Michigan or Lake Superior that are within the jurisdiction of the state, the owner shall provide written notice of the planned wind energy system to the commission.

(2) PRE-APPLICATION NOTICE REQUIREMENTS. The owner shall include all of the following in a notice under sub. (1) or (1m):

(a) A complete description of the wind energy system, including the number and size of the planned wind turbines.

(b) A map showing the planned location of all wind energy system facilities.

(c) Contact information for the owner.

(d) A list of all potential permits or approvals the owner anticipates may be necessary for construction of the wind energy system.

(e) Whether the owner is requesting a joint application review process under s. 13.30 (7) and the name of each political subdivision that may participate in the joint review process.

13.11 Real property provisions. (1) EASEMENT RECORDING REQUIRED. A wind energy system easement or wind access easement shall be recorded under ch. 706, Stats. A wind energy system easement or wind access easement shall include the term of the easement and a full legal description of the property subject to the easement.

(2) WIND LEASE AND WAIVER PROVISIONS. A wind energy system lease and any waiver under s. 13.14 (5) or 13.15 (4) shall hold harmless and indemnify the real property owner for all of the following:
(a) Any violation of federal, state or local law by the owner of the wind energy system.

(b) Any damages or bodily injury caused by the construction, operation or decommissioning of the wind energy system.

13.12 Existing property uses. (1) LAND USE AND COMMERCIAL ENTERPRISES. An owner shall make reasonable efforts to ascertain and accommodate any land use or commercial enterprise located on a nonparticipating property within 0.5 mile of a proposed wind turbine site if the land use or commercial enterprise exists when the owner gives notice under s. 13.105 (1), or if complete publicly-available plans for construction are on file with the Town within 30 days of the date the owner gives notice under s. 13.105 (1).

(2) AGRICULTURAL USE. An owner shall design a wind energy system to reasonably minimize the conversion of land from agricultural use.

13.13 Siting criteria. (1) SETBACK DISTANCE AND HEIGHT REQUIREMENTS. (a) An owner shall design and construct a wind energy system using the wind turbine setback distances shown in Table 1.

(b) An owner shall measure wind turbine setback distances as a straight line from the vertical centerline of the wind turbine tower to the nearest point on the permanent
(c) An owner shall work with the Town and owners of participating and nonparticipating properties to site wind turbines to minimize individual hardships.

(d) The owner of a nonparticipating residence or occupied community building may waive the applicable wind turbine setback distances in Table 1 for those structures to a minimum setback distance of 1.1 times the maximum blade tip height. The owner of a nonparticipating property may waive the applicable wind turbine setback distance in Table 1 from a nonparticipating property line.

13.14 Noise criteria. (1) DEFINITIONS. In this section, nighttime hours are the hours beginning at 10:00 p.m. and ending at 6:00 a.m. daily and daytime hours are the hours beginning at 6:00 a.m. and ending at 10:00 p.m. daily.

(2) PLANNING, (a) The noise limits in this section apply at the outside wall of a nonparticipating residence or occupied community building that exists when the owner gives notice under s. 13.105 (1) or for which complete publicly-available plans for construction are on file with the Town within 30 days of the date on which the owner gives notice under s. 13.105 (1).

(b) An owner shall design the proposed wind energy system to minimize noise at a residence or occupied community building to the extent reasonably practicable.

(c) An owner shall design a wind energy system to comply with the noise standards in this section under planned operating conditions.

(3) NOISE LIMITS, (a) Except as provided in par. (b), sub. (4) (c) and sub. (5), an owner shall operate the wind energy system so that the noise attributable to the wind energy system does not exceed 50 dBA during daytime hours and 45 dBA during nighttime hours.

(b) In the event audible noise due to wind energy system operations contains a steady pure tone, such as a whine, whistle, screech, or hum, the owner shall promptly take corrective action to permanently eliminate the noise. This paragraph does not apply to sound the wind energy system produces under normal operating conditions.

(4) COMPLIANCE, (a) If an owner uses sound level measurements to evaluate compliance with this section at a nonparticipating residence or occupied community building, those measurements shall be made as near as possible to the outside wall nearest to the closest wind turbine, or at an alternate wall as specified by the owner of the nonparticipating residence or occupied community building. The owner may take additional measurements to evaluate compliance in addition to those specified by this section.

(b) Upon receipt of a complaint regarding a violation of the noise standards in sub. (3) (a), an owner shall test for compliance with the noise limits in sub. (3) (a). A political subdivision or monitoring committee established under s. 13.41 may not require additional testing to show compliance with sub. (3) (a) if the owner has provided the results of an accurate test conducted within 2 years of the date of the complaint showing that the wind energy system is in compliance with sub. (3) (a) at the location relating to the complaint.
(c) Methods available for the owner to comply with sub. (3) shall include operational curtailment of one or more wind turbines. Upon receipt of a complaint about a noise under sub. (3) (b), the owner shall use operational curtailment to eliminate the noise until the owner permanently corrects the problem.

(d) An owner shall evaluate compliance with sub. (3) (a) as part of pre- and post-construction noise studies. An owner shall conduct pre- and post-construction noise studies under the most current version of the noise measurement protocol as described in s. 13.50 (2).

(5) WAIVER. Upon request by an owner of a wind energy system, an owner of an affected nonparticipating residence or occupied community building may relieve the owner of the wind energy system of the requirement to meet any of the noise limits in this section at the affected residence or occupied community building by written contract with the wind energy system owner. Unless otherwise provided in a contract signed by an owner of an affected nonparticipating residence or occupied community building, a waiver by an owner of an affected nonparticipating residence or occupied community building is an encumbrance on the real property, runs with the land until the wind energy system is decommissioned, and shall be recorded under ch. 706, Stats.

(6) NOTIFICATION. (a) Before entering into a contract under sub. (5), an owner of a wind energy system shall provide written notice of the requirements of this section to the owner of an affected nonparticipating residence or occupied community building.

(b) Before the initial operation of the wind energy system, an owner of a wind energy system shall provide notice of the requirements of this section to an owner of a nonparticipating residence or occupied community building within 0.5 mile of a constructed wind turbine that has not entered into a contract under sub. (5).

13.15 Shadow flicker. (1) PLANNING. (a) The shadow flicker requirements in this section apply to a nonparticipating residence or occupied community building that exists when the owner gives notice under s. 13.105 (1) or for which complete publicly-available plans for construction are on file with the Town within 30 days of the date on which the owner gives notice under s. 13.105 (1).

(b) An owner shall design the proposed wind energy system to minimize shadow flicker at a residence or occupied community building to the extent reasonably practicable.

(c) An owner shall use shadow flicker computer modeling to estimate the amount of shadow flicker anticipated to be caused by a wind energy system and shall design the wind energy system so that computer modeling indicates that no nonparticipating residence or occupied community building will experience more than 30 hours per year of shadow flicker under planned operating conditions.

(2) SHADOW FLICKER LIMITS. An owner shall operate the wind energy system in a manner that does not cause more than 30 hours per year of shadow flicker at a nonparticipating residence or occupied community building. If a nonparticipating residence or occupied community building experiences more than 30 hours per year of shadow flicker under the wind energy system’s normal operating conditions, the owner shall use operational curtailment to comply with this subsection.

(3) SHADOW FLICKER MITIGATION. (a) An owner of a wind energy system shall work with an owner of a nonparticipating residence or occupied community building to mitigate the effects of
(b) An owner shall provide reasonable shadow flicker mitigation at the owner’s expense for a nonparticipating residence or occupied community building experiencing 20 hours or more per year of shadow flicker.

(c) An owner shall model shadow flicker and a nonparticipating residence or occupied community building is eligible for mitigation if computer modeling shows that shadow flicker at the nonparticipating residence or occupied community building will be 20 hours or more per year. An owner of a nonparticipating residence or occupied community building is not required to document the actual hours per year of shadow flicker if modeling indicates the nonparticipating residence or occupied community building is eligible for mitigation. A nonparticipating residence or occupied community building that experiences 20 hours or more per year of shadow flicker based on records kept by the resident of a nonparticipating residence or the occupant of an occupied community building shall also be eligible for mitigation.

(d) An owner may provide shadow flicker mitigation for any residence or occupied community building in addition to the mitigation required under par. (b).

(e) The requirement under par. (b) to mitigate shadow flicker applies when the owner receives a complaint or request for mitigation regarding shadow flicker for an eligible nonparticipating residence or occupied community building. If shadow flicker mitigation is required, the owner of the wind energy system shall allow the owner of the nonparticipating residence or occupied community building to choose a preferred reasonable mitigation technique, including installation of blinds or plantings at the wind energy system owner’s expense.

(4) WAIVER. Upon request by an owner of a wind energy system, an owner of an affected nonparticipating residence or occupied community building may relieve the wind energy system owner of a requirement under sub. (2) or (3) (b) at the affected nonparticipating residence or occupied community building by written contract with the wind energy system owner. Unless otherwise provided in a contract signed by an owner of an affected nonparticipating residence or occupied community building, a waiver by an owner of an affected nonparticipating residence or occupied community building is an encumbrance on the real property and runs with the land until the wind energy system is decommissioned, and shall be recorded under ch. 706, Stats.

(5) NOTIFICATION, (a) Before entering into a contract under sub. (4), a wind energy system owner shall provide notice of the requirements of this section to individual owners of an affected nonparticipating residence or occupied community building.

(b) Before the initial operation of the wind energy system, a wind energy system owner shall provide notice of the requirements of this section to an owner of a nonparticipating residence or occupied community building within 0.5 mile of a constructed wind turbine that has not entered into a contract under sub. (4).

13.16 Signal interference. (1) PLANNING, (a) Except as provided in sub. (4) (b), the signal interference requirements in this section apply to commercial communications and personal communications in use when the wind energy system begins operation.
(b) A owner shall use reasonable efforts to avoid causing interference with commercial communications and personal communications to the extent practicable.

(c) An owner may not construct wind energy system facilities within existing line-of-sight communication paths that are used by government or military entities to provide services essential to protect public safety. The owner shall provide information showing that wind turbines and other wind energy system facilities will be in compliance with this paragraph.

(2) COMMERCIAL COMMUNICATIONS INTERFERENCE MITIGATION. An owner shall use reasonable and commercially available technology to mitigate interference caused by a wind energy system with commercial communications in use when a wind energy system begins operation. Before implementing mitigation measures, the owner shall consult with affected parties regarding the preferred mitigation solution for commercial communications interference problems. Except as provided in sub. (4), an owner shall mitigate commercial communications interference caused by the wind energy system by making the affected party’s preferred reasonable mitigation solution effective until either the wind energy system is decommissioned or the communication is no longer in use, whichever is earlier.

(3) PERSONAL COMMUNICATIONS INTERFERENCE MITIGATION, (a) An owner shall use reasonable and commercially available technology to mitigate interference with personal communications in use when a wind energy system begins operation caused by a wind energy system. The owner shall use reasonable and commercially available technology to mitigate interference with personal communications that were not in use when the wind energy system began commercial operation, if a wind energy system is causing the interference and the interference occurs at a location at least 0.5 mile from a wind turbine.

(b) Before implementing mitigation measures, the owner shall consult with affected parties regarding the preferred mitigation solution for personal communications interference problems. Except as provided in sub. (4), an owner shall mitigate personal communications interference caused by the wind energy system by making the affected party’s preferred reasonable mitigation solution effective until either the wind energy system is decommissioned or the communication is no longer in use, whichever is earlier.

(4) MITIGATION PROTOCOL. Under the protocol established under s. 13.50 (2), owners are required to implement a new mitigation solution that becomes commercially available before the wind energy system is decommissioned to address interference for which mitigation is required under sub. (2) or (3) and for which the original mitigation solution implemented is only partially effective.

13.17 Stray voltage. (1) TESTING REQUIRED. (a) An owner shall work with the local electric distribution company to test for stray voltage at all dairy and confined animal operations within 0.5 mile of a wind energy system facility pursuant to the stray voltage protocol established by the commission before any wind energy system construction activity that may interfere with testing commences and again after construction of the wind energy system is completed, except as otherwise specified by commission staff under par. (b).

(b) Before any testing under par. (a) begins, an owner shall work with commission staff to determine the manner in which stray voltage testing will be conducted and on which properties. The electric distribution company serving a dairy or confined animal operation where testing is required under par. (a) shall conduct or arrange to conduct all required testing at the expense of the owner.
(2) RESULTS OF TESTING. An owner and the electric distribution company shall provide to commission staff the results of all stray voltage testing in writing.

(3) REQUIREMENT TO RECTIFY PROBLEMS. An owner shall work with the electric distribution company and farm owner to rectify any stray voltage problems attributable to the construction and operation of the wind energy system, in compliance with the commission’s stray voltage protocol.

13.18 Construction and operation. (1) PHYSICAL CHARACTERISTICS. (a) An owner may not display advertising material or signage other than warnings, equipment information, or indicia of ownership on a wind turbine. An owner may not attach any flag, decorative sign, streamers, pennants, ribbons, spinners, fluttering, or revolving devices to a wind turbine. An owner may attach a safety feature or wind monitoring device to a wind turbine.

(b) An owner shall ensure that a wind turbine has a conventional or unobtrusive finish.

(c) An owner shall install lighting at a wind energy system that complies with standards established by the federal aviation administration. The Town may not establish lighting requirements for a wind energy system that conflict with standards established by the federal aviation administration. The Town may require use of shielding or control systems approved by the federal aviation administration to reduce visibility of lighting to individuals on the ground.

(d) An owner shall take appropriate measures to ensure that a wind turbine is not readily climbable except by authorized personnel.

(e) An owner shall ensure that all wind turbine access doors and electrical equipment are locked when authorized personnel are not present.

(f) An owner shall place appropriate warning signage on or at the base of each wind turbine.

(g) An owner shall post and maintain up-to-date signs containing a 24-hour emergency contact telephone number, information identifying the owner, and sufficient information to identify the location of the sign within the wind energy system. An owner shall post these signs at every intersection of a wind energy system access road with a public road and at each wind turbine location.

(h) An owner shall clearly mark guy wires and supports for a wind energy system, meteorological tower or other device for measuring wind speeds so that the wires and supports are visible to low flying aircraft under fair weather conditions.

(2) ELECTRICAL STANDARDS, (a) An owner shall construct, maintain, and operate collector circuit facilities in a manner that complies with the national electrical safety code and ch. PSC 114 and shall construct, maintain, and operate all wind energy system facilities in a manner that complies with the national electrical code.

(b) An owner shall construct collector circuit facilities for a wind energy system underground to the extent practicable.

(c) An owner shall establish an inspection schedule for all overhead collector circuits to
ensure that third-party facilities, including cable television and telecommunications cables, are not attached or bonded to overhead collector circuit grounding. If third-party facilities are found attached to the overhead collector facilities, the owner shall ensure that the third-party facilities are promptly removed.

(3) CONSTRUCTION, OPERATION, AND MAINTENANCE STANDARDS. (a) An owner shall construct, operate, repair, maintain and replace wind energy system facilities as needed to keep the wind energy system in good repair and operating condition and in a manner that protects individuals from injury.

(am) An owner shall minimize soil compaction, topsoil mixing and damage to drainage systems on agricultural land during the construction or decommissioning of the wind energy system. The Town may establish reasonable requirements designed to minimize soil compaction, topsoil mixing and damage to drainage systems on agricultural land.

(b) Except for the area physically occupied by the wind energy system facilities, an owner shall restore the topography, soils and vegetation of the project area to original condition after construction is complete, unless otherwise provided in a contract signed by an affected landowner, considering any modifications needed to comply with DNR requirements.

(c) An owner shall carry general liability insurance relating to claims for property damage or bodily injury arising from the construction, operation or decommissioning of the wind energy system and shall include turbine host property owners as additional insured persons on the policy.

(4) EMERGENCY PROCEDURES. (a) An owner shall notify the Town of the occurrence and nature of a wind energy system emergency within 24 hours of the wind energy system emergency.

(b) An owner shall establish and maintain liaison with the Town and with fire, police, and other appropriate first responders serving the wind energy system to create effective emergency plans that include all of the following:

1. A list of the types of wind energy system emergencies that require notification under par. (a).

2. Current emergency contact information for first responders and for the wind energy system owner, including names and phone numbers.

3. Procedures for handling different types of wind energy system emergencies, including written procedures that provide for shutting down the wind energy system or a portion of the system as appropriate.

4. Duties and responsibilities of the owner and of first responders in the event of a wind energy system emergency.

5. An emergency evacuation plan for the area within 0.5 mile of any wind energy system facility, including the location of alternate landing zones for emergency services aircraft.

(c) The owner shall review the emergency plan at least annually in collaboration with fire,
police and other appropriate first responders to update and improve the emergency plan as needed.

(d) The owner shall distribute current copies of the emergency plan to the Town and fire, police and other appropriate first responders as identified by the Town.

(e) The Town may require the owner to provide annual training for fire, police and other appropriate first responders regarding responding to a wind energy system emergency until the wind energy system has been decommissioned.

(f) An owner of a wind energy system shall do all of the following:

1. Furnish its operator, supervisors and employees who are responsible for emergency action a copy of the current edition of the emergency procedures established under this subsection to ensure compliance with those procedures.

2. Train the appropriate operating personnel to ensure they have knowledge of the emergency procedures and verify that the training is effective.

3. As soon as possible after the end of a wind energy system emergency, review employee activities to determine whether the procedures were effectively followed.

13.19 Decommissioning. (1) REQUIREMENT TO DECOMMISSION. (a) An owner of a wind energy system shall decommission and remove the wind energy system when the system is at the end of its useful life.

(b) A wind energy system is presumed to be at the end of its useful life if the wind energy system generates no electricity for a continuous 360-day period. This presumption may be rebutted under par. (c).

(c) Upon application by the owner, and except as provided in par. (d), the Town shall grant an extension of the time period for returning the wind energy system to service by one or more additional 180 day periods if the owner demonstrates it is likely the wind energy system will operate again in the future and any of the following occur:

1. The owner submits a plan to the Town that demonstrates an ongoing good faith effort to return the wind energy system to service and outlines the steps and schedule for returning the wind energy system to service in a reasonable period of time, including by repairing, replacing or repowering the wind energy system facilities as necessary to generate electricity.

2. The owner demonstrates that the wind energy system is part of a prototype or other demonstration project being used for ongoing research or development purposes.

3. The owner demonstrates that the wind energy system is being used for educational purposes.

(d) The Town may deny a request for an extension under par. (c) if the wind energy system has not generated any electricity for a continuous period of 540 days or more and the Town finds that the owner is not capable of returning the wind energy system to service within a
reasonable period of time.

(e) A wind energy system is irrebuttably presumed to be at the end of its useful life if the wind energy system generates no electricity for a period of 540 days and any of the following occur:

1. The owner does not request an extension of the time period for returning the wind energy system to service under par. (c).
2. The Town denies a request for an extension under par. (d) and any appeal rights have expired.

(f) When decommissioning is required, the owner shall begin decommissioning within 360 days after the wind energy system has reached the end of its useful life. The owner shall complete decommissioning and removal of the wind energy system within 540 days after the wind energy system has reached the end of its useful life.

(2) DECOMMISSIONING REVIEW. The Town may establish a decommissioning review process to determine when a wind energy system has reached the end of its useful life.

(3) FINANCIAL RESPONSIBILITY. (a) The owner of a wind energy system with a nameplate capacity of one megawatt or larger shall maintain proof of the owner’s ability to fund the actual and necessary cost to decommission the wind energy system and shall ensure the availability of funds necessary for decommissioning throughout the expected life of the wind energy system and through to completion of the decommissioning activities.

(b) An owner of a wind energy system with a nameplate capacity of one megawatt or larger shall provide financial assurance of the owner’s ability to pay for the actual and necessary cost to decommission the wind energy system before commencing major civil construction activities such as blasting or foundation construction at the wind energy system site. An owner may comply with this paragraph by choosing to provide a bond, deposit, escrow account, irrevocable letter of credit, or some combination of these financial assurances, that will ensure the availability of funds necessary for decommissioning throughout the expected life of the wind energy system and through to completion of the decommissioning activities.

(c) An owner shall provide the financial assurance under par. (b) in an amount up to the estimated actual and necessary cost to decommission the wind energy system. The owner shall provide the Town with up to 3 cost estimates of the actual and necessary cost to decommission the wind energy system that are prepared by third parties agreeable to the owner and the Town. The owner shall establish financial assurance that places the Town in a secured position, and any secured funds may only be used for decommissioning the wind energy system until either the Town determines that the wind energy system has been decommissioned under sub. (5) (b), or until the Town has otherwise approved the release of the secured funds, whichever is earlier. The owner shall establish financial assurance that allows the Town to access funds for the purpose of decommissioning the wind energy system if the owner does not decommission the wind energy system when decommissioning is required.

(d) The amount of the financial assurance is not required to exceed the average of the cost estimates provided.
(e) Any approval by the Town of a wind energy system is subject to the owner’s compliance with pars. (b) and (c).

(f) During the useful life of a wind energy system, the Town may periodically request information from the owner regarding the industry costs for decommissioning the wind energy system. If the Town finds that the future anticipated cost to decommission the wind energy system is at least 10 percent more or less than the amount of financial assurance previously provided under par. (b), the Town may correspondingly increase or decrease the amount of financial assurance required for the wind energy system. The Town may not adjust the financial assurance under this paragraph more often than once in a 5-year period.

(g) The Town may require an owner to submit to the Town a substitute financial assurance of the owner’s choosing under par. (b) if an event occurs that raises material concerns regarding the viability of the existing financial assurance.

(4) SITE RESTORATION. (a) Except as provided in par. (b), if a wind energy system was constructed on land owned by a person other than the owner of the wind energy system, the owner of the wind energy system shall ensure that the property is restored to preconstruction condition, unless otherwise provided in a contract signed by an affected landowner, considering any modifications needed to comply with DNR requirements.

(b) If a wind energy system was constructed on a brownfield, as defined in s. 560.13 (1) (a), Stats., the owner shall restore the property to eliminate effects caused by the wind energy system, except for the effects of environmental remediation activities, as defined in s. 560.13(1) (d), Stats.

(5) DECOMMISSIONING COMPLETION. (a) An owner shall file a notice of decommissioning completion with the Town and the commission when a wind energy system approved by the Town has been decommissioned and removed.

(b) Within 360 days of receiving a notice of decommissioning, the Town shall determine whether the owner has satisfied the requirements of subs. (1) (a) and (4).

13.30 Application and notice requirements. (1) APPLICATION REQUIRED. An owner shall file an application to construct a wind energy system with all political subdivisions with jurisdiction over the wind energy system, including the Town Clerk.

(2) CONTENTS OF AN APPLICATION. An owner shall complete and file with the Town Clerk an application that includes all of the following:

   (a) Wind energy system description and maps showing the locations of all proposed wind energy facilities.

   (b) Technical description of wind turbines and wind turbine sites.

   (c) Timeline and process for constructing the wind energy system.

   (d) Information regarding anticipated impact of the wind energy system on local infrastructure.

   (e) Information regarding noise anticipated to be attributable to the wind energy system.
(f) Information regarding shadow flicker anticipated to be attributable to the wind energy system.

(g) Information regarding the anticipated effects of the wind energy system on existing land uses within 0.5 mile of the wind energy system.

(h) Information regarding the anticipated effects of the wind energy system on airports and airspace.

(i) Information regarding the anticipated effects of the wind energy system on line-of-sight communications.

(j) A list of all state and federal permits required to construct and operate the wind energy system.

(k) Information regarding the planned use and modification of roads within the Town during the construction, operation, and decommissioning of the wind energy system, including a process for assessing road damage caused by wind energy system activities and for conducting road repairs at the owner’s expense.

(L) A copy of all emergency plans developed in collaboration with appropriate first responders under s. 13.18 (4) (b). An owner may file plans using confidential filing procedures as necessary.

(m) A decommissioning and site restoration plan providing reasonable assurances that the owner will be able to comply with s. 13.19.

(n) A representative copy of all notices issued under sub. (5) and ss. 13.105 (1) (a) and 13.42 (1).

(p) Any other information necessary to understand the construction, operation or decommissioning of the proposed wind energy system.

(3) ACCURACY OF INFORMATION. The owner shall ensure that information contained in an application is accurate.

(4) DUPLICATE COPIES. The Town may specify a reasonable number of copies to be filed. Each copy shall include all worksheets, maps, and other attachments included in the application. Upon prior written approval of the Town, the Town may permit an owner to file an application electronically.

(5) NOTICE TO PROPERTY OWNERS AND RESIDENTS. (a) On the same day an owner files an application for a wind energy system, the owner shall, under s. 66.0401 (4) (a) 3., Stats., use commercially reasonable methods to provide written notice of the filing of the application to property owners and residents located within one mile of the proposed location of any wind energy system facility. The notification shall include all of the following:

1. A complete description of the wind energy system, including the number and size of the wind turbines.

2. A map showing the locations of all proposed wind energy system facilities.
3. The proposed timeline for construction and operation of the wind energy system.
4. Locations where the application is available for public review.

5. Owner contact information.

(b) After the Town receives an application for a wind energy system, the notice required to be published by the Town under s. 66.0401 (4) (a) 1., Stats., shall include a brief description of the proposed wind energy system and its proposed location, the locations where the application is available for public review, the method and time period for the submission of public comments to the Town, and the approximate schedule for review of the application by the Town.

(6) PUBLIC PARTICIPATION. (a) The Town shall make an application for a wind energy system available for public review at a local library and at the Town Hall. The Town may also provide public access to the application electronically.

(b) The Town shall establish a process for accepting and considering written public comments on an application for a wind energy system.

(c) The Town shall hold at least one public meeting to obtain comments on and to inform the public about a proposed wind energy system.

(7) JOINT APPLICATION REVIEW PROCESS. (a) If the wind energy system is proposed to be located in more than one political subdivision with jurisdiction over the wind energy system, the political subdivisions involved may conduct a joint application review process on their own motion or upon request. If an owner requests a joint application review, the owner shall include the request in its notice of intent to file an application with the Town under s. 13.105 (1). If the owner requests a joint application review process, the political subdivisions involved shall approve or deny this request within 60 days of receipt of the owner’s notice of intent to file an application.

(b) Except as provided in s. 66.0401 (4) (a) 2., Stats., if political subdivisions elect to conduct a joint application review process, the process shall be consistent with this chapter and the political subdivisions shall establish the process within 90 days of the date the political subdivisions receive the owner’s notice of intent to file an application. The Town may follow the review process of another political subdivision for purposes of conducting a joint application review process concurrently with the other political subdivision. If a joint application review process is adopted, the owner shall file the joint-review process application with all of the political subdivisions participating in the joint review process.

13.31 Application completeness. (1) COMPLETE APPLICATIONS, (a) An application is complete if it meets the filing requirements under ss. 13.30 (2) and 13.50 (1).

(b) The Town shall determine the completeness of an application, and shall notify the owner in writing of the completeness determination, no later than 45 days after the day the application is filed. An application is considered filed the day the owner notifies the Town in writing that all the application materials have been filed. If the Town determines that the application is incomplete, the notice provided to the owner shall state the reasons for the determination.
(c) An owner may file a supplement to an application that the Town has determined to be incomplete. There is no limit to the number of times that an owner may re-file an application. For incomplete applications, the owner shall provide additional information as specified in the notice under par. (b).

(d) An additional 45-day completeness review period shall begin the day after the Town receives responses to all items identified in the notice under par. (b).

(e) If the Town does not make a completeness determination within the applicable review period, the application is considered to be complete.

(2) REQUESTS FOR ADDITIONAL INFORMATION. The Town may request additional information necessary to understand the wind energy system after determining that an application is complete. An owner shall provide additional information in response to all reasonable requests. An owner shall respond to all inquiries made subsequent to a determination of completeness in a timely, complete, and accurate manner.

13.32 Town review of a wind energy system. (1) APPROVAL BY TOWN. Except as provided in s. 13.02 (1), the Town may require an owner to obtain approval from the Town before constructing any of the following:

(a) A wind energy system.

(b) An expansion of an existing or previously-approved wind energy system.

(2) STANDARD FOR APPROVAL. (a) The Town may not unreasonably deny an application for a wind energy system or impose unreasonable conditions.

(3) WRITTEN DECISION. (a) The Town shall issue a written decision to grant or deny an application for a wind energy system. The written decision shall include findings of fact supported by evidence in the record. If an application is denied, the decision shall specify the reason for the denial. The Town may make its approval subject to the conditions in s. 13.33.

(b)1. The Town shall provide its written decision to the owner and to the commission. If the Town approves an application for a wind energy system, the Town shall provide the owner with a duplicate original of the decision.

2. The owner shall record the duplicate original of a decision approving an application with the register of deeds for the county in which the wind energy system is located.

(4) EFFECT OF OWNERSHIP CHANGE ON APPROVAL. Approval by the Town of a wind energy system remains in effect if there is a change in the owner of the wind energy system. The Town may require an owner to provide timely notice of any change in the owner of the wind energy system.

(5) FEES. (a) The Town may charge an owner a reasonable application fee or require an owner to reimburse the Town for reasonable expenses relating to the review and processing of an application for a wind energy system.
(b) The Town’s fee or reimbursement requirement under par. (a) shall be based on the actual and necessary cost of the review of the wind energy system application, and may include the cost of services necessary to review an application that are provided by outside engineers, attorneys, planners, environmental specialists, and other consultants or experts. The Town may by ordinance set standardized application fees based on the size and complexity of a proposed wind energy system.

(c) The Town may require an owner of a wind energy system to submit up to 50 percent of the total estimated amount of the fee or reimbursement for the wind energy system application under par. (a) before issuing a written decision under sub. (3) (a), if the Town gives written notice to the owner of its intent to do so within 10 days of the date the application is deemed complete and the notice contains an estimate of the amount of the fee and the relevant reimbursement requirements.

(d) The Town may not charge an owner an annual fee or other recurring fees to operate or maintain a wind energy system.

Note: See also s. 66.0628(2), Stats., which requires any fee imposed by the Town to bear a reasonable relationship to the service for which the fee is imposed.

13.33 Additional provisions. The following conditions apply to any Town approval of an application to construct a wind energy system:

(1) INFORMATION. The owner shall provide information about whether the owner has consulted with and received any non-binding recommendations for constructing, operating or decommissioning the wind energy system from a state or federal agency, and whether the owner has incorporated such non-binding recommendations into the design of the wind energy system.

(2) STUDIES. The owner shall cooperate with any study of the effects of wind energy systems coordinated by a state agency.

(3) MONETARY COMPENSATION. The owner of a wind energy system shall offer an agreement that includes annual monetary compensation to the owner of a nonparticipating residence, if the residence is located within 0.5 mile of a constructed wind turbine. For one turbine located within 0.5 mile of a nonparticipating residence, the initial annual monetary compensation may not exceed $600. For two turbines located within 0.5 mile of a nonparticipating residence, the initial annual monetary compensation may not exceed $800. For three or more turbines located within 0.5 mile of a nonparticipating residence, the initial annual monetary compensation may not exceed $1,000. The initial annual monetary compensation under this subsection shall apply to agreements entered into in 2011. For agreements entered into in 2012 and thereafter, the initial annual amounts shall increase each year by the greater of two percent or the increase in the Consumer Price Index, as described in s. 196.374 (5) (bm) 2. b., Stats., from the previous year. An agreement offered under this subsection shall specify in writing any waiver of a requirement or right under this chapter and whether the landowner’s acceptance of payment establishes the landowner’s property as a participating property under this chapter.

(3m) AERIAL SPRAYING. The owner of a wind energy system shall offer an agreement that includes monetary compensation to a farm operator farming on a nonparticipating property located within 0.5 mile of a constructed wind turbine if the farm operator demonstrates all of the following:
(a) Substantial evidence of a history, before the wind energy system owner gives notice under s. 13.105 (1), of using aerial spraying for pest control or disease prevention for growing potatoes, peas, snap beans or sweet corn on all or part of a farm field located within 0.5 mile of a constructed wind turbine.

(b) A material reduction in potato, pea, snap bean or sweet corn production or a material increase in application costs on all or part of a farm field located within 0.5 mile of a constructed wind turbine as a result of the wind energy system’s effect on aerial spraying practices.

(4) PERMITS. The owner shall submit to the Town copies of all necessary state and federal permits and approvals.

(5) ANNUAL REPORTS. The owner shall file an annual report with the Town documenting the operation and maintenance of the wind energy system during the previous calendar year.

13.34 Record of decision. (1) RECORDKEEPING, (a) The Town shall keep a complete written record of its decision-making relating to an application for a wind energy system.

   (b) If the Town denies an application, the Town shall keep the record for at least 7 years following the year in which it issues the decision.

   (c) If the Town approves an application, the Town shall keep the record for at least 7 years after the year in which the wind energy system is decommissioned.

(2) RECORD CONTENTS. The record of a decision shall include all of the following:

   (a) The approved application and all additions or amendments to the application.

   (b) A representative copy of all notices issued under ss. 13.105 (1) (a), 13.30 (5) and 13.42 (1).

   (c) A copy of any notice or correspondence that the Town issues related to the application.

   (d) A record of any public meeting under s. 13.30 (6) (c) and any hearing related to the application. The record may be an electronic recording, a transcript prepared from an electronic recording, or a transcript prepared by a court reporter or stenographer. The record shall include any documents or evidence submitted by meeting or hearing participants.

   (e) Copies of any correspondence or evidentiary material that the Town considered in relation to the application, including copies of all written public comments filed under s. 13.30 (6) (b).

   (f) Minutes of any Town, board, council or committee meetings held to consider or act on the application.

   (g) A copy of the written decision under s. 13.32 (3) (a).

   (h) Other materials that the Town prepared to document its decision-making process.
(i) A copy of any Town ordinance cited in or applicable to the decision.

(3) POST-CONSTRUCTION FILING REQUIREMENT. Within 90 days of the date a wind energy system commences operation, the owner shall file with the Town and the commission an as-built description of the wind energy system, an accurate map of the wind energy system showing the location of all wind energy system facilities, geographic information system information showing the location of all wind energy system facilities and current information identifying the owner of the wind energy system. An owner shall in the filings under this subsection label each wind turbine location with a unique identifier consistent with the information posted at the wind turbine location under s. 13.18 (1) (g).

13.35 Modifications to an approved wind energy system. (1) MATERIAL CHANGE.

(a) An owner may not make a material change in the approved design, location or construction of a wind energy system without the prior written approval of the Town that authorized the wind energy system, unless the Town automatically approves the material change by taking either of the steps specified in s. 13.32 (2) (b) 1. or 2.

(b) An owner shall submit an application for a material change to an approved wind energy system to the Town that authorized the wind energy system.

(2) REVIEW LIMITED, (a) On receipt of an application for a material change to a wind energy system under sub. (1) (b) may not reopen the merits of the earlier approval but shall consider only those issues relevant to the proposed change.

(b) An application for a material change is subject to ss. 13.30 (1), (3) to (5), (6) (a) and (b) and (7) and 13.31 to 13.34.

(c) An application for a material change shall contain information necessary to understand the material change.

(d) The Town may hold at least one public meeting to obtain comments on and to inform the public about a proposed material change to an approved wind energy system.

13.36 Monitoring compliance. (1) MONITORING PROCEDURE. The Town may establish a procedure to monitor compliance by the owner with any condition on an approved wind energy system or to assess when wind energy system facilities are not maintained in good repair and operating condition. The procedure may include timelines, provide for payment of reasonable fees for conducting an assessment, and provide for notification to the public.

(2) THIRD-PARTY INSPECTOR DURING CONSTRUCTION. The Town may require an owner to pay a reasonable fee for a third-party inspector to monitor and report to the Town regarding the owner’s compliance with permit requirements during construction. An inspector monitoring compliance under this subsection shall also report to a state permitting authority upon the state permitting authority’s request.

13.40 Complaint process. (1) MAKING A COMPLAINT, (a) An aggrieved person may make a complaint regarding failure by an owner to comply with an obligation under this chapter.

(b) A complaint under par. (a) shall be made first to the owner of the wind energy system
pursuant to a complaint resolution process developed by the owner.

(c) A complainant may petition the Town for review of a complaint that is not resolved within 45 days of the day the owner receives the original complaint.

(d) The Town’s decision under par. (c) is subject to review under s. 66.0401 (5), Stats.

(2) COMPLAINT RESOLUTION. (a) An owner shall use reasonable efforts to resolve complaints regarding a wind energy system and shall investigate complaints regarding a wind energy system at the owner’s expense.

(b) Upon receipt of a complaint, an owner shall provide the complainant with a copy of the notice described in s. 13.42 (1). Within 30 days of receiving a complaint, an owner shall provide an initial response to the complainant.

(c) An owner shall make a good faith effort to resolve complaints within 45 days of receiving a complaint. An owner shall notify the Town of complaints that have not been resolved within 45 days of the date the owner received the original complaint.

(d) An owner shall maintain a log of all complaints received regarding the wind energy system. The owner shall include in the log the name and address of each complainant, the nature of each complaint, and the steps taken to resolve each complaint. An owner shall provide a copy of a complaint log monthly, at no cost, either to a monitoring committee established under s. 13.41 or, if a monitoring committee has not been established, to the Town. An owner shall make any complaint log available to the commission upon request.

(e) An owner shall develop a complaint resolution process that is consistent with this subsection.

13.41 Monitoring committee. (1) COMMITTEE. Except as provided in sub. (3), the Town may establish a monitoring committee to oversee resolution of complaints regarding a wind energy system. A monitoring committee shall include on the committee a member who is a local employee of an owner of a wind energy system and, if in existence, at least one nonparticipating landowner residing in the Town within 0.5 mile of a wind turbine that is located in the Town.

(2) DUTIES. A monitoring committee established under sub. (1) may do any of the following:

(a) Maintain a record of all complaints brought to it.

(b) Require the owner to provide the committee with information regarding the owner’s response to any complaint forwarded to the owner by the committee.

(c) Recommend to the Town a reasonable resolution to a complaint based upon the information gathered by the committee.

(3) MULTIPLE JURISDICTIONS. If a wind energy system is located in more than one political subdivision with jurisdiction over the wind energy system and multiple political subdivisions decide to establish a monitoring committee, the political subdivisions shall jointly establish a single monitoring committee to oversee resolution of complaints regarding the wind energy system.
13.42 **Notice to property owners and residents.** (1) NOTICE OF PROCESS FOR MAKING COMPLAINTS. Before construction of a wind energy system begins, an owner shall provide written notice of the process for making complaints and obtaining mitigation measures to all residents and landowners within 0.5 mile of any wind energy system facility. An owner shall include in the notice the requirements under s. 13.40 (1) for submitting a complaint to the owner, a petition for review to the Town, and an appeal to the commission, and shall include a contact person and telephone number for the owner for receipt of complaints or concerns during construction, operation, maintenance and decommissioning.

(2) NOTICE TO TOWN. An owner shall provide a copy of the notice under sub. (1) to any Town with jurisdiction over the wind energy system, and the owner shall keep the contact person and telephone number current and on file with the Town.

II. **SMALL WIND ENERGY SYSTEM REGULATION.**

13.60 **Exemptions from this chapter.** All of the provisions in this chapter apply to a small wind energy system except ss. 13.14 (4) (d) and (6) (b), 13.15 (1) (c), (3) (b) to (e) and (5), 13.16 (2) to (4), 13.18 (1) (g), (2) (b) and (c), (3) (am), (b) and (c), and (4) (b) to (f), 13.19 (1) (c) to (e), (3) and (4), 13.30 (2) (L) and (m), 13.33 (1) to (3m) and (5), 13.34 (1), 13.36, 13.40 (2) (b) to (e), 13.41 and 13.42.

13.61 **Modifications to this chapter.** The following provisions in this chapter are modified to apply to a small wind energy system as follows:

(1) NOTICE. Under s. 13.105 (1), the notice shall be filed at least 60 days before an owner files an application to construct a small wind energy system and the notice shall be provided only to adjacent landowners and the political subdivisions with jurisdiction over the small wind energy system.

(2) LAND USE. Section 13.12 (1) applies only to existing land uses and enterprises that are located on adjacent nonparticipating properties.

(3) SETBACK DISTANCES. In s. 13.13 (1):

(a) Table 1 is replaced with Table 2.

(b) The owner of an adjacent nonparticipating residence or adjacent occupied community building may waive the applicable turbine setback distances in Table 2.

<table>
<thead>
<tr>
<th>Setback Description</th>
<th>Setback Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupied Community Buildings</td>
<td>1.0 times the maximum blade tip height</td>
</tr>
<tr>
<td>Participating Residences</td>
<td>None</td>
</tr>
<tr>
<td>Nonparticipating Residences</td>
<td></td>
</tr>
</tbody>
</table>

23
1.0 times the maximum blade tip height

Participating Property Lines
None

Nonparticipating Property Lines
1.0 times the maximum blade tip height

Public Road Right-of-Way
None

Overhead Communication and Electric Transmission or Distribution Lines - Not including utility service lines to individual houses or outbuildings
1.0 times the maximum blade tip height

Overhead Utility Service Lines - Lines to individual houses or outbuildings
None

(4) NOISE. Under s. 13.14 (6) (b), an owner shall provide notice of the requirements of s. 13.14 only to each adjacent nonparticipating residence or occupied community building before the initial operation of the small wind energy system.

(5) USEFUL LIFE. Under s. 13.19 (1), a small wind energy system is presumed to be at the end of its useful life if it generates no electricity for a continuous 540-day period.

(6) EFFECTS ON LAND USES. Under s. 13.30 (2) (g), the information regarding the anticipated effects of the small wind energy system on existing land uses shall only be for parcels adjacent to the wind energy system.

(7) APPLICATION NOTICE. Under s. 13.30 (5) (a), written notice of the filing of the application shall be provided only to property owners and residents located adjacent to the small wind energy system.

(8) MEETINGS. Under s. 13.30 (6) (c), the Town may hold at least one public meeting to obtain comments on and to inform the public about a proposed small wind energy system.