

SECTION 31

Wind Energy Regulations

Section 31: Additional Use Regulations

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Section 31.1. INTENT.

The intent of this article is to provide for the regulation of owners/developers engaged in the construction, erection, placement, location and maintenance of wind energy devices in Ida County; and to preserve and protect public health and safety without significantly increasing the cost or decreasing the efficiency of wind energy devices and associated structures.

Section 31.2. JURISDICTION.

The regulations stated in this article are adopted by the Ida County Board of Supervisors governing all lands within the unincorporated areas of Ida County, Iowa. This article and its provisions shall not apply to those properties or projects occurring within the incorporated cities in Ida County.

Section 31.3. DEFINITIONS.

1. Administrator - Any person or firm appointed by Ida County Board of Supervisors to oversee the permitting and compliance of the wind energy device regulations.
2. Commercial Wind Energy Device – any wind energy device with a nameplate capacity of more than 100kw of which its primary intent is to generate electrical power to be sold to utility or power companies.
3. Owner/Developer - shall mean the individual or entity that intends to own and operate the wind energy system in accordance with this ordinance.
4. Rotor Diameter - means the cross sectional dimension of the circle swept by the rotating blades.
5. Total Height - means the vertical distance from ground level to the tip of a wind generator blade when the tip is at its highest point.
6. Tower - means a monopole, freestanding, or guyed structure that supports a wind generator.
7. Wind Energy Device - means equipment that converts and then stores or transfers energy from the wind into usable forms of energy. This equipment includes any base, blade, foundation, generator, nacelle, rotor, tower, transformer, wire, inverter, batteries or other

components used in the system. The term wind energy device often refers to and includes wind towers, wind turbines, wind generators, windmills or wind energy conversion systems.

8. Meteorological Tower (or Met Tower) - Any meteorological, measuring or surveying equipment erected on or attached to any tower, monopole, or guyed structure to verify the wind and weather resources found within a certain area. Meteorological towers are also subject to permitting on both temporary and permanent structures.
9. Small Wind Energy Device - A wind energy system that is used to generate electricity and has a nameplate capacity of 100kw or less. Wind energy devices with a generating capacity of 20kw or less may be used for residential or personal use. A wind energy device with a generating capacity between 20kw and 100kw is considered small wind energy for commercial/industrial applications. A wind energy device is considered “small” only if it supplies electrical power solely for on-site use, except that when a parcel on which the system is installed also receives electrical power supply by a utility company, excess electrical power generated and not presently needed for on-site use may be used by the utility company in accordance with Section 199, chapter 15.11 (5) of the Iowa Administrative Code.

Section 31.4. WIND ENERGY REQUIREMENTS.

1. Location and Height.

Commercial wind energy devices shall not be permitted within any defined residential zoned district nor shall they be permitted within 5,280 feet of any residential zoned district. Commercial wind energy devices shall also not be permitted within any defined recreational district nor shall they be permitted within 2,640 feet of any recreational district. No height limitations shall apply in all other zoning districts, except that no wind energy device, meteorological tower or other associated structures shall be permitted to extend into approach zones, clear zones or other restricted air space required for the protection of any airport.

Small wind energy devices are exempt from any zoning height limitations, except that no wind energy device, meteorological tower or other associated structures shall be permitted to extend into approach zones, clear zones or other restricted air space required for the protection of any airport.

2. Setbacks.

Commercial wind energy devices shall be set back a distance equal to 110% its total height from any public right of way, overhead utility lines or adjacent property lines not under the same ownership unless written consent is granted by the property owner or entity with jurisdiction over the street, utilities or adjacent properties. With that stated, those wind energy devices that are located on land adjacent to property under the same ownership may have the property line setback requirement waived; however, the setbacks still apply to overhead utility lines and public right-of-ways. Commercial wind energy devices shall be setback a distance of no less than 1,250 feet from any human occupied dwelling. A human occupied dwelling is defined as one that is currently occupied or capable of being occupied for residential purposes. A greater setback may be required to minimize shadow flicker, nuisance noise, and other possible documented effects to humans living in these dwellings.

Small wind energy devices located on a freestanding pole or other tower structure must maintain a setback distance equal to 110% of its total height from any public street or road

right-of-way, overhead utility lines or adjacent property lines not under the same ownership unless written permission is granted by the property owner or entity with jurisdiction over the street, utilities or adjacent properties.

3. Placement or Spacing.

Commercial wind energy device spacing will vary depending on common industry practice and manufacturer specifications. The owner/developer shall consider the public interest and the natural environment, and maintain the intent and purpose of this ordinance.

Small wind energy devices designed for residential or personal use shall be erected on either a freestanding pole or tower. In all residential zoned districts, no small wind energy device or accessory structures shall be permitted within the front yard.

4. Public Lands or Waterways. It is required that the owner/developer of commercial wind energy devices have a preliminary review with the Iowa Department of Natural Resources (IDNR) and the Ida County Conservation Board early in the planning stages of all wind energy device projects located in Ida County. This review will allow the IDNR and/or County Conservation Board to comment and offer suggestions regarding the siting of wind energy devices near wildlife habitats. The review will also allow IDNR staff or the County Conservation Board to identify sensitive environmental concerns near public lands or waters, and to work with the owner/developer to voluntarily identify alternative siting options that minimize negative impacts to environmentally sensitive areas.

5. Access. All ground mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.

6. Electrical Wires. All electrical wires associated with any wind energy device, other than wires necessary to the operation of the wind turbine itself shall be located underground. In the instance of commercial wind energy projects, transmission lines or high capacity electrical lines from substations transferring cumulative energy resources from a wind energy project shall not be required to be placed underground.

7. Lighting. Any wind energy device shall not be artificially lighted unless such lighting is required by the Federal Aviation Administration.

8. Appearance, Color, and Finish. Any wind energy device shall remain painted or finished the color or finish that was originally applied by the manufacturer, unless approved in the conditional use permit.

9. Signs. All signs shall be prohibited other than the manufacturer or installer's identification sign and appropriate warning signs. Documentation showing any signage is required with the application. Signs indicating the 911 rural addressing of each commercial wind energy device or grouping of multiple wind energy devices shall be placed at each wind energy device site and/or the entry points of access roads as per the Ida County 911 rural addressing signage requirements.

10. Code Compliance. Any wind energy device shall comply with all applicable state construction and electrical codes, and the National Electrical Code.

11. Utility notification and interconnection.

Commercial wind energy devices that connect to the electric utility shall comply with all local, state and federal regulations regarding the connection of energy generation facilities.

Small wind energy devices shall not be installed until evidence has been given that the utility company has authorized interconnection of the small wind device to its electric distribution or transmission, under an agreement approved by and subject to regulation adopted by the Iowa Utilities Board. Small wind energy devices not connected to a public utility system shall be exempt from this requirement.

12. Sound. Sound produced by any wind energy devices under normal operating conditions, as measured at the property line shall not produce sound at a level that would constitute a nuisance. Industry standards support that wind energy noise should not exceed 50dba at a distance of 1,250 feet, the setback distance in Ida County to a human occupied dwelling. Sound levels, however, may be exceeded during short term events out of anyone’s control, such as utility outages and/or severe wind storms.

13. Climbing Apparatus. Any commercial wind energy device tower must be designed to prevent climbing within the first ten feet (10’).

14. Change of Ownership. Any commercial wind energy device, whether singularly or within a group of multiple wind energy devices, shall submit to the Ida County zoning administrator notification upon change of ownership of commercial wind energy devices.

15. Electromagnetic Interference. Any wind energy device shall be designed and constructed so as not to cause radio and television interference. If it is determined that the wind energy device is causing electromagnetic interference, the owner shall take the necessary corrective action to eliminate this interference including relocation or removal of the facilities, subject to the approval of the appropriate county authority. A construction and/or occupancy compliance certificate granting a wind energy device may be revoked if electromagnetic interference from such device becomes evident.

Section 31.5. CONDITIONAL USE PERMIT.

Commercial wind energy devices, wind energy towers or meteorological towers erected in any zoning district may be granted as a conditional use permit and approved by the Board of Adjustment after a public hearing. The zoning administrator shall perform an assessment of the issues raised as a result of erecting wind energy devices and issuing conditional use permits in the zoning district prior to any public hearing and any action by the Board of Adjustment. Any conditions or requirements issued as part of the conditional use permit shall not be more lenient than the stated wind energy requirements in Section 31.4. Additional conditions or requirements for the acceptable erection and operation of wind energy devices in any zoning district shall be clearly stated in the conditional use permit.

Small wind energy devices designed, marketed and sold explicitly for personal or private residential or business applications, which has a nameplate capacity of 100kw or less shall be considered a conditional use in all zoning districts. For small wind energy devices only, if such device is used expressly for agricultural purposes or to supply power for agricultural purposes

and not intended to be connected to an electrical grid and sold for profit or power credit, then the wind energy device is determined to be farm exempt, and not subject to these regulations.

Section 31.6. PERMIT REQUIREMENTS.

A construction and/or occupancy compliance certificate shall be required for the installation of any wind energy device, except for small wind energy devices used expressly for agricultural purposes or to supply power for agricultural purposes. The application for construction and/or occupancy compliance certificate will be accompanied by a detailed site plan for the wind energy device. A site plan and other such plans and manufacturer's specifications shall show the dimensions, arrangements, descriptive data, site layout and other information essential to an understanding of the use and construction of the proposed wind energy device. The construction and/or occupancy compliance certificate shall also be accompanied by an application fee of \$500.00. A site plan shall include the following at a minimum:

- Location of the proposed wind energy device(s)
- Wind energy device specifications, including manufacturer and model, rotor diameter, tower height, tower type (freestanding or guyed)
- Tower foundation blueprints or drawings and tower blueprint or drawing
- Site layout, including location of property lines, wind turbines, electrical wires, connection points with electrical grid, and related accessory structures.
- The site plan shall be drawn to scale.
- Documentation of land ownership or legal control of the property.
- FAA Permit Application, if applicable.
- GPS coordinates for wind energy device locations on final/approved site plan
- Applicable for commercial wind energy; access points to roads showing construction details typical of all entrances proposed to be built in the public right-of-way.
- Applicable for commercial wind energy; the leaseholder or ownership details of the building site.
- Applicable for commercial wind energy; the distances to any human occupied dwellings and the distances to other wind energy devices or other tower structures within 1,250 feet.

Section 31.7. NOTIFICATION.

The owner/developer shall be responsible for obtaining and submitting to Ida County an abstractor's or attorney's certificate, at the time the application is made, showing the names and last known addresses of the owners of all property within 2,640 feet (½ mile) of the parameter of the total project development site containing wind energy device(s). Prior to the public hearing for such conditional use permit, notice shall be given by ordinary mail to all adjacent property owners and owners of property within 2,640 feet (½ mile) of the proposed site(s) for which the conditional use is requested.

Section 31.8. REVIEW AND APPROVAL.

A construction and/or occupancy compliance certificate shall not be granted for a commercial wind energy device or commercial wind energy project unless and until the following procedures have been fulfilled:

1. Pre-application meeting. Whenever a commercial wind energy device, whether singularly or within a group of multiple wind energy devices, is proposed in the jurisdiction of Ida County the owner/developer is required to hold a public informational meeting on the proposed development within 90 days prior to submitting an application. A public notice of the meeting shall be published in a newspaper of general circulation within the vicinity of the proposed project site as well as published within the official publication(s) of Ida County no less than 4 days and no more than 20 days prior to the meeting. The public notice shall include at a minimum the name of the proposed project, a contact person for the project, the location of the project, the time and place of the meeting and a description of the project activities. The owner/developer is responsible in meeting all of these requirements and shall provide documentation to the county that these requirements have been satisfied prior to making application for a construction and/or occupancy compliance certificate.
2. Agency notice/review. Prior to submitting an application for a commercial wind energy device, whether singularly or within a group of multiple wind energy devices, the project owner/developer of such structure shall be responsible for notifying applicable governmental and community agencies and allowing each agency 60 days advance notice to do a preliminary review. Documentation of notification of these agencies, and any reports from the agencies are to be provided to the county when the application is submitted. If any agency does not act within 60 days, the plan may be deemed approved by the agency that failed to act upon proof of notice. It is recommended that any issues be addressed prior to the public hearing. Ida County staff and the project applicant will agree to a list of applicable agencies (identified below) to which the applicant will solicit comment from prior to Ida County considering an application for wind energy project.
 - a. Federal Aviation Administration
 - b. Army Corps of Engineers
 - c. Bureau of Land Management
 - d. U.S. Fish and Wildlife
 - e. U.S. Department of Agriculture (Local FSA and NRCS)
 - f. Environmental Protection Agency
 - g. Federal Communications Commission
 - h. Iowa Department of Transportation
 - i. Iowa Department of Natural Resources
 - j. Iowa Utilities Board
 - k. Office of State Archaeologist
 - l. Ida County Engineer's Office
 - m. Ida County Conservation Board
 - n. Local EMS Fire and Rescue
3. Within 60 days of receiving the official permit application for a commercial wind energy device, whether singularly or within a group of multiple wind energy devices, the Board of Adjustment shall schedule a public hearing regarding the conditional use permit. Notice shall be given to the public no less than 4 days and no more than 20 days prior to the public hearing by publication in the official newspaper(s) of Ida County as well as publication in a newspaper within the general vicinity of the proposed project site. Prior to the public hearing,

notice shall also be given by ordinary mail to all adjacent property owners and all property owners located within 2,640 feet (½ mile) of the total development site of the proposed wind energy device(s) for which the permit is requested.

4. The Board of Adjustment may prescribe additional appropriate conditions and safeguards in conformity with this ordinance and other ordinances of the county.
5. **Commercial wind energy** devices are subject to a wind energy permit fee of \$1,000.00 per wind energy device erected, of which must be received and acknowledged prior to approval of said application.
Small wind energy devices are subject to a wind energy permit fee of \$250.00 per wind energy device erected, of which must be received and acknowledged prior to approval of said application. If the wind energy device is used solely for agricultural purposes and not connected to an electrical grid or used for commercial energy, then the wind energy device is considered exempt from these zoning regulations and not subject to the permit fee.
6. Approval of the conditional use permit for a wind energy device shall be valid for a period no longer than two (2) years from the date of such permit, unless construction has commenced or the Board of Adjustment specifically grants a longer period of time for the conditional use permit.
7. The approval and issuance of a conditional use permit for the construction or installation of a commercial wind energy device, whether singularly or within a group of multiple wind energy devices, under this ordinance shall not relieve any permittee, applicant or owner from compliance with all legal requirements, nor relieve the permittee, applicant or owner of any liability for damage or loss resulting from the placement, construction or maintenance of such wind energy device. Ida County assumes no liability whatsoever by virtue of the issuance of a conditional use permit for wind energy devices.

Section 31.9. MITIGATION OF DAMAGES.

In the event there are any damages that occur during construction or maintenance of any wind energy device, the owner/developer shall be fully responsible to mitigate and correct any damages to public or private infrastructure.

1. Roads. Costs of replacement, maintenance, restoration, and/or damage to county roads, rights-of-way, or any county infrastructure resulting from modifications, adjustments, heavy or frequent use during construction and operation of the wind energy devices shall be the responsibility of the owner/developer of such project. A separate roads agreement that clearly and specifically lays out the rights and obligations of Ida County and the owner/developer with respect to the construction, maintenance and use of roads in connection with the development project will be required as a condition of the permit.
2. Drainage system. The owner/developer of the wind energy device shall remedy any adverse effect on any duly established drainage tile caused by construction or repair of such project.

Section 31.10. DISCONTINUANCE OR ABANDONMENT.

Each application for a commercial wind energy device shall have a decommissioning plan outlining the anticipated means and proposed financing methods adequate to remove such structure(s) upon becoming a discontinued use. Any commercial wind energy device that is out-of-service for a continuous one (1) year period will be deemed to have been abandoned and discontinued for use. At such time the wind energy device is determined to be abandoned, the owner shall remove the wind energy device at the owner's expense within one (1) year of receipt of notice. If the owner fails to remove the wind energy device, the zoning administrator may pursue legal action against the owner of such wind energy devices.

Section 31.11. PENALTY.

It shall be unlawful for any person, firm or corporation to construct, install, or operate a wind energy device that is not in compliance with this ordinance or with any special conditions contained in the conditional use permit. Wind energy devices installed prior to the adoption of this ordinance are exempt. The zoning administrator may enter any property for which a permit has been issued under this ordinance to conduct an inspection to determine whether the conditions stated in the permit have been met.

Any person who fails to comply with any provision of this ordinance or an approved special exception permit for any wind energy device shall be deemed a county infraction and punishable by a civil penalty of not less than \$100.00 but not to exceed \$750.00 plus court costs for the first offense and not less than \$100.00 but not to exceed \$1,000.00 plus court costs for each repeat offense. Ida County may seek all relief prescribed by State law for county infractions. The Ida County Auditor and the Ida County Attorney are the officers authorized to enforce this ordinance by issuance of civil citations for county infractions. Each wind energy device determined to be in violation will be considered a separate infraction. Each day that a violation occurs or continues to exist constitutes a separate offense.