

**Lyon County, Iowa**  
**Summary Only - Wind**

For full ordinance text, please find pdf below or visit county website.

**Date Passed/Amended:** 2012  
**Summary Written:** December 13, 2022

**Agricultural Use Table:**

**Eligible Zoning:** Special Exception Use in the Prime Agricultural District, Transitional Agricultural District, Conservation District, Highway Commercial District, Light Industrial District, and the Heavy Industrial District

**Prohibition Language:** Commercial wind energy devices shall not be permitted within any defined residential zoned district.

**Required Information/Permits Required:**

- a) Special Exception Use Permit/Zoning Compliance Permit
  - a. Application Requirements:
    - i. Location of the proposed wind energy device(s)
    - ii. Wind energy device specifications, including manufacturer and model, rotor diameter, tower height, tower type (freestanding or guyed)
    - iii. Tower foundation blueprints or drawings and tower blueprint or drawing
    - iv. Site layout, including location of property lines, wind turbines, electrical wires, connection points with electrical grid, and related accessory structures
    - v. Documentation of land ownership or legal control of the property on which such devices will be located
    - vi. Federal Aviation Administration Application

**Request for Variance:**

- a) A Special Exception Use Permit must be issued by the Board of Adjustment

**Site and Structure Requirements:**

- a) Compliance with all local, state, and federal regulations:
  - a. A wind energy device shall comply with all applicable state construction and electrical codes, and the National Electrical Code.

- b. Wind energy devices that connect to the electric utility shall comply with all local, State of Iowa and Federal regulations regarding the connection of energy generation facilities.
  - c. Wind energy devices shall comply with any local ordinance regulating the volume of sound as a nuisance.
- b) Concentrating Solar Power Facilities:
- c) Fencing/Security:
- a. All ground mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.
  - b. The tower must be designed to prevent climbing within the first ten feet (10').
- d) Glare minimization/Shadow Flicker:
- a. The wind energy device shall remain painted or finished the color or finish that was originally applied by the manufacturer, unless approved in the special exception use permit.
- e) Height:
- a. Commercial wind energy devices shall be limited to a total height of two hundred fifty feet (250') within twelve hundred fifty feet (1,250') of any residential zoned district.
  - b. No height limitations shall apply in all other zoning districts, except that no wind energy device 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.
- f) Lighting:
- a. A wind energy device shall not be artificially lighted unless such lighting is required by the Federal Aviation Administration
- g) Minimum Lot Size:
- |                           |  |
|---------------------------|--|
| Prime Agricultural        | Thirty-five (35) acres minimum         |
| Transitional Agricultural | Ten (10) acres minimum                 |
| Conservation              | One (1) acre minimum                   |
| Highway Commercial        | Ten thousand (10,000) sq ft minimum    |
| Light Industrial          | Twenty thousand (20,000) sq ft minimum |
| Heavy Industrial          | One (1) acre minimum                   |
- h) Noise:
- a. Sound produced by wind energy devices under normal operating conditions, as measured at the property line shall: a) not produce sound at a level that would

constitute a nuisance; b) shall comply with any local ordinance regulating the volume of sound as a nuisance, if applicable.

- b. Sound levels may, however, be exceeded during short term events out of anyone' control, such as utility outages and/or severe wind storms.
- i) Outside storage:
- j) Setbacks and Lot Coverage:
  - a. Commercial wind energy devices shall be set back a distance of no less than twelve hundred fifty feet (1,250') from any residential dwellings.
  - b. Commercial wind energy devices shall be set back a distance equal to one hundred ten percent (110%) its total height from any public street 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.
  - c. 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 rights-of-ways.
- k) Screening:
- l) Signage:
  - a. All signs visible from any public road, other than the manufacturer or installer's identification or appropriate warning signs shall be prohibited.
- m) Site Access/Emergency Response:
- n) Utility Connections:
  - a. All electrical wires associated with a wind energy device, other than wires necessary to the operation of the wind turbine itself shall be located underground.
  - b. Wind energy devices that connect to the electric utility shall comply with all local, State of Iowa and Federal regulations regarding the connection of energy generation facilities.
- o) Waste:

Operation and Maintenance Plan:

- a) Monitoring and Maintenance:
- b) Soil and Erosion and Sediment Control:

Decommissioning and Site Reclamation: