Osceola County, IA Summary Only - Wind

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

Date Passed/Amended: 2013 **Summary Written**: June 21, 2022

Agricultural Use Table:

Eligible Zoning:

- a) Commercial Wind Energy Conversion System (CWECS)
 - a. Agriculture District (AG)
 - b. Environment and Conservation District (EC)
 - c. Highway Commercial District (HC)
 - d. General Industrial District (GI)

Prohibition Language:

Required Information/Permits Required:

- a) Commercial Wind Energy Conversion System (CWECS)
 - a. Conditional Use Permit is required
 - b. Application must include:
 - i. Location of the CWECS
 - ii. Device specifications including make, model, rotor diameter, tower height and tower type.
 - iii. Tower foundation blueprints
 - iv. Site Layout
 - v. Site Plan
 - vi. Documentation of land ownership or legal control
 - vii. FAA permit application, if applicable
 - viii. GPS coordinates for tower locations
 - ix. Access points to roads showing construction details for entrances proposed to be built in the public right-of way
 - x. Leaseholder or ownership details of the building site
 - xi. Distances to any human occupied dwellings and distances to other CWECS or towers within twelve hundred and fifty (1,250) feet

Request for Variance:

Site and Structure Requirements:

- a) Compliance with all local, state, and federal regulations:
 - a. Commercial Wind Energy Conversion System (CWECS)

- i. CWECS shall comply with all applicable state construction and electrical codes and the National Electrical Code.
- b) Concentrating Solar Power Facilities:
- c) Fencing/Security:
 - a. Commercial Wind Energy Conversion System (CWECS)
 - i. All ground mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.
 - ii. CWECS towers must be designed to prevent climbing within the first ten (10) feet.
- d) Glare minimization:
 - a. Commercial Wind Energy Conversion System (CWECS)
 - i. CWECS shall remain painted or finished the original color applied by the manufacturer unless approved by the County.
 - Site plans for CWECS shall address offsetting, placement and proximity to residential dwellings to address and minimize the effects of shadow flicker.
- e) Height:
 - a. Commercial Wind Energy Conversion System (CWECS)
 - CWECS tower heights shall be limited to two hundred and fifty (250) feet within twelve hundred and fifty (1,250) feet of any residential zoned district.
 - ii. CWECS tower heights have no limitations in any other permitted zoning district but shall not extend into approach zones, clear zones or other restricted air space required for protection of any airport.
- f) Lighting:
 - a. Commercial Wind Energy Conversion System (CWECS)
 - CWECS shall not be artificially lighted unless such lighting is required by the FAA.
- g) Minimum Lot Size:
- h) Noise:
 - a. Commercial Wind Energy Conversion System (CWECS)
 - i. Sound produced by the CWECS under normal operating conditions as measured at the property line shall not produce sound at a level that would constitute a nuisance.
 - ii. Industry standards support that the CWECS shall not exceed fifty (50) dba at a distance of twelve hundred and fifty (1,250) feet.

- iii. Sound levels however may be exceeded during short term events out of anyone's control, such as utility outages and/or severe wind storms.
- i) Outside storage:
- j) Setbacks and Lot Coverage:
 - a. Commercial Wind Energy Conversion System (CWECS)
 - i. CWECS shall be setback a distance equal to one hundred and ten (110) percent 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.
 - ii. CWECS shall be setback a distance of no less than twelve hundred and fifty (1,250) feet from any human occupied dwelling. A greater setback may be required to minimize shadow flicker, nuisance noise and other possible documented effects to humans living in these dwellings.
 - iii. CWECS device spacing will vary depending on common industry practice and manufacturer specifications and the owner/operator shall consider the public interest and natural environment and maintain the intent and purpose of this ordinance.
 - iv. CWECS shall have a preliminary review from the Iowa Department of Natural Resources and the County Conservation Board early in the planning stages. This review will allow for suggestions regarding the siting of the CWECS near wildlife habitats and identify sensitive environmental concerns near public lands or waters and possibly identify alternate siting options.
- k) Screening:
- I) Signage:
 - a. Commercial Energy Conversion System (CWECS)
 - i. All signs shall be prohibited other than the manufacturer or installer's identification sign and appropriate warning signs.
 - ii. Signs indicating the 911 rural addressing of each CWECS shall be placed at each site and/or entry points of access roads as per the County 911 rural addressing signage requirements.
- m) Site Access/Emergency Response:
- n) Utility Connections:
 - a. Commercial Wind Energy Conversion System (CWECS)
 - 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.

- ii. For CWECS, 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.
- iii. CWECS that connects to the electric utility shall comply with all local, state 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:
 - a. Commercial Wind Energy Conversion System (CWECS)
 - 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 he CWECS shall be the responsibility of the owner/operator.
 - ii. A separate roads agreement detailing this responsibility will be required as condition of the permit.
 - iii. Owner/operator shall remedy any adverse effect on any duly established drainage tile caused by construction or repair of the project.

Decommissioning and Site Reclamation

- a) Commercial Wind Energy Conversion System (CWECS)
 - a. A Decommissioning Plan is to be submitted and approved by the County during the application process.
 - b. CWECS is considered abandoned or discontinued after one (1) year of no energy production. The owner/operator will have one (1) year following this determination to decommission and remove the CWECS at the owner's expense.
 - c. If the CWECS is not decommissioned and removed during the one (1) year period, the County may pursue legal action against the owner.