BEFORE THE BOARD OF COUNTY COMMISSIONERS OF DEUEL COUNTY, NEBRASKA

IN THE MATTER OF – Updates to the County Zoning Regulations for Section 13

RESOLUTION NO. 2026-0010

WHEREAS, the Board of County Commissioners of Deuel County, Nebraska (hereinafter referred to as the "County Board"), have been presented by the Deuel County Planning & Zoning Board a recommendation to update Section 13 of the Deuel County Regulations as follows:

(SEE ATTACHED EXHIBIT A)

and WHEREAS, the County Board has taken into consideration the recommendations of the Deuel County Planning & Zoning Board,

NOW, THEREFORE, BE IT RESOLVED, by the Board of County Commissioners of Deuel County, Nebraska, that the update to County Zoning Regulations Section 13 as noted above is hereby approved.

Dated this ____ day of _____ 2026.

By the Board of County Commissioners of Deuel County, Nebraska

X _____

X _____

X _____

Attest:

X _____

Tammy Sherman, Deuel County Clerk

EXHIBIT A
Resolution 2026-0010

Updates to County Zoning Regulations Section 13
Pages 34 - 52

SECTION 13. SMALL AND COMMERCIAL WIND ENERGY CONVERSION SYSTEMS

13.1 Intent: In order to balance the need for clean, renewable energy resources with the protection of the health, safety, and welfare of the residents of Deuel County, Nebraska, the County finds these regulations are necessary in order to ensure that all wind energy conversion systems (CWECS) are appropriately designed, sited, and installed.

These regulations pertaining to all wind energy conversion systems are intended to respond to equipment available at the time of adoption. Deuel County recognizes that this is an emerging technology and that new means of collecting wind energy, including but not limited to vertical axis wind turbine generators are under development. Accordingly, these standards will be reviewed and may be amended as technology advances.

13.2 Types of Wind Energy Systems:

~~1.~~ Small Wind Energy Conversion System - (SWECS) – A wind energy conversion system which has a rated capacity of up to Twenty-Five (25) kilowatts and which is incidental and subordinated to Permitted Principal and Accessory Uses in the same zoning district. A system is considered a small wind energy system only if it supplies electrical power for site use, except that when a parcel on which the system is installed also received electrical power supplied by a utility company, excess electrical power generated and not presently needed for onsite use may be sold back to the utility company. *(25 Kilowatt limit approved by the Deuel County Planning Commission to increase to a maximum of 100 Kilowatts with Nebraska State Legislature authorization by future amendment)*–

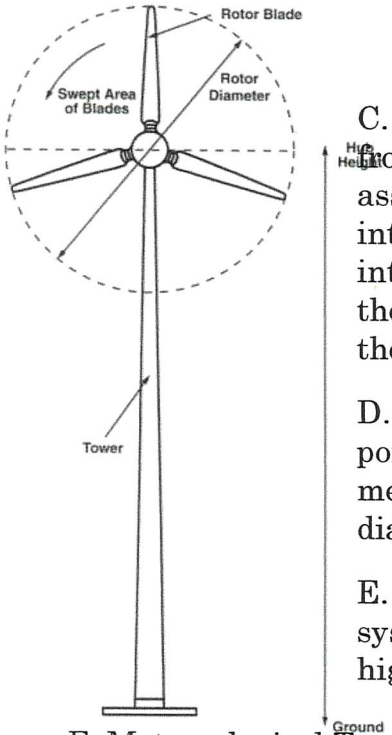
not crossed out.

2. Commercial Wind Energy Conversion System – (CWECS) A wind energy conversion system under common or aggregated ownership or operating control that includes substations, MET towers, cables/wires and other building accessories, in which the main purpose is to supply electricity to off-site customers.

13.3 Definitions:

A. Aggregated Project – Those projects that are developed and operated in a coordinated fashion, but which have multiple entities separately owning one or more of the individual CWECS within a larger project. Associated infrastructure such as power lines and transformers that service the facility may be owned by a separate entity but are also included as part of the aggregated project.

B. Fall Zone – The area, defined as the furthest distance from the tower base, in which a tower will collapse in the event of a structural failure.



C. Feeder Line – Any power line that carries electrical power from one or more wind turbines or individual transformers associated with individual wind turbines to the point of interconnection with the electric power grid, in the case of interconnection with the high voltage transmission systems the point of the interconnection shall be the substation serving the WECS.

D. Height, hub – The height above grade of the fixed portion of the tower, including the generation unit, measured to the hub or center point of the rotor blade diameter.

E. Height, total system – The height above grade of the system, including the generating unit and measured the highest vertical extension of any rotor blades or rotors.

F. Meteorological Tower – For the purposes of wind energy conversion systems, meteorological towers are those which are erected primarily to measure wind speed and direction plus other data relevant to locating a CWECS. Meteorological towers do not include towers and equipment used by airports, the Nebraska Department of Roads or other similar applications to monitor weather conditions.

G. Rotor Diameter – The diameter of the circle created by the outer most point of the rotor blades of the windmill. (see Diagram #1)

H. Shadow flicker – Strobe effect that occurs when sun is horizontal to rotor blades, which causes repetitive intermittent shadows that can affect people on nearby properties.

I. Substations – Any electrical facility utilized to convert electricity produced by a Commercial Wind Energy Conversion System for interconnection with high voltage transmission lines.

J. Tower – The vertical component of a wind energy conversion system that elevates the wind turbine generator and attached blades above the ground.

K. Transmission Line – shall mean the ~~The~~ electrical power lines that are High Voltage Transmission Lines carrying electricity over medium to long distances rather than directly interconnecting and supplying electric energy to retail customers.

L. Wind Energy Conversion System (WECS) – An aggregation of parts including

the base, tower, generator, rotor, blades, supports, and configuration as necessary to convert the power of wind into mechanical or electrical energy, e.g. wind charger, windmill, or wind turbine.

M. CWECS – shall mean any piece of electrical generating equipment that converts the kinetic energy of blowing wind into electrical energy using airfoils or similar devices to capture the wind.

N. Wind Turbine Generator – The component of a wind energy system that transforms mechanical energy from the wind into electrical energy.

O. Floodplain – shall mean any land area susceptible to being inundated by floodwaters from any source.

P. Force Majeure – shall mean a fire, earthquake flood, or other acts of God; strikes or labor disputes; war, civil strife, or other violence; or any other condition beyond the reasonable control of a party.

Q. Bluff – shall mean rugged terrain with steep sloped or elevated areas which is associated with a larger geological formation.

R. Property Line – shall mean the legally defined described boundary.

S. Public Conservation Lands – shall mean land owned in fee title by State or Federal agencies and managed specifically for conservation purposes, including but not limited to State Wildlife Management Areas, State Parks, Federal Wildlife Refuges and Waterfowl Production Areas. For purposes of this regulation, public conservation lands will also include lands owned in fee title by non-profit conservation organizations. Public conservation lands will also include private lands upon which conservation easements have been sold to public agencies or non-profit conservation organizations.

T. Scenic Byway – shall mean a specially designated road, waterway or corridor identified by a government agency for its significant archeological, cultural, historic, natural, recreational, or scenic qualities.

U. Historical Site – shall mean a location that is officially recognized for its cultural heritage value.

V. Waterway, Creek, River – shall mean any identified Waterway, Creek or River.

Setbacks
All towers shall adhere to the setbacks as measured from the center point of the tower foundation established in the following table:

	Small Wind – SWECS Non-Commercial	Commercial Wind CWECS
Property Lines (other than right angle corners) Participant Non Participant	 0 300'	 0 1.0 miles
Human Occupied Dwelling Units (1) (2) Participant Non Participant	 0 300'	 0 5 miles
Other Structures Participant Non Participant	 0 300'	 0 1.5 miles
Road Right-of-Way	300'	Generator blades shall not encroach on the right-of-way. A minimum setback of 3 miles shall be deployed beyond registered right-of-way measured from the center line of the road.
Other Right-of-Ways	300'	3 miles
Highways / Railroads	1.5 miles	1.5 miles
City / Village	5 miles	5 miles
Airport	1 mile	5 miles
Church's, Registered Cemetery's	300'	1/4 mile
Scenic Byway / Historic or Heritage Sites	300'	2 miles
Public Conservation Land, Habitats, Identified Wildlife Reserves, Waterways, Creeks, Rivers	2650'	4.5 miles
Zone A Floodplain	300'	1.5 x's height + diameter of blades.

1. The setback for dwelling units and other structures shall apply only at the time of CWECS initial construction.
2. Human Occupied Dwelling shall mean a single-family home occupied by humans or a structure with dual use farm/Ag building with a human occupied dwelling inside of it.
3. Other Structures shall mean any structure not designated with a single-family home in whole or in part of it.

13.4 Small Wind Energy Conversion System

A Small Wind Energy Conversion System (SWECS) is a facility used for the production of a maximum of Twenty-Five (25) kilowatts of electrical energy supplied by the wind. The facility may include wind turbine(s) with total height(s) of one hundred and eighty (180) feet or less and any transmission lines. The SWECS is primarily used to generate energy for use by its owner. A small wind energy facility shall be sited and designed to minimize adverse visual impacts on neighboring properties. **To be used in conformance with Nebraska State Statutes 70- 2001 through 70-2005, regarding Net Metering.** *(25 Kilowatt limit approved by the Deuel County Planning Commission to increase to a maximum of 100 Kilowatts with Nebraska State Legislature authorization by future amendment)*

General Site and Design Standards

1. Located on a lot or parcel of at least ~~three (3)~~ ten (10) acres.

2. Each SWECS location must have a 911 address.

3. Shall be permitted as a Conditional Use permitted by special review in the "A", "RE", "TS", "LI", "HI" and "O" Zoning Districts.

~~4. SWECS shall maintain a minimum setback distance from any property line of one and one-half (1.5) times the total system height of the windmill for non-participating property owners. Adjoining property owners (second or third additional farm/ranch single dwelling units for the purpose of housing relatives or permanent agriculture workers) participating in the same or Aggregated Project shall have no setback requirements between adjoining properties.~~ Now in setbacks under definitions.

~~5. SWECS shall maintain a minimum setback distance from any public road, or highway of at least one point one (1.1) times the total system height of the windmill from the public road or highway right-of-way.~~ **Now in setbacks under definitions.**

4 ~~6.~~ In no case shall a WECS be located within any required setback or in any front yard area.

5 ~~7.~~ Turbines and towers shall be painted or coated, shall be of a non-reflective white, grey, or other neutral color and shall not be used to display advertising.

6 ~~8.~~ SWECS shall not be artificially lighted unless such lighting is required by the Federal Aviation Administration (FAA).

7 ~~9.~~ All electrical wires associated with a small wind energy system other than the wires necessary to connect the wind generator to the tower wiring, the tower wiring to the disconnect junction box, and the grounding wires shall be located underground.

8 ~~10~~. The minimum distance between the ground and any part of the rotor blade system shall be thirty (30) feet.

9 ~~11~~. All ground mounted electrical and control equipment must be labeled and secured to prevent unauthorized access. A tower may not have step bolts or a ladder within eight (8) feet of the ground that is readily accessible to the public.

10 ~~12~~. The owner of a small wind energy facility shall minimize or mitigate any interference with electromagnetic communications, such as radio, telephone or television signals caused by the facility.

11 ~~13~~. Construction access must be re-graded and re-vegetated to minimize environmental impacts.

12 ~~14~~. A SWECS application must include an agreement that addresses decommissioning and abandonment of the facility. The agreement must at a minimum provide for reuse or dismantlement of the facility at the owner's expense.

13 ~~15~~. All SWECS shall have a containment basin surrounding the base of each tower, specifically the size of the nacelle plus ten (10) feet each way in all directions.

Application Requirements

1. A survey map at an appropriate scale identifying:
   - Site boundary;
   - Adjacent public right-of-ways;
   - Existing structures;
   - Proposed small wind energy system and accessory structures;
   - Adjacent ownership and existing residences;
   - Existing overhead utility lines.
2. A report or documentation from the Manufactures including the following:
   a. Small wind system specifications including manufacturer and model; rotor diameter, tower height, tower type (freestanding or guyed);
   b. Documentation to establish that the tower has sufficient structural integrity for the proposed use at the proposed location;
   c. Certification that the small wind energy system complies with all applicable state construction and electrical codes and the National Electrical Code.

3. Compliance with FAA Regulations, including any Documentation required by the FAA certifying approval of proposed location when located within the ten (10) ~~three (3)~~ mile Planning Jurisdiction of any airport.

4. Signed letter of Notification by the property owner submitted to the Electrical Supplier/Purchaser, Deuel County Assessor's Office, and Deuel

County Zoning Administrator signifying utility service is approved.
5. Require proof of insurance on application.

13.5 Commercial Wind Energy Conversion System – (CWECS)

A Commercial Wind Energy Conversion System (CWECS) ~~wind energy conversion system~~ under common or aggregated ownership or operating control that includes substations, MET towers, cables/wires and other building accessories, of which the main purpose is to supply electricity to off-site customers.

Commercial Wind Energy Conversion Systems may be included as an aggregated project. Such as those projects that are developed and operated in a coordinated fashion, but which have multiple entities separately owning one or more of the CWECS within a larger project. Associated infrastructure such as power lines and transformers that service the facility may be owned by a separate entity but are also part of the aggregated project. The aggregated project may include wind turbine(s) with a total height(s) of six-hundred ninety-nine (699) feet as determined from the top of the rotor while top dead center. All individual wind turbine towers of an aggregated project shall be in conformance with Section 6.55 (A) items one through 15.

General Site and Design Standards:

1. Located on a lot or parcel of at least ~~ten (10)~~ seventy-five (75) acres in size.
2. The entire aggregated project shall be permitted as a **Conditional Use** permitted by special review in an "A" Agricultural District.
3. If an aggregated project, setbacks from multiple entities (turbines) shall be one and one-tenth (1.1) times the height of the total system.
4. Each CWECS location must have a 911 address.
5. CWECS shall be designed and placed in such a manner as to minimize to the greatest extent feasible, adverse visual and noise impacts on adjacent areas. This shall include documentation of:
   a) Noise levels conforming to the International Electromechanical Commission (IEC) Standard 61400-11 part 11; and
   b) Projections of the "shadow flicker" on any existing structures located off the property on which the CWECS will be constructed and the extent and duration of the shadow flicker on these existing structures.
6. ~~CWECS shall maintain a minimum setback distance from any property line of one and one-half (1.5) times the total system height of the windmill for non-participating property owners. Adjoining property owners participating in the same Aggregated Project shall have no setback requirements between adjoining properties.~~ **Now in setbacks under definitions.**

~~7. CWECS shall maintain a minimum setback distance from any public road, or highway of at least one point one (1.1) times the total system height of the windmill from the public road or highway right-of-way.~~ **Now in setbacks under definitions.**

6 ~~8.~~ In no case shall a WECS be located within any required setback or in any front yard area.

7 ~~9.~~ The minimum distance between the ground and any part of the rotor blade system shall be fifty (50) feet.

8 ~~10.~~ Structures for wind turbines shall be self-supporting tubular towers, if painted or coated shall be of a non-reflective neutral color such as white or pale gray. No lattice structure shall be used. No logos or advertisements are allowed on these structures. Each turbine shall be marked with a visible identification number located no higher than fifteen (15) feet above ground level.

9 ~~11.~~ Colors and surface treatment of the CWECS and supporting structures shall, to the greatest extent possible, minimize disruption of the natural characteristics of the site.

10 ~~12.~~ Reasonable measures shall be taken to ~~mitigate~~ ensure there are no specific adverse visual impacts such as reflections, shadow flicker, and blade glint affecting non participating residences within or immediately adjacent to the project area.

11 ~~13.~~ CWECS ~~shall be equipped with air traffic warning lights or other marking lights only if so required by the Federal Aviation Administration and in which event, such light should be positioned or shielded to avoid visual impact on neighboring properties, and shall be a white flashing light from daylight till twilight and a steady red light night time. Light system must be maintained and working at all times.~~ must have a Light-mitigating technology system (ADLS) which includes aircraft detection lighting or any other comparable system capable of reducing the impact of facility obstruction lighting while maintaining conspicuity sufficient to assist aircraft in identifying and avoiding collision with a wind energy conversion system. The owner/operator shall be responsible for ensuring the light system is monitored, maintained and working at all times.

12 ~~14.~~ The applicant shall ensure there is no ~~minimize or mitigate any~~ interference with electromagnetic communications, such as radio, telephone or television signals caused by any wind energy facility.

13 ~~15.~~ All CWECS shall have a containment basin surrounding the base of each tower, specifically the size of the nacelle plus ten (10) feet each way in all directions.

16. ~~A Meteorological Tower is permitted by a **Conditional Use Permit** for the purposes of the Aggregated Project. Meteorological towers shall meet the same setback requirements of those established for an Aggregated Project. If the tower is non-functional, it shall be removed after a period of one (1) year. (dated 6/18/2024, Resolution # 2024-008)~~ **Moved to 13.6 after Disconinuation and Decommissioning**

~~**Safety Markings and Lighting Specific to Meteorological Towers**~~

~~A. Prior to construction, anyone desiring to erect a Meteorological Evaluation Tower (MET) must submit site plans and a copy of all forms submitted to FAA and Nebraska Department of Transportation to the Airport Zoning Board and obtain necessary building permit or conditional use permit.~~

~~B. Permits would be limited to 5 years but allow for extensions upon application.~~

~~C. MET towers 50 feet or higher must be made more visible by complying with the following requirements:~~

~~a. Paint towers in seven, equal bands of Aviation Orange and White. The bands should begin with Aviation Orange at the top and finish with the same orange as the bottom band.~~

~~b. A dual lighting system of medium or high intensity white flashing light at the top of the tower with a minimum of 2 nautical miles visibility when flashing for daytime visibility and an aviation red light flashing light for nighttime visibility. Lighting shall conform with FAA guideline AC 150/5345-43 *Specification for Obstruction Lighting Equipment* or most recent guidelines in place at the time of installation.~~

~~c. Guy-Wired Towers must have a total of eight marker balls attached as follows: 4 marker balls attached to guy lines at the top of the tower at a distance no further down than 15 feet from the top wire connection; 4 marker balls at the bottom of wires at a height of 5 to 10 feet above the tallest crop to be grown in the immediate vicinity of the tower.~~

~~d. Guy-Wired Towers shall have a 7' safety sleeve at each anchor point.~~

~~e. All MET Towers shall be fitted with an ADLS-B transponder.~~

Moved to 13.6 after Discontinuation and Decommissioning

17. ~~CWECS shall have a minimum setback of one-quarter (1/4) mile from any adjacent residence not owned by the owner of the CWECS. However, no setback is required between an adjacent residence that is owned by a participating member of the same Aggregated Project~~ **Now in setbacks under definitions.**

Application Requirements

The applicant for a conditional use permit for construction of a CWECS shall file an application with the Deuel County Zoning Administrator. The application shall include the name(s) of the project applicant(s), the name of the project owner(s),

and the legal description and address for the project~~.~~, a description of the project including; number, type, name plate generating capacity, tower height, rotor diameter, and total height of all wind turbines and means of interconnecting with the feeder lines.
The application shall also include the following documents:

A survey map illustrating the following:

1. Property lines, dimension, acreage and contours with appropriate intervals for site evaluation.

2. Location and elevation of all components of the proposed CWECS.

3. The latitude and longitude of individual wind turbines at time of application;

4. An Acoustical Analysis or wind turbine manufacturer's certificate that certifies that the noise requirements within this regulation in section 606.10 can be met;

5. Location and dimensions of all existing structures and uses on property within three hundred (300) feet of the system;

6. Height of any structures over thirty-five (35) feet within a ~~five hundred (500)~~ three hundred (300) foot radius on site or offsite of the proposed CWECS;

7. Location of any overhead utility lines on the property;

8. Location of all known communications towers within ~~two (2)~~ five (5) miles of the proposed CWECS

9. Proposed ~~A~~access roads;

~~10. Adjacent ownership, land uses, existing residences, schools, churches, hospitals, public libraries, federal, state, county or local parks, recognized scenic byways, historic or heritage sites, identified wildlife preserves, or habitat areas to a distance of 2,650 feet (one-half mile).~~ **Now in setbacks under definitions.**

10 ~~11~~. Provide a copy of the Easement Deed from the Deuel County Register of Deeds Office for each property involved in the CWECS.

11 ~~12~~. Provide a map illustrating all transmission lines connecting to the Substation.

12 ~~13~~. Copy of Agreement or Notification of Compliance Letter and determination of no hazard to air navigation between any municipal Airport Authority and the Applicant.

13 ~~14~~. A signed agreement to provide financial funding for all costs to enable the County to hire, on its behalf, and chosen by the County, a qualified representative, attorney, engineer or other professional individual or firm with expertise in the development of Commercial WECS to assist the County in review of the Conditional Use Permit Application.

14 ~~15~~. A signed agreement to provide financial funding for all costs to enable the County to hire, on its behalf, and chosen by the County, a qualified engineering firm, or other qualified individual or firm, to monitor the construction and compliance of all State, Federal and Local regulations related to the development of the proposed CWECS project.

15 ~~16~~. A signed agreement to provide financial funding for all costs related to upgrading the grid necessary to handle the wind energy generated by a large-scale project.

16 ~~17~~. No special permitting for wildlife take.

Applicant shall identify potential effects in terms of constraints or benefits the wind energy facility may place on current or future use of the land within the project site and the surrounding area. The extent of any limitations due to public health and safety risks shall be specifically addressed, and the effects on the following activities shall also be addressed:

1. Existing or proposed tourist or recreation activities;
2. Residential activities;
3. Industrial activities;
4. Agricultural activities;
5. Commercial activities

Soil erosion, sediment control, and storm water runoff plan shall address what types of erosion control measures will be used during each phase of the project. It shall identify plans for:

1. Grading;
2. Construction and drainage of access roads and turbine pads;
3. Design features to control dust;
4. Design features to maintain downstream water quality;
5. Re-vegetation to ensure slope stability;
6. Restoring the site after temporary project activities;
7. Disposal or storage of excavated materials;
8. Protecting exposed soil;
9. Stabilizing restored material and removal of silt fences or barriers when the area is stabilized; and
10. Maintenance of erosion controls throughout the life of the project.

Applicant shall provide information regarding flora and fauna of the proposed project area including:

1. Officially listed threatened or endangered species;
2. Critical habitat and habitat conditions;
3. An avian study based on the US Fish and Wildlife Services "Interim Guidelines to Avoid and Minimize Wildlife Impacts from Wind Turbines"

Standard drawings of the structural components of the CWECS, including structures, tower, base, and footings.

Certification by a registered engineer that:

1. There is a substantial need for the proposed use or CWECS, one hundred (100) kW or greater;
2. All applicable local, state, and federal building, structural and electrical codes have been followed;
3. The site is feasible for a CWECS; the CWECS can be successfully operated in the climate conditions found in Deuel County;
4. The rotor and over speed control have been designed for the proposed use on the proposed site;
5. The design and safety of the proposed tower to withstand winds of ninety (90) miles per hour; and
6. If the wind turbine were to fall, no building or structure, existing or potential, would be damaged.

Construction and Operations

All public roads to be used for the purpose of transporting CWECS, substation parts, cement or equipment for construction, operation, or maintenance of the CWECS shall be identified and applicable weight and size permits from the impacted road authority(ies) shall be obtained prior to construction.

A pre-construction survey must be conducted with the appropriate jurisdictions to determine existing road conditions. Those included are Applicant(s); Landowner(s); CWECS Owner(s); Township Representative(s), County Highway Superintendent and~~/or~~ Zoning Administrator. The survey shall include photographs and a written agreement to document the conditions of the public roads and facilities. All expenses of the survey shall be the Applicant's responsibility.

Prior to construction, a signed Roads Agreement must be approved and in place. The CWECS owner/operator shall be responsible for immediate repair of damage to public roads and drainage systems stemming from construction, operation, or maintenance of the CWECS. All costs of upgrading and maintaining any roads impacted by construction/ operation or maintenance of the CWECS project in Deuel County will be at the expense of the owner/operator of the CWECS project.

Solid and hazardous waste, including but not limited to crates, packaging materials, damaged or worn parts, as well as used oils and lubricants and wildlife remains, shall be removed from the site promptly but no more than fourteen (14)

days and disposed of in accordance with all applicable local, state, and federal regulations. CWECS Facility Owner or Operator shall be responsible for removing all waste disposal from participating and non-participating land at the facility owner's expense. At no time are damaged and worn parts allowed to be stored anywhere in Deuel County, including on participating properties.
The applicant, permittee or current owner will be responsible for compliance with all federal, state and local laws applicable to the generation, storage, transportation, clean-up and disposal of any hazardous waste generated during any phase of the wind energy facilities life.

The applicant, permittee or current owner shall remove all waste and scrap that is the product of construction, operations, restoration and maintenance from the facility and properly dispose of upon the completion of each task. Personal litter, bottles and paper products deposited by facility personnel shall be removed on a daily basis.

The applicant, permittee or current owner shall control noxious weeds on the property site and shall not allow weeds, noxious or other, to spread to adjacent agricultural land. The use of chemicals on or in the wind energy facility is limited to those herbicides and methods approved by Nebraska Department of Agriculture and the Nebraska Department of Health. The person/company providing the service must be certified. The applicant, permittee or current owner must contact the affected landowners prior to application.

Safety Measures

All towers shall adhere to the following safety and design standards:

1. Each CWECS shall be equipped with both manual and automatic controls to limit the rotational speed of the rotor blade, so it does not exceed the design limits of the rotor.

2. The Planning Commission shall determine the height, color, and type of fencing, if needed, for the CWECS installation. CWECS shall include no sign or advertising of any kind, except for one sign not to exceed two (2) square feet posted at the base of the tower, transformer, substation, electrical equipment, and entrances. The sign shall contain the following information:

    1. Warning – high voltage
    2. Manufacturer's name
    3. Operator's name
    4. Emergency phone number
    5. Emergency shutdown procedures

3. Each CWECS shall be properly grounded to safely sustain natural lightning strikes in conformance with the National Electric Code.

4. Any CWECS facility shall be equipped with anti-climbing devices. Tower climbing apparatus shall not be located within fifteen (15) feet of the ground.

Where the tower is capable of being climbed, a locked, protective fence at least six (6) feet high shall enclose the tower.

5. Clearance of rotor blades or airfoils must maintain a minimum of 30 feet of clearance between their lowest point and the ground for Small Wind Energy Systems. Clearance of rotor blades or airfoils must maintain a minimum of 50 feet of clearance between their lowest point and the ground for Commercial/Utility Grade Wind Energy Systems.

6. All CWECS, shall be installed with tubular, monopole type tower(s).

7. Consideration shall be given to painted aviation warnings on all towers less than 200 feet.

8. Color and finish: All CWECS shall be white, grey, or another non-obtrusive color. Finishes shall be matte or non-reflective. One (1) blade on the CWECS must be painted black with an FAA aeronautical-study determination.

9. Feeder Lines: All communication and feeder lines installed as part of a CWECS shall be buried at a depth of four (4) feet. All county roads must be bored and cased. Electrical lines from the wind farm to the substation may be placed overhead, if needed, by applying for a variance.

The applicant, permittee or current owner will only place overhead electric lines on a public right-of-way if approval or the required permits have been obtained from the governmental jurisdiction responsible for the affected right-of-way. When placing electric lines on private property, the applicant, permitee or current owner, will place the electric lines in accordance with the easement negotiated with the affected landowner/s. All underground electric lines must be placed at a depth of at least four (4) feet.

10. Shadow/Flicker:

A flicker study needs to be submitted to obtain a conditional use permit. Each study will contain the following input:

- Turbine location (latitude and longitude)
- Shadow Flicker receptor (dwelling) locations (latitude and longitude)
- U.S. Geological Survey (USGS) 1:24,000 topographic scale and USGS Digital Elevation Model (DEM) (height contours)
- Turbine rotor diameter
- Turbine hub height
- Wind speed and direction frequency distribution date
- Sunshine hours (long term monthly reference data)
- Identification of the model and turbine size

Output from the model must include the following information:

- Calculated shadow-flicker time at selected receptors
- Tabulated and plotted time of day with shadow flicker at selected receptors
- Map showing turbine locations, selected shadow-flicker receptors and iso-line contours indications projected shadow-flicker time (hours per year)

If a turbine model change occurs after the completion and submission of the shadow/flicker study, a new study will not be necessary should the turbine remain at the same or smaller hub height and rotor diameter. Any applicable certifications or materials provided by a turbine manufacturer that satisfactorily meets the requirements set for above shall substitute for a

formal study.
The Shadow Flicker Study must indicate there will not be a shadow flicker on any non-participating human occupied dwelling, county road or highway and not exceed 30 minutes per week or 30 hours per year on all other non-participating structures, churches or cemeteries.

11. Noise assessment study:

A one-month noise assessment study needs to be submitted to obtain a conditional use permit.

Each study shall contain the following information:

- An estimation or survey of the existing ambient background noise levels.
- Prediction (or measurement) of noise levels including infrasound from the turbines(s) for any human occupied residences within the scope of the project in Deuel County.
- Identification of the model and turbine size for sound propagation (sound modeling software shall include a propagation model)
- Comparing calculated sound pressure levels from the wind turbines with the background sound pressure levels at the locations of concern.

If a turbine model change occurs after the completion and submission of the noise assessment study, a new study will not be necessary should the turbine remain at the same or smaller hub height and rotor diameter. Any applicable certifications or materials provided by a turbine manufacturer that satisfactorily meets the requirements set for above shall substitute for a formal study. If a turbine should need repaired, modified or repowered and increases the megawatts of capacity, a new noise assessment study will be required before the work is started.

The Noise Assessment Study must indicate that the proposed project will meet the requirements as set out in ~~606.10~~ 13.9 of these regulations.

12. Interference: Any CWECS or component thereof shall not interfere with any existing electromagnetic communications, such as radio telephone, or television signals. The applicant shall notify all registered communication tower operators within five (5) miles of the proposed CWECS location upon application to the county for permits and shall provide the contact list to the county zoning administrator.

13.Must provide an updated, toll free number for emergency contacts.

14.A copy of the state required Archeology Resourse Survey shall be provided to the County.

15.Emergency Plan: The applicant or owner/operator of the CWECS will cooperate with local emergency management in developing an Emergency Response Plan to be submitted with the application. A means of shutting down the CWECS must be clearly identified. The current owner/operator will identify a responsible person for public inquiries throughout the life of the CWECS. An information sign must be posted and maintained at all entrance(s), which lists the name(s) and phone number(s) of the current owner/operator.

16.Liability Insurance: The applicant, permittee, or current owner and/or operator of the CWECS will defend, indemnify and hold harmless Deuel County and its officials from and against any and all claims, demands, losses, suits, causes of action, damages, injuries, costs, expenses and liabilities whatsoever, including attorney's fees, without limitation, arising out

of unlawful acts or missions of the applicant, permittee, current owner and/or operator associated with the construction and/or operation of the CWECS.

The current owner and/or operator of the CWECS will maintain a current liability policy covering installation, operation and any possible damage or bodily injury and property damage that might result from the failure of a tower(s) or any other part(s) of the generation and transmission facility and name Deuel County, its employees, officers, agents and contractors as additional insured with limits of at least twenty-five million ($25,000,000) dollars per occurrence and five million ($5,000,000) dollars in aggregate with a deductible of no more than five thousand ($5000) dollars. Any loss of coverage, and expired insurance certificate or failure to maintain the minimum coverage amount will be considered grounds for revocation of the CWECS application.

Certificates evidencing required insurance must be provided to Deuel County upon approval of the CWECS Application and prior to the commencement of any construction. A letter indicating continued ~~annual~~ coverage must be submitted to Deuel County annually.

17. Permit Fees: Fees will be calculated as outlined in the Deuel County Fee Schedule, established by the County Board of Commissioners. Fees shall be sufficient to cover actual and anticipated costs to the County associated with the proposed project. A twenty-five (25) percent (non-refundable) of the total fee amount must accompany the CWECS application and Conditional Use Permit. The remaining seventy-five (75) percent will be due and payable upon approval of the CWECS Conditional Use Permit. The fee must be made payable to Deuel County.

~~The CWECS operator shall maintain a current insurance policy which will cover liability, installation, operation, and any possible damage or injury that might result from the failure of a tower or towers or any other part or parts of the generation and transmission facility. The amount of said policy shall be established as a condition of approval. The CWECS shall be warranted against any system failures reasonably expected in severe weather operation conditions.~~

Discontinuation and Decommissioning.

A. CWECS and/or individual tower shall be considered discontinued use after one (1) year without 50% energy production, unless nonproduction is caused by an event of Force Majeure. In that event, a plan must be ~~is~~ developed and submitted to the Deuel County Zoning Administrator outlining the steps and schedule for returning the CWECS to service. A quarterly report will be required to track the energy production during the year. All CWECS, including foundations, underground cables and lines and accessory facilities, shall be dismantled and removed ~~four (4) feet~~ ten (10) feet below ground level within ninety (90) days of the discontinuation of use.

   This period may be extended by no more than an additional ninety (90) days by the Zoning Administrator following a written request by an agent of the owner of the CWECS. At no time shall explosives be used in the dismantling and decommissioning of any CWECS.

B. CWECS shall have a decommissioning plan outlining the anticipated means and costs of removing CWECS at the end of the serviceable life or upon becoming discontinued use and return the roads to pre-construction or better

condition. The cost estimates shall be made by a competent party, such as a professional engineer, a contractor capable of decommissioning, or a person with suitable expertise or experience with decommissioning. The plan shall also identify the financial resources that will be available to pay for decommissioning and removal of the CWECS and accessory facilities. Financial assurance in an amount sufficient to perform the required work in decommissioning per this plan will be required in full upon approval of the application by the Deuel County Board of Commissioners and prior to any construction beginning. Decommissioning cost estimates will be evaluated no less than every two (2) years by a competent party chosen by the County at the project owner's expense.

C. The CWECS Owner or Operator shall post and maintain Decommissioning Funds in an amount equal to current Total Decommissioning Costs of the entire Project. The Decommissioning Funds shall be deposited and maintained with a bonding company or Federal or State of Nebraska chartered lending institution chosen by the Facility Owner or Operator and participating landowner posting the financial security, provided that the bonding or lending institution is authorized to conduct such business within the State of Nebraska and is approved by the County.

The decommissioning plan shall include the method or means of removing the CWECS and accessory facilities, parties responsible for removal and site cleanup, evidence of a damage insurance liability policy, schedule for removal not to exceed ninety (90) days from approval of the plan. The Applicant shall set aside one hundred (100) percent of each tower's cost for future decommissioning upon approval of the application by the Deuel County Board of Commissioners (and increased as needed after every 2-year evaluation) and prior to any construction beginning. The funds are to be placed in a cash escrow account with a local Deuel County Bank with Deuel County added as an additional owner.
(Resolution _____April 21, 2015.

D. At the end of the aggregated project's useful life, the entire site shall be restored in accordance with the requirements of this condition to original condition to the depth of ten (10) feet within ~~eighteen (18)~~ twelve (12) months.

13.6 Meteorological Towers

A Meteorological Tower is permitted by a **Conditional Use Permit** for the purposes of the Aggregated Project. Meteorological towers shall meet the same setback requirements of those established for an Aggregated Project. If the tower is non-functional, it shall be removed after a period of one (1) year. (dated 6/18/2024, Resolution # 2024-008)

Safety Markings and Lighting Specific to Meteorological Towers

A. Prior to construction, anyone desiring to erect a Meteorological Evaluation Tower (MET) must submit site plans and a copy of all forms submitted to FAA and Nebraska Department of Transportation to the Airport Zoning Board and obtain necessary building permits or conditional use permits.
B. Permits would be limited to ~~five (5)~~ two (2) years for construction but allow for extensions upon application.
C. MET towers ~~fifty (50) feet or higher~~ regardless of height must be made more visible by complying with the following requirements:
    a. Paint towers in seven, equal bands of Aviation Orange and White. The bands should begin with Aviation Orange at the top and finish with the same orange as the bottom band.
    b. A dual lighting system of medium or high intensity white flashing light at the top of the tower with a minimum of 2 nautical miles visibility when flashing for daytime visibility and an aviation red light flashing light for nighttime visibility. Lighting shall conform with FAA guideline AC 150/5345-43 *Specification for Obstruction Lighting Equipment* or most recent guidelines in place at the time of installation.
    c. Guy-Wired Towers must have a total of eight marker balls attached as follows: 4 marker balls attached to guy lines at the top of the tower at a distance no further down than 15 feet from the top wire connection; 4 marker balls at the bottom of wires at a height of 5 to 10 feet above the tallest crop to be grown in the immediate vicinity of the tower.
    d. Guy-Wired Towers shall have a 7' safety sleeve at each anchor point.
    e. All MET Towers shall be fitted with an ADLS-B transponder.

13.7 Minimum Regulations/Requirements:

These regulations shall serve as minimum requirements for CWECS applications. The applicant will comply with all applicable federal, state, and local laws and regulations. The County Board of Commissioners may require additional information and/or place additional reasonable conditions or requirements prior to approval of a Conditional Use Permit.

13.8 Life of Permits:

The Conditional Use Permit for the CWECS project shall be valid for a period of three (3) years after issuance. If new Wind Turbines or Towers are installed that increase the CWECS acreage or megawatts of capacity from the original project, a new permit will be required prior to installation. Repairs, replacement and/or repower that does not increase the CWECS acreage or total megawatts of CWECS capacity, will not require a new conditional use permit.

~~606.10~~ **Noise and Infrasound**
13.9

No CWECS shall exceed ~~60~~ 35 dBA during the daytime hours of 7am – 7pm and 30 dBA during the nighttime hours of 7pm – 7am within the setback ~~at~~ to the nearest non-participating structure occupied by humans. In the event of periods of severe weather, as defined by the United States Weather Service, a CWECS may exceed ~~60~~ 35 dBA. No CWECS shall exceed the ambient sound pressure level plus five (5) dBA with no more than 10 minutes of Leq (continuous sound pressure) during a 24-hour period within the setback at the nearest human occupied non-participating structure.

BEFORE THE BOARD OF COUNTY COMMISSIONERS OF DEUEL COUNTY, NEBRASKA

IN THE MATTER OF – Updates to the Deuel County Building Permit Fee Schedule

RESOLUTION NO. 2026-0011

WHEREAS, the Board of County Commissioners of Deuel County, Nebraska (hereinafter referred to as the "County Board"), have been presented by the Deuel County Planning & Zoning Board a recommendation to update the Deuel County Building Permit Fee Schedule as follows:

(SEE ATTACHED EXHIBIT A)

and WHEREAS, the County Board has taken into consideration the recommendations of the Deuel County Planning & Zoning Board,

NOW, THEREFORE, BE IT RESOLVED, by the Board of County Commissioners of Deuel County, Nebraska, that the update to the Deuel County Building Permit Fee Schedule as noted above is hereby approved.

Dated this _____ day of _____ 2026.

By the Board of County Commissioners of Deuel County, Nebraska

X _____

X _____

X _____

Attest:

X _____

Tammy Sherman, Deuel County Clerk

Deuel	Proposed Fee's

Permits	100 + addtl fee
House	addtl. 0.25 p/sqft
Addition	addtl. 0.20 p/sqft
Accessory Bldg Rural Res	addtl. 0.20 p/sqft
Farm Bldg Ag Use	addtl. 0.20 p/sqft
Farm Bldg non Ag Use	addtl. 0.25 p/sqft
Farm Bldg Comm use	addtl. .50 p/sqft

FloodPlain	Non- Structural	200 + utility permit fee
	Subst Imp / New Structure	200 + permit fee

Signs	
81 - 200 sq ft or larger	200
renew every 5 years	100
up to 80 sq ft	80
renew every 5 years	40

Setback Adjustment	250

Subdivision	500
** developer pays all assoc fees and consit fees/costs	
Subdivision Amendment	250
Minor Subdivision Changes	150
Per Lot	50 per lot
Preliminary Plat	300 + 50 p/Lot
Final Plat	300 + 50 p/Lot
Replat	200 + 50 p/Lot
Vacate Lot	400
Vacate Multiple Lots	400 + 50 p/Lot
Vacate Subdivision	500 + 50 p/Lot

Variance	500

Conditional Use Permit / CUP	500 + permit fee
Amend Conditional Use Permit (CUP)	250
6 mths or less	125
1 Year	225
2 Year	325
Cell Towers	1000
Cell Towers Equip Upgrade	500
Solar - 2 Years	500 + permit fees
** developer pays all assoc fees, consit fees and grid upgrade fees/costs	
total cost of project	2%
Private 25kw or less	300
Comm Solar 50-100kw	1000
Comm Solar 101kw-1mw	5000
Comm >1mw-100mw	10000
Comm Solar >100mw	20000
Yearly Per Megawatt Fee	100
1-Year Extension	5% Original Fee

MET Towers - 2 Years	500 + permit fees
total cost of project	2%
Per Tower	2000
1-Year Extension	1000
Wind - 2 Years	500 + permit fees
** developer pays all assoc fees, consit fees and grid upgrade fees/costs	
total cost of project	2%
Private 25kw or less	500
Comm Wind	30000
Per Tower	5000
Yearly Per Tower	1000
1-Year Extension	15000
Oil & Gas	500 + permit fees
** developer pays all assoc fees, consit fees and tansmission site upgrade fees/costs	
total cost of project	2%
Comm Oil & Gas	25000
Per Well	5000
Yearly Per Well	1000
1-Year Extension	15000
Intensive Feeding (Feedlot)	500 + permit fees
Class I 301-1000 Animal Units	250
Class II 1001-2500 Animal Units	500
Class III 2501-5000 Animal Units	1000
Class IV 5001-10000 Animal Units	2000
Class V 10001 or more Animal Units	4000
Paunch Manure Permit	100 per site

Subdivision Appeal	100
Subdivision Waiver	100

Appeal to BOA	500
Appeal BOA Decisiion	500
Map Interpretation by BOA	200

Regulation Amendment or Text Change	300
Comp Plan Amendment	300
Re Zoning Application	300
Zoning Amendment	300
Zoning Map Change	300

Formal Complaint Process	100
Postponement of Pub Hearing Fee	160

Publishing Fee for Variance/CUP/Public Hearing	60
Mailing Costs for Variance/CUP/Public Hearing Notices	current mailing costs

Copies Comp Plan / Regulations	50 ea
Copies Paper	0.50 p/page
Copies Electronic	1.00 p/page
Extension of Building Permit not completed in 1-year	**25**
Building without a permit Fee	**$10.00 or 10% of building value, whichever is larger**

Moratorium Extension Resolution 2026-0019

WHEREAS, the County of Deuel, a political subdivision of the State of Nebraska, has a comprehensive development plan adopted October, 2016 by the Deuel County Board of Commissioners (hereinafter "County Board of Deuel County") pursuant to Nebraska Revised Statute 23-114.02; and

WHEREAS, on November 4, 2025 the County Board of Deuel County approved a twelve (12) month moratorium extension (Moratorium Extension Resolution 2025-18) *incorporated herein by reference)* on accepting any applications for commercial wind energy systems or commercial solar energy systems, as defined in the current county zoning regulations: and

WHEREAS, the purpose of said moratorium extension is to enable the County of Deuel, Nebraska to update the comprehensive development plan and zoning regulations; and

WHEREAS, the County of Deuel, Nebraska is still in the process of said updates; and

WHEREAS, Moratorium Extension Resolution 2025-18 has the option to an extension, if necessary, in order for the county to finish the process of updating the comprehensive plan and zoning regulations.

NOW THEREFORE BE IT RESOLVED, County Board of Deuel County hereby extends Moratorium Extension Resolution 2025-18 for twelve (12) months or the adoption of the updated comprehensive development plan and zoning regulations, whichever event comes first:

BE IT FURTHER RESOLVED that this moratorium extension will be extended if necessary in order to allow the planning and zoning commission to conduct public meetings, including but not limited to public hearings, in direct regards to current and potential changes to regulations pertaining to commercial wind energy systems and commercial solar energy systems and updating the comprehensive plan adopted October 2016; and to further allow any potential changes to be passed on to the Deuel County Board of Commissioners for review, approval or disapproval with the same previously mentioned considerations as allowed for the Planning and Zoning Commission.

BE IT FURTHER RESOLVED that said extension shall become effective as of December 3, 2026.

Dated this _____ day of _____ 2026

DEUEL COUNTY NEBRASKA
BOARD OF COMMISSIONERS

_____
Jim Reichman, Chairman

_____
Jean Timm

ATTEST:

_____
Tammy Sherman, Deuel County Clerk

_____