

## SECTION 6.03 Wind Energy Installation

### A. Statement of 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 Burt County, Nebraska, the County finds these regulations are necessary in order to ensure that all wind energy conversion systems (WECS) are appropriately designed, sited, installed, and decommissioned. These regulations pertaining to all wind energy conversion systems are intended to respond to equipment available at the time of adoption. Burt 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.

### B. Definitions

The following are defined for the specific use of this Section 6.03.

CLUSTERING shall mean the grouping of wind turbines positioned or occurring closely together.

COMMERCIAL WECS (CWECS) shall mean a wind energy conversion system of equal to or greater than one hundred kilowatts (100kW) in total name plate generation capacity.

DEVELOPER shall mean any individual, corporation, or other organized entity that is planning, proposing, collecting easements/contracts from property owners, or any other activity associated with a proposed WECS project, WECS project under construction, or operator of the completed WECS system including individual wind turbines, and/or their successors.

DAYTIME HOURS shall mean a time beginning at sunrise and ending at sunset.

FAA stands for Federal Aviation Administration.

FEEDER LINE shall mean any power line that carries electrical power from one or more 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 interconnection shall be the substation serving the wind energy conversion system.

HUB The mechanical area sitting atop of a wind turbine structure containing the generation equipment and the point where the blades are connected to the system.

HUB HEIGHT shall mean the overall height measured from the grade of the system to the center point of the hub of the turbine.

HEIGHT- TOTAL SYSTEM shall mean the height above the grade of the system, including the generating unit and the measured highest vertical extension of any rotor blades or rotors.

ICE BREAKING shall mean a means built into individual wind turbines that will shut the turbine down if ice buildup is detected.

IMPACT EASEMENT-An Easement or deeds restriction, recorded in the Office of the Burt County Register of Deeds, which runs with the land and is granted to the owner of a CWECs for the period of time that such use shall exist, by the owners of the adjoining property in which it is mutually agreed between the grantor and grantee that the grantor shall hold the grantee harmless from noise, visual or other legal impacts associated with such use on the grantor’s property when such use is operated in accordance with the terms of such easement or deed restriction. This impact easement only relates to wind energy systems over 100KW. The area that the easement is being applied for needs to be defined with a legal description.

LANDOWNER, PARTICIPATING shall mean an individual, group of individuals or entity involved in the overall project via land leases, permit applications, contracts, easements, impact easements, or waivers.

LANDOWNER, NON-PARTICIPATING shall mean an individual, group of individuals or entity **not** involved in the overall project via land leases, contracts, easements, impact easements, or waivers.

METEOROLOGICAL TOWER shall mean, for purposes of this Regulation, a tower which is erected primarily to measure wind speed and directions plus other data relevant to siting a Wind Energy Conversion System. Meteorological towers do not include towers and equipment used by airports, the Nebraska Department of Transportation, or other applications to monitor weather conditions.

PROJECT OWNER shall mean a person or group responsible for initiating, funding, and overseeing a project.

PROPERTY LINE shall mean defined lines that mark the end of one owner’s property and the beginning of another owner.

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, Federal Wildlife Refuge, and Waterfowl Production Areas. For purposes of this Section 6.03, 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.

REPOWERING-is the process of replacing older power stations with newer ones that either have a greater nameplate capacity or more efficiency which results in a net increase of power generated.

ROTOR DIAMETER shall mean the diameter of the circle described by the moving rotor blades in Figure 1.

SHADOW FLICKER The effect of a pulsating shadow that occurs when the rotating blades of a wind turbine moves between the sun and an observer.

SMALL WIND ENERGY SYSTEM shall mean a wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity of not more than one hundred kilowatts (100kW) and which is intended to primarily reduce on-site consumption of utility power.

SUBSTATIONS shall mean any electrical facility to convert electricity produced by wind turbines to a voltage greater than thirty-five thousand (35,000, 35kV) for interconnection with high voltage transmission line.

TOTAL HEIGHT shall mean the highest point, above ground level. Reached by a rotor tip or any other part of the Wind Conversion System.

TOWER shall mean the vertical structure that supports the electrical, rotor blades, or meteorological equipment.

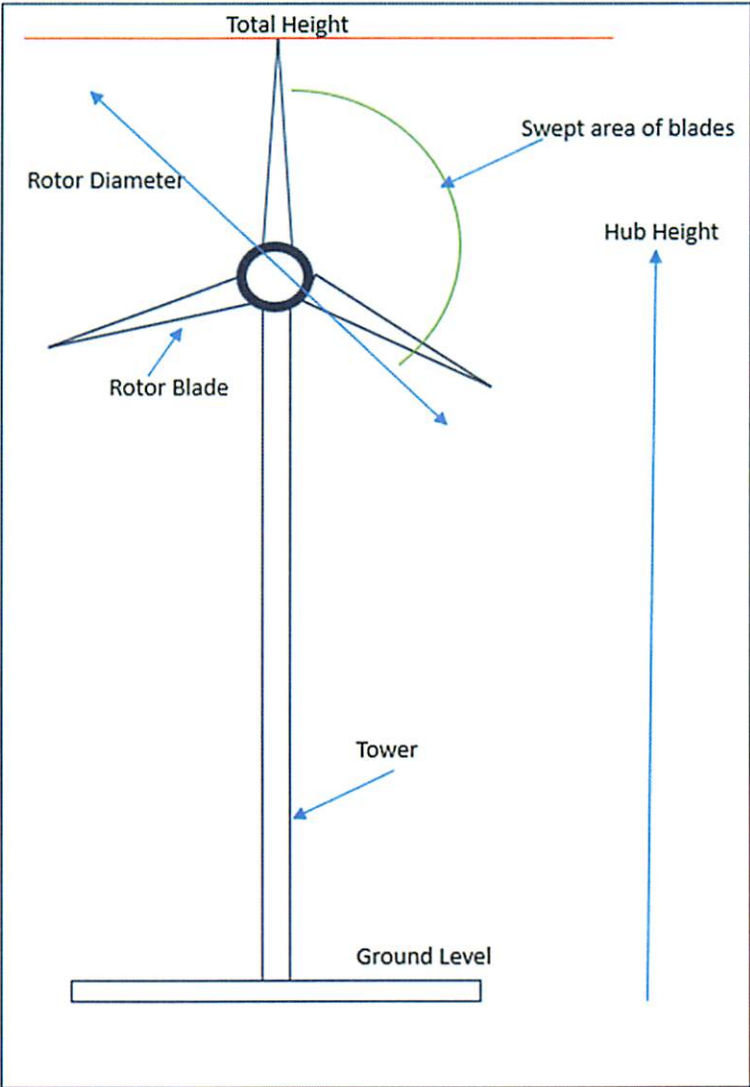
TRANSMISSION LINE shall mean the electrical power lines that carry voltages of at least sixty-nine thousand (69,000) volts (69kV) and are primarily used to carry electrical energy over medium to long distances rather than directly interconnecting and supplying electric energy to retail customers.

WIND ENERGY Kinetic energy present in wind motion that can be converted to mechanical energy for driving pumps, mills, and electric power generators.

WIND ENERGY CONVERSION SYSTEM (WECS) shall mean an aggregation of parts including but not limited to the base, tower, generator, rotor, blades, supports, structures, inverters/transformers, operation and maintenance building, access roads, wiring, substations, and configuration as necessary to convert the power of wind into mechanical or electrical energy, e.g. wind charger, windmill, or wind turbine.

WIND TURBINES 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.

Figure 1.



## C. Small Wind Energy Systems

1. Purpose It is the purpose of this regulation to promote the safe, effective, and efficient use of small wind energy systems installed to reduce the on-site consumption of utility supplied electricity.

### 2. Requirements

#### A. Tower Height

- a. For property sizes between one half (½) acre and one (1) acre the tower height shall be limited to eighty (80) feet.
- b. For Property sizes of one (1) acre or more, there is a limit on tower height of 160 (one hundred sixty) feet, except as imposed by FAA regulation. See Figure 1

#### B. Setbacks

- a. No part of the wind system structure, including guy-wire anchors, may extend closer than 1.1 times total height to the property lines of the installation site.

#### C. Noise

- a. Small wind energy systems shall not exceed fifty (50) dBA, as measured at the closest potential neighboring dwelling unit.
- b. The noise level may be exceeded during short term events such as utility outages and/or severe storms.

#### D. Approved Wind Turbines

- a. Small wind turbines must have been approved under the Emerging Technologies program of the California Energy Commission or any other small wind certification program recognized by the American Wind Energy Association.

#### E. Compliance with Zoning Codes

- a. Applications for small wind energy systems shall be accomplished by standard drawings of the wind turbine structure, including the tower base and footings.
- b. An engineering analysis of the tower showing compliance with the official building code of the governing body and/or the State of Nebraska certified by a professional engineer licensed and certified in Nebraska shall also be submitted.
- c. Wet stamps shall not be required.

#### F. Compliance with FAA Regulations and Airport Overlay District.

- a. Small wind energy systems must comply with applicable FAA Regulations, including any necessary approvals for installations close to an airport.

G. Compliance with Burt County Public Power District Code.

- a. Permit applications for small wind energy systems shall be accompanied by a line drawing of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the Burt County Public Power District code.

H. Utility Notification.

- a. No small wind energy system shall be installed until evidence has been given that the utility company has been informed or the customer's intent to install an interconnected customer-owned generator.
- b. Off-grid systems shall be exempt for this requirement.

D. Commercial/Utility Grade Wind Energy Systems

1. Purpose

It is the purpose of this Regulation to promote the safe, effective, and efficient use of commercial/utility grade wind energy systems while protecting the Health, Safety, and Welfare of all residents within Burt County.

2. Application Requirements

- a. A CWECS under common or aggregated ownership or operating control that includes substations, MET towers, cables/wires and other building accessories, whose main purpose it to supply electricity to off-site customers, CWECS (s) 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 entire aggregated project shall be permitted by a Conditional Use Permit only in the A-1 Zoning district.

The landowner will execute a Covenant/Subdivision Restriction indicating that once the project is approved for a specific parcel of land, the landowner will no longer be able to subdivide that parcel of land without the consent of the appropriate County Official.

The project owner shall designate and provide as part of the application, and shall maintain at the office of the Zoning Administrator in Burt County, the name and contact information of a local agent (local meaning a person whose residence is in Burt County, NE or a Business with its primary place of business or its registered agent located in Burt County NE). The project owner shall authorize the local agent to accept service of legal notice and be served legal notice and can be a first point of contact by the public.

If an appropriate Burt County Official requests information regarding any part of the project the applicant shall provide a response in writing within 5 business days.

A completed Conditional Use Permit shall be signed off by County Engineer, County Attorney, Planning and Zoning, and County Board.

The following requirements and information shall be met and supplied:

- i. The name of the project owner and landowner(s). If the project owner is not the owner of the land on which the project will be located, the landowner must join in the application as a co-applicant.
- ii. A copy of the Impact Easement Deed or similarly recorded document from Burt County Register of Deeds office for each Participating Property. This must include the legal description of the parcel of land.
- iii. A description of the project, including standard drawings of structural components of the CWECS including number, type, name plate generating capacity, tower height, rotor diameter, total height, structures, tower base and footings of all wind turbines and means of interconnecting with the feeder lines.
- iv. A survey map (site layout) 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. Location and dimensions of all existing structures and uses on property within three (3) miles. (including residences, schools, churches, federal, state, county or local parks, recognized historic or heritage sites, designated scenic by-ways, identified wildlife preserves or habitat areas or wetlands)
  4. Location of any overhead utility lines on the property.
  5. Location of all known communications towers within three (3) miles of the proposed CWECS.
  6. Location of all access roads.
  7. The latitude and longitude along with the legal description of individual wind turbine(s) showing all setbacks are met.
- v. Provide a map illustrating all transmission lines connecting to the Substation. All electrical connection systems and lines from the CWECS to the electrical grid connection shall be located and maintained underground. Burial depth shall be at a depth that causes no known environmental, land use, or safety issues. Depth shall be a minimum of six (6) feet below grade, or deeper than drain tile, and be in compliance with NEC 2017 or new code standards. The Planning and Zoning Board or Burt County Board of Supervisors may waive the burial requirement and allow above-ground structures in limited circumstances, such as geography precludes, or a demonstrated benefit to Burt County. The waiver shall not be granted solely on cost savings to Applicant. Request for variation shall consider aesthetics, future use of land, and effect on nearby landowners.
- vi. Provide any written technical assistance, as well as minutes and reports from meeting(s) and coordination with Nebraska Game and Parks



Commission, Papio and Lower Elkhorn NRD to review the proposed CW ECS site plan, including mitigation action taken to protect flora and fauna of the proposed project area.

- vii. Provide information regarding flora and fauna of the proposed project area including:
  - 1. Officially listed threatened or endangered species
  - 2. Critical habitat or habitat conditions
  - 3. An avian study based on the U.S. Fish and Wildlife Services. “Interim Guidelines to Avoid and Minimize Wildlife Impacts from Wind Turbines.”
- viii. Compliance with FAA regulations, including any documentation required by the FAA, which shall include Form 7460, certifying approval of each proposed location.
- ix. Any permit that was issued by the Nebraska Department of Environmental and Energy (NDEE) including, but not limited to, Storm Water Prevention Plan.
- x. Provide minutes from the meeting(s) with the Tekamah Airport Joint Zoning Board that discuss the review of the proposed CW ECS site plan (if applicable)
- xi. Results of consultation with the National Oceanic and Atmospheric Administration (NOAA), National Weather Service, or any other relevant weather monitoring systems in the CW ECS project areas.
- xii. Results of consultation regarding potential interference with existing communication facilities within two (2) miles of the proposed CW ECS project area, with proof that the Applicant has designed and mitigated any possible interference and have met with communication providers for proper site planning within the CW ECS project area.
- xiii. A pre-construction noise modeling study shall be conducted in accordance with procedures approved by Standard 61400-11 of the International Electro-technical Commission (IEC); and shall include all property within three (3) miles of an aggregated project. The protocol, methodology and noise modeling shall be included in the study. Studies shall include noise modeling for all four (4) seasons and include typical and worst-case scenarios for noise propagation. The Acoustician will be chosen by Burt County and paid for by the applicant. The complete results and full study report shall be submitted to the Burt County Planning Commission for review at the time of the Conditional Use Permit.
- xiv. Any proposed turbine which is within 3 miles of a dwelling shall provide shadow flicker modeling data showing the expected effect of shadow flicker on properties. Shadow flicker shall not fall upon any dwelling or other building which is occupied by humans, for no more than 30 minutes per day and no more than a total of 30 hours per any calendar year. If shadow flicker exceeds these limits, measures shall be taken to reduce the

effects of shadow flicker on buildings, which may include shutting the turbine down during periods of shadow flicker. If a turbine violates this standard on a dwelling unit, constructed after the turbine is approved, then the turbine becomes a non-conforming use.

- xv. Proof of compliance with any Overlay District regulations within Burt County.
  - xvi. Decommissioning plan and decommissioning bond as required by Section 6.03 and the Conditional Use Permit.
- b. Additional Requirements
- i. Each turbine will be required to have a 911 address.
  - ii. No shadow flicker will be allowed on any road.
  - iii. Once the CW ECS is built, a copy of as-built plans including structural and electrical drawings of all facilities and all disturbances associated with the CW ECS and accessory facilities must be certified by an independent professional engineer licensed in the State of Nebraska that the information included on depicted as-built plans is complete and accurate; and be given to the Burt County Zoning Administrator.
  - iv. CW ECS shall be placed on a minimum of 80 acres.
- c. Roads- Applicants shall:
- i. All public roads to be used for the purpose of transporting aggregate project materials, concrete or equipment for construction, operation, maintenance, or decommissioning of the CW ECS 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); Land Owner(s); Township Representative(s); Highway Superintendent(s) and/or Zoning Administrator(s); and 3 members of the Board of Supervisors. The survey shall include photographs and a written agreement (Road Agreement) to document the conditions of the public roads and facilities. All expenses of the survey shall be the Applicant's responsibility.
  - ii. Prior to the commencement of construction or decommissioning of any turbine, the Applicant shall enter into an agreement with Burt County Roads Department regarding use of county roads during construction and decommissioning. This agreement shall include traffic routes, time of the year use, staging area, and any other physical sites related to CW ECS. All roads shall be maintained to allow access, at all times, by any emergency service vehicle(s). The CW ECS owner shall be responsible for repair of damage to public roads and drainage systems stemming from construction, operation, maintenance, or decommissioning of the CW ECS, as stated in the Road Agreement. Any violation of the agreement will incur an

assessment against the Applicant for damages as determined by the Board of Supervisors for every violation occurrence and paid within 30 days.

- iii. Be responsible for restoring the road(s) and bridges to preconstruction conditions following construction, installation, re-installation, maintenance and repairs, and/or decommissioning efforts.
- iv. No bridges or culverts shall be crossed if the load is overweight.
- v. If road elevation changes are needed this has to be brought forward at the time of the Conditional Use Permit, to be signed off on by the County Engineer, Highway Superintendent, and the Board of Supervisors before the elevation can be altered.
- vi. There is to be no shadow flicker on any road.
- vii. If any part of the CW ECS is in the public right of way, it must be removed to six (6) feet below current grade.
- viii. Surety Bond shall cover no less than 150% of cost estimate associated with the repair of roadways and other infrastructure as a result of construction, operation, maintenance, or decommissioning. This surety bond shall be in place at the time of the CUP application and reviewed annually.
  - 1. Burt County will not accept a surety bond from a surety company for any project owner unless that surety is registered with the State of Nebraska Auditor and is listed in the United States Department of the Treasury Circular 570 as revised.
- ix. Other road factors may be considered at the time of the Road Agreement.

d. Drainage System

- i. Public Drainage Systems- The Applicant shall be responsible for repair of damage to public drainage systems stemming from construction, operation, maintenance or decommissioning of the CW ECS. Such Damage to be repaired as soon as feasible and on a schedule agreeable to the Burt County Highway Superintendent.
- ii. Private Drainage Systems- The Applicant shall be responsible for repair of damage to private drainage systems stemming from construction, operation, or decommissioning of the CW ECS. Such damage to be repaired as soon as feasible and, on a schedule, agreeable to the affected landowner.

e. Permit Fees:

Applicant(s) shall remit an application fee set by Burt County Board of Supervisors.

### 3. Setbacks

All towers shall adhere to the setbacks as measured from the center of the turbine base established in the following table:

	Wind Turbine Non-Commercial	WECS Wind Turbine Commercial/Utility WECS	Meteorological Towers
Distance from Towns and Villages		3 miles from corporate limits.	
Property Lines*	1.1 times the total height	1 mile with a minimum of 1800 feet	1.1 times the total height
Occupied Dwelling	N.A.	½ mile	1.1 times the total height
Road Rights-of-Way	1.1 times the total height	1,000 feet	1.1 times the total height
Public Conservation Lands including Wildlife Management Areas, Federal/ State Recreation Areas, NRD-Watershed areas; Wetlands, USFW Types III, IV, and V	Same setback as accessory buildings	1 mile unless proper authority signs waiver with a minimum of ½ mile	600 feet

\* Setback can be reduced with a signed impact easement by all affected parties. By signing the Impact Easement, the landowner is now a participating landowner.

4. Special Safety and Design Standard

- a. All towers shall adhere to the following safety and design standards:
  - i. A clearance of rotor blades or airfoils must maintain a minimum of twenty-five (25) feet of clearance between their lowest point and the ground.
- b. CW ECS shall include no sign or advertising of any kind, except for one sign using 4" letters and posted at the access road entrance. The sign shall contain the following information:
  1. No Trespassing
  2. Warning – high voltage.
  3. Emergency phone number.
  4. 911 address.
  5. No other signage will be allowed.
- c. Any CW ECS 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.
- d. All wind turbines, which are a part of commercial/utility WECS, shall be installed with a tubular, monopole type tower.
- e. Consideration shall be given to painted aviation warnings on all towers less than two hundred (200) feet.
- f. Color finish: All wind turbines and towers that are a part of a commercial/utility WECS shall be white, gray, or another non-obtrusive color. Blades may be black in order to facilitate decking. Finishes shall be matte or non-reflective.
- g. Shadow flicker: Shadow flicker will not be allowed on any road due to safety concerns.
- h. Feeder Lines: all communications and feeder lines installed as part of a CW ECS shall be buried, where feasible. Feeder lines installed as part of the CW ECS shall not be considered an essential service.
- i. Height: no CW ECS shall exceed 590 Feet in total height.
- j. Number Limitations: Burt County shall have no more than 20 total CW ECS.
- k. Lighting: lighting including light intensity and frequency of strobe, shall adhere and apply for the latest lighting requirements with FAA requirements being the

minimum and established by the FAA permits and regulations and comply with current standards and best practices to be specified in the conditional use permit. Must comply with Nebraska State Statute 66-915

- l. **Waste Disposal:** solid and hazardous wastes, including but not limited to crates, packaging materials, damaged or worn parts, as well as used oils and lubricants, shall be removed from the site promptly and disposed of in accordance with all applicable Local, State, and Federal rules and regulations.
  
- m. **Noise:** no Commercial/Utility WECS or combination of CWECS shall exceed forty (40) dBA measured at 10-minute leq at the closest exterior wall of any dwelling located on the property of a non-participating land owners and fifty (50) dBA measured at 10-minute leq at the closest exterior wall of any dwelling located on the property of a participating land owners. Exception; a Commercial/Utility WECS may exceed forty (40) dBA for non-participating and fifty (50) for participating during periods of severe weather as defined by the US Weather Service.
  - i. The Burt County Planning and Zoning Administrator and the Burt County Board of Supervisors shall require post-construction noise level measurements at the expense of the holder of the Conditional Use Permit within one (1) year of completion. The testing shall be completed by a licensed, independent acoustical engineer of Burt County's choosing, and the results shall be forwarded to the Burt County Board of Supervisors. The results will be a public document subject to Nebraska's public records laws.
  - ii. After the post-construction noise level report is submitted to the Board of Supervisors, they may request additional noise studies as they deem necessary.
  - iii. All noise complaints regarding the operation of any CWECS shall be referred, in writing, to the Burt County Planning and Zoning Administrator who will then take it to the Burt County Board of Supervisors.
  - iv. The Burt County Board of Supervisors shall determine whether a violation has occurred. If a violation has occurred then they have 30 days to rectify.
  
- n. The Applicant shall design and locate the CWECS to mitigate any interference with electromagnetic communications, such as internet, microwave, radio, telephone, television, or Burt County 911 Communication System. A beam study shall be conducted at the expense of the CWECS Applicant, and a site plan must be provided to communication providers during the planning process.

- o. The distance between tower support bases of any two CW ECS shall be a minimum of five (5) rotor diameter, determined by the size of the largest rotor diameter.
- p. The applicant shall supply the emergency management agency and/or fire departments with an emergency operation plan. The applicant shall provide a copy of the project description and site plan to Burt County local fire departments and rescue services. The applicant shall coordinate with such local entities in the development of an emergency operations plan.
- q. Each site shall have its own 911 address
- r. An Emergency Operations Plan (EOP) must be placed on file and kept current with Burt County Zoning Administrator, Burt County Emergency Management and Fire and Rescue Department (s) within Burt County. The plan shall demonstrate an all-hazards planning approach, based on an emergency incident or disaster of any magnitude or geographic size that may cause disruption to the function of the CW ECS and include contacts for notification.
- s. Upon completion of the CW ECS project, the CW ECS Applicant shall meet with local Fire and Rescue jurisdictions to review the EOP.
- t. Liability Insurance:
  - i. The CW ECS owner/operator maintain a current general liability policy covering bodily injury and property damage with limits of at least \$10,000,000 per occurrence and \$40,000,000 in the aggregate, with an annual certificate of insurance being provided to the Planning and Zoning Administrator of Burt County, with Burt County being added as an additional insured, with the designation to primary and non-contributory.
  - ii. The applicant shall promptly increase such liability insurance if such amount is increased in this regulation (Section 6.03) and the applicant is notified in writing by Burt County. The applicant shall provide evidence of such increased insurance to the Planning & Zoning Administrator.
  - iii. Insurance coverage shall be maintained without interruption from the date of permitting through the decommissioning of all wind turbines. Certificates of insurance acceptable to Burt County and in compliance with this section shall be filed with Burt County Prior to commencement of any work on the CW ECS and thereafter upon renewal or replacement of each required policy of insurance. These certificates and the insurance policies required under this section shall contain a provision that

coverages afforded under the policies shall not be cancelled or allowed to expire until at least 60 days written notice has been given to Burt County.

u. Indemnification:

- i. The applicant, owner, landowner and/or operator of the CW ECS shall defend, indemnify, and hold harmless Burt 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 attorneys' fees, without limitation, arising out of acts or omissions of the applicant, owner, landowner, and/or operator associated with the construction and/or operations of the CW ECS.

5. Retention of Expert

- a. The Planning Commission and County Board may hire an engineer and/or expert to oversee all aspects of the project including, but not limited, to conditional use permit application, roads, application requirements, electrical, and any other process that occurs during preconstruction, construction, decommissioning, and reclamation. The applicant shall reimburse Burt County for the actual costs of such engineer and/or expert used during any of the phases of planning, development, decommissioning and reclamation.
- b. The total amount of the costs to be reimbursed to Burt County for engineer or expert services may vary with the scope and complexity of the project, the completeness of the application, and other information as may be needed to complete the necessary review and analysis.
- c. Burt County Engineer, County Attorney, and the Planning and Zoning Administration shall have discretion to determine when an application is deemed complete and sufficient administrative review has been conducted before scheduling of a public hearing before the Planning Commission.
- d. Said cost shall be reimbursed within 30 days of billing.

6. Decommissioning and Abandonment

1. Purpose:

Given that the infrastructure associated with a Commercial Wind Energy Conversion System has a useful life of limited duration, it is necessary to ensure that the CW ECS and all its components are safely removed from the site, and that such removal activities do not place any financial obligation on Burt County and its taxpayers.



Decommissioning Standards:

The decommissioning of a CWECS shall comply with the following minimum standards:

1. All structures, utility lines, and equipment associated with the CWECS shall be removed to six (6) feet below ground level.
2. Following the removal of structures, utility lines and equipment, all remaining materials and debris shall be removed, and the site shall be inspected to identify the presence of any potentially hazardous substances or contaminants. Such substances shall be removed and remediated in accordance with all applicable state and federal laws at the time of decommissioning, and to the satisfaction of the Board of Supervisors.
3. All areas of ground and roads that had been disturbed to construct and operate the CWECS shall be graded, reseeded, and otherwise restored to their condition prior to the establishment of the CWECS, to the satisfaction of the Board of Supervisors.
4. The materials comprising these components shall be recycled to the greatest extent practicable, and under no circumstances shall the tower, blades, or nacelle of a wind turbine be disposed of in a landfill within Burt County.
5. Facility Owner and/or Surety Bond holder shall maintain adequate assets so that Burt County shall not be held liable for any costs associated for the purpose of decommissioning and restoration of land. Any cost incurred by Burt County associated with decommissioning, not paid by the Facility Owner and/or the Surety, shall be liability of the landowners. Landowner agrees that cost paid by Burt County regarding the decommissioning, not paid by Facility Owner and/or surety bond, is a liability of the landowner.

Decommissioning Plan:

Each CWECS shall have a decommissioning and restoration plan detailing the projected means and costs of removing CWECS at the end of the serviceable life or upon becoming a discontinued use and completion of property restoration. The cost estimates shall be prepared by a professional engineer licensed in the State of Nebraska and approved by the Burt County Board of Supervisors. Burt County requires two cost estimates from licensed engineers in the State of Nebraska. The decommissioning and restoration plan and projected costs shall be reviewed and updated every year.

A decommissioning plan must include:

1. A description of the planned procedure to remove all wind turbines and towers, accessory facilities, power lines and overhead cables, transformers, substations, and meteorological towers, turbine generators, and debris of the CWECS.
  - a. Removal of the CWECS and accessory facilities to six (6) feet below ground level within 180 days of the discontinuation of use unless a plan is approved by the Zoning Administrator and Board of Supervisors within three months.

These 180 days may be extended by the Board of Supervisors following a written request by an agent or the owner of the CWECS.

- b. This shall include a description of the process through which the site will be inspected to identify any hazardous substances or contaminants that may have been deposited on or below the ground surface, as well as the process to remove and remediate those materials.
  - c. All pieces of the wind turbine shall be removed from the site as a whole component. There shall be no cutting/fracturing/shattering/disintegrating of any wind turbine components that would cause fragments or debris to litter any surrounding land.
2. A description of the planned procedure to restore all previously disturbed land to its condition prior to the construction of the CWECS.
- a. Site restoration and reclamation to the approximate original topography that existed prior to the construction of the CWECS with grading, topsoil, respread over the disturbed areas at a depth like that in existence prior to the disturbance, and reseeded that achieves the same utility of native vegetation of the surrounding areas to prevent adverse hydrological effects within 180 days. These 180 days may be adjusted if the Burt County Board of Supervisors approves a signed request by the applicable landowner, identifying the surface features the landowner prefers to remain in place and a valid reason the landowner prefers those features to remain.
    - i. This shall include aerial and ground level photographs, written descriptions, or any other such documentation that the Board of Supervisors determines necessary for documenting the existing condition of the property(ies) involved.
3. A description of the disposal process for the major components of all wind turbines involved, including the tower, blades, and nacelle.
4. A detailed estimate of the cost of decommissioning a CWECS by an independent professional engineer licensed in the State of Nebraska that shall at minimum include:
- a. A written financial plan that adequately ensures that the operator will be able to supply the necessary funds at the time of decommissioning.
  - b. The financial plan shall stipulate that all costs associated with the decommissioning of the CWECS shall be borne entirely by the owner or operator, without any assistance from Burt County.
  - c. The financial plan shall stipulate that the terms will apply to all future successors, assignees, or heirs to which responsibility for operating the system may be transferred at a later date.

5. A statement that the owner or operator will notify Burt County in advance of the planned decommissioning of a CW ECS and how Burt County will be notified.
6. A statement that Burt County shall have access to the CW ECS and to the funds to complete decommissioning no less than 180 consecutive days after the structure(s) have ceased operations.

CW ECS shall be considered a discontinued use after 1(one) year without energy production, unless a plan is developed and submitted to the Burt County Zoning Administrator outlining the steps and schedule for returning the CW ECS to service.

The decommissioning plan shall also be reviewed by Burt County Attorney for recommendations.

The Burt County Board of Supervisors may reject a decommissioning plan if it finds that the plan does not provide for decommissioning as defined herein and as required by any applicable federal or state laws, rules, or regulations.

Cost Estimate:

The following requirements shall apply to the cost estimate supplied by the developer, as stipulated in Section 4 of the Decommissioning Plan.

1. At the developer's expense, two cost estimates shall be prepared by two separate professional engineers licensed in the State of Nebraska chosen by Burt County Board of Supervisors.
2. The cost estimate shall encompass all costs associated with the decommissioning of the CW ECS, including the deconstruction, transportation, and disposal of equipment, as well as site clean-up activities.
3. The cost estimate shall also include the anticipated cost of repairing public roads, culverts, natural drainage ways and any other infrastructure following the removal and transport of all equipment.
4. The cost estimate shall also include the cost of providing liability insurance coverage to Burt County, at an amount acceptable to the Burt County Board of Supervisors, if the developer's liability insurance coverage lapses for any reason.
5. When preparing the cost estimate, under no circumstances shall the salvage value of the equipment be deducted from the total cost of decommissioning.
6. At their own expense, the developer shall obtain an independent third-party review of the supplied cost estimate, to be conducted by an individual or firm of Burt County's choosing.
  - a. If the third-party review does not support the estimate supplied by the developer, the developer shall supply Burt County with an explanation of the discrepancy, obtained either through further consultation with their engineer or another licensed professional in the State of Nebraska.

- b. Approval of the Decommissioning Plan shall be contingent upon the submittal of a revised cost estimate that is supported by the third-party reviewer.
7. To account for inflation and any unanticipated future trends and influences, the cost estimate shall be reevaluated and updated every year after the approval of the Conditional Use Permit.

The Burt County Board of Supervisors may reject a decommissioning plan if it finds that the plan does not adequately describe the cost of decommissioning.

Financial Security:

All costs associated with the decommissioning of a CW ECS shall be paid for entirely by the owner and/or operator, without any assistance from Burt County.

1. Owner shall post, at the time of the Conditional Use Permit approval, a decommissioning surety bond in an amount determined by the Burt County Board of Supervisors. This shall be used to complete the decommissioning of the CW ECS should the owner or operator fail to do so.
  - a. Burt County will not accept a surety bond from a surety company for any project owner unless that surety is registered with the State of Nebraska Auditor and is listed in the United States Department of the Treasury Circular 570 as revised.
2. The surety bond shall cover no less than 150% of the cost estimate outlined in the previous section.
3. Following the initial approval of a Conditional Use Permit for a CW ECS, the owner or operator shall continually renew the surety bond every year throughout the lifespan of the CW ECS until decommissioning is completed. At the time of each renewal, the cost estimate shall be reevaluated under the same procedure as outlined in the initial calculation and the surety bond shall cover no less than 150% of the updated estimated total cost.
4. The owner or operator shall provide the Board with a notice of their intent to continue operations no less than 180 days prior to the 1(one) year anniversary of the previous bond filing or renewal and shall supply the renewed surety bond to the Board of Supervisors no less than 90 days prior to that anniversary.
  - a. If the surety bond has not been renewed 90 days prior to the anniversary of the previous bond filing or renewal, the owner or operator shall take the steps necessary to begin the decommissioning of the CW ECS at that time.
5. Each time that the surety bond is filed or renewed, it shall be accompanied by a written agreement that stipulates that it will apply to all future successors, assignees, or heirs to which responsibility for operating the CW ECS may be transferred between the time of the filing and the next renewal.

6. The surety bond shall only be released once the Board of Supervisors can confirm that the land has been restored to its condition prior to the construction of the CW ECS, including the remediation of any contamination.

**Determination of Abandonment:**

The Facility Owner shall provide to the Zoning Administrator and the Burt County Board of Supervisors proof of energy production every 3(three) months per commercial wind turbine. Any CW ECS, or portion thereof, that has not been in operation for a period of 365 consecutive days shall be deemed to be abandoned by the Burt County Zoning Administrator and notification of this determination shall be submitted to the owner and/or operator at this time.

1. Following the determination of abandonment, the owner or operator shall within 90 consecutive days, either reactivate the use of the structure(s) or begin the process of dismantling and removing them.
    - a. This required timeframe for reactivation shall only be extended if the owner or operator is able to provide sufficient evidence or documentation to the Burt County Board of Supervisors that the failure to reactivate is due to either a natural catastrophic event or a mechanical or technological failure that the owner or operator is actively working to remedy at the time.
  2. If the owner and/or operator desires to reinstate and maintain operations for the CW ECS, they shall provide the Board of Supervisors with substantial evidence of their intention and ability to do so within 90 consecutive days of the abandonment determination and resubmit such evidence every 180 days after the initial 90-day period.
  3. In the absence of any intent to reinstate operations, failure to begin the dismantling and removal of an abandoned CW ECS within 90 consecutive days shall constitute a violation of this ordinance.
  4. If the turbines and other structures are not removed as required, the Board of Supervisors may initiate the removal of the CW ECS using the funds set aside through the decommissioning surety bond. As needed, the Board may take any other legally authorized steps to recover the cost of the removal, including the sale of the removed materials, or initiation of judicial proceedings against the owner or operator.
7. Repowering
- a. The “repowering” of the CW ECS system or any components thereof shall be treated as the installation of a new CW ECS system or component and shall require re-application with updated studies and required information as to the then current state of facts, negotiation, approval and entry of Road Use Agreement and establishment of a Decommissioning plan.
  - b. No “repowering” of any CW ECS system nor component thereof shall commence until all conditions precedent for the installation of a new CW ECS system contained herein are satisfied.

8. Violations

- a. Any violations that occur in this regulation are subject to a penalty of not more than five hundred dollars (\$500.00) and an additional penalty of five hundred dollars (\$500.00) for each day the violation occurs.
- b. If the owner of a CW ECS is found to be in violation of the provisions of this regulation, appeals should be made in accordance with the established procedures of the Burt County Zoning Regulations.