MORGAN COUNTY
PLANNING AND BUILDING DEPARTMENT

Monday, June 6, 2022
AGENDA

TO: **Morgan County Planning Commission**
DATE: **Monday, June 6, 2022**
TIME: **7:00 P.M.**
PLACE: **Assembly Room – Option of remote attendance via ZOOM**

Link to Zoom meeting:
https://us02web.zoom.us/j/81226426490

Or Telephone:
US: +1 346 248 7799

Webinar ID: 812 2642 6490

All materials are available for inspection at the Planning Administrator's Office, 231 Ensign St., Fort Morgan, Colorado, during regular office hours. At time of the public hearing an opportunity will be given for presentation of evidence related to the application.

For handicapped access call 970-768-7197

AGENDA

Roll Call
Agenda
Minutes from 04.11.2022

NEW BUSINESS:

1.) **Board of County Commissioners recruiting citizens to serve on the Planning Commission and Board of Adjustment.**

There are currently positions open for Planning Commission and Board of Adjustments. Individuals with interest in serving should submit a letter of interest to the Board of County Commissioners. The Commissioners will then select the new members for the committees to terms that will begin in 2022. Members of the committees will be paid a stipend for attendance at scheduled Planning Commission or Board of Adjustments meetings. Letters of Interest will be accepted until the positions are filled. You may submit your letters of interest

to: bccmorganc@co.morgan.co.us or letter can be delivered to their office at: 218 W Kiowa, P.O. Box 596 Fort Morgan, CO 80701

2.) **Amendments to the Morgan County Zoning Regulations:**

Concerning the regulations of wind energy conversion, solar collector, and battery energy storage systems.

OTHER MATTERS:

ADJOURN:

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2.) Amendments to the Morgan County Zoning Regulations:

Concerning the regulations of wind energy conversion, solar collector, and battery energy storage systems.

OTHER MATTERS:

ADJOURN:

MORGAN COUNTY
PLANNING AND BUILDING DEPARTMENT

PLANNING COMMISSION
WIND ENERGY CONVERSION, SOLAR COLLECTOR, AND BATTERY ENERGY STORAGE SYSTEMS REGULATIONS
AMENDMENT SUMMARY
June 6, 2022

On January 4, 2022 the Board of County Commissioners adopted a moratorium on the processing of applications for wind and solar power generation or collection facilities, associated power lines and battery energy storage systems in Morgan County to allow for research to be conducted on the appropriate regulatory means for such facilities.

On May 10, 2022, draft of the regulations was produced and provided to the public, stakeholders and other interested parties for review and comment.

Included in your packets are the May 10th draft regulations with a couple of minor corrections, and a copy of the draft regulations including May 16th comments made by Duke Energy.

The following amendments are proposed to the Zoning Regulations:

Section 1. Addition of solar collector facilities to the list of uses-by-right as accessory uses in the following zone districts and subsections:

Estate Residential Zone (ER) – §3-210
Rural Residential Zone (RR) – §3-230
Rural Community Residential Zone (RCR) – §3-250
Moderate Density Residential Zone (MDR) – §3-270
High Density Residential Zone (HDR) – §3-295
Commercial Zone (C) – §3-315.5
Mobile Home Zone (MH) – §3-380

This change would allow property owners to install roof-mounted solar panels or small arrays on their property where such uses would be compatible with the residential natures of these zones. These are not intended to be utility scale solar farms. These uses will be subject to the regulations for accessory ground-mounted solar collectors and accessory building mounted solar collectors found in the resolution.

Section 2. Addition of building-mounted wind energy facilities (WEFs) to the list of uses-by-right as accessory uses in the following zone districts:

Agriculture Production Zone (A) – §3-170 for both parcels larger than 20 acres and parcels 20 acres or smaller
Agriculture/Agri-Business Zone (AB) – §3-190
Estate Residential Zone (ER) – §3-210
Rural Residential Zone (RR) – §3-230
Rural Community Residential Zone (RCR) – §3-250
Moderate Density Residential Zone (MDR) – §3-270
High Density Residential Zone (HDR) – §3-295
Commercial Zone (C) – §3-315.5
Light Industrial Zone (LI) – §3-335.5
Heavy Industrial (HI) – §3-355.5
Mobile Home Zone (MH) – §3-380

This change would allow property owners to install building-mounted WEF where such uses would be compatible with the residential natures of these zones. These are not intended to be utility scale wind farms. These uses will be subject to the regulations for accessory building mounted WEF found in the resolution.

Section 3. Addition of solar collector facilities (20 acres or less) to the list of conditional uses, as primary use and accessory use in the following zone districts:

Agriculture Production Zone (A) – §3-175 for both parcels 20 acres or smaller
Agriculture/Agri-Business Zone (AB) – §3-195
Light Industrial Zone (LI) – §3-340
Heavy Industrial (HI) – §3-360

This change would allow property owners to install roof-mounted solar panels or small arrays on their property where such conditional uses would be compatible with these zones. These are not intended to be utility scale solar farms. These uses will be subject to the regulations for ground-mounted solar collectors and building mounted solar collectors found in the resolution.

Section 4. Addition of solar collector facilities (more than 20 acres), ground-mounted wind energy facilities (WEFs) and battery energy storage systems (BESS) to the list of special uses, as a primary use and accessory uses in the following zone districts:

Agriculture Production Zone (A) – §3-180
Agriculture/Agri-Business Zone (AB) – §3-200
Light Industrial Zone (LI) – §3-345
Heavy Industrial (HI) – §3-365

This change would allow property owners to install a utility scale solar farm, wind farm and/or battery storage system. These uses will be subject to the regulations for ground-mounted solar collectors, battery energy storage systems and ground mounted WEFs found in the resolution.

Section 5. New subsections shall be added to the supplementary Regulations in Chapter 4 of the Morgan County Zoning Regulations

Solar Collector Facility Regulations:
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The amendments as proposed will address wind and solar power collections or generation facilities and BESS in a manner that protects the public health, safety and welfare while at the same time allow for the development of important alternative sources of energy.

Nicole Hay
Planning and Zoning Administrator

MORGAN COUNTY, COLORADO
BOARD OF COUNTY COMMISSIONERS

RESOLUTION NO. 2022 BCC ____

AN RESOLUTION AMENDING THE MORGAN COUNTY ZONING REGULATIONS CONCERNING THE REGULATION OF WIND ENERGY CONVERSION, SOLAR COLLECTOR, AND BATTERY ENERGY STORAGE SYSTEMS

WHEREAS, wind energy conversion, solar collector, and battery energy storage systems are rapidly growing in demand and present opportunities for the County;

WHEREAS, the County seeks to promote the Comprehensive Plan goals of diversifying the economy while achieving compatibility with existing land uses;

WHEREAS, on January 4, 2022, the Board of County Commissioners passed a temporary moratorium on new wind energy, solar collector facility and BESS applications to allow for research to be conducted on the appropriate regulatory means for such facilities; and

WHEREAS, the County wishes to regulate wind energy conversion, solar collector, and battery energy storage systems in a tailored manner that seeks to address the perceived impacts of each type of system.

NOW THEREFORE BE IT RESOLVED by the Morgan County Board of County Commissioners as follows:

Section 1. The Morgan County Zoning Regulations shall be amended by the addition of solar collector facilities to the list of uses-by-right as accessory uses in the following zone districts and subsections:

Estate Residential Zone (ER) – §3-210

Rural Residential Zone (RR) – §3-230

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Agriculture Production Zone (A) – §3-180

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Light Industrial Zone (LI) – §3-345

Heavy Industrial (HI) – §3-365

Section 5. The following new subsections shall be added to the Supplementary

Regulations in Chapter 4 of the Morgan County Zoning Regulations to read:

SOLAR COLLECTOR FACILITY REGULATIONS

4-810 Applicability

These Solar Collector Facility Regulations and applicable portions of the Zoning Regulations apply to those activities that are not a major facility of a public utility, as defined in the County's 1041 Regulations. To the extent the proposed activity is a major electrical facility of a public utility or power authority subject to these Solar Facility Regulations and applicable portions of the Zoning Regulations, such application shall be processed in accordance with C.R.S. § 29-20-108.

4-815 Definitions

Agrivoltaic Systems: A system designed for the simultaneous use of areas of land for both ground-mounted solar collectors and agriculture.

Parking Canopy Solar System: Ground-mounted solar collectors installed above parking areas.

Solar Collector: A photovoltaic (PV) panel, array of panels or other solar energy device, the primary purpose of which is to provide for the collection, inversion, storage, and distribution of solar energy for electricity generation, space heating, space cooling, or water heating. Ground-mounted solar collector includes agrivolatic systems and parking canopy solar systems when installed on surface parking lots. Building-mounted solar collector includes parking canopy solar systems when installed on the roof of a parking garage.

4-820 Submittal Requirements

In addition to the submittal requirements for the applicable land use permit, an application for a solar collector shall include the following:

(A) Site Plan/Map. The required map shall include the following in addition to the other requirements of these Zoning Regulations:

(1) Location and description of current land use, including agricultural use, dwelling units, microwave communication links and airports.

(2) Clearly identified boundary lines and dimensions of the site where the proposed solar collector facility will be located.

(3) Project area boundary and approximate size of the site where the proposed solar collector facility will be located, in acres or square feet.

(4) Location of all proposed structures and facilities, including the location and dimensions for each solar panel in the proposed solar collector facility, including:

a. Setbacks for each solar panel from property lines.

b. Setbacks of all accessory buildings and structures.

(5) Description of utility interconnection and crossing.

(B) Drawing. A schematic drawing showing the solar panels.

(C) Narrative and Impact Analysis. A narrative, in addition to the requirements of the applicable permit, including:

(1) Project description and proposed phasing of development.

(2) A description of the project and each phase of development, including the approximate number of solar panels, and the accessory structures, power output (in MW), and infrastructure and interconnection requirements for each phase.

(3) Description of potential access route(s), including road surface material, proposed measures for dust control, and proposed road maintenance schedule or program.

(4) Impact Analysis. The applicant will provide a description of the impacts that the proposed solar collector may cause, based upon the standards in these Solar Collector Facility and Zoning Regulations. This analysis shall include: a description of baseline conditions and the impacts that the proposed use may cause; a description of how the applicant will mitigate impacts; and documentation that applicable standards will be satisfied. The applicant shall also assess the potential effects of the proposed project on County services and capital facilities. In the event that impacts to County services or County capital facilities from construction and operation of a solar collector are identified, the applicant shall develop a plan to maintain County services and County capital facilities. If impacts cannot be fully mitigated, the applicant may be required to pay the County a mutually agreed upon impact fee to allow the County to maintain existing County services and capital facilities.

(D) Utility Interconnection or Crossing. The applicant will provide certification of intent to enter into an interconnection agreement and crossing agreement(s) to/with applicable utilities.

(E) Decommissioning Plan. The applicant shall provide a decommissioning plan in accordance with Section 4-835.

(F) Notification to Mineral Rights Holders. Applicant shall notify the individual mineral rights holders within the project site in accordance with County and statutory notification requirements.

(G) Septic System. If the proposed solar collector facility includes uses that must be served by a septic system, the applicant shall comply with applicable County requirements. The applicant shall provide a statement certifying that the septic system for the solar collector will comply with applicable County, State, and Federal requirements.

(H) Water System. If the proposed solar collector facility includes uses that must be served by water, the application shall describe the water source and sufficiency of the water supply for the solar collector facility, including decreed or conditional water rights. If a well is required, the applicant shall obtain the necessary permit

from the State of Colorado Office of the State Engineer.

(I) Water and/or Wind Erosion Control Plan. The applicant will provide a plan showing existing and proposed grading for the solar collector site. The drainage and erosion control plan shall be accompanied by a description of practices that will be utilized to prevent erosion and run-off during construction. If there are any modifications to this plan, the applicant will provide a final drainage and erosion control plan prior to commencement of construction.

(J) Geotechnical Report. The applicant shall provide written certification that prior to construction, a professional engineer licensed in Colorado will complete a geotechnical study that includes the following:

(1) Soils engineering and engineering geologic characteristics of the site based upon on-site sampling and testing.

(2) Foundation and tower systems design criteria for all proposed structures.

(3) Slope stability analysis.

(4) Grading criteria for ground preparation, cuts and fills, and soil compaction

(K) Road Agreement. If any County roads will be used during construction of a solar collector facility for the purpose of transporting parts, materials and/or equipment, the applicant shall enter into a road agreement with the County. The roads agreement shall comply with Section 4-825 and shall also include the following:

(1) A map showing which County roads will be used during construction.

(2) A pre-construction baseline survey of County roads to be used during construction to document their pre-construction condition.

(3) A mitigation plan to address traffic congestion and potential impacts to County roads to be used during construction.

(4) A legally binding agreement between the applicant and the County that requires the applicant to return any County roads to their pre-construction baseline condition.

(L) Liability Insurance. The applicant shall provide evidence of liability insurance to cover loss or damage to persons and structures during construction and operation of the solar collector facility.

(M) Maintenance of Solar Panels. The applicant shall provide a statement certifying that the solar panels will be maintained and operated in accordance with manufacturer specifications, Owner Environmental Health and Safety Plans, and applicable Occupational Health and Safety Administration (OSHA) requirements to ensure the safety of site personnel and the public.

(N) Additional Information and Waivers. The County may request additional information that may be required to evaluate the proposed solar collector facility. The County may waive or alter any of these minimum requirements if they are determined to be inappropriate or unnecessary to determining if the application satisfied applicable standards.

4-825 Solar Collector Facility Standards

(A) General Standards for all solar collectors.

(1) All exterior electrical lines shall be buried below the surface of the ground when possible.

(2) All systems shall comply with all applicable building and electrical codes.

(3) The property owner shall notify the electrical utility where the solar system is connected to the electrical utility system.

(B) Accessory Ground-Mounted Solar Collectors. Accessory ground-mounted solar collectors shall:

(1) Be located in a side or rear yard only;

(2) Be set back at least six feet from the side and rear property line;

(3) Not be located within an easement;

(4) Be located so as to minimize glare visible from abutting properties;

(5) Not exceed 15 feet in height with panels oriented in a vertical position; and

(6) Be included in determining the maximum coverage of structures on the lot.

(C) Accessory Building-Mounted Solar Collectors. Accessory building-mounted solar collectors shall:

(1) Not extend more than 18 inches above the maximum height permitted in the zone district in which it is located;

(2) If mounted to a portion of the roof ending at, or extending over, the front façade of the building, shall be mounted so that the edge of the device is set back at least one foot from the edge of the roof closest to the front lot line; and

(3) If mounted to the wall of a building, may extend into or over no more than 33 percent of the depth of a minimum yard or setback that is required along a side lot line but shall not extend closer than four feet to a side lot line.

(D) Principal Ground-Mounted Solar Collectors.

(1) The setbacks in this subsection shall govern over any setbacks established in these Zoning Regulations.

	Minimum Setback
Setback from above-ground public electric power lines of communication lines	70 feet
Setback from existing public road or highway or railroad	70 feet
Setback from inhabited buildings including:	500 feet

residence, school, hospital, church or public library.	
Setback from all other property lines	70 feet

(a) The setback requirement from inhabited structures may be reduced if appropriate screening through landscape or an opaque fence is installed, or upon submittal to the County of a waiver or informed consent signed by the owner of the inhabited structure agreeing to the lesser setback. If landscaping or opaque fencing is substituted for setback, a landscaping plan or fencing plan shall first be submitted to and approved by the County.

(3) Setback from the section lines. The County has established right-of-ways (ROWS) that are located 30 feet on each side of section lines. The purpose of this ROW is to allow for maintenance of existing county roads and construction of new county roads. Placement of solar panels within this ROW will be reviewed by the County on a case by case basis to confirm that they will not conflict with the County's existing road plans and future road plans. In the event of a potential conflict, solar panels may need to be relocated outside of this established ROW to allow for future construction of county roads. In the event that there is no conflict, the County may issue a waiver that will allow for placement of the solar panel within the existing county ROW. It is the responsibility of the applicant to apply for a waiver in these situations, and to provide exact location of proposed placement of solar panels and the distance from section lines. In the event a survey is required, the applicant will be responsible for paying the costs of survey.

(4) Scenic Resources Setback. Solar panels comprising the solar collector facility shall be setback a minimum ¼ mile from any highway, designated to be a scenic highway or roadway by the Morgan County Comprehensive Plan or by the state.

(5) Substations, facility buildings, and other accessory structures that are part of the solar collector facility shall comply with the required primary building setbacks for the zone district in which the project is located.

(6) Maximum Height. The maximum height of the solar panels shall not exceed 30 feet in height when oriented at maximum tilt.

(7) Maximum Lot Coverage. The panels shall be considered in determining the maximum coverage of structures on the lot.

(8) Septic System. If applicable, the proposed solar collector facility complies with applicable County requirements.

(9) Water Supply System. If applicable, the solar collector facility has demonstrated access to a water supply.

(10) Roadways and Access.

(a) Legal access to public right-of-way to and from the solar collector

facility shall be safe and in conformance with access permit requirements of the County.

(b) All reasonable efforts must be made not cause traffic congestion during operations and unsafe traffic conditions during the construction phase or operations.

(c) Adequate turning radii shall be installed at all entrances to accommodate large truck movement.

(d) Off-street parking and loading zones shall be surfaced with gravel or the equivalent and shall be graded to prevent drainage problems.

(e) Staging activities and parking of equipment and vehicles shall occur on-site and on private rights-of-way, and shall be prohibited on maintained County roads.

(f) The use of any County roads during construction shall be in accordance with and in compliance of Federal, State, County and local regulations governing such activities. The applicant will prepare a roads agreement that includes a mitigation plan addressing potential impacts to County roads to be used during construction. As part of the roads agreement, the applicant at their expense will be required to return any County roads that are impacted by construction to their pre-construction baseline condition.

(11) Erosion and Sedimentation Control. Erosion and sedimentation control measures that ensure that disturbed areas and soil stockpiles are stabilized during construction shall be implemented. Disturbed areas shall be revegetated in accordance with landowner agreements.

(12) Drainage/Storm-Water Run-Off. Run-off shall be managed in accordance with applicable County, State and Federal regulations. If applicable, the applicant shall obtain a Construction Stormwater Discharge Permit from the Colorado Department of Public Health and the Environment, Water Quality Control Division.

(13) Protection of Agricultural Lands. The solar collector facility shall not have a significant adverse impact on agricultural lands and agricultural operations above what is allowed for under landowner lease agreements.

(14) Fire Protection. The solar collector facility shall have adequate fire control and prevention measures.

(15) Glare, Dust or Noise. Construction and operation of the WEF shall not significantly increase existing glare, dust or noise at surrounding properties.

(a) The proposed solar collector facility shall comply with the statutory provisions for maximum permissible noise levels for industrial zoning in C.R.S. § 25-12-103.

(b) Fugitive dust and particulate emissions shall be controlled on the site.

(c) Waste materials shall be handled, stored, and disposed of in a manner that controls fugitive dust, fugitive particulate conditions, blowing debris and other potential nuisance conditions.

(d) The panels shall be located so as to minimize glare visible from an abutting property.

(16) Underground Location of Electrical Collection System Wiring. Unless geologic conditions or other technical engineering considerations prevent underground installation, electrical collection system wiring and powerlines for the solar collector facility shall be installed underground except where the solar collector facility wiring is brought together from the project substation to the point of electrical interconnection. Overhead transmission lines are permissible from the project substation to the point of electrical interconnection.

(17) Interconnection and Electrical Distribution Facilities.

(a) Transmission from the project substation to the point of electrical interconnection shall comply with the National Electrical Code.

(b) Interconnection shall conform to the requirements of the electric utility company, and applicable state and federal regulatory codes.

(18) Certification of Equipment and Appurtenant Facilities.

(a) All solar collector facilities shall be reviewed by a registered structural engineer, licensed in Colorado, to confirm their compliance with the applicable State, Federal and local regulations and to conform with good engineering practices.

(b) The electrical system shall be certified by a registered electrical engineer, licensed in Colorado, to the compliant with the applicable State, Federal and local regulations, and to conform with good engineering practices.

4-830 Review Criteria and Process

(A) In addition to any review criteria imposed by the Zoning Regulations for the applicable permit, the County shall consider whether the application complies with the requirements of these Solar Collector Regulations.

(B) All applications under these Solar Collector Facility Regulations shall be processed pursuant to the procedures applicable to the type of permit required.

4-835 Decommissioning Requirements for Solar Collector Facilities

(A) General Requirements.

(1) If a solar collector facility ceases to perform its originally intended function for more than 12 consecutive months, the permit holder and/or property owner shall remove the facility, mount and associated equipment and facilities by no later than 180 days after the end of the 12-month period.

(2) If permit holder and/or property owner notifies the County of the termination of operations, decommissioning shall be completed no less than 180 days from the date of the notice.

(3) Upon removal of a solar collector facility, the property shall be restored to the condition prior to development of the facility.

(B) Decommissioning Plan. The decommissioning plan shall include:

(1) Contact information for all parties involved (e.g., landowner, developer, utilities, etc.);

(2) A detailed plan for the removal of all facilities and equipment from the site, including provisions for the removal of structures, debris and cabling including those below the soil surface to depths agreed to in landowner agreements or down twenty-four (24) inches;

(3) A cost estimate for the decommissioning prepared by a professional engineer or contractor with expertise in related decommissioning projects; and

(4) Roles and responsibilities of each party involved in the decommissioning.

(C) Decommissioning Bond or Letter of Credit. The decommissioning cost shall be made by cash, surety bond or irrevocable letter of credit at 50% before construction commences and the remaining 50% prior to the fifth anniversary of the commencement of construction of the facility.

(D) If decommissioning does not proceed in accordance with the decommissioning plan, the County shall have the right, but not the requirement, to enter the property and cause the appropriate abandonment and decommissioning measures as determined by the approved decommissioning plan.

4-840 Ownership Changes

If the ownership of a principal ground-mounted solar collector facility changes or the owner of the property changes, the use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the use permit and decommissioning plan. A new owner or operator of the principal ground-mounted solar collector facility shall notify the County Planning Department and the Board of County Commissioners in writing of such change in ownership or operator within thirty (30) days of the ownership change. The use permit and all other local approvals for the principal ground-mounted solar collector facility will be voided if a new owner or operator fails to provide written notification as provided herein in the required timeframe. Reinstatement of a void use permit will be subject to the same review and approval processes for new applications.

4-845 Approval Time Frame and Abandonment

The use permit for a principal ground-mounted solar collector facility shall be valid for a period of 12 months, provided that a building permit is issued for construction and

construction is commenced. In the event construction is not completed in accordance with the final plans, as may have been amended and approved within 12 months after approval, the County Planning Department may extend the time to complete construction for 180 days. If the owner and/or operator fails to perform substantial construction after 36 months, the approval shall expire.

BATTERY ENERGY STORAGE SYSTEM (BESS)

4-850 Definitions

Battery Energy Storage System (BESS): A rechargeable energy storage system consisting of batteries, battery chargers, controls, power conditioning systems and associated electrical equipment designed to provide electrical power to a building or to provide electrical grid-related services.

4-855 Submittal Requirements

(A) In addition to any submittal documents required by the Zoning Regulations for the applicable use permit, except as modified by these BESS Regulations, an application for a BESS shall contain the following items:

(1) Change Conditions Narrative. Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures.

(2) Electrical Diagram. A one or three-line electrical diagram detailing the BESS layout, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and over current devices.

(3) Specification Sheet. A preliminary equipment specification sheet that documents the proposed BESS components, inverters and associated electrical equipment that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of building permit.

(4) Contact Information. Name, address, and contact information of proposed or potential system installer and the owner and/or operator of the BESS. Such information of the final system installer shall be submitted prior to the issuance of building permit.

(5) Narrative. A narrative providing an explanation of the project, the above grade and below grade infrastructure, the type of battery, temperature control (if applicable) for the BESS system, identified environmental impacts and mitigation,

(6) Maintenance Plant. A system and property maintenance plan describing continuing BESS maintenance and property upkeep during the operation of the BESS.

(7) Fire Mitigation Plan. A fire mitigation plan including identification of the nearest water source for fire suppression.

(8) Drainage Plan. A drainage plan, regardless of the square footage of the BESS.

(9) Decommissioning Plan. A decommissioning plan in accordance with Section 4-870.

(10) Emergency Operation Plan. An emergency operation plan including the following:

(a) Procedures for safe shutdown, de-energizing, or isolation of equipment and systems under emergency conditions to reduce the risk of fire, electric shock, and personal injuries, and for safe start-up following cessation of emergency conditions.

(b) Procedures for inspection and testing of associated alarms, interlocks, and controls.

(c) Procedures to be followed in response to notifications from the BESS management system, when provided, that could signify potentially dangerous conditions, including shutting down equipment, summoning service and repair personnel, and providing agreed upon notification to fire department personnel for potentially hazardous conditions in the event of a system failure.

(d) Emergency procedures to be followed in case of fire, explosion, release of liquids or vapors, damage to critical moving parts, or other potentially dangerous conditions. Procedures can include sounding the alarm, notifying the fire department or district, evacuating personnel, de-energizing equipment, and controlling and extinguishing the fire.

(e) Response considerations similar to a safety data sheet (SDS) that will address response safety concerns and extinguishment when an SDS is not required.

(f) Procedures for dealing with BESS equipment damaged in a fire or other emergency event, including maintaining contact information for personnel qualified to safely remove damaged BESS equipment from the facility.

(B) Application for a BESS that are part of a solar collector facility and submitted concurrently with an application for the solar collector facility may be processed concurrently.

4-860 Battery Energy Storage System (BESS) Standards

(A) BESS shall comply with all applicable requirements of the underlying zone district and the Accessory Uses and Structures requirements in Sec. 3-130 of these Zoning Regulations.

(B) All BESS, including all mechanical equipment, shall be enclosed by a minimum of a six (6) foot tall fence with a self-locking gate to prevent unauthorized access, unless housed in a building dedicated to the BESS. No fencing may interfere with any ventilation or exhaust ports.

(C) All BESS, their components, and associated ancillary equipment shall be placed with required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with applicable electric code, as adopted by the State of Colorado.

4-865 Review Criteria and Process

(A) In addition to any review criteria imposed by the Zoning Regulations for the applicable permit, the County shall consider whether the application complies with the requirements of these BESS Regulations.

(B) All applications under these BESS Regulations shall be processed pursuant to the procedures applicable to the type of permit required.

4-870 Decommissioning Requirements for BESS

(A) General Requirements.

(1) If a BESS ceases to perform its originally intended function for more than 12 consecutive months, the permit holder and/or property owner shall remove the system, foundation and associated equipment and facilities by no later than 180 days after the end of the 12-month period.

(2) If permit holder and/or property owner notifies the County of the termination of operations, decommissioning shall be completed no less than 180 days from the date of the notice.

(3) Upon removal of a BESS, the property shall be restored to the condition prior to development of the system.

(B) Decommissioning Plan. The decommissioning plan shall include:

(1) Contact information for all parties involved (e.g., landowner, developer, utilities, etc.);

(2) A detailed plan for the removal of all systems and equipment from the site, including provisions for the removal of structures, debris and cabling including those below the soil surface to depths agreed to in landowner agreements or down twenty-four (24) inches;

(3) A cost estimate for the decommissioning prepared by a professional engineer or contractor with expertise in related decommissioning projects;

and

(4) Roles and responsibilities of each party involved in the decommissioning.

(C) Decommissioning Bond or Letter of Credit. The decommissioning cost shall be made by cash, surety bond or irrevocable letter of credit at 50% before construction commences and the remaining 50% prior to the fifth anniversary of the commencement of construction of the BESS.

(D) If decommissioning does not proceed in accordance with the decommissioning plan, the County shall have the right, but not the requirement, to enter the property and cause the appropriate abandonment and decommissioning measures as determined by the approved decommissioning plan.

4-875 Ownership Changes

If the ownership of a BESS changes or the owner of the property changes, the use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the use permit and decommissioning plan. A new owner or operator of the BESS shall notify the County Planning Department and the Board of County Commissioners in writing of such change in ownership or operator within thirty (30) days of the ownership change. The use permit and all other local approvals for the BESS will be voided if a new owner or operator fails to provide written notification as provided herein in the required timeframe. Reinstatement of a void use permit will be subject to the same review and approval processes for new applications.

4-880 Approval Time Frame and Abandonment

The use permit for a BESS shall be valid for a period of 12 months, provided that a building permit is issued for construction and construction is commenced. In the event construction is not completed in accordance with the final plans, as may have been amended and approved within 12 months after approval, the County Planning Department may extend the time to complete construction for 180 days. If the owner and/or operator fails to perform substantial construction after 36 months, the approval shall expire.

WIND ENERGY FACILITY REGULATIONS

4-885 Applicability

These Wind Energy Facility Regulations and applicable portions of the Zoning Regulations apply to those activities that are not a major facility of a public utility, as defined in the County's 1041 Regulations. To the extent the proposed activity is a major electrical facility of a public utility or power authority subject to these Wind Energy Facility Regulations and applicable portions of the Zoning Regulations, such application shall be processed in accordance with C.R.S. § 29-20-108.

4-890 Definitions

Hub: The part of the wind turbine to which the blades are attached, together creating the rotor

Hub Height: The distance measured from ground level to the center of the turbine hub.

MET Tower: A meteorological tower used for the measurement of wind speed.

System Height. The combined height of the tower, the wind turbine and any blade extended at its highest point, measured from ground level.

Wind Energy Facility (WEF): All necessary devices that together convert wind energy into electricity, including the rotor, nacelle, generator, WEF tower, electrical components, WEF foundation, transformer, and electrical cabling from the WEF tower to the substation(s). WEF shall include MET towers.

Wind Turbine: A wind energy conversion system that converts wind energy into electricity through the use of a wind turbine generator. The term "wind turbine" shall include the turbine, blade, tower, base and pad transformer.

4-895 Submittal Requirements

In addition to the submittal requirements for the applicable land use permit, an application for a WEF shall include the following:

(A) Site Plan/Map. The required map shall include the following in addition to the other requirements of these Zoning Regulations:

(1) Location and description of current land use, including agricultural use, dwelling units, microwave communication links and airports.

(2) Clearly identified boundary lines and dimensions of the site where the proposed WEF will be located.

(3) Project area boundary and approximate size of the site where the proposed WEF will be located, in acres or square feet.

(4) Location of all proposed structures and facilities, including the location and dimensions for each wind turbine in the proposed WEF, including:

a. Setbacks for each wind turbine from property lines.

b. Setbacks of all accessory buildings and structures.

(5) Description of utility interconnection and crossing.

(B) Drawing. A schematic drawing showing the wind turbine and range of dimensions, including system height, rotor diameter, hub height, and rotor ground clearance.

(C) Narrative and Impact Analysis. A narrative, in addition to the requirements of the applicable permit, including:

(1) Project description and proposed phasing of development.

(2) A description of the project and each phase of development, including the approximate number of wind turbines, and the accessory structures, power output (in MW), and infrastructure and interconnection requirements for each phase.

(3) Description of potential access route(s), including road surface material, proposed measures for dust control, and proposed road maintenance schedule or program.

(4) Impact Analysis. The applicant will provide a description of the impacts that the proposed WEF may cause, based upon the standards in these WEF and Zoning Regulations.. This analysis shall include: a description of baseline conditions and the impacts that the proposed use may cause, as described in Section 6-105; a description of how the Applicant will mitigate impacts; and documentation that applicable standards will be satisfied. The applicant shall also assess the potential effects of the proposed project on County services and capital facilities. In the event that impacts to County services or County capital facilities from construction and operation of a WEF are identified, the applicant shall develop a plan to maintain County services and County capital facilities. If impacts cannot be fully mitigated, the Applicant may be required to pay the County a mutually agreed upon impact fee to allow the County to maintain existing County Services and Capital facilities.

(D) Utility Interconnection or Crossing. The applicant will provide certification of intent to enter into an interconnection agreement and crossing agreement(s) to/with applicable utilities.

(E) Decommissioning Plan. The applicant shall provide a Decommissioning Plan in accordance with Section 4-910.

(F) Notification Requirements.

(1) Mineral Right Holders. Applicant shall notify the individual mineral rights holders within the project site in accordance with County and statutory notification requirements.

(2) Notice to FAA and Approval. The Application will provide written certification that the Federal Aviation Administration (FAA) forms have been submitted to the FAA in accordance with the FAA requirements, and the FAA has issued approval for the location of the WEF.

(3) Notice to Operator of Communication Link. If any Wind Turbine included within the proposed WEF is located within two (2) miles of any wireless communications link, the Applicant shall certify that they will notify the operator of the communication link in writing about the proposed project at least thirty (30) days prior to commencement of construction.

(G) Septic System. If the proposed WEF includes uses that must be served by a septic system, the applicant shall comply with applicable County requirements. The applicant shall provide a statement certifying that the septic system for the WEF will comply with applicable County, State, and Federal requirements.

(H) Water System. If the proposed WEF includes uses that must be served by water, the application shall describe the water source and sufficiency of the water supply for the WEF, including decreed or conditional water rights. If a well is required, the applicant shall obtain the necessary permit from the State of Colorado Office of the State Engineer.

(I) Water and/or Wind Erosion Control Plan. The applicant will provide a plan showing existing and proposed grading for the WEF site. The drainage and erosion

control plan shall be accompanied by a description of practices that will be utilized to prevent erosion and run-off during construction. If there are any modifications to this plan, the applicant will provide a final drainage and erosion control plan prior to commencement of construction.

(J) Geotechnical Report. The applicant shall provide written certification that prior to construction, a professional engineer licensed in the State of Colorado will complete a geotechnical study that includes the following:

(1) Soils engineering and engineering geologic characteristics of the site based upon on-site sampling and testing.

(2) Foundation and tower systems design criteria for all proposed structures.

(3) Slope stability analysis.

(4) Grading criteria for ground preparation, cuts and fills, and soil compaction

(K) Road Agreement. If any County roads will be used during construction of a WEF for the purpose of transporting parts, materials and/or equipment, the applicant shall enter into a roads agreement with the County. The roads agreement shall comply with Section 4-900 and shall also include the following:

(1) A map showing which County roads will be used during construction.

(2) A pre-construction baseline survey of County roads to be used during construction to document their pre-construction condition.

(3) A mitigation plan to address traffic congestion and potential impacts to County roads to be used during construction.

(4) A legally binding agreement between the applicant and the County that requires the applicant to return any County roads to their pre-construction baseline condition.

(L) Liability Insurance. The applicant shall provide evidence of liability insurance to cover loss or damage to persons and structures during construction and operation of the WEF.

(M) Maintenance of Wind Turbines. The applicant shall provide a statement certifying that the wind turbines will be maintained and operated in accordance with manufacturer specifications, Owner Environmental Health and Safety Plans, and applicable Occupational Health and Safety Administration (OSHA) requirements to ensure the safety of site personnel and the public.

(N) Additional Information and Waivers. The County may request additional information that may be required to evaluate the proposed WEF. The County may waive or alter any of these minimum requirements if they are determined to be inappropriate or unnecessary to determining if the application satisfied applicable standards.

4-900 WEF Standards

(A) Height Limitation.

(1) The height of ground-mounted WEFs shall be subject to FAA approval.

(2) Building-mounted WEFs may not exceed the height permitted for the zone district in which the project is located by more than five feet.

(B) Setbacks for Ground-Mounted WEF.

(1) The setbacks in this subsection shall govern over any setbacks established in these Zoning Regulations.

	Minimum Setback
Setback from above-ground public electric power lines of communication lines	1.1 times system height
Setback from existing public road or highway or railroad	1.1 times system height
Setback from inhabited buildings including: residence, school, hospital, church or public library.	2 times system height
Setback from public road or highway with ADT of 7,000 or more	1.1 times system height
Setback from all other property lines, unless appropriate easements are secured from adjacent property owners or other acceptable mitigation is approved by the Board	1.1 time system height

(2) Setback from the section lines. The County has established right-of-ways (ROWS) that are located 30 feet on each side of section lines. The purpose of this ROW is to allow for maintenance of existing county roads and construction of new county roads. Placement of wind turbines, including their foundations, within this ROW will be reviewed by the County on a case by case basis to confirm that they will not conflict with the County's existing road plans and future road plans. In the event of a potential conflict, wind turbines may need to be relocated outside of this established ROW to allow for future construction of county roads. In the event that there is no conflict, the County may issue a waiver that will allow for placement of the wind turbine within the existing county ROW. It is the responsibility of the applicant to apply for a waiver in these situations, and to provide exact location of proposed placement of wind turbines and the foundations, and the distance from section lines. In the event a survey is required, the applicant will be responsible for paying the costs of survey.

(3) Scenic Resources Setback. Wind turbines compromising the WEF shall be setback a minimum ¼ mile from any highway, designated to be a scenic highway or roadway by the Morgan County Comprehensive Plan or by the state. A scenic resource protection setback requirement may be reduced to 1.1 times the total wind system height if the Board determines that the

characteristics of the surrounding property eliminate or substantially reduce considerations of scenic value.

(4) Substations, facility buildings, and other accessory structures that are part of the WEF shall comply with the required primary building setbacks for the zone district in which the project is located.

(C) Setbacks for Building-Mounted WEF

(1) The blades of a building-mounted WEF shall not extend beyond the property line in any operational position.

(D) Minimum Ground Clearance for Ground-Mounted WEF. The blade tip of any wind turbine shall, at its lowest point, have ground clearance of no less than sixty (60) feet.

(E) Separation Distance. Ground-mounted WEFs blades that spin on a horizontal axis shall not be located within 500 feet of any State wildlife areas and wetlands as mapped by the Colorado Wetland Inventory.

(D) Septic System. If applicable, the proposed WEF complies with applicable County requirements.

(E) Water Supply System. If applicable, the WEF has demonstrated access to a water supply.

(F) Roadways and Access.

(1) Legal access to public right-of-way to and from the WEF shall be safe and in conformance with access permit requirements of the County.

(2) All reasonable efforts must be made not cause traffic congestion during operations and unsafe traffic conditions during the construction phase or operations.

(3) Adequate turning radii shall be installed at all entrances to accommodate large truck movement.

(4) Off-street parking and loading zones shall be surfaced with gravel or the equivalent and shall be graded to prevent drainage problems.

(5) Staging activities and parking of equipment and vehicles shall occur on-site and on private rights-of-way, and shall be prohibited on maintained County roads.

(6) The use of any County roads during construction shall be in accordance with and in compliance of Federal, State, County and local regulations governing such activities. The applicant will prepare a roads agreement that includes a mitigation plan addressing potential impacts to County roads to be used during construction. As part of the roads agreement, the applicant at their expense will be required to return any County roads that are impacted by construction to their pre-construction baseline condition.

(G) Air Quality. The proposed WEF shall comply with applicable County, State and Federal air quality laws.

(H) Glare, Dust or Noise. Construction and operation of the WEF shall not significantly increase existing glare, dust or noise at surrounding properties.

(1) To minimize the potential for glare, Wind turbines shall be painted a neutral color such as matte white or matte gray.

(2) The proposed WEF shall comply with the statutory provisions for maximum permissible noise levels for industrial zoning in C.R.S. § 25-12-103.

(3) Fugitive dust and particulate emissions shall be controlled on the site.

(4) Waste materials shall be handled, stored, and disposed of in a manner that controls fugitive dust, fugitive particulate conditions, blowing debris and other potential nuisance conditions.

(5) The WEF shall comply with FAA minimum lighting requirements and be at the lowest intensity allowed. Any array of flashing or pulsed obstruction lighting shall be synchronized to flash simultaneously. No accessory lighting is permitted, except for lighting that is necessary for safety and security purposes.

(I) Erosion and Sedimentation Control. Erosion and sedimentation control measures that ensure that disturbed areas and soil stockpiles are stabilized during construction shall be implemented. Disturbed areas shall be revegetated in accordance with landowner agreements.

(J) Drainage/Storm-Water Run-Off. Run-off shall be managed in accordance with applicable County, State and Federal regulations. If applicable, the applicant shall obtain a Construction Stormwater Discharge Permit from the Colorado Department of Public Health and the Environment, Water Quality Control Division.

(K) Protection of Agricultural Lands. The WEF shall not have a significant adverse impact on agricultural lands and agricultural operations above what is allowed for under landowner lease agreements.

(L) Fire Protection. The WEF shall have adequate fire control and prevention measures.

(M) Underground Location of Electrical Collection System Wiring. Unless geologic conditions or other technical engineering considerations prevent underground installation, electrical collection system wiring and power lines for the WEF shall be installed underground except where the WEF collector system wiring is brought together from the project substation to the point of electrical interconnection. Overhead transmission lines are permissible from the project substation to the point of electrical interconnection.

(N) Interconnection and Electrical Distribution Facilities.

(1) Transmission from the project substation to the point of electrical interconnection shall comply with the National Electrical Code.

(2) Interconnection shall conform to the requirements of the electric utility company, and applicable state and federal regulatory codes.

(O) Certification of Equipment and Appurtenant Facilities.

(1) All wind turbine towers and foundations systems (i.e. structural systems) shall be reviewed by a registered structural engineer, licensed in Colorado, to confirm their compliance with the applicable State, Federal and local regulations and to conform with good engineering practices.

(2) The electrical system shall be certified by a registered electrical engineer, licensed in Colorado, to the compliant with the applicable State, Federal and local regulations, and to conform with good engineering practices.

(P) Signs. Wind Turbines shall not be used for displaying any messaging or communication, except for reasonable identification of the manufacturer or operator of the Wind Energy Facility.

4-905 Review Criteria and Process

(A) In addition to any review criteria imposed by the Zoning Regulations for the applicable permit, the County shall consider whether the application complies with the requirements of these BESS Regulations.

(B) All applications under these BESS Regulations shall be processed pursuant to the procedures applicable to the type of permit required.

4-910 Decommissioning Requirements for WEF

(A) General Requirements.

(1) If a WEF ceases to perform its originally intended function for more than 12 consecutive months, the permit holder and/or property owner shall remove the facility, mount and associated equipment and facilities by no later than 180 days after the end of the 12-month period.

(2) If permit holder and/or property owner notifies the County of the termination of operations, decommissioning shall be completed no less than 180 days from the date of the notice.

(3) Upon removal of a WEF, the property shall be restored to the condition prior to development of the facility.

(B) Decommissioning Plan. The decommissioning plan shall include:

(1) Contact information for all parties involved (e.g., landowner, developer, utilities, etc.);

(2) A detailed plan for the removal of all systems and equipment from the site, including provisions for the removal of structures, debris and cabling including those below the soil surface to depths agreed to in landowner agreements or down twenty-four (24) inches;

(3) A cost estimate for the decommissioning prepared by a professional engineer or contractor with expertise in related decommissioning projects; and

(4) Roles and responsibilities of each party involved in the decommissioning.

(C) Decommissioning Bond or Letter of Credit. The decommissioning cost shall be made by cash, surety bond or irrevocable letter of credit at 50% before construction commences and the remaining 50% prior to the fifth anniversary of the commencement of construction of the facility.

(D) If decommissioning does not proceed in accordance with the decommissioning plan, the County shall have the right, but not the requirement, to enter the property and cause the appropriate abandonment and decommissioning measures as determined by the approved decommissioning plan.

4-915 Ownership Changes

If the ownership of a WEF changes or the owner of the property changes, the use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the use permit and decommissioning plan. A new owner or operator of the WEF shall notify the County Planning Department and the Board of County Commissioners in writing of such change in ownership or operator within thirty (30) days of the ownership change. The use permit and all other local approvals for the WEF will be voided if a new owner or operator fails to provide written notification as provided herein in the required timeframe. Reinstatement of a void use permit will be subject to the same review and approval processes for new applications.

4-920 Approval Time Frame and Abandonment

The use permit for a WEF shall be valid for a period of 12 months, provided that a building permit is issued for construction and construction is commenced. In the event construction is not completed in accordance with the final site plan, as may have been amended and approved within 12 months after approval, the County Planning Department may extend the time to complete construction for 180 days. If the owner and/or operator fails to perform substantial construction after 36 months, the approvals shall expire.

APPROVED this _____ day of _____, 2022.

BOARD OF COUNTY COMMISSIONERS
MORGAN COUNTY, COLORADO

_____
Jon J. Becker, Chair

_____
Gordon H. Westhoff, Commissioner

_____
Mark A. Arndt, Commissioner

ATTEST:
(SEAL)

Susan L. Bailey
Clerk to the Board

ADDITIONAL INFORMATION:

Information received after delivery of original PC packet to members

Additional Information

NextEra Comments

MORGAN COUNTY, COLORADO
BOARD OF COUNTY COMMISSIONERS

RESOLUTION NO. 2022 BCC ____

AN RESOLUTION AMENDING THE MORGAN COUNTY ZONING REGULATIONS CONCERNING THE REGULATION OF WIND ENERGY CONVERSION, SOLAR COLLECTOR, AND BATTERY ENERGY STORAGE SYSTEMS

WHEREAS, wind energy conversion, solar collector, and battery energy storage systems are rapidly growing in demand and present opportunities for the County;

WHEREAS, the County seeks to promote the Comprehensive Plan goals of diversifying the economy while achieving compatibility with existing land uses;

WHEREAS, on January 4, 2022, the Board of County Commissioners passed a temporary moratorium on new wind energy, solar collector facility and BESS applications to allow for research to be conducted on the appropriate regulatory means for such facilities; and

WHEREAS, the County wishes to regulate wind energy conversion, solar collector, and battery energy storage systems in a tailored manner that seeks to address the perceived impacts of each type of system.

NOW THEREFORE BE IT RESOLVED by the Morgan County Board of County Commissioners as follows:

Section 1. The Morgan County Zoning Regulations shall be amended by the addition of solar collector facilities to the list of uses-by-right as accessory uses in the following zone districts and subsections:

Estate Residential Zone (ER) – §3-210

Rural Residential Zone (RR) – §3-230

Rural Community Residential Zone (RCR) – §3-250

Moderate Density Residential Zone (MDR) – §3-270

High Density Residential Zone (HDR) – §3-295

Commercial Zone (C) – §3-315.5

Mobile Home Zone (MH) – §3-380

Section 2. The Morgan County Zoning Regulations shall be amended by the addition of building-mounted wind energy facilities (WEFs) to the list of uses-by-right as accessory uses in the following zone districts and subsections:

Agriculture Production Zone (A) – §3-170 for both parcels larger than 20 acres and parcels 20 acres or less

Agriculture/Agri-Business Zone (AB) – §3-190

Estate Residential Zone (ER) – §3-210

Rural Residential Zone (RR) – §3-230

Rural Community Residential Zone (RCR) – §3-250

Moderate Density Residential Zone (MDR) – §3-270

High Density Residential Zone (HDR) – §3-295

Commercial Zone (C) – §3-315.5

Light Industrial Zone (LI) – §3-335.5

Heavy Industrial (HI) – §3-355.5

Mobile Home Zone (MH) – §3-380

Section 3. The Zoning Regulations shall be amended by the addition of solar collector facilities (20 acres or less) to the list of conditional uses, as a primary use and accessory use, in the following zone districts:

Agriculture Production Zone (A) – §3-175 for both parcels larger than 20 acres and parcels 20 acres or less

Agriculture/Agri-Business Zone (AB) – §3-195

Light Industrial Zone (LI) – §3-340

Heavy Industrial (HI) – §3-360

Section 4. The Zoning Regulations shall be amended by the addition of solar collector facilities (more than 20 acres), ground-mounted wind energy facilities (WEFs) and battery energy storage systems (BESS) to the list of special uses, as a primary use and accessory use, in the following zone districts:

Agriculture Production Zone (A) – §3-175 for both parcels larger than 20 acres and parcels 20 acres or less

Agriculture/Agri-Business Zone (AB) – §3-195

Light Industrial Zone (LI) – §3-340

Heavy Industrial (HI) – §3-360

Section 4. The following new subsections shall be added to the Supplementary Regulations in Chapter 4 of the Morgan County Zoning Regulations to read:

SOLAR COLLECTOR FACILITY REGULATIONS

4-810 Applicability

These Solar Collector Facility Regulations and applicable portions of the Zoning Regulations apply to those activities that are not a major facility of a public utility, as defined in the County's 1041 Regulations. To the extent the proposed activity is a major electrical facility of a public utility or power authority subject to these Solar Facility Regulations and applicable portions of the Zoning Regulations, such application shall be processed in accordance with C.R.S. § 29-20-108.

4-815 Definitions

Agrivoltaic Systems: A system designed for the simultaneous use of areas of land for both ground-mounted solar collectors and agriculture.

Parking Canopy Solar System: Ground-mounted solar collectors installed above parking areas.

Solar Collector: A photovoltaic (PV) panel, array of panels or other solar energy device, the primary purpose of which is to provide for the collection, inversion, storage, and distribution of solar energy for electricity generation, space heating, space cooling, or water heating. Ground-mounted solar collector includes agrivolatic systems and parking canopy solar systems when installed on surface parking lots. Building-mounted solar collector includes parking canopy solar systems when installed on the roof of a parking garage.

4-820 Submittal Requirements

In addition to the submittal requirements for the applicable land use permit, an application for a solar collector shall include the following:

(A) Site Plan/Map. The required map shall include the following in addition to the other requirements of these Zoning Regulations:

(1) Location and description of current land use, including agricultural use, dwelling units, microwave communication links and airports.

(2) Clearly identified boundary lines and dimensions of the site where the proposed solar collector facility will be located.

(3) Project area boundary and approximate size of the site where the proposed solar collector facility will be located, in acres or square feet.

(4) Location of all proposed structures and facilities, including the location and dimensions for each solar panel in the proposed solar collector facility, including:

a. Setbacks for each solar panel from property lines.

b. Setbacks of all accessory buildings and structures.

(5) Description of utility interconnection and crossing.

(B) Drawing. A schematic drawing showing the solar panels.

(C) Narrative and Impact Analysis. A narrative, in addition to the requirements of the applicable permit, including:

(1) Project description and proposed phasing of development.

(2) A description of the project and each phase of development, including the approximate number of solar panels, and the accessory structures, power output (in MW), and infrastructure and interconnection requirements for each phase.

(3) Description of potential access route(s), including road surface material, proposed measures for dust control, and proposed road maintenance schedule or program.

(4) Impact Analysis. The applicant will provide a description of the impacts that the proposed solar collector may cause, based upon the standards in these Solar Collector Facility and Zoning Regulations. This analysis shall include: a description of baseline conditions and the impacts that the proposed use may cause; a description of how the applicant will mitigate impacts; and documentation that applicable standards will be satisfied. The applicant shall also assess the potential effects of the proposed project on County services and capital facilities. In the event that impacts to County services or County capital facilities from construction and operation of a solar collector are identified, the applicant shall develop a plan to maintain County services and County capital facilities. If impacts cannot be fully mitigated, the applicant may be required to pay the County a mutually agreed upon impact fee to allow the County to maintain existing County services and capital facilities.

(D) Utility Interconnection or Crossing. The applicant will provide certification of intent to enter into an interconnection agreement and crossing agreement(s) to/with applicable utilities.

(E) Decommissioning Plan. The applicant shall provide a decommissioning plan in accordance with Section 4-835.

(F) Notification to Mineral Rights Holders. Applicant shall notify the individual mineral rights holders within the project site in accordance with County and statutory notification requirements.

(G) Septic System. If the proposed solar collector facility includes uses that must be served by a septic system, the applicant shall comply with applicable County requirements. The applicant shall provide a statement certifying that the septic system for the solar collector will comply with applicable County, State, and Federal requirements.

(H) Water System. If the proposed solar collector facility includes uses that must be served by water, the application shall describe the water source and sufficiency of the water supply for the solar collector facility, including decreed or conditional

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Number: 1 Author: AWM0RTR Subject: Highlight Date: 6/1/2022 4:28:30 PM
Are the county services water,sewage, and/or emergency?

water rights. If a well is required, the applicant shall obtain the necessary permit from the State of Colorado Office of the State Engineer.

(I) Water and/or Wind Erosion Control Plan. The applicant will provide a plan showing existing and proposed grading for the solar collector site. The drainage and erosion control plan shall be accompanied by a description of practices that will be utilized to prevent erosion and run-off during construction. If there are any modifications to this plan, the applicant will provide a final drainage and erosion control plan prior to commencement of construction.

(J) Geotechnical Report. The applicant shall provide written certification that prior to construction, a professional engineer licensed in Colorado will complete a geotechnical study that includes the following:

(1) Soils engineering and engineering geologic characteristics of the site based upon on-site sampling and testing.

(2) Foundation and tower systems design criteria for all proposed structures.

(3) Slope stability analysis.

(4) Grading criteria for ground preparation, cuts and fills, and soil compaction

(K) Road Agreement. If any County roads will be used during construction of a solar collector facility for the purpose of transporting parts, materials and/or equipment, the applicant shall enter into a road agreement with the County. The roads agreement shall comply with Section 4-825 and shall also include the following:

(1) A map showing which County roads will be used during construction.

(2) A pre-construction baseline survey of County roads to be used during construction to document their pre-construction condition.

(3) A mitigation plan to address traffic congestion and potential impacts to County roads to be used during construction.

(4) A legally binding agreement between the applicant and the County that requires the applicant to return any County roads to their pre-construction baseline condition.

(L) Liability Insurance. The applicant shall provide evidence of liability insurance to cover loss or damage to persons and structures during construction and operation of the solar collector facility.

(M) Maintenance of Solar Panels. The applicant shall provide a statement certifying that the solar panels will be maintained and operated in accordance with manufacturer specifications, Owner Environmental Health and Safety Plans, and applicable Occupational Health and Safety Administration (OSHA) requirements to ensure the safety of site personnel and the public.

(N) Additional Information and Waivers. The County may request additional information that may be required to evaluate the proposed solar collector facility. The County may waive or alter any of these minimum requirements if they are determined to be inappropriate or unnecessary to determining if the application

satisfied applicable standards.

4-825 Solar Collector Facility Standards

(A) General Standards for all solar collectors.

(1) All exterior electrical lines shall be buried below the surface of the ground when possible.

(2) All systems shall comply with all applicable building and electrical codes.

(3) The property owner shall notify the electrical utility where the solar system is connected to the electrical utility system.

(B) Accessory Ground-Mounted Solar Collectors. Accessory ground-mounted solar collectors shall:

(1) Be located in a side or rear yard only;

(2) Be set back at least six feet from the side and rear property line;

(3) Not be located within an easement;

(4) Be located so as to minimize glare visible from abutting properties;

(5) Not exceed 15 feet in height with panels oriented in a vertical position; and

(6) Be included in determining the maximum coverage of structures on the lot.

(C) Accessory Building-Mounted Solar Collectors. Accessory building-mounted solar collectors shall:

(1) Not extend more than 18 inches above the maximum height permitted in the zone district in which it is located;

(2) If mounted to a portion of the roof ending at, or extending over, the front façade of the building, shall be mounted so that the edge of the device is set back at least one foot from the edge of the roof closest to the front lot line; and

(3) If mounted to the wall of a building, may extend into or over no more than 33 percent of the depth of a minimum yard or setback that is required along a side lot line but shall not extend closer than four feet to a side lot line.

(D) Principal Ground-Mounted Solar Collectors.

(1) The setbacks in this subsection shall govern over any setbacks established in these Zoning Regulations.

	Minimum Setback
Setback from above-ground public electric power lines of communication lines	70 feet
Setback from existing public road or highway or railroad	70 feet

Setback from inhabited buildings including: residence, school, hospital, church or public library.	500 feet
Setback from all other property lines	70 feet

(a) The setback requirement from inhabited structures may be reduced if appropriate screening through landscape or an opaque fence is installed, or upon submittal to the County of a waiver or informed consent signed by the owner of the inhabited structure agreeing to the lesser setback. If landscaping or opaque fencing is substituted for setback, a landscaping plan or fencing plan shall first be submitted to and approved by the County.

(3) Setback from the section lines. The County has established right-of-ways (ROWS) that are located 30 feet on each side of section lines. The purpose of this ROW is to allow for maintenance of existing county roads and construction of new county roads. Placement of solar panels within this ROW will be reviewed by the County on a case by case basis to confirm that they will not conflict with the County's existing road plans and future road plans. In the event of a potential conflict, solar panels may need to be relocated outside of this established ROW to allow for future construction of county roads. In the event that there is no conflict, the County may issue a waiver that will allow for placement of the solar panel within the existing county ROW. It is the responsibility of the applicant to apply for a waiver in these situations, and to provide exact location of proposed placement of solar panels and the distance from section lines. In the event a survey is required, the applicant will be responsible for paying the costs of survey.

(4) Scenic Resources Setback. Solar panels comprising the solar collector facility shall be setback a minimum ¼ mile from any highway, designated to be a scenic highway or roadway by the Morgan County Comprehensive Plan or by the state.

(5) Substations, facility buildings, and other accessory structures that are part of the solar collector facility shall comply with the required primary building setbacks for the zone district in which the project is located.

(6) Maximum Height. The maximum height of the solar panels shall not exceed 30 feet in height when oriented at maximum tilt.

(7) Maximum Lot Coverage. The panels shall be considered in determining the maximum coverage of structures on the lot.

(8) Septic System. If applicable, the proposed solar collector facility complies with applicable County requirements.

(9) Water Supply System. If applicable, the solar collector facility has demonstrated access to a water supply.

(10) Roadways and Access.

(a) Legal access to public right-of-way to and from the solar collector facility shall be safe and in conformance with access permit requirements of the County.

(b) All reasonable efforts must be made not cause traffic congestion during operations and unsafe traffic conditions during the construction phase or operations.

(c) Adequate turning radii shall be installed at all entrances to accommodate large truck movement.

(d) Off-street parking and loading zones shall be surfaced with gravel or the equivalent and shall be graded to prevent drainage problems.

(e) Staging activities and parking of equipment and vehicles shall occur on-site and on private rights-of-way, and shall be prohibited on maintained County roads.

(f) The use of any County roads during construction shall be in accordance with and in compliance of Federal, State, County and local regulations governing such activities. The applicant will prepare a roads agreement that includes a mitigation plan addressing potential impacts to County roads to be used during construction. As part of the roads agreement, the applicant at their expense will be required to return any County roads that are impacted by construction to their pre-construction baseline condition.

(11) Erosion and Sedimentation Control. Erosion and sedimentation control measures that ensure that disturbed areas and soil stockpiles are stabilized during construction shall be implemented. Disturbed areas shall be revegetated in accordance with landowner agreements.

(12) Drainage/Storm-Water Run-Off. Run-off shall be managed in accordance with applicable County, State and Federal regulations. If applicable, the applicant shall obtain a Construction Stormwater Discharge Permit from the Colorado Department of Public Health and the Environment, Water Quality Control Division.

(13) Protection of Agricultural Lands. The solar collector facility shall not have a significant adverse impact on agricultural lands and agricultural operations above what is allowed for under landowner lease agreements.

(14) Fire Protection. The solar collector facility shall have adequate fire control and prevention measures.

(15) Glare, Dust or Noise. Construction and operation of the WEF shall not significantly increase existing glare, dust or noise at surrounding properties.

(a) The proposed solar collector facility shall comply with the statutory provisions for maximum permissible noise levels for industrial zoning in C.R.S. § 25-12-103.

(b) Fugitive dust and particulate emissions shall be controlled on the

site.

(c) Waste materials shall be handled, stored, and disposed of in a manner that controls fugitive dust, fugitive particulate conditions, blowing debris and other potential nuisance conditions.

(d) The panels shall be located so as to minimize glare visible from an abutting property.

(16) Underground Location of Electrical Collection System Wiring. Unless geologic conditions or other technical engineering considerations prevent underground installation, electrical collection system wiring and powerlines for the solar collector facility shall be installed underground except where the solar collector facility wiring is brought together from the project substation to the point of electrical interconnection. Overhead transmission lines are permissible from the project substation to the point of electrical interconnection.

(17) Interconnection and Electrical Distribution Facilities.

(a) Transmission from the project substation to the point of electrical interconnection shall comply with the National Electrical Code.

(b) Interconnection shall conform to the requirements of the electric utility company, and applicable state and federal regulatory codes.

(18) Certification of Equipment and Appurtenant Facilities.

(a) All solar collector facilities shall be reviewed by a registered structural engineer, licensed in Colorado, to confirm their compliance with the applicable State, Federal and local regulations and to conform with good engineering practices.

(b) The electrical system shall be certified by a registered electrical engineer, licensed in Colorado, to the compliant with the applicable State, Federal and local regulations, and to conform with good engineering practices.

4-830 Review Criteria and Process

(A) In addition to any review criteria imposed by the Zoning Regulations for the applicable permit, the County shall consider whether the application complies with the requirements of these Solar Collector Regulations.

(B) All applications under these Solar Collector Facility Regulations shall be processed pursuant to the procedures applicable to the type of permit required.

4-835 Decommissioning Requirements for Solar Collector Facilities

(A) General Requirements.

(1) If a solar collector facility ceases to perform its originally intended function for more than 12 consecutive months, the permit holder and/or property owner shall remove the facility, mount and associated equipment and

facilities by no later than 180 days after the end of the 12-month period.

(2) If permit holder and/or property owner notifies the County of the termination of operations, decommissioning shall be completed no less than 180 days from the date of the notice.

(3) Upon removal of a solar collector facility, the property shall be restored to the condition prior to development of the facility.

(B) Decommissioning Plan. The decommissioning plan shall include:

(1) Contact information for all parties involved (e.g., landowner, developer, utilities, etc.);

(2) A detailed plan for the removal of all facilities and equipment from the site, including provisions for the removal of structures, debris and cabling including those below the soil surface to depths agreed to in landowner agreements or down twenty-four (24) inches;

(3) A cost estimate for the decommissioning prepared by a professional engineer or contractor with expertise in related decommissioning projects; and

(4) Roles and responsibilities of each party involved in the decommissioning.

(C) [1]Decommissioning Bond or Letter of Credit. The decommissioning cost shall be made by cash, surety bond or irrevocable letter of credit at 50% before construction commences and the remaining 50% prior to the fifth anniversary of the commencement of construction of the facility.

(D) If decommissioning does not proceed in accordance with the decommissioning plan, the County shall have the right, but not the requirement, to enter the property and cause the appropriate abandonment and decommissioning measures as determined by the approved decommissioning plan.

4-840 Ownership Changes

If the ownership of a principal ground-mounted solar collector facility changes or the owner of the property changes, the use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the use permit and decommissioning plan. A new owner or operator of the principal ground-mounted solar collector facility shall notify the County Planning Department and the Board of County Commissioners in writing of such change in ownership or operator within thirty (30) days of the ownership change. The use permit and all other local approvals for the principal ground-mounted solar collector facility will be voided if a new owner or operator fails to provide written notification as provided herein in the required timeframe. Reinstatement of a void use permit will be subject to the same review and approval processes for new applications.

4-845 Approval Time Frame and Abandonment

Number: 1 Author: AWM0RTR Subject: Highlight Date: 6/1/2022 4:24:13 PM

Construction may be a lengthy process for solar facilities. We suggest the Bond be put into place within 90 days after the end of construction.

The use permit for a principal ground-mounted solar collector facility shall be valid for a period of 12 months, provided that a building permit is issued for construction and construction is commenced. In the event construction is not completed in accordance with the final plans, as may have been amended and approved within 12 months after approval, the County Planning Department may extend the time to complete construction for 180 days. If the owner and/or operator fails to perform substantial construction after 36 months, the approval shall expire.

BATTERY ENERGY STORAGE SYSTEM (BESS)

4-850 Definitions

Battery Energy Storage System (BESS): A rechargeable energy storage system consisting of batteries, battery chargers, controls, power conditioning systems and associated electrical equipment designed to provide electrical power to a building or to provide electrical grid-related services.

4-855 Submittal Requirements

(A) In addition to any submittal documents required by the Zoning Regulations for the applicable use permit, except as modified by these BESS Regulations, an application for a BESS shall contain the following items:

(1) Change Conditions Narrative. Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures.

(2) Electrical Diagram. A one or three-line electrical diagram detailing the BESS layout, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and over current devices.

(3) Specification Sheet. A preliminary equipment specification sheet that documents the proposed BESS components, inverters and associated electrical equipment that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of building permit.

(4) Contact Information. Name, address, and contact information of proposed or potential system installer and the owner and/or operator of the BESS. Such information of the final system installer shall be submitted prior to the issuance of building permit.

(5) Narrative. A narrative providing an explanation of the project, the above grade and below grade infrastructure, the type of battery, temperature control (if applicable) for the BESS system, identified environmental impacts and mitigation,

(6) Maintenance Plant. A system and property maintenance plan describing continuing BESS maintenance and property upkeep during the operation of

the BESS.

(7) Fire Mitigation Plan. A fire mitigation plan [1] ~~including identification of the nearest water source for fire suppression.~~

(8) Drainage Plan. A drainage plan, regardless of the square footage of the BESS.

(9) Decommissioning Plan. A decommissioning plan in accordance with Section 4-870.

(10) Emergency Operation Plan. An emergency operation plan including the following:

(a) Procedures for safe shutdown, de-energizing, or isolation of equipment and systems under emergency conditions to reduce the risk of fire, electric shock, and personal injuries, and for safe start-up following cessation of emergency conditions.

(b) Procedures for inspection and testing of associated alarms, interlocks, and controls.

(c) Procedures to be followed in response to notifications from the BESS management system, when provided, that could signify potentially dangerous conditions, including shutting down equipment, summoning service and repair personnel, and providing agreed upon notification to fire department personnel for potentially hazardous conditions in the event of a system failure.

(d) Emergency procedures to be followed in case of fire, explosion, release of liquids or vapors, damage to critical moving parts, or other potentially dangerous conditions. Procedures can include sounding the alarm, notifying the fire department or district, evacuating personnel, de-energizing equipment, and controlling and extinguishing the fire.

(e) Response considerations similar to a safety data sheet (SDS) that will address response safety concerns and extinguishment when an SDS is not required.

(f) Procedures for dealing with BESS equipment damaged in a fire or other emergency event, including maintaining contact information for personnel qualified to safely remove damaged BESS equipment from the facility.

(B) Application for a BESS that are part of a solar collector facility and submitted concurrently with an application for the solar collector facility may be processed concurrently.

Number: 1 Author: AWM0RTR Subject: Cross-Out Date: 6/1/2022 4:23:41 PM
Standard BESS fire mitigation plans do not require identifying the nearest source of water for fire mitigation

4-860 Battery Energy Storage System (BESS) Standards

(A) BESS shall comply with all applicable requirements of the underlying zone district and the Accessory Uses and Structures requirements in Sec. 3-130 of these Zoning Regulations.

(B) All BESS, including all mechanical equipment, shall be enclosed by a minimum of a six (6) foot tall fence with a self-locking gate to prevent unauthorized access, unless housed in a building dedicated to the BESS. No fencing may interfere with any ventilation or exhaust ports.

(C) All BESS, their components, and associated ancillary equipment shall be placed with required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with applicable electric code, as adopted by the State of Colorado.

4-865 Review Criteria and Process

(A) In addition to any review criteria imposed by the Zoning Regulations for the applicable permit, the County shall consider whether the application complies with the requirements of these BESS Regulations.

(B) All applications under these BESS Regulations shall be processed pursuant to the procedures applicable to the type of permit required.

4-870 Decommissioning Requirements for BESS

(A) General Requirements.

(1) If a BESS ceases to perform its originally intended function for more than 12 consecutive months, the permit holder and/or property owner shall remove the system, foundation and associated equipment and facilities by no later than 180 days after the end of the 12-month period.

(2) If permit holder and/or property owner notifies the County of the termination of operations, decommissioning shall be completed no less than 180 days from the date of the notice.

(3) Upon removal of a BESS, the property shall be restored to the condition prior to development of the system.

(B) Decommissioning Plan. The decommissioning plan shall include:

(1) Contact information for all parties involved (e.g., landowner, developer, utilities, etc.);

(2) A detailed plan for the removal of all systems and equipment from the site, including provisions for the removal of structures, debris and cabling including those below the soil surface to depths agreed to in landowner agreements or down twenty-four (24) inches;

(3) A cost estimate for the decommissioning prepared by a professional engineer or contractor with expertise in related decommissioning projects;

and

(4) Roles and responsibilities of each party involved in the decommissioning.

(C) Decommissioning Bond or Letter of Credit. The decommissioning cost shall be made by cash, surety bond or irrevocable letter of credit at 50%[1] ~~before construction commences~~ and the remaining 50% prior to the fifth anniversary of the commencement of construction of the BESS.

(D) If decommissioning does not proceed in accordance with the decommissioning plan, the County shall have the right, but not the requirement, to enter the property and cause the appropriate abandonment and decommissioning measures as determined by the approved decommissioning plan.

4-875 Ownership Changes

If the ownership of a BESS changes or the owner of the property changes, the use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the use permit and decommissioning plan. A new owner or operator of the BESS shall notify the County Planning Department and the Board of County Commissioners in writing of such change in ownership or operator within thirty (30) days of the ownership change. The use permit and all other local approvals for the BESS will be voided if a new owner or operator fails to provide written notification as provided herein in the required timeframe. Reinstatement of a void use permit will be subject to the same review and approval processes for new applications.

4-880 Approval Time Frame and Abandonment

The use permit for a BESS shall be valid for a period of 12 months, provided that a building permit is issued for construction and construction is commenced. In the event construction is not completed in accordance with the final plans, as may have been amended and approved within 12 months after approval, the County Planning Department may extend the time to complete construction for 180 days. If the owner and/or operator fails to perform substantial construction after 36 months, the approval shall expire.

WIND ENERGY FACILITY REGULATIONS

4-885 Applicability

These Wind Energy Facility Regulations and applicable portions of the Zoning Regulations apply to those activities that are not a major facility of a public utility, as defined in the County's 1041 Regulations. To the extent the proposed activity is a major electrical facility of a public utility or power authority subject to these Wind Energy Facility Regulations and applicable portions of the Zoning Regulations, such application shall be processed in accordance with C.R.S. § 29-20-108.

4-890 Definitions

Hub: The part of the wind turbine to which the blades are attached, together creating the rotor

Hub Height: The distance measured from ground level to the center of the turbine hub.

Number: 1 Author: AWM0RTR Subject: Cross-Out Date: 6/1/2022 4:25:52 PM
"90 days after construction has ended

MET Tower: A meteorological tower used for the measurement of wind speed.

System Height. The combined height of the tower, the wind turbine and any blade extended at its highest point, measured from ground level.

Wind Energy Facility (WEF): All necessary devices that together convert wind energy into electricity, including the rotor, nacelle, generator, WEF tower, electrical components, WEF foundation, transformer, and electrical cabling from the WEF tower to the substation(s). WEF shall include MET towers.

Wind Turbine: A wind energy conversion system that converts wind energy into electricity through the use of a wind turbine generator. The term "wind turbine" shall include the turbine, blade, tower, base and pad transformer.

4-895 Submittal Requirements

In addition to the submittal requirements for the applicable land use permit, an application for a WEF shall include the following:

(A) Site Plan/Map. The required map shall include the following in addition to the other requirements of these Zoning Regulations:

(1) Location and description of current land use, including agricultural use, dwelling units, microwave communication links and airports.

(2) Clearly identified boundary lines and dimensions of the site where the proposed WEF will be located.

(3) Project area boundary and approximate size of the site where the proposed WEF will be located, in acres or square feet.

(4) Location of all proposed structures and facilities, including the location and dimensions for each wind turbine in the proposed WEF, including:

a. Setbacks for each wind turbine from property lines.

b. Setbacks of all accessory buildings and structures.

(5) Description of utility interconnection and crossing.

(B) Drawing. A schematic drawing showing the wind turbine and range of dimensions, including system height, rotor diameter, hub height, and rotor ground clearance.

(C) Narrative and Impact Analysis. A narrative, in addition to the requirements of the applicable permit, including:

(1) Project description and proposed phasing of development.

(2) A description of the project and each phase of development, including the approximate number of wind turbines, and the accessory structures, power output (in MW), and infrastructure and interconnection requirements for each phase.

(3) Description of potential access route(s), including road surface material, proposed measures for dust control, and proposed road maintenance schedule or program.

(4) Impact Analysis. The applicant will provide a description of the impacts that the proposed WEF may cause, based upon the standards in these WEF and Zoning Regulations.. This analysis shall include: a description of baseline conditions and the impacts that the proposed use may cause, as described in Section 6-105; a description of how the Applicant will mitigate impacts; and documentation that applicable standards will be satisfied. The applicant shall also assess the potential effects of the proposed project on County services and capital facilities. In the event that impacts to County services or County capital facilities from construction and operation of a WEF are identified, the applicant shall develop a plan to maintain County services and County capital facilities. If impacts cannot be fully mitigated, the Applicant may be required to pay the County a mutually agreed upon impact fee to allow the County to maintain existing County Services and Capital facilities.

(D) Utility Interconnection or Crossing. The applicant will provide certification of intent to enter into an interconnection agreement and crossing agreement(s) to/with applicable utilities.

(E) Decommissioning Plan. The applicant shall provide a Decommissioning Plan in accordance with Section 4-910.

(F) Notification Requirements.

(1) Mineral Right Holders. Applicant shall notify the individual mineral rights holders within the project site in accordance with County and statutory notification requirements.

(2) Notice to FAA and Approval. The Application will provide written certification that the Federal Aviation Administration (FAA) forms have been submitted to the FAA in accordance with the FAA requirements, and the FAA has issued approval for the location of the WEF.

(3) Notice to Operator of Communication Link. If any Wind Turbine included within the proposed WEF is located within two (2) miles of any wireless communications link, the Applicant shall certify that they will notify the operator of the communication link in writing about the proposed project at least thirty (30) days prior to commencement of construction.

(G) Septic System. If the proposed WEF includes uses that must be served by a septic system, the applicant shall comply with applicable County requirements. The applicant shall provide a statement certifying that the septic system for the WEF will comply with applicable County, State, and Federal requirements.

(H) Water System. If the proposed WEF includes uses that must be served by water, the application shall describe the water source and sufficiency of the water supply for the WEF, including decreed or conditional water rights. If a well is required, the applicant shall obtain the necessary permit from the State of Colorado Office of the State Engineer.

(I) Water and/or Wind Erosion Control Plan. The applicant will provide a plan showing existing and proposed grading for the WEF site. The drainage and erosion

control plan shall be accompanied by a description of practices that will be utilized to prevent erosion and run-off during construction. If there are any modifications to this plan, the applicant will provide a final drainage and erosion control plan prior to commencement of construction.

(J) Geotechnical Report. The applicant shall provide written certification that prior to construction, a professional engineer licensed in the State of Colorado will complete a geotechnical study that includes the following:

(1) Soils engineering and engineering geologic characteristics of the site based upon on-site sampling and testing.

(2) Foundation and tower systems design criteria for all proposed structures.

(3) Slope stability analysis.

(4) Grading criteria for ground preparation, cuts and fills, and soil compaction

(K) Road Agreement. If any County roads will be used during construction of a WEF for the purpose of transporting parts, materials and/or equipment, the applicant shall enter into a roads agreement with the County. The roads agreement shall comply with Section 4-900 and shall also include the following:

(1) A map showing which County roads will be used during construction.

(2) A pre-construction baseline survey of County roads to be used during construction to document their pre-construction condition.

(3) A mitigation plan to address traffic congestion and potential impacts to County roads to be used during construction.

(4) A legally binding agreement between the applicant and the County that requires the applicant to return any County roads to their pre-construction baseline condition.

(L) Liability Insurance. The applicant shall provide evidence of liability insurance to cover loss or damage to persons and structures during construction and operation of the WEF.

(M) Maintenance of Wind Turbines. The applicant shall provide a statement certifying that the wind turbines will be maintained and operated in accordance with manufacturer specifications, Owner Environmental Health and Safety Plans, and applicable Occupational Health and Safety Administration (OSHA) requirements to ensure the safety of site personnel and the public.

(N) Additional Information and Waivers. The County may request additional information that may be required to evaluate the proposed WEF. The County may waive or alter any of these minimum requirements if they are determined to be inappropriate or unnecessary to determining if the application satisfied applicable standards.

4-900 WEF Standards

(A) Height Limitation.

(1) The height of ground-mounted WEFs shall be subject to FAA approval.

(2) Building-mounted WEFs may not exceed the height permitted for the zone district in which the project is located by more than five feet.

(B) Setbacks for Ground-Mounted WEF.

(1) The setbacks in this subsection shall govern over any setbacks established in these Zoning Regulations.

	Minimum Setback
Setback from above-ground public electric power lines of communication lines	1.1 times system height
Setback from existing public road or highway or railroad	1.1 times system height
Setback from inhabited buildings including: residence, school, hospital, church or public library.	2 times system height
Setback from public road or highway with ADT of 7,000 or more	1.1 times system height
Setback from all other property lines, unless appropriate easements are secured from adjacent property owners or other acceptable mitigation is approved by the Board	1.1 time system height

(2) Setback from the section lines. The County has established right-of-ways (ROWS) that are located 30 feet on each side of section lines. The purpose of this ROW is to allow for maintenance of existing county roads and construction of new county roads. Placement of wind turbines, including their foundations, within this ROW will be reviewed by the County on a case by case basis to confirm that they will not conflict with the County's existing road plans and future road plans. In the event of a potential conflict, wind turbines may need to be relocated outside of this established ROW to allow for future construction of county roads. In the event that there is no conflict, the County may issue a waiver that will allow for placement of the wind turbine within the existing county ROW. It is the responsibility of the applicant to apply for a waiver in these situations, and to provide exact location of proposed placement of wind turbines and the foundations, and the distance from section lines. In the event a survey is required, the applicant will be responsible for paying the costs of survey.

(3) Scenic Resources Setback. Wind turbines compromising the WEF shall be setback a minimum ¼ mile from any highway, designated to be a scenic highway or roadway by the Morgan County Comprehensive Plan or by the state. A scenic resource protection setback requirement may be reduced to 1.1 times the total wind system height if the Board determines that the

characteristics of the surrounding property eliminate or substantially reduce considerations of scenic value.

(4) Substations, facility buildings, and other accessory structures that are part of the WEF shall comply with the required primary building setbacks for the zone district in which the project is located.

(C) Setbacks for Building-Mounted WEF

(1) The blades of a building-mounted WEF shall not extend beyond the property line in any operational position.

(D) Minimum Ground Clearance for Ground-Mounted WEF. The blade tip of any wind turbine shall, at its lowest point, have ground clearance of no less than sixty (60) feet.

(E) Separation Distance. [1]Ground-mounted WEFs blades that spin on a horizontal axis shall not be located within 500 feet of any State wildlife areas and wetlands as mapped by the Colorado Wetland Inventory.

(D) Septic System. If applicable, the proposed WEF complies with applicable County requirements.

(E) Water Supply System. If applicable, the WEF has demonstrated access to a water supply.

(F) Roadways and Access.

(1) Legal access to public right-of-way to and from the WEF shall be safe and in conformance with access permit requirements of the County.

(2) All reasonable efforts must be made not cause traffic congestion during operations and unsafe traffic conditions during the construction phase or operations.

(3) Adequate turning radii shall be installed at all entrances to accommodate large truck movement.

(4) Off-street parking and loading zones shall be surfaced with gravel or the equivalent and shall be graded to prevent drainage problems.

(5) Staging activities and parking of equipment and vehicles shall occur on-site and on private rights-of-way, and shall be prohibited on maintained County roads.

(6) The use of any County roads during construction shall be in accordance with and in compliance of Federal, State, County and local regulations governing such activities. The applicant will prepare a roads agreement that includes a mitigation plan addressing potential impacts to County roads to be used during construction. As part of the roads agreement, the applicant at their expense will be required to return any County roads that are impacted by construction to their pre-construction baseline condition.

(G) Air Quality. The proposed WEF shall comply with applicable County, State and Federal air quality laws.

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Most wetlands are identified during a desktop assessment prior to construction are not wetlands. We suggest to add some language that specifies that the 500' setback is from delineated wetlands .

(H) Glare, Dust or Noise. Construction and operation of the WEF shall not significantly increase existing glare, dust or noise at surrounding properties.

(1) To minimize the potential for glare, Wind turbines shall be painted a neutral color such as matte white or matte gray.

(2) The proposed WEF shall comply with the statutory provisions for maximum permissible noise levels for industrial zoning in C.R.S. § 25-12-103.

(3) Fugitive dust and particulate emissions shall be controlled on the site.

(4) Waste materials shall be handled, stored, and disposed of in a manner that controls fugitive dust, fugitive particulate conditions, blowing debris and other potential nuisance conditions.

(5) The WEF shall comply with FAA minimum lighting requirements and be at the lowest intensity allowed. Any array of flashing or pulsed obstruction lighting shall be synchronized to flash simultaneously. No accessory lighting is permitted, except for lighting that is necessary for safety and security purposes.

(I) Erosion and Sedimentation Control. Erosion and sedimentation control measures that ensure that disturbed areas and soil stockpiles are stabilized during construction shall be implemented. Disturbed areas shall be revegetated in accordance with landowner agreements.

(J) Drainage/Storm-Water Run-Off. Run-off shall be managed in accordance with applicable County, State and Federal regulations. If applicable, the applicant shall obtain a Construction Stormwater Discharge Permit from the Colorado Department of Public Health and the Environment, Water Quality Control Division.

(K) Protection of Agricultural Lands. The WEF shall not have a significant adverse impact on agricultural lands and agricultural operations above what is allowed for under landowner lease agreements.

(L) Fire Protection. The WEF shall have adequate fire control and prevention measures.

(M) Underground Location of Electrical Collection System Wiring. Unless geologic conditions or other technical engineering considerations prevent underground installation, electrical collection system wiring and power lines for the WEF shall be installed underground except where the WEF collector system wiring is brought together from the project substation to the point of electrical interconnection. Overhead transmission lines are permissible from the project substation to the point of electrical interconnection.

(N) Interconnection and Electrical Distribution Facilities.

(1) Transmission from the project substation to the point of electrical interconnection shall comply with the National Electrical Code.

(2) Interconnection shall conform to the requirements of the electric utility company, and applicable state and federal regulatory codes.

(O) Certification of Equipment and Appurtenant Facilities.

(1) All wind turbine towers and foundations systems (i.e. structural systems) shall be reviewed by a registered structural engineer, licensed in Colorado, to confirm their compliance with the applicable State, Federal and local regulations and to conform with good engineering practices.

(2) The electrical system shall be certified by a registered electrical engineer, licensed in Colorado, to the compliant with the applicable State, Federal and local regulations, and to conform with good engineering practices.

(P) Signs. Wind Turbines shall not be used for displaying any messaging or communication, except for reasonable identification of the manufacturer or operator of the Wind Energy Facility.

4-905 Review Criteria and Process

(A) In addition to any review criteria imposed by the Zoning Regulations for the applicable permit, the County shall consider whether the application complies with the requirements of these BESS Regulations.

(B) All applications under these BESS Regulations shall be processed pursuant to the procedures applicable to the type of permit required.

4-910 Decommissioning Requirements for WEF

(A) General Requirements.

(1) If a WEF ceases to perform its originally intended function for more than 12 consecutive months, the permit holder and/or property owner shall remove the facility, mount and associated equipment and facilities by no later than 180 days after the end of the 12-month period.

(2) If permit holder and/or property owner notifies the County of the termination of operations, decommissioning shall be completed no less than 180 days from the date of the notice.

(3) Upon removal of a WEF, the property shall be restored to the condition prior to development of the facility.

(B) Decommissioning Plan. The decommissioning plan shall include:

(1) Contact information for all parties involved (e.g., landowner, developer, utilities, etc.);

(2) A detailed plan for the removal of all systems and equipment from the site, including provisions for the removal of structures, debris and cabling including those below the soil surface to depths agreed to in landowner agreements or down twenty-four (24) inches;

(3) A cost estimate for the decommissioning prepared by a professional engineer or contractor with expertise in related decommissioning projects; and

(4) Roles and responsibilities of each party involved in the decommissioning.

(C) Decommissioning Bond or Letter of Credit. The decommissioning cost shall be made by cash, surety bond or irrevocable letter of credit at 50% before construction commences and the remaining 50% prior to the fifth anniversary of the commencement of construction of the facility.

(D) If decommissioning does not proceed in accordance with the decommissioning plan, the County shall have the right, but not the requirement, to enter the property and cause the appropriate abandonment and decommissioning measures as determined by the approved decommissioning plan.

4-915 Ownership Changes

If the ownership of a WEF changes or the owner of the property changes, the use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the use permit and decommissioning plan. A new owner or operator of the WEF shall notify the County Planning Department and the Board of County Commissioners in writing of such change in ownership or operator within thirty (30) days of the ownership change. The use permit and all other local approvals for the WEF will be voided if a new owner or operator fails to provide written notification as provided herein in the required timeframe. Reinstatement of a void use permit will be subject to the same review and approval processes for new applications.

4-920 Approval Time Frame and Abandonment

The use permit for a WEF shall be valid for a period of 12 months, provided that a building permit is issued for construction and construction is commenced. In the event construction is not completed in accordance with the final site plan, as may have been amended and approved within 12 months after approval, the County Planning Department may extend the time to complete construction for 180 days. If the owner and/or operator fails to perform substantial construction after 36 months, the approvals shall expire.

APPROVED this _____ day of _____, 2022.

BOARD OF COUNTY COMMISSIONERS
MORGAN COUNTY, COLORADO

_____
Jon J. Becker, Chair

_____
Gordon H. Westhoff, Commissioner

_____
Mark A. Arndt, Commissioner

ATTEST:
(SEAL)

Susan L. Bailey
Clerk to the Board

Referrals & Responses

Notifications

Public Comments or Concerns Received

NOTICE OF PUBLIC HEARING
MORGAN COUNTY PLANNING COMMISSION
JUNE 6, 2022 AT 7:00 P.M.
VIRTUAL AND IN PERSON IN THE ASSEMBLY ROOM, MORGAN COUNTY ADMINISTRATIVE BUILDING, 231 ENSIGN, FORT MORGAN, COLORADO

Notice is hereby given that on the date and time above (or as soon as possible following the scheduled time) and at the location above, or at such time and place as this hearing may be adjourned, the Morgan County Planning Commission will conduct public hearings on proposed **Amendments to the Morgan County Zoning Regulations** related to Wind, Solar and BESS. Beginning on May 16, 2022, the proposed amendments will be available for public inspection on the Morgan County Website https://morgancounty.colorado.gov and at the County Planning Department, 231 Ensign Street, Fort Morgan, Colorado 80701; (970) 542-3526.

Information on attending this meeting virtually will be available on the agenda for the meeting, when posted or contact the Planning Department at (970) 542-3526.

Nicole Hay, Morgan County Planning Administrator

Published: May 14, 2022

Duke Energy Comments

MORGAN COUNTY, COLORADO
BOARD OF COUNTY COMMISSIONERS

RESOLUTION NO. 2022 BCC ____

AN RESOLUTION AMENDING THE MORGAN COUNTY ZONING REGULATIONS CONCERNING THE REGULATION OF WIND ENERGY CONVERSION, SOLAR COLLECTOR, AND BATTERY ENERGY STORAGE SYSTEMS

WHEREAS, wind energy conversion, solar collector, and battery energy storage systems are rapidly growing in demand and present opportunities for the County;

WHEREAS, the County seeks to promote the Comprehensive Plan goals of diversifying the economy while achieving compatibility with existing land uses;

WHEREAS, on January 4, 2022, the Board of County Commissioners passed a temporary moratorium on new wind energy, solar collector facility and BESS applications to allow for research to be conducted on the appropriate regulatory means for such facilities; and

WHEREAS, the County wishes to regulate wind energy conversion, solar collector, and battery energy storage systems in a tailored manner that seeks to address the perceived impacts of each type of system.

NOW THEREFORE BE IT RESOLVED by the Morgan County Board of County Commissioners as follows:

Section 1. The Morgan County Zoning Regulations shall be amended by the addition of solar collector facilities to the list of uses-by-right as accessory uses in the following zone districts and subsections:

Estate Residential Zone (ER) – §3-210

Rural Residential Zone (RR) – §3-230

Rural Community Residential Zone (RCR) – §3-250

Moderate Density Residential Zone (MDR) – §3-270

High Density Residential Zone (HDR) – §3-295

Commercial Zone (C) – §3-315.5

Mobile Home Zone (MH) – §3-380

Section 2. The Morgan County Zoning Regulations shall be amended by the addition of building-mounted wind energy facilities (WEFs) to the list of uses-by-right as accessory uses in the following zone districts and subsections:

Agriculture Production Zone (A) – §3-170 for both parcels larger than 20 acres and parcels 20 acres or less

Agriculture/Agri-Business Zone (AB) – §3-190

Estate Residential Zone (ER) – §3-210

Rural Residential Zone (RR) – §3-230

Rural Community Residential Zone (RCR) – §3-250

Moderate Density Residential Zone (MDR) – §3-270

High Density Residential Zone (HDR) – §3-295

Commercial Zone (C) – §3-315.5

Light Industrial Zone (LI) – §3-335.5

Heavy Industrial (HI) – §3-355.5

Mobile Home Zone (MH) – §3-380

Section 3. The Zoning Regulations shall be amended by the addition of solar collector facilities (20 acres or less) to the list of conditional uses, as a primary use and accessory use, in the following zone districts:

Agriculture Production Zone (A) – §3-175 for both parcels larger than 20 acres and parcels 20 acres or less

Agriculture/Agri-Business Zone (AB) – §3-195

Light Industrial Zone (LI) – §3-340

Heavy Industrial (HI) – §3-360

Section 4. The Zoning Regulations shall be amended by the addition of solar collector facilities (more than 20 acres), ground-mounted wind energy facilities (WEFs) and battery energy storage systems (BESS) to the list of special uses, as a primary use and accessory use, in the following zone districts:

Agriculture Production Zone (A) – §3-175 for both parcels larger than 20 acres and parcels 20 acres or less

Agriculture/Agri-Business Zone (AB) – §3-195

Light Industrial Zone (LI) – §3-340

Heavy Industrial (HI) – §3-360

Section 4. The following new subsections shall be added to the Supplementary Regulations in Chapter 4 of the Morgan County Zoning Regulations to read:

SOLAR COLLECTOR FACILITY REGULATIONS

4-810 Applicability

These Solar Collector Facility Regulations and applicable portions of the Zoning Regulations apply to those activities that are not a major facility of a public utility, as defined in the County's 1041 Regulations. To the extent the proposed activity is a major electrical facility of a public utility or power authority subject to these Solar Facility Regulations and applicable portions of the Zoning Regulations, such application shall be processed in accordance with C.R.S. § 29-20-108.

4-815 Definitions

Agrivoltaic Systems: A system designed for the simultaneous use of areas of land for both ground-mounted solar collectors and agriculture.

Parking Canopy Solar System: Ground-mounted solar collectors installed above parking areas.

Solar Collector: A photovoltaic (PV) panel, array of panels or other solar energy device, the primary purpose of which is to provide for the collection, inversion, storage, and distribution of solar energy for electricity generation, space heating, space cooling, or water heating. Ground-mounted solar collector includes agrivolatic systems and parking canopy solar systems when installed on surface parking lots. Building-mounted solar collector includes parking canopy solar systems when installed on the roof of a parking garage.

4-820 Submittal Requirements

In addition to the submittal requirements for the applicable land use permit, an application for a solar collector shall include the following:

(A) Site Plan/Map. The required map shall include the following in addition to the other requirements of these Zoning Regulations:

(1) Location and description of current land use, including agricultural use, dwelling units, microwave communication links and airports.

(2) Clearly identified boundary lines and dimensions of the site where the proposed solar collector facility will be located.

(3) Project area boundary and approximate size of the site where the proposed solar collector facility will be located, in acres or square feet.

(4) Location of all proposed structures and facilities, including the location and dimensions for each solar panel in the proposed solar collector facility, including:

a. Setbacks for each solar panel from property lines.

b. Setbacks of all accessory buildings and structures.

Summary of Comments on Ordinance_Morgan County_Wind Solar Battery Storage-R051022 (Duke Energy Comments)-1-1.pdf

Page: 3

Number: 1 Author: MKSpore Subject: Sticky Note Date: 5/16/2022 6:37:07 AM

It seems like the location of each solar panel (and the dimensions for each panel) is a bit intensive. Perhaps the intention is to have a full location of the arrays (meaning each row length and depth)? Or the dimensions of each solar block?

(5) Description of utility interconnection and crossing.

(B) Drawing. A schematic drawing showing the solar panels.

(C) Narrative and Impact Analysis. A narrative, in addition to the requirements of the applicable permit, including:

(1) Project description and proposed phasing of development.

(2) A description of the project and each phase of development, including the approximate number of solar panels, and the accessory structures, power output (in MW), and infrastructure and interconnection requirements for each phase.

(3) Description of potential access route(s), including road surface material, proposed measures for dust control, and proposed road maintenance schedule or program.

(4) Impact Analysis. The applicant will provide a description of the impacts that the proposed solar collector may cause, based upon the standards in these Solar Collector Facility and Zoning Regulations. This analysis shall include: a description of baseline conditions and the impacts that the proposed use may cause; a description of how the applicant will mitigate impacts; and documentation that applicable standards will be satisfied. The applicant shall also assess the potential effects of the proposed project on County services and capital facilities. In the event that impacts to County services or County capital facilities from construction and operation of a solar collector are identified, the applicant shall develop a plan to maintain County services and County capital facilities. If impacts cannot be fully mitigated, the applicant may be required to pay the County a mutually agreed upon impact fee to allow the County to maintain existing County services and capital facilities.

(D) Utility Interconnection or Crossing. The applicant will provide certification of intent to enter into an interconnection agreement and crossing agreement(s) to/with applicable utilities.

(E) Decommissioning Plan. The applicant shall provide a decommissioning plan in accordance with Section 4-835.

(F) Notification to Mineral Rights Holders. Applicant shall notify the individual mineral rights holders within the project site in accordance with County and statutory notification requirements.

(G) Septic System. If the proposed solar collector facility includes uses that must be served by a septic system, the applicant shall comply with applicable County requirements. The applicant shall provide a statement certifying that the septic system for the solar collector will comply with applicable County, State, and Federal requirements.

(H) Water System. If the proposed solar collector facility includes uses that must be served by water, the application shall describe the water source and sufficiency of the water supply for the solar collector facility, including decreed or conditional

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Number: 1 Author: ILEUTHO Subject: Sticky Note Date: 5/11/2022 9:25:13 AM

Is a certain level of design required?

For example: 25% engineering, 40% engineering, etc...

Or is the conceptual schematic suitable?

Number: 2 Author: ILEUTHO Subject: Sticky Note Date: 5/11/2022 9:23:09 AM

What level of title review is required to identify mineral rights holders?

Author: MKSpore Subject: Sticky Note Date: 5/16/2022 6:24:37 AM

This may involve a full title search of each parcel depending on if/when the mineral rights were severed or reserved. What happens in the event that the mineral rights holder is unidentifiable?

water rights. If a well is required, the applicant shall obtain the necessary permit from the State of Colorado Office of the State Engineer.

(I) Water and/or Wind Erosion Control Plan. The applicant will provide a plan showing existing and proposed grading for the solar collector site. The drainage and erosion control plan shall be accompanied by a description of practices that will be utilized to prevent erosion and run-off during construction. If there are any modifications to this plan, the applicant will provide a final drainage and erosion control plan prior to commencement of construction.

(J) Geotechnical Report. The applicant shall provide written certification that prior to construction, a professional engineer licensed in Colorado will complete a geotechnical study that includes the following:

(1) Soils engineering and engineering geologic characteristics of the site based upon on-site sampling and testing.

(2) Foundation and tower systems design criteria for all proposed structures.

(3) Slope stability analysis.

(4) Grading criteria for ground preparation, cuts and fills, and soil compaction

(K) Road Agreement. If any County roads will be used during construction of a solar collector facility for the purpose of transporting parts, materials and/or equipment, the applicant shall enter into a road agreement with the County. The roads agreement shall comply with Section 4-825 and shall also include the following:

(1) A map showing which County roads will be used during construction.

(2) A pre-construction baseline survey of County roads to be used during construction to document their pre-construction condition. 1

(3) A mitigation plan to address traffic congestion and potential impacts to County roads to be used during construction.

(4) A legally binding agreement between the applicant and the County that requires the applicant to return any County roads to their pre-construction baseline condition.

(L) Liability Insurance. The applicant shall provide evidence of liability insurance to cover loss or damage to persons and structures during construction and operation of the solar collector facility.

(M) Maintenance of Solar Panels. The applicant shall provide a statement certifying that the solar panels will be maintained and operated in accordance with manufacturer specifications, Owner Environmental Health and Safety Plans, and applicable Occupational Health and Safety Administration (OSHA) requirements to ensure the safety of site personnel and the public.

(N) Additional Information and Waivers. The County may request additional information that may be required to evaluate the proposed solar collector facility. The County may waive or alter any of these minimum requirements if they are determined to be inappropriate or unnecessary to determining if the application

Page: 5

Number: 1 Author: lLEUTHO Subject: Sticky Note Date: 5/11/2022 9:22:03 AM

Is the survey done by County and costs reimbursed by Solar Project?

satisfied applicable standards.

4-825 Solar Collector Facility Standards

(A) General Standards for all solar collectors.

(1) All exterior electrical lines shall be buried below the surface of the ground when possible.

(2) All systems shall comply with all applicable building and electrical codes.

(3) The property owner shall notify the electrical utility where the solar system is connected to the electrical utility system.

(B) Accessory Ground-Mounted Solar Collectors. Accessory ground-mounted solar collectors shall:

(1) Be located in a side or rear yard only;

(2) Be set back at least six feet from the side and rear property line;

(3) Not be located within an easement;

(4) Be located so as to minimize glare visible from abutting properties;

(5) Not exceed 15 feet in height with panels oriented in a vertical position; and

(6) Be included in determining the maximum coverage of structures on the lot.

(C) Accessory Building-Mounted Solar Collectors. Accessory building-mounted solar collectors shall:

(1) Not extend more than 18 inches above the maximum height permitted in the zone district in which it is located;

(2) If mounted to a portion of the roof ending at, or extending over, the front façade of the building, shall be mounted so that the edge of the device is set back at least one foot from the edge of the roof closest to the front lot line; and

(3) If mounted to the wall of a building, may extend into or over no more than 33 percent of the depth of a minimum yard or setback that is required along a side lot line but shall not extend closer than four feet to a side lot line.

(D) Principal Ground-Mounted Solar Collectors.

(1) The setbacks in this subsection shall govern over any setbacks established in these Zoning Regulations.

	Minimum Setback
Setback from above-ground public electric power lines or communication lines	70 feet
Setback from existing public road or highway or railroad	70 feet

Page: 6

Number: 1 Author: MKSpore Subject: Sticky Note Date: 5/16/2022 6:31:06 AM
or communication lines?

Number: 2 Author: MKSpore Subject: Highlight Date: 5/16/2022 6:30:47 AM

Setback from inhabited buildings including: residence, school, hospital, church or public library.	500 feet
Setback from all other property lines	70 feet

(a) The setback requirement from inhabited structures may be reduced if appropriate screening through landscape or an opaque fence is installed, or upon submittal to the County of a waiver or informed consent signed by the owner of the inhabited structure agreeing to the lesser setback. If landscaping or opaque fencing is substituted for setback, a landscaping plan or fencing plan shall first be submitted to and approved by the County.

(3) Setback from the section lines. The County has established right-of-ways (ROWS) that are located 30 feet on each side of section lines. The purpose of this ROW is to allow for maintenance of existing county roads and construction of new county roads. Placement of solar panels within this ROW will be reviewed by the County on a case by case basis to confirm that they will not conflict with the County's existing road plans and future road plans. In the event of a potential conflict, solar panels may need to be relocated outside of this established ROW to allow for future construction of county roads. In the event that there is no conflict, the County may issue a waiver that will allow for placement of the solar panel within the existing county ROW. It is the responsibility of the applicant to apply for a waiver in these situations, and to provide exact location of proposed placement of solar panels and the distance from section lines. In the event a survey is required, the applicant will be responsible for paying the costs of survey.

(4) Scenic Resources Setback. Solar panels comprising the solar collector facility shall be setback a minimum ¼ mile from any highway, designated to be a scenic highway or roadway by the Morgan County Comprehensive Plan or by the state. 1

(5) Substations, facility buildings, and other accessory structures that are part of the solar collector facility shall comply with the required primary building setbacks for the zone district in which the project is located.

(6) Maximum Height. The maximum height of the solar panels shall not exceed 30 feet in height when oriented at maximum tilt. 2

(7) Maximum Lot Coverage. The panels shall be considered in determining the maximum coverage of structures on the lot.

(8) Septic System. If applicable, the proposed solar collector facility complies with applicable County requirements.

(9) Water Supply System. If applicable, the solar collector facility has demonstrated access to a water supply.

(10) Roadways and Access.

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Number: 1 Author: ILEUTHO Subject: Sticky Note Date: 5/11/2022 9:20:29 AM
Can the County provide maps or lists of those roads?

Number: 2 Author: ILEUTHO Subject: Sticky Note Date: 5/11/2022 9:19:54 AM
This will probably work for agrivoltaics, but depending on the agricultural use being pursued it may prove restrictive

(a) Legal access to public right-of-way to and from the solar collector facility shall be safe and in conformance with access permit requirements of the County.

(b) All reasonable efforts must be made not cause traffic congestion during operations and unsafe traffic conditions during the construction phase or operations.

(c) Adequate turning radii shall be installed at all entrances to accommodate large truck movement.

(d) Off-street parking and loading zones shall be surfaced with gravel or the equivalent and shall be graded to prevent drainage problems.

(e) Staging activities and parking of equipment and vehicles shall occur on-site and on private rights-of-way, and shall be prohibited on maintained County roads.

(f) The use of any County roads during construction shall be in accordance with and in compliance of Federal, State, County and local regulations governing such activities. The applicant will prepare a roads agreement that includes a mitigation plan addressing potential impacts to County roads to be used during construction. As part of the roads agreement, the applicant at their expense will be required to return any County roads that are impacted by construction to their pre-construction baseline condition.

(11) Erosion and Sedimentation Control. Erosion and sedimentation control measures that ensure that disturbed areas and soil stockpiles are stabilized during construction shall be implemented. Disturbed areas shall be revegetated in accordance with landowner agreements.

(12) Drainage/Storm-Water Run-Off. Run-off shall be managed in accordance with applicable County, State and Federal regulations. If applicable, the applicant shall obtain a Construction Stormwater Discharge Permit from the Colorado Department of Public Health and the Environment, Water Quality Control Division.

(13) Protection of Agricultural Lands. The solar collector facility shall not have a significant adverse impact on agricultural lands and agricultural operations above what is allowed for under landowner lease agreements.

(14) Fire Protection. The solar collector facility shall have adequate fire control and prevention measures.

(15) Glare, Dust or Noise. Construction and operation of the WEF shall not significantly increase existing glare, dust or noise at surrounding properties.

(a) The proposed solar collector facility shall comply with the statutory provisions for maximum permissible noise levels for industrial zoning in C.R.S. § 25-12-103.

(b) Fugitive dust and particulate emissions shall be controlled on the

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Number: 1 Author: ILEUTHO Subject: Sticky Note Date: 5/11/2022 9:18:28 AM

What happens if Duke buys the land from landowner?

site.

(c) Waste materials shall be handled, stored, and disposed of in a manner that controls fugitive dust, fugitive particulate conditions, blowing debris and other potential nuisance conditions.

(d) The panels shall be located so as to minimize glare visible from an abutting property.

(16) Underground Location of Electrical Collection System Wiring. Unless geologic conditions or other technical engineering considerations prevent underground installation, electrical collection system wiring and powerlines for the solar collector facility shall be installed underground except where the solar collector facility wiring is brought together from the project substation to the point of electrical interconnection. Overhead transmission lines are permissible from the project substation to the point of electrical interconnection.

(17) Interconnection and Electrical Distribution Facilities.

(a) Transmission from the project substation to the point of electrical interconnection shall comply with the National Electrical Code.

(b) Interconnection shall conform to the requirements of the electric utility company, and applicable state and federal regulatory codes.

(18) Certification of Equipment and Appurtenant Facilities.

(a) All solar collector facilities shall be reviewed by a registered structural engineer, licensed in Colorado, to confirm their compliance with the applicable State, Federal and local regulations and to conform with good engineering practices.

(b) The electrical system shall be certified by a registered electrical engineer, licensed in Colorado, to the compliant with the applicable State, Federal and local regulations, and to conform with good engineering practices.

4-830 Review Criteria and Process

(A) In addition to any review criteria imposed by the Zoning Regulations for the applicable permit, the County shall consider whether the application complies with the requirements of these Solar Collector Regulations.

(B) All applications under these Solar Collector Facility Regulations shall be processed pursuant to the procedures applicable to the type of permit required.

4-835 Decommissioning Requirements for Solar Collector Facilities

(A) General Requirements.

(1) If a solar collector facility ceases to perform its originally intended function for more than 12 consecutive months, the permit holder and/or property owner shall remove the facility, mount and associated equipment and

Page: 9

Number: 1 Author: ILEUTHO Subject: Sticky Note Date: 5/11/2022 9:17:39 AM

How would this be applied?

Would this apply to an abutting farm field or just a residence?

Panels orientation is standard across the industry since it's dictate by the sun.

Number: 2 Author: ILEUTHO Subject: Sticky Note Date: 5/11/2022 9:14:04 AM

Recommend including a repowering provision. If all the panels are replaced with better performing models in the future.

That process may take more than 12 months. And the project may not be producing power during that time.

facilities by no later than 180 days after the end of the 12-month period.

(2) If permit holder and/or property owner notifies the County of the termination of operations, decommissioning shall be completed no less than 180 days from the date of the notice.

(3) Upon removal of a solar collector facility, the property shall be restored to the condition prior to development of the facility.

(B) Decommissioning Plan. The decommissioning plan shall include:

(1) Contact information for all parties involved (e.g., landowner, developer, utilities, etc.);

(2) A detailed plan for the removal of all facilities and equipment from the site, including provisions for the removal of structures, debris and cabling including those below the soil surface to depths agreed to in landowner agreements or down twenty-four (24) inches;

(3) A cost estimate for the decommissioning prepared by a professional engineer or contractor with expertise in related decommissioning projects; and

(4) Roles and responsibilities of each party involved in the decommissioning.

(C) Decommissioning Bond or Letter of Credit. The decommissioning cost shall be made by cash, surety bond or irrevocable letter of credit at 50% before construction commences and the remaining 50% prior to the fifth anniversary of the commencement of construction of the facility.

(D) If decommissioning does not proceed in accordance with the decommissioning plan, the County shall have the right, but not the requirement, to enter the property and cause the appropriate abandonment and decommissioning measures as determined by the approved decommissioning plan.

4-840 Ownership Changes

If the ownership of a principal ground-mounted solar collector facility changes or the owner of the property changes, the use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the use permit and decommissioning plan. A new owner or operator of the principal ground-mounted solar collector facility shall notify the County Planning Department and the Board of County Commissioners in writing of such change in ownership or operator within thirty (30) days of the ownership change. The use permit and all other local approvals for the principal ground-mounted solar collector facility will be voided if a new owner or operator fails to provide written notification as provided herein in the required timeframe. Reinstatement of a void use permit will be subject to the same review and approval processes for new applications.

4-845 Approval Time Frame and Abandonment

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Number: 1 Author: ILEUTHO Subject: Sticky Note Date: 5/11/2022 9:10:26 AM

180 days (6 months) may be too short. Especially considering interplay between seasonal conditions and when operations cease.

270 days (9 months) is more realistic. Especially as projects become larger and larger in accordance with industry trend. For example, a 1,000 acre project can be decommissioned much faster than a 5,000 acre project.

Number: 2 Author: ILEUTHO Subject: Sticky Note Date: 5/11/2022 9:12:01 AM

Recommended edit "condition prior or as agreed to with landowner"

Some landowners want it reverted to a prairie and some want it row-crop ready.

Number: 3 Author: ILEUTHO Subject: Sticky Note Date: 5/11/2022 9:06:50 AM

This would require that that third party engineer estimate decommissioning costs before construction begins.

Are decommissioning costs net of salvage value?

Can bond be delayed until expiration of power purchase contract with public utility (ex. Xcel or TriState)?

The use permit for a principal ground-mounted solar collector facility shall be valid for a period of 12 months, provided that a building permit is issued for construction and construction is commenced. In the event construction is not completed in accordance with the final plans, as may have been amended and approved within 12 months after approval, the County Planning Department may extend the time to complete construction for 180 days. If the owner and/or operator fails to perform substantial construction after 36 months, the approval shall expire.

BATTERY ENERGY STORAGE SYSTEM (BESS)

4-850 Definitions

Battery Energy Storage System (BESS): A rechargeable energy storage system consisting of batteries, battery chargers, controls, power conditioning systems and associated electrical equipment designed to provide electrical power to a building or to provide electrical grid-related services.

4-855 Submittal Requirements

(A) In addition to any submittal documents required by the Zoning Regulations for the applicable use permit, except as modified by these BESS Regulations, an application for a BESS shall contain the following items:

(1) Change Conditions Narrative. Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures.

(2) Electrical Diagram. A one or three-line electrical diagram detailing the BESS layout, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and over current devices.

(3) Specification Sheet. A preliminary equipment specification sheet that documents the proposed BESS components, inverters and associated electrical equipment that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of building permit.

(4) Contact Information. Name, address, and contact information of proposed or potential system installer and the owner and/or operator of the BESS. Such information of the final system installer shall be submitted prior to the issuance of building permit.

(5) Narrative. A narrative providing an explanation of the project, the above grade and below grade infrastructure, the type of battery, temperature control (if applicable) for the BESS system, identified environmental impacts and mitigation,

(6) Maintenance Plant. A system and property maintenance plan describing continuing BESS maintenance and property upkeep during the operation of

Page: 11

Number: 1 Author: ILEUTHO Subject: Sticky Note Date: 5/11/2022 9:30:06 AM

12 months is likely to be problematic when considering the interconnection application fees and timeline.

Recommend an approach that allows permit to remain valid while project is proceeding through interconnection studies.

Number: 2 Author: ILEUTHO Subject: Sticky Note Date: 5/11/2022 9:31:32 AM

Advise that the definition be expanded. There are many electricity/energy storage technologies other than electrochemical (aka battery)

the BESS.

(7) Fire Mitigation Plan. A fire mitigation plan including identification of the nearest water source for fire suppression.

(8) Drainage Plan. A drainage plan, regardless of the square footage of the BESS.

(9) Decommissioning Plan. A decommissioning plan in accordance with Section 4-870.

(10) Emergency Operation Plan. An emergency operation plan including the following:

(a) Procedures for safe shutdown, de-energizing, or isolation of equipment and systems under emergency conditions to reduce the risk of fire, electric shock, and personal injuries, and for safe start-up following cessation of emergency conditions.

(b) Procedures for inspection and testing of associated alarms, interlocks, and controls.

(c) Procedures to be followed in response to notifications from the BESS management system, when provided, that could signify potentially dangerous conditions, including shutting down equipment, summoning service and repair personnel, and providing agreed upon notification to fire department personnel for potentially hazardous conditions in the event of a system failure.

(d) Emergency procedures to be followed in case of fire, explosion, release of liquids or vapors, damage to critical moving parts, or other potentially dangerous conditions. Procedures can include sounding the alarm, notifying the fire department or district, evacuating personnel, de-energizing equipment, and controlling and extinguishing the fire.

(e) Response considerations similar to a safety data sheet (SDS) that will address response safety concerns and extinguishment when an SDS is not required.

(f) Procedures for dealing with BESS equipment damaged in a fire or other emergency event, including maintaining contact information for personnel qualified to safely remove damaged BESS equipment from the facility.

(B) Application for a BESS that are part of a solar collector facility and submitted concurrently with an application for the solar collector facility may be processed concurrently.

4-860 Battery Energy Storage System (BESS) Standards

(A) BESS shall comply with all applicable requirements of the underlying zone district and the Accessory Uses and Structures requirements in Sec. 3-130 of these Zoning Regulations.

(B) All BESS, including all mechanical equipment, shall be enclosed by a minimum of a six (6) foot tall fence with a self-locking gate to prevent unauthorized access, unless housed in a building dedicated to the BESS. No fencing may interfere with any ventilation or exhaust ports.

(C) All BESS, their components, and associated ancillary equipment shall be placed with required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with applicable electric code, as adopted by the State of Colorado.

4-865 Review Criteria and Process

(A) In addition to any review criteria imposed by the Zoning Regulations for the applicable permit, the County shall consider whether the application complies with the requirements of these BESS Regulations.

(B) All applications under these BESS Regulations shall be processed pursuant to the procedures applicable to the type of permit required.

4-870 Decommissioning Requirements for BESS

(A) General Requirements.

(1) If a BESS ceases to perform its originally intended function for more than 12 consecutive months, the permit holder and/or property owner shall remove the system, foundation and associated equipment and facilities by no later than 180 days after the end of the 12-month period.

(2) If permit holder and/or property owner notifies the County of the termination of operations, decommissioning shall be completed no less than 180 days from the date of the notice.

(3) Upon removal of a BESS, the property shall be restored to the condition prior to development of the system.

(B) Decommissioning Plan. The decommissioning plan shall include:

(1) Contact information for all parties involved (e.g., landowner, developer, utilities, etc.);

(2) A detailed plan for the removal of all systems and equipment from the site, including provisions for the removal of structures, debris and cabling including those below the soil surface to depths agreed to in landowner agreements or down twenty-four (24) inches;

(3) A cost estimate for the decommissioning prepared by a professional engineer or contractor with expertise in related decommissioning projects;

and

(4) Roles and responsibilities of each party involved in the decommissioning.

(C) Decommissioning Bond or Letter of Credit. The decommissioning cost shall be made by cash, surety bond or irrevocable letter of credit at 50% before construction commences and the remaining 50% prior to the fifth anniversary of the commencement of construction of the BESS.

(D) If decommissioning does not proceed in accordance with the decommissioning plan, the County shall have the right, but not the requirement, to enter the property and cause the appropriate abandonment and decommissioning measures as determined by the approved decommissioning plan.

4-875 Ownership Changes

If the ownership of a BESS changes or the owner of the property changes, the use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the use permit and decommissioning plan. A new owner or operator of the BESS shall notify the County Planning Department and the Board of County Commissioners in writing of such change in ownership or operator within thirty (30) days of the ownership change. The use permit and all other local approvals for the BESS will be voided if a new owner or operator fails to provide written notification as provided herein in the required timeframe. Reinstatement of a void use permit will be subject to the same review and approval processes for new applications.

4-880 Approval Time Frame and Abandonment

The use permit for a BESS shall be valid for a period of 12 months, provided that a building permit is issued for construction and construction is commenced. In the event construction is not completed in accordance with the final plans, as may have been amended and approved within 12 months after approval, the County Planning Department may extend the time to complete construction for 180 days. If the owner and/or operator fails to perform substantial construction after 36 months, the approval shall expire.

WIND ENERGY FACILITY REGULATIONS

4-885 Applicability

These Wind Energy Facility Regulations and applicable portions of the Zoning Regulations apply to those activities that are not a major facility of a public utility, as defined in the County's 1041 Regulations. To the extent the proposed activity is a major electrical facility of a public utility or power authority subject to these Wind Energy Facility Regulations and applicable portions of the Zoning Regulations, such application shall be processed in accordance with C.R.S. § 29-20-108.

4-890 Definitions

Hub: The part of the wind turbine to which the blades are attached, together creating the rotor

Hub Height: The distance measured from ground level to the center of the turbine hub.

MET Tower: A meteorological tower used for the measurement of wind speed.

System Height. The combined height of the tower, the wind turbine and any blade extended at its highest point, measured from ground level.

Wind Energy Facility (WEF): All necessary devices that together convert wind energy into electricity, including the rotor, nacelle, generator, WEF tower, electrical components, WEF foundation, transformer, and electrical cabling from the WEF tower to the substation(s). WEF shall include MET towers.

Wind Turbine: A wind energy conversion system that converts wind energy into electricity through the use of a wind turbine generator. The term "wind turbine" shall include the turbine, blade, tower, base and pad transformer.

4-895 Submittal Requirements

In addition to the submittal requirements for the applicable land use permit, an application for a WEF shall include the following:

(A) Site Plan/Map. The required map shall include the following in addition to the other requirements of these Zoning Regulations:

(1) Location and description of current land use, including agricultural use, dwelling units, microwave communication links and airports.

(2) Clearly identified boundary lines and dimensions of the site where the proposed WEF will be located.

(3) Project area boundary and approximate size of the site where the proposed WEF will be located, in acres or square feet.

(4) Location of all proposed structures and facilities, including the location and dimensions for each wind turbine in the proposed WEF, including:

a. Setbacks for each wind turbine from property lines.

b. Setbacks of all accessory buildings and structures.

(5) Description of utility interconnection and crossing.

(B) Drawing. A schematic drawing showing the wind turbine and range of dimensions, including system height, rotor diameter, hub height, and rotor ground clearance.

(C) Narrative and Impact Analysis. A narrative, in addition to the requirements of the applicable permit, including:

(1) Project description and proposed phasing of development.

(2) A description of the project and each phase of development, including the approximate number of wind turbines, and the accessory structures, power output (in MW), and infrastructure and interconnection requirements for each phase.

(3) Description of potential access route(s), including road surface material, proposed measures for dust control, and proposed road maintenance schedule or program.

(4) Impact Analysis. The applicant will provide a description of the impacts that the proposed WEF may cause, based upon the standards in these WEF and Zoning Regulations.. This analysis shall include: a description of baseline conditions and the impacts that the proposed use may cause, as described in Section 6-105; a description of how the Applicant will mitigate impacts; and documentation that applicable standards will be satisfied. The applicant shall also assess the potential effects of the proposed project on County services and capital facilities. In the event that impacts to County services or County capital facilities from construction and operation of a WEF are identified, the applicant shall develop a plan to maintain County services and County capital facilities. If impacts cannot be fully mitigated, the Applicant may be required to pay the County a mutually agreed upon impact fee to allow the County to maintain existing County Services and Capital facilities.

(D) Utility Interconnection or Crossing. The applicant will provide certification of intent to enter into an interconnection agreement and crossing agreement(s) to/with applicable utilities.

(E) Decommissioning Plan. The applicant shall provide a Decommissioning Plan in accordance with Section 4-910.

(F) Notification Requirements.

(1) Mineral Right Holders. Applicant shall notify the individual mineral rights holders within the project site in accordance with County and statutory notification requirements.

(2) Notice to FAA and Approval. The Application will provide written certification that the Federal Aviation Administration (FAA) forms have been submitted to the FAA in accordance with the FAA requirements, and the FAA has issued approval for the location of the WEF.

(3) Notice to Operator of Communication Link. If any Wind Turbine included within the proposed WEF is located within two (2) miles of any wireless communications link, the Applicant shall certify that they will notify the operator of the communication link in writing about the proposed project at least thirty (30) days prior to commencement of construction.

(G) Septic System. If the proposed WEF includes uses that must be served by a septic system, the applicant shall comply with applicable County requirements. The applicant shall provide a statement certifying that the septic system for the WEF will comply with applicable County, State, and Federal requirements.

(H) Water System. If the proposed WEF includes uses that must be served by water, the application shall describe the water source and sufficiency of the water supply for the WEF, including decreed or conditional water rights. If a well is required, the applicant shall obtain the necessary permit from the State of Colorado Office of the State Engineer.

(I) Water and/or Wind Erosion Control Plan. The applicant will provide a plan showing existing and proposed grading for the WEF site. The drainage and erosion

control plan shall be accompanied by a description of practices that will be utilized to prevent erosion and run-off during construction. If there are any modifications to this plan, the applicant will provide a final drainage and erosion control plan prior to commencement of construction.

(J) Geotechnical Report. The applicant shall provide written certification that prior to construction, a professional engineer licensed in the State of Colorado will complete a geotechnical study that includes the following:

(1) Soils engineering and engineering geologic characteristics of the site based upon on-site sampling and testing.

(2) Foundation and tower systems design criteria for all proposed structures.

(3) Slope stability analysis.

(4) Grading criteria for ground preparation, cuts and fills, and soil compaction

(K) Road Agreement. If any County roads will be used during construction of a WEF for the purpose of transporting parts, materials and/or equipment, the applicant shall enter into a roads agreement with the County. The roads agreement shall comply with Section 4-900 and shall also include the following:

(1) A map showing which County roads will be used during construction.

(2) A pre-construction baseline survey of County roads to be used during construction to document their pre-construction condition.

(3) A mitigation plan to address traffic congestion and potential impacts to County roads to be used during construction.

(4) A legally binding agreement between the applicant and the County that requires the applicant to return any County roads to their pre-construction baseline condition.

(L) Liability Insurance. The applicant shall provide evidence of liability insurance to cover loss or damage to persons and structures during construction and operation of the WEF.

(M) Maintenance of Wind Turbines. The applicant shall provide a statement certifying that the wind turbines will be maintained and operated in accordance with manufacturer specifications, Owner Environmental Health and Safety Plans, and applicable Occupational Health and Safety Administration (OSHA) requirements to ensure the safety of site personnel and the public.

(N) Additional Information and Waivers. The County may request additional information that may be required to evaluate the proposed WEF. The County may waive or alter any of these minimum requirements if they are determined to be inappropriate or unnecessary to determining if the application satisfied applicable standards.

4-900 WEF Standards

(A) Height Limitation.

(1) The height of ground-mounted WEFs shall be subject to FAA approval.

(2) Building-mounted WEFs may not exceed the height permitted for the zone district in which the project is located by more than five feet.

(B) Setbacks for Ground-Mounted WEF.

(1) The setbacks in this subsection shall govern over any setbacks established in these Zoning Regulations.

	Minimum Setback
Setback from above-ground public electric power lines or communication lines	1.1 times system height
Setback from existing public road or highway or railroad	1.1 times system height
Setback from inhabited buildings including: residence, school, hospital, church or public library.	2 times system height
Setback from public road or highway with ADT of 7,000 or more	1.1 times system height
Setback from all other property lines, unless appropriate easements are secured from adjacent property owners or other acceptable mitigation is approved by the Board	1.1 time system height

(2) Setback from the section lines. The County has established right-of-ways (ROWS) that are located 30 feet on each side of section lines. The purpose of this ROW is to allow for maintenance of existing county roads and construction of new county roads. Placement of wind turbines, including their foundations, within this ROW will be reviewed by the County on a case by case basis to confirm that they will not conflict with the County's existing road plans and future road plans. In the event of a potential conflict, wind turbines may need to be relocated outside of this established ROW to allow for future construction of county roads. In the event that there is no conflict, the County may issue a waiver that will allow for placement of the wind turbine within the existing county ROW. It is the responsibility of the applicant to apply for a waiver in these situations, and to provide exact location of proposed placement of wind turbines and the foundations, and the distance from section lines. In the event a survey is required, the applicant will be responsible for paying the costs of survey.

(3) Scenic Resources Setback. Wind turbines compromising the WEF shall be setback a minimum ¼ mile from any highway, designated to be a scenic highway or roadway by the Morgan County Comprehensive Plan or by the state. A scenic resource protection setback requirement may be reduced to 1.1 times the total wind system height if the Board determines that the

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Number: 1 Author: MKSpore Subject: Sticky Note Date: 5/16/2022 6:36:00 AM
or communication lines?

Number: 2 Author: MKSpore Subject: Highlight Date: 5/16/2022 6:35:47 AM

characteristics of the surrounding property eliminate or substantially reduce considerations of scenic value.

(4) Substations, facility buildings, and other accessory structures that are part of the WEF shall comply with the required primary building setbacks for the zone district in which the project is located.

(C) Setbacks for Building-Mounted WEF

(1) The blades of a building-mounted WEF shall not extend beyond the property line in any operational position.

(D) Minimum Ground Clearance for Ground-Mounted WEF. The blade tip of any wind turbine shall, at its lowest point, have ground clearance of no less than sixty (60) feet.

(E) Separation Distance. Ground-mounted WEFs blades that spin on a horizontal axis shall not be located within 500 feet of any State wildlife areas and wetlands as mapped by the Colorado Wetland Inventory.

(D) Septic System. If applicable, the proposed WEF complies with applicable County requirements.

(E) Water Supply System. If applicable, the WEF has demonstrated access to a water supply.

(F) Roadways and Access.

(1) Legal access to public right-of-way to and from the WEF shall be safe and in conformance with access permit requirements of the County.

(2) All reasonable efforts must be made not cause traffic congestion during operations and unsafe traffic conditions during the construction phase or operations.

(3) Adequate turning radii shall be installed at all entrances to accommodate large truck movement.

(4) Off-street parking and loading zones shall be surfaced with gravel or the equivalent and shall be graded to prevent drainage problems.

(5) Staging activities and parking of equipment and vehicles shall occur on-site and on private rights-of-way, and shall be prohibited on maintained County roads.

(6) The use of any County roads during construction shall be in accordance with and in compliance of Federal, State, County and local regulations governing such activities. The applicant will prepare a roads agreement that includes a mitigation plan addressing potential impacts to County roads to be used during construction. As part of the roads agreement, the applicant at their expense will be required to return any County roads that are impacted by construction to their pre-construction baseline condition.

(G) Air Quality. The proposed WEF shall comply with applicable County, State and Federal air quality laws.

(H) Glare, Dust or Noise. Construction and operation of the WEF shall not significantly increase existing glare, dust or noise at surrounding properties.

(1) To minimize the potential for glare, Wind turbines shall be painted a neutral color such as matte white or matte gray.

(2) The proposed WEF shall comply with the statutory provisions for maximum permissible noise levels for industrial zoning in C.R.S. § 25-12-103.

(3) Fugitive dust and particulate emissions shall be controlled on the site.

(4) Waste materials shall be handled, stored, and disposed of in a manner that controls fugitive dust, fugitive particulate conditions, blowing debris and other potential nuisance conditions.

(5) The WEF shall comply with FAA minimum lighting requirements and be at the lowest intensity allowed. Any array of flashing or pulsed obstruction lighting shall be synchronized to flash simultaneously. No accessory lighting is permitted, except for lighting that is necessary for safety and security purposes.

(I) Erosion and Sedimentation Control. Erosion and sedimentation control measures that ensure that disturbed areas and soil stockpiles are stabilized during construction shall be implemented. Disturbed areas shall be revegetated in accordance with landowner agreements.

(J) Drainage/Storm-Water Run-Off. Run-off shall be managed in accordance with applicable County, State and Federal regulations. If applicable, the applicant shall obtain a Construction Stormwater Discharge Permit from the Colorado Department of Public Health and the Environment, Water Quality Control Division.

(K) Protection of Agricultural Lands. The WEF shall not have a significant adverse impact on agricultural lands and agricultural operations above what is allowed for under landowner lease agreements.

(L) Fire Protection. The WEF shall have adequate fire control and prevention measures.

(M) Underground Location of Electrical Collection System Wiring. Unless geologic conditions or other technical engineering considerations prevent underground installation, electrical collection system wiring and power lines for the WEF shall be installed underground except where the WEF collector system wiring is brought together from the project substation to the point of electrical interconnection. Overhead transmission lines are permissible from the project substation to the point of electrical interconnection.

(N) Interconnection and Electrical Distribution Facilities.

(1) Transmission from the project substation to the point of electrical interconnection shall comply with the National Electrical Code.

(2) Interconnection shall conform to the requirements of the electric utility company, and applicable state and federal regulatory codes.

(O) Certification of Equipment and Appurtenant Facilities.

(1) All wind turbine towers and foundations systems (i.e. structural systems) shall be reviewed by a registered structural engineer, licensed in Colorado, to confirm their compliance with the applicable State, Federal and local regulations and to conform with good engineering practices.

(2) The electrical system shall be certified by a registered electrical engineer, licensed in Colorado, to the compliant with the applicable State, Federal and local regulations, and to conform with good engineering practices.

(P) Signs. Wind Turbines shall not be used for displaying any messaging or communication, except for reasonable identification of the manufacturer or operator of the Wind Energy Facility.

4-905 Review Criteria and Process

(A) In addition to any review criteria imposed by the Zoning Regulations for the applicable permit, the County shall consider whether the application complies with the requirements of these BESS Regulations.

(B) All applications under these BESS Regulations shall be processed pursuant to the procedures applicable to the type of permit required.

4-910 Decommissioning Requirements for WEF

(A) General Requirements.

(1) If a WEF ceases to perform its originally intended function for more than 12 consecutive months, the permit holder and/or property owner shall remove the facility, mount and associated equipment and facilities by no later than 180 days after the end of the 12-month period.

(2) If permit holder and/or property owner notifies the County of the termination of operations, decommissioning shall be completed no less than 180 days from the date of the notice.

(3) Upon removal of a WEF, the property shall be restored to the condition prior to development of the facility.

(B) Decommissioning Plan. The decommissioning plan shall include:

(1) Contact information for all parties involved (e.g., landowner, developer, utilities, etc.);

(2) A detailed plan for the removal of all systems and equipment from the site, including provisions for the removal of structures, debris and cabling including those below the soil surface to depths agreed to in landowner agreements or down twenty-four (24) inches;

(3) A cost estimate for the decommissioning prepared by a professional engineer or contractor with expertise in related decommissioning projects; and

(4) Roles and responsibilities of each party involved in the decommissioning.

(C) Decommissioning Bond or Letter of Credit. The decommissioning cost shall be made by cash, surety bond or irrevocable letter of credit at 50% before construction commences and the remaining 50% prior to the fifth anniversary of the commencement of construction of the facility.

(D) If decommissioning does not proceed in accordance with the decommissioning plan, the County shall have the right, but not the requirement, to enter the property and cause the appropriate abandonment and decommissioning measures as determined by the approved decommissioning plan.

4-915 Ownership Changes

If the ownership of a WEF changes or the owner of the property changes, the use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the use permit and decommissioning plan. A new owner or operator of the WEF shall notify the County Planning Department and the Board of County Commissioners in writing of such change in ownership or operator within thirty (30) days of the ownership change. The use permit and all other local approvals for the WEF will be voided if a new owner or operator fails to provide written notification as provided herein in the required timeframe. Reinstatement of a void use permit will be subject to the same review and approval processes for new applications.

4-920 Approval Time Frame and Abandonment

The use permit for a WEF shall be valid for a period of 12 months, provided that a building permit is issued for construction and construction is commenced. In the event construction is not completed in accordance with the final site plan, as may have been amended and approved within 12 months after approval, the County Planning Department may extend the time to complete construction for 180 days. If the owner and/or operator fails to perform substantial construction after 36 months, the approvals shall expire.

APPROVED this _____ day of _____, 2022.

BOARD OF COUNTY COMMISSIONERS
MORGAN COUNTY, COLORADO

_____
Jon J. Becker, Chair

_____
Gordon H. Westhoff, Commissioner

_____
Mark A. Arndt, Commissioner

ATTEST:
(SEAL)

Susan L. Bailey
Clerk to the Board

AES Comments

Gmail

Nicole Hay <nhay@co.morgan.co.us>

Draft Renewable Energy Regulations: comments/suggestions

1 message

Page Bolin <page.bolin@aes.com>
To: Nicole Hay <nhay@co.morgan.co.us>
Cc: Sam Sours <sam.sours@aes.com>

Fri, May 27, 2022 at 12:44 PM

Good afternoon, Nicole. Thanks so much for the conversation yesterday as it was helpful in formulating my comments/suggestions on the Draft ordinance. My comments are few and, generally speaking, the draft ordinance is generally well crafted. Below are a couple of thoughts:

1. The term "major facility of a public utility" is not clearly defined. Per our discussion, if there is a way, it would be helpful to clearly define the difference between what is a "public utility" (Xcel, Black Hills, Tri-State Generation), subject to the 1041 process, and what is not (private project developers like AES Clean Energy), subject to these new Special Use Permit requirements, for the purposes of which process to use. For a well-referenced definition I would suggest pointing to State Statute, specifically CRS Title 40: 40-1-103
2. In Sections 4-845 and 4-880 (Approval Time Frame and Abandonment), the approval period for a Special Use Permit for a major solar facility is identified as 12 months, which can be extended for a period of 180 days so long as substantial construction has been started. This is an unrealistic time frame from an industry standpoint. Solar projects are often required to get local permit approval well in advance of project award and construction. As an example, many utilities that request proposals to buy renewable energy power, require local permit approval before awarding a project. It can take up to 3 years to begin construction on a project, depending on size and complexity. And larger projects (larger than 200MW for example) can take up to two (2) years to construct. We would request that the approval time frame for a Special Use Permit for a major solar facility be extended from 12 months (one year) to a minimum of three (3) to five (5) years, with extensions available by Board approval after that time period. Ideally, the Board would be able to evaluate a project's need for an approval timeline in that 3-5 year time frame based on the application material and a discussion during the hearing.
3. In the Setbacks section, there is a discussion about setbacks from section lines to allow for improvement of, or construction of new County roads. Where big projects are located over multiple sections, this could be problematic from a design and security standpoint. The waiver process identified in the draft regulations will help alleviate that concern up front during the special use permit review and hearing process. However, as a backstop to these regulations, It's not uncommon for a large scale project that involves multiple section lines to review and account for future roads established through a long range transportation plan, but most of the areas that large scale projects develop are often far enough outside of the typical municipal expansion areas to not necessarily impact the transportation system. If that's the case, it shouldn't necessarily be the default that all section lines be setback from for unknown future conditions. It will be critical to identify those areas needing to be accounted for as early in the process as possible in the absence of a long range transportation plan – well before any permit review or hearing so that these critical areas can be accounted for in initial designs.
4. Decommissioning bond. Decommissioning Plans to be submitted should expressly allow for salvage value of the materials in the project in their cost estimate (this is industry standard across the country). Additionally, it is unusual to require Decommissioning bond before construction commences, as the materials themselves, being new, far outweigh the decommissioning cost. Having a decommissioning bond due, based on the estimate (including salvage value), and held by the County, at the beginning of Year 6 (after 5 years of operation) is closer to industry standard.

Thank you for the opportunity to comment and provide feedback on these new regulations. I'm happy to answer any questions or provide clarification.

Regards,

Page

Page Bolin

Development Manager

The AES Corporation

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