

LAND USE ITEMS

April 23, 2024 9:00 A.M.

544 Rood Avenue Grand Junction, CO

PROJECT REVIEW PRO2024-0022 TXT Land Development Code Amendment



200 S. Spruce Street • PO Box 20,000-5022 • Grand Junction, Colorado • 81502 Telephone: 970.244.1636 • www.mesacounty.us/planning

PROJECT REVIEW

April 5, 2024

2024-0022 TXT LAND DEVELOPMENT CODE AMENDMENT

Representative: Mesa County Community Development Department

Planner: Sean Norris, 970-254-4183, sean.norris@mesacounty.us

Request: The Mesa County Planning Division is proposing amendments to the following Sections and Tables of the Mesa County 2020 Land Development Code (as amended): Section 6.01 Use Table, 6.02 Use Specific Standards Section 12.01 General and Section 12.04 Institutional and Civic Use Categories

Proposed amendments to the Land Development Code (LDC): LDC amendments to create a new category for Utility Production and establish specific use requirements and definitions to manage electrical energy production within the Mesa County for utility scale, private scale and community solar garden energy production facilities.

I. PROJECT DESCRIPTION:

Amendments to the Mesa County Land Development Code to codify specific use requirements for Utility Generation/Production Facilities, Private Energy Facilities, and Community Solar Gardens. Prior to the creation of this new text, Utility Production was not well defined within the LDC. In response to the concerns of citizens within the County, on January 9, 2024, the Board of County Commissioners placed a temporary moratorium on applications for energy generation projects, more specifically solar facilities, in order to give the Community Development Department, and the Planning Division, time to prepare new code language to be included in the LDC. The recommended amendments to the LDC include the following tables, sections and definitions:

SECTION 6.01 | USE REGULATIONS

TABLE 6-1: USE TABLE																												
Principal Uses Allowed																												
Use Category (Section)	Specific Use Type	Rural			U	Irbo	an I	les.	ide	ntio	al				Nc	onre	esic	len	tial	I	Mack Overlay	Districts	Mix Di	ced istric	Use ts	Gate Ove Dis	eway erlay trict	Site Specific Standards
		AFT/AF35	RSFR	URR	RSFE	RSF-1	RSF-2	RSF-4	RMF-5	RMF-8	RMF-12	RMF-16	RMF-24	R-O	B-1	B-2	C-1	C-2	1-1	1-2	TIER #1	TIER #2	MU-OTC	MUR	MUC	Area A	Area B	
		<u>.</u>		In	stit	utic	ona	&	Civ	ic ((<u>Se</u>	ctic	on 1	2.0	<mark>)4</mark>)					<u> </u>		<u>.</u>			I		<u> </u>	
	Cemetery	А								С	С	С					А	А			А	А			С	А	С	
Parks and Open	Golf Course	А	А	А	А	А	А	А	А	А	А	А	А		А	А	А	А				С		А	А	С	С	
Space	Golf Driving Ranges	А	С	С	С	С	С	С	С	С	С	С	С			А	А	А	А	А	А	А		С	С	С	С	
<u>12.04 E.</u>	Parks/Lakes/Reservoirs	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	
	All Other	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	С	А	С	
Religious Institutions <u>12.04 F.</u>	All	A	A	А	A	A	А	A	А	A	А	A	A	A	A	A	A	A	А	A	A	A	А	А	А	A	A	
Public Safety Facilities	Jails, Honor Camps, Reformatories, Rehabilitation Centers															С		С	С	С		С						
<u>12.04 G.</u>	Police Station & Sub- Station/Fire Station/Ambulance	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	Α	А	A	A	A	
Cabaala	Boarding School	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	А	А			А	А	А	А	А	С	С	
3Chools 12.04 H.	Elementary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А				А	А	А	А	А	А	С	
	Secondary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А			А	А	А	А	А	А	С	
	I		1	1	1	<u>U</u> 1	<u>tiliti</u>	es (Sec	ctic	on 1	2.0	<u>)4)</u>	1	1		1	1	1	1	1	1	1	1	r	1	1	
	Utility Service Facilities (underground)	A	A	А	А	А	А	Α	А	А	А	А	А	А	А	А	А	Α	А	А	А	А	А	А	А	А	А	
Utility, Basic <u>12.04 I.</u>	Utility Treatment, Production or Service Facility	С																	С	С		С	С	С	С			
	Minor Basic Utilities	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	
	Basic Utilities	С	С	С	С	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	С	С	С	С	А	С	С	
	Transmission lines (above ground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	<u>6.02 F.</u>
Utility Corridors <u>12.04 J.</u>	Transmission lines (underground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	А	А	А	С	С	А	А	А	С	С	
	Minor Utility Facility	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	
	All Others	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	
	Community Solar Garden	<u>A</u>	A	<u>A</u>	A	<u>A</u>	A	A	A	A	A	<u>A</u>	A	<u>A</u>	A	<u>A</u>	A	A	A	A	A	<u>A</u>	<u>A</u>	<u>A</u>	Δ	A	A	<u>6.02 CC.</u>
	Private Energy System	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	Δ	A	Δ	A	A	<u>6.02 CC.</u>
<u>Utility, Production</u>	Energy Generation/Production Facility	<u>c</u>															A	A	A	A								<u>6.02 CC.</u>
	Agrivoltaics	Α	1										1								1		1		1		1	

SECTION 6.02 | USE SPECIFIC STANDARDS

CC. Utility, Production

- 1. Applicability
 - a. The following standards shall apply to all new energy production facilities to regulate the development and surface impacts that these facilities may have on the public health, safety, and welfare for any of the following:
 - (1) Private energy facilities
 - (2) Community solar garden as defined by CRS 40-2-127
 - (3) Energy generation/production facility
 - (4) Agrivoltaics
 - b. Any facility that exceeds the definition of a private energy facility in C.R.S 124 or C.R.S 40-2-127, or community solar garden in C.R.S 40-2-127 shall be processed as an energy generation/production facility.
- 2. Submittal Requirements for Energy Generation/Production Facilities
 - a. Narrative

The applicant will provide a narrative describing the proposed facility including but not limited to; general description of the proposal, the height and location of equipment and ancillary structures, health and safety, decommissioning, traffic analysis, construction schedule, type and location of interconnection, rated capacity,

b. Site plan

The site plan map shall be provided in a legible format and shall include but not be limited to the location and arrangement of screening, fencing, existing and proposed structures, equipment, roadways and access points, wildlife corridors, floodplain, easements, existing utilities, and connection to the electrical grid.

- c. Setbacks
 - (1) One quarter (1/4) mile from a designated Scenic By-way.
 - (2) A minimum of one hundred fifty (150) feet from the nearest outside wall of residential occupied structure on adjacent properties.
- d. Fire Prevention and Safety Procedures
 - (3) The relevant Fire Protection District's adopted standards, based on current fire code, shall apply.
 - (4) A fire break or other facility perimeter design acceptable to the fire district shall be required to reduce or eliminate the interface risk from wildfire.
 - (5) If fenced, egress gates should be installed approximately every 300 feet along any perimeter fencing.
 - (6) A vegetation management plan shall describe the operator's methods to maintain vegetation inside the facility to address wildfire which may include treatment, mowing, agrivoltaics or other methods of fuel reduction.
- e. Visual Mitigation

Reasonable efforts to mitigate visual impacts of an energy generation/production facility will be detailed in the project narrative. Visual impact mitigation may include opaque fencing, screening, berming, use of existing or planted vegetation of landscaping either on-site, or off-site.

- (1) Solar System equipment shall be no higher than fifteen (15) feet at the solar panel mounting point. The height of the interconnection equipment may exceed 15 feet. Solar System Facilities within 50 feet of a property line of a residential zoned property should be designed with some form of visual mitigation, to include but not be limited to, opaque fencing, or landscaping.
- (2) Agrivoltaics are exempt from height restrictions.
- f. Wildlife, Wetlands, Riparian Areas and Stream Channel Measures
 - (7) The Operator shall address the recommendations of Colorado Parks & Wildlife (CPW) that address any site-specific site conditions. The Applicant shall avoid constructing in CPW-mapped High Priority Habitats (HPH) to the maximum extent possible.
 - (8) Operator shall inspect the interior of the facility at least once weekly, to potentially free any trapped animals.
 - (9) When fencing is necessary, the use of wildlife friendly fencing is encouraged.
- g. Decommissioning Plan

At the time of application, Operator shall include a decommissioning plan for the facility which will include detailed plans for management and removal of equipment, mounting systems, above and underground utilities, equipment and facilities as follows:

- (10) A cost estimate for the decommissioning of the facility and restoration of the site prepared by a Professional Engineer or contractor who has expertise in removal of such facilities.
- (11) Within twelve (12) months of ceasing operations, the operator shall complete decommissioning of the facility which may include removal of all aboveground and belowground equipment and structures and removal of any access roads and fire breaks unless previous agreements have been made with the property owner.
- (12) Any equipment that cannot be recycled shall be properly disposed in accordance with all State and Federal regulations.
- (13) The site shall be revegetated in compliance with the property owner's specifications or to a minimum of 70% of predevelopment vegetative cover whichever is less.
- h. Utility Interconnection

The applicant shall provide available information or certification of intent to enter into an interconnection agreement with final details submitted prior to construction of the facility.

i. Insurance

The owner/operator shall provide proof of general liability insurance with commercially reasonable amounts of coverage for the permitted facility. Facility owners/operators shall maintain such insurance in place through all times the facility is in operation.

3. Approval Criteria

In evaluating the proposal, the request shall consider conditions of approval and all applicable requirements of this LDC, including, but not limited to:

- a. The health, safety and welfare of the citizens of this jurisdiction will be protected and served;
- b. The facility will not unreasonably impact the physical, economic, or social environment, except as permitted in Chapter 6 Use Regulations as applicable.
- c. When an impact is expected to occur, reasonable modifications and programs and other reasonable mitigating actions will be implemented and maintained to minimize the degree of adversity of the impact;
- d. There exists a need, or a reasonably foreseeable need, for the facility as proposed.

SECTION 12.01 | GENERAL

Energy Generation/Production Facility. A facility designed to generate electricity by the conversion of natural resources such as light, fossil fuels, nuclear or water which is directly connected to the utility grid supplying electricity serving a wide customer base without being connected to specific end-users.

Private Energy Facility. A residential or business-scale energy conversion facility designed to generate electricity by the conversion of natural resources such as light, natural gas, nuclear, biomass or water which produces electricity for on-site uses or to nearby off-site facilities under the same ownership, for which the private facility is intended to provide electrical power and is a behind-the-meter installation.

Community Solar Garden: A solar power generating facility designed to produce electricity as defined in C.R.S 40-2-127. A community solar garden may include battery storage equipment as accessory equipment.

Agrivoltaics: Agrivoltaics, agrophotovoltaics, agrisolar, or dual-use solar is the simultaneous use of land for both solar panels and agricultural production, such as crop or livestock production or pollinator habitats, underneath or adjacent to solar panels.

Behind-the-meter: Means an energy resource that is interconnected on the property owner's side of the utility meter providing electric energy primarily to serve the property owner's loads.

Fire Protection District: A Fire Protection District within Mesa County is defined as one which has been recognized by resolution as per C.R.S 32-1-102 (2022) by the BoCC.

Residential Occupied Structure: See Building, Principle see also Dwelling Unit.

SECTION 12.04 | GENERAL

K. Utilities, Production

1. Characteristics

A facility designed and operated for the generation, and distribution of electricity which use fossil fuels, solar energy, hydroelectric energy, geothermal energy, nuclear, biomass energy or wind energy as a resource for the primary purpose of selling electricity generated to the electric power grid.

2. Accessory Uses

Accessory uses may include parking and control, monitoring, data or transmission or battery storage equipment and agrivoltaics.

- 3. Exceptions
 - a. Does not apply to on-site generation equipment when such use is an accessory use as described in Section 6.02 CC of this LCD.
 - b. Transmission lines, substations, and pipelines.
 - c. Utility production facilities with no occupied structures or full-time on-site employees are exempt from the requirements for potable water required in Section 8.09.

II. TEXT AMENDMENT APPROVAL CRITERIA:

Section 1.05 Purpose:

This Land Development Code is adopted for the purpose of preserving and improving the public health, safety, and general welfare of the citizens and businesses of Mesa County. More specifically, it is the purpose of this Land Development Code to:

A. Implement the purposes, goals, and policies of the Mesa County Master Plan;

The Master Plan is implemented in part through the development review process. The proposed text amendments do not conflict and are consistent with the purposes, goals and policies of the Master Plan.

Criterion has been met

B. Promote predictability, consistency, and efficiency in the land development process for residents, neighborhoods, businesses, and agricultural and development interests;

The amendments promote predictability, consistency, and efficiency in the land development process.

Criterion has been met

C. Provide appropriate opportunities for participation and involvement in the development process by all affected parties;

The proposed amendments do not affect the opportunities for participation and involvement in the development process.

Criterion has been met

D. Promote development that is consistent and compatible with that of the municipalities within Mesa County within the joint municipal planning areas;

The proposed amendments were provided to all municipalities for review.

Criterion has been met; and:

E. Be fair to all by giving due consideration to protecting private property rights, the rights of individuals, and the rights of the community as a whole. In instances where an application to develop does not meet all applicable criteria of this Code, and unique or special circumstances exist which would warrant the approval of the application to develop, and provided the proposed development: (a) poses no threat to health or safety; (b) provides for the mitigation of impacts to the maximum extent reasonable; and (c) is generally consistent and compatible with the allowed uses in the applicable Zoning District, the application to develop may be approved.

Protection of private property rights, the rights of individuals and the interests of the community as a whole were considered during the drafting of the proposed text amendments and it is staff's opinion that the proposed amendments do not diminish these rights.

Criterion has been met

III. REVIEW AGENCY COMMENTS

No opposition from review agencies were received. A report of agenciy review comments is attached to the file.

I. PUBLIC COMMENTS:

Over the course of the project review, many public comments were collected during meetings, open houses and via email. Every effort to filter through the abundant comments was made to add what was codifiable and to respond to that which is of concern to residents but not codifiable. Copies of all public comments are attached to the project file.

II. STAFF RECOMMENDATION

Recommend approval of the proposed text amendments.

Basis: The amendments meets the purpose statements in Section 1.05 of the Mesa County 2020 Land Development Code (as amended) and do not conflict with other sections in the Land Development Code. The proposed text amendments meet the basic goals of the Mesa County Master Plan and do not conflict with State Statutes regulating County Planning.

Summary

Purpose

1.05.A (implement Master Plan purposes, goals, and policies)	is met
1.05.B (promote predictability, consistency and efficiency)	is met
1.05.C (provide opportunities for participation and involvement)	is met
1.05.D (development compatible with the municipalities)	is met
1.05.E (give due consideration to protecting rights)	is met

V. MCPC RECOMMENDATION: March 21, 2024

VI. BoCC ACTION: April 23, 2024

SOLAR TIMELINE

JAN. 30, 2024 Public Open House 1 - 7 p.m. The Presentations 1:30, 3:30, 5:30 p.m.
200 S. Spruce St., Main Conference Room

FEB. 7, 2024

Code Focus Group Review

FEB. 8, 2024 Planning Commission () 5:45 p.m. Workshop

200 S. Spruce St., Main Conference Room

MARCH 21, 2024

Planning Commission () 6 p.m. Hearing 544 Rood Ave., Public Hearing Room

APRIL 23, 2024

County Commissioner () 9 a.m. Public Hearing 544 Rood Ave., Public Hearing Room

PRIOR MCPC MINUTES March 21, 2024

MESA COUNTY PLANNING COMMISSION March 21, 2024 PUBLIC HEARING MINUTES

Chair Harris called to order a scheduled hearing of the Mesa County Planning Commission at 6 PM. Chair Harris led the Pledge of Allegiance. The hearing was held in the Public Hearing Room, Mesa County Administration Building at 544 Rood Avenue, Grand Junction, Colorado.

In attendance representing the Mesa County Planning Commission were Chair Dean Harris, Steve Damm, Larry Anna, Greg Haitz, Dennis Clark, Clifton Anson, and Erika Satie.

In attendance, representing the Mesa County Planning Division was Sean Norris. Greg Moberg, and Todd Star were present in the audience. Collin Rode was present to record the minutes.

There was were eight (8) citizens present throughout the hearing.

Approval of Minutes January 18, 2024

Motion: Commissioner Anson "Mr. Chairman I move that we approve the minutes" Second: Commissioner Haitz "Second" Motion Approved 7-0

Hearing Items One

1. 2024-0022 TXT LAND DEVELOPMENT CODE AMENDMENT

Representative:Mesa County Community Development DepartmentPlanner:Sean Norris, 970-254-4183, sean.norris@mesacounty.usRequest:The Mesa County Planning Division is proposing amendments to
the following Sections and Tables of the Mesa County 2020 Land
Development Code (as amended): Section 6.01 Use Table, 6.02
Use Specific Standards Section 12.01 General and Section 12.04
Institutional and Civic Use Categories

Proposed amendments to the Land Development Code (LDC): LDC amendments to create a new category for Utility Production and establish specific use requirements and definitions to manage electrical energy production within the Mesa County for utility scale, private scale and community solar garden energy production facilities.

Staff Presentation

Sean Norris, Planning Manager, read through the project description and entered in to the record exhibits A-F Staff PowerPoint Presentation, MCPC Hearing Binder, Project File, Mesa County Land Development Code (MCLDC), Mesa County Master Plan (MCMP), and Public Comments. He explained the reason for the amendments are to codify the general requirements for utility generation production facilities. Mr. Norris highlighted the sections of MCLDC that would be amended which were Section 6.02, 12.01, and 12.04. He continued by explaining the topics brought for discussion during the hearing such as Agrivoltaics, Decommissioning plan and bonding, 200% maximum production for onsite power use, Use-by-Right in commercial/industrial zones, and Interconnection Agreement. Review Agency comments were received with no objections and numerous public comments were received. Staff recommended approval of the project.

Commissioner Damm questioned if the topic of bonding could be incorporated in to the insurance portion of the submittal requirements during both construction and decommissioning. Mr. Norris answered it would be rather difficult to codify specific types of insurances for specific purposes and even more difficult for staff to regulate. Commissioner Damm questioned how the interconnect agreement might impact a micro grid. Mr. Norris answered everything in a community micro grid would be considered a private system and would therefore be allowable. Commissioner Anna questioned what the difference was between before verses after the meter. Mr. Norris answered behind the meter refers to an energy system located on a customer's side of the utility meter. Chair Harris asked if keeping a 200% maximum production, protects neighbors by discouraging someone from building a large system on their property that is intended to make a large profit, Mr. Norris concurred.

Public Comments

Lori Welch, Palisade community group representative, suggested the Planning Commission consider aspects such as lack of fire protection and property values. Greg Brophy, director of the Colorado Western Way, recommended the Planning Commission incorporate the federal definition of agrivoltaics. In addition, he recommended that there be a minimum requirement in regards to bonding. Tyler McDermit, Western Colorado Alliance, stated that bonding wasn't something that needed to be considered, as it is difficult to anticipate the cost of decommission. He continued stating that an interconnect agreement could pose potential conflicts. Matt Fowler, Atlasta Solar Center, stated rapid shutdown requirements are apart of the national electrical code which is only required for roof mounted systems. In addition, he recommended different language for the Energy Generation/ Production Facility portion. Dan Craig community member, stated that a bond should be required in regards to the decommissioning process.

Planning Commission Discussion & Vote

Chair Harris stated his support of the amendment and mentioned that the Planning Commission should only consider the amendment itself. Commissioner Anson asked for more clearly defined language and references to the appropriate sections. He also requested the decommissioning plan address conditions in order to obtain approval. He continued stating that if a Conditional Use Permit (CUP) is required for an Energy Production Facility there should be some type of recertification after a period of time. Lastly Commissioner Anson requested that if a commercial Energy Production Facility gathers and ships out energy from the valley, then there should be some sort of severance or compensation for the residents of the valley. Commissioner Damm stated that he would encourage the Board of County Commissioners (BoCC) to utilize their 1041 powers in regards to the State statues. Greg Moberg Community Development Director asked the Planning Commission, in regards to the Use-by-right in commercial/industrial zones, if they felt it should be added or left as it is currently is as a CUP. Commissioner Anson asked if this would be utility grade, Mr. Moberg answered yes. Mr. Norris clarified Mr. Moberg's point. Commissioner Damm stated it should be under a CUP, Chair Harris agreed.

Mr. Moberg continued asking the Planning Commission in regards to Agrivoltaics, should the distinction be made between Use-by-right verses a CUP if the energy produced is for private use verses for profit. Or should it be a use-by-right regardless of how the energy be utilized as long as it is on agricultural land. Chair Harris Stated that he agreed with how the code is currently written, Commissioner Damm agreed. Commissioner Anna questioned what opinions members of the agricultural community had. Mr. Norris explained they had no objections in either regard. Chair Harris questioned if an amendment to the motion is needed or would the observations would be noted for the BoCC. Mr. Norris answered that the observations and recommendations that were made will be added in to the text that will be presented to the Board of County Commissioners. Commissioner Anson questioned if the amendment can be tabled for a later date. Todd Star Mesa County Attorney encouraged the Planning Commission to make staff aware of their areas of concern so they can be presented to the BoCC and allow the amendment to move forward, Chair Harris agreed.

Motion: Commissioner Anson "I MOVE TO MAKE A MOTION TO RECOMMEND FOR APPROVAL PROJECT NUMBER PRO2024-0022 TXT, REVISING SECTION 6.01 USE TABLE, 6.02 USE SPECIFIC STANDARDS SECTION 12.01 GENERAL AND SECTION 12.04 INSTITUTIONAL AND CIVIC USE CATEGORIES, WITH THE FOLLOWING COMMENTS, THAT STAFF AND THE COUNTY COMMISSIONERS TAKE INTO ACCOUNT A REVIEW OF DECOMMISSIONING PROCEDURES AND BONDING, FIRE PROTECTION STANDARDS FOR THE VARIOUS OPERATIONS THAT ARE ALLOWED, LET'S SEE WHAT ELSE DO I WANT TO PUT INT HERE, CONSIDERING SOME LIMITATIONS ON THE TIME FRAME FOR THE CONDITIONAL USE PERMIT, IS THERE ANYTHING ELSE THAT YOU WANT TO PUT IN THERE? ANYBODY? AND THEN (CHAIR HARRIS ADDING: GOTCHA, CONSIDERATION OF ALLOWABLE OR CONDITIONAL USE FOR ELECTRIC OH FOR UM ENERGY GENERATION) THAT'S NUMBER 3, OR 4, AND UH THEN THE UM USE BY RIGHT IN COMMERCIAL AND INDUSTRIAL ZONES. WAS THAT THE OTHER ISSUE? OK SO, DID ANYBODY WRITE THAT DOWN?" Further discussion took place prior to the second however no further changes were made to the motion as stated.

Second: Commissioner Haitz "So I second the motion"

Discussion ensued on the process of amendments however no amendment took place. **Motion Approved 6-1 (Erika Satie)**

ADJOURNMENT:

Motion: Commissioner Anson "I move we adjourn" Second: Commissioner Satie "Second" Motion Approved 7-0

Hearing adjourned at 8:01 PM

Respectfully Submitted,

Ed Krey, Secretary

LEGAL ADS

To be considered all comments should be submitted in writing and received by the project planner Sean Norris <u>sean.norris@mesacounty.us</u> or Mesa County Planning Division at P.O. Box 20,000 Dept. 5022, Grand Junction, CO 81502.

Amendment to Section 6.02 Use Specific Standards

CC. Utility, Production

- 1. Applicability
 - a. The following standards shall apply to all new energy production facilities to regulate the development and surface impacts that these facilities may have on the public health, safety, and welfare for any of the following:
 - (1) Private energy facilities, with the following exception;
 - (a) Roof mounted systems;
 - (b) Facilities with a rated capacity of less than 100 kW, occupying no more than one half (.5) acre of land that will be used to produce electricity to on-site uses.
 - (2) Community solar garden; and
 - (3) Energy generation/production facility.
 - b. Any facility that exceeds the definition of a private energy facility or community solar garden shall be processed as an energy generation/production facility.
- 2. Submittal Requirements
 - a. Narrative

The applicant will provide a narrative describing the proposed facility including but not limited to; general description of the proposal, the height and location of equipment and ancillary structures, health and safety, decommissioning, traffic analysis, construction schedule, type and location of interconnection, rated capacity,

b. Site plan

The site plan map shall be provided in a legible format and shall include but not be limited to the location and arrangement of screening, fencing, existing and proposed structures, equipment, roadways and access points, wildlife corridors, floodplain, easements, existing utilities, and connection to the electrical grid.

- c. Setbacks
 - (1) All structures must meet minimum street, side, and rear setback requirements for the zone district in which the proposed facility is to be located.
 - (2) One quarter (1/4) mile from a designated Scenic By-way.
 - (3) A minimum of two hundred (200) feet from any residential occupied structure.
- d. Grading plan
- e. Elevations
- f. Traffic Study
- g. Fire Prevention and Safety Procedures
 - (1) The relevant Fire Protection District's adopted standards, based on current fire code, shall apply unless.
 - (2) A fire break or other facility perimeter design acceptable to the fire district shall be required to reduce or eliminate the interface risk from wildfire.

- (3) Locked gates shall be installed every 300 feet on the inside of the perimeter fencing.
- (4) A vegetation management plan shall describe the operator's methods to maintain vegetation inside the facility to a minimum level, which may include treatment, mowing, agrivoltaics or other methods of fuel reduction.
- h. Visual Mitigation

Reasonable efforts to mitigate visual impacts of an energy generation/production facility will be detailed in the project narrative. Visual impact mitigation may include opaque fencing, screening, berming, use of existing or planted vegetation of landscaping.

- (1) Solar System equipment shall be no higher than fifteen (15) feet at the solar panel mounting point. The height of the interconnection equipment may exceed 15 feet. Solar System Facilities within 50 feet of a property line of a property containing a residential occupied structure shall be designed with some form of visual mitigation, to include but not be limited to, opaque fencing, berming, or landscaping.
- i. Wildlife, Wetlands, Riparian Areas and Stream Channel Measures
 - (1) The Operator shall address the recommendations of Colorado Parks & Wildlife (CPW) that address any site-specific site conditions. The Applicant shall avoid constructing in CPW-mapped High Priority Habitats (HPH) to the maximum extent possible.
 - (2) Operator shall inspect the interior of the facility at least once weekly, to potentially free any trapped animals.
- j. Decommissioning Plan

At the time of application, Operator shall include a decommissioning plan for the facility which will include detailed plans for management and removal of equipment, mounting systems, above and underground utilities, equipment and facilities as follows:

- (1) Within six (6) months of ceasing operations, the operator shall complete decommissioning of the facility which will include removal of all aboveground and belowground equipment and structures and removal of any access roads and fire breaks.
- (2) Any equipment that cannot be recycled shall be properly disposed in accordance with all State and Federal regulations.
- (3) The site shall be revegetated in compliance with the property owner's specifications.

(C)

k. Insurance

The owner/operator shall provide proof of general liability insurance with commercially reasonable amounts of coverage for the permitted facility. Facility owners/operators shall maintain such insurance in place through all times the facility is in operation.

I. Referral

Once a complete application has been submitted, County staff will refer the application for review to appropriate review agencies which may include; law enforcement, state and federal agencies, local municipalities, fire districts utility providers and others as may be deemed appropriate.

3. Approval Criteria

In evaluating the proposal, the request shall comply with any conditions of approval and all applicable requirements of this LDC, including, but not limited to:

a. The health, safety and welfare of the citizens of this jurisdiction will be protected and served;

- b. The facility will not adversely impact the physical, economic, or social environment, except as permitted in Chapter 6 Use Regulations as applicable. 6.
- c. When an adverse impact is expected to occur, reasonable modifications and programs and other reasonable mitigating actions will be implemented and maintained to minimize the degree of adversity of the impact;
- d. There exists a need, or a reasonably foreseeable need, for the facility as proposed;
- e. Adequate resources (e.g., schools, utilities, roads) exist, or will exist, for the construction and efficient operation of the facility;

<u>Fire Protection District</u>: A Fire Protection District within Mesa County is defined as one which has been recognized by resolution as per C.R.S 32-1-102 (2022) by the BoCC.

<u>Residential Occupied Structure</u>: See Building, Principle see also Dwelling Unit.

Amendment to Section 12.04 Institutional And Civic Use Categories

- K. Utilities, Production
 - 1. Characteristics

A facility designed and operated for the generation, and distribution of electricity which use fossil fuels, solar energy, hydroelectric energy, geothermal energy, biomass energy or wind energy as a resource for the primary purpose of selling electricity generated to the electric power grid.

2. Accessory Uses

Accessory uses may include parking and control, monitoring, data or transmission equipment.

- 3. Exceptions
 - a. Does not apply to on-site generation equipment when such use is an accessory use as described in Section 6.02 A of this LCD.
 - b. Transmission lines, power plants, substations, and pipelines.
 - c. Utility production facilities with no occupied structures or full-time on-site employees are exempt from the requirements for potable water required in Section 8.09.

Additions to Section 12.01 Definitions

Energy Generation/Production Facility. A facility designed to generate electricity by the conversion of natural resources such as light, natural gas, or water with a rated capacity of more than two (2) Megawatts and/or occupying more than five (5) acres of land.

Private Energy Facility. A residential or business-scale energy conversion facility designed to generate electricity by the conversion of natural resources such as light, natural gas, biomass or water with a rated capacity of two (2) Megawatts or less, occupying no more than five (5) acres of land, that produces electricity to on-site uses.

Community Solar Garden: A solar power generating facility designed to produce electricity with a maximum rated capacity of five (5) Megawatts or less and meets the definition contained within C.R.S 40-2-127. A community solar garden does not include battery storage equipment.

	TABLE Error! No text of specified style in document1: USE TABLE																											
							Pr	inc	ipa	l Us	es	Allo	owe	ed														
Use Category (Section)	Specific Use Type	Rural			ι	Jrbo	an I	Res	ide	ntic	1				N	onre	esic	leni	lial		Mack Overlay	Districts	Mix Di	ed istric	Use :ts	Gate Ove Dist	eway erlay trict	Site Specific Standards
		AFT/AF35	RSFR	URR	RSFE	RSF-1	RSF-2	RSF-4	RMF-5	RMF-8	RMF-12	RMF-16	RMF-24	R-O	B-1	B-2		C-2	F-1	I-2	TIER #1	TIER #2	MU-OTC	MUR	MUC	Area A	Area B	
					In	nstit	utic	ona	8	Civ	ic (Sec	ctio	on 1	2.0	<mark>4</mark>)												
Colleges and Vocational Schools	Colleges and Universities/Vocational/ Technical/ Trade Schools									A	A	А	А	A	А	A	А	A	A	A	С	С	А		A	С	С	
<u>12.04 A.</u>	All Other Educational Institutions									С	С	С	С	A	А	А	А	А	А	А	А	А	С		С	С	С	
Community	All Community Services	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А			А	А	С	С	С	А	С	
Service <u>12.04 B.</u>	Museums/Art Galleries/Opera House	А	А											A	А	A	А	А	А	А	А	А	А	А	А	A	С	
Davi Care	Home-Based Day Care	А	А	А	А	А	А	А	А	А	А	А	А	А	А						А	А	С	С	С	А	С	
<u>12.04 C.</u>	Limited Day Care	С	С	С	А	А	А	А	А	А	А	А	А	А	А	А					А	А	С	С	С	Α	С	
	General Day Care	С	С	С	С	С	С	С	С	А	Α	A	A	A	A	A	C				C •	C	A	C	C	A	C	
	Counseling/Rehabilitation											A	A	A	A	A	A	A	A		A	A	A	С	A	A	С	
Hospital	Centers (nonresident)											-		^		^	^	^			C	C	C	C	C			
<u>12.04 D.</u>	Physical and Mental Rehabilitation (residential)													A	A	A	A	A			С	С	С	С	С	С	С	
	All Other														t	С	С	С			С	С	С		С	С	С	
	Cemetery	А								С	С	С			t	-	A	A			A	A			С	A	С	
Parks and Open	Golf Course	А	А	А	А	А	А	А	А	А	А	А	А		А	А	А	А				С		А	А	С	С	
Space	Golf Driving Ranges	А	С	С	С	С	С	С	С	С	С	С	С			А	А	А	А	А	А	А		С	С	С	С	
<u>12.04 E.</u>	Parks/Lakes/Reservoirs	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	
	All Other	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	С	А	С	
Religious Institutions 12.04 F.	All	А	A	A	А	А	А	А	А	А	А	А	A	A	А	A	А	A	А	А	А	А	А	А	А	A	A	
Public Safety	Jails, Honor Camps, Reformatories, Rehabilitation Centers															С		С	с	С		С						
<u>12.04 G.</u>	Police Station & Sub- Station/Fire Station/Ambulance	A	A	A	A	A	A	A	A	A	A	А	A	A	А	A	A	A	A	A	A	A	А	А	А	A	А	
Schools	Boarding School	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	А	А			А	А	А	А	А	С	С	
<u>12.04 H.</u>	Elementary School	A	А	А	А	Α	А	A	A	А	А	A	А	А	А	А	А				А	А	А	А	Α	A	С	
	Secondary School	A	Α	A	A	A	A	A	A	A	A	A	A	A	Α	Α	Α	Α			А	A	Α	Α	Α	A	С	
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	(underground)	A	A	A	A	A	A	A	А	A	A	A	A	A	Α	А	A	A	A	A	A	А	A	A	A	A	A	
Utility, Basic <u>12.04 I.</u>	Utility Treatment, Production or Service Facility	С																	С	С		С	С	С	С			
	Minor Basic Utilities	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	Α	Α	А	A	А	A	
	Basic Utilities	С	С	С	С	С	С	С	С	С	С	С	С	С	Α	А	А	А	А	А	С	С	С	С	А	С	С	
Utility Corridors	Transmission lines (above ground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	<u>6.02 F.</u>
<u>12.04 J.</u>	Transmission lines (underground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	А	А	А	С	С	А	А	А	С	С	
	Minor Utility Facility	А	А	А	А	А	А	А	А	А	А	А	Α	А	Α	А	А	А	А	А	А	А	А	А	А	А	Α	

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Use Category (Section)	Specific Use Type	Rural			ι	Jrbo	an F	lesi	ide	ntia	ıl				No	onre	sid	ent	ial		Mack Overlay	Districts	Mix Di	ed stric	Use :ts	Gate Ove Dist	eway erlay trict	Site Specific Standards
		AFT/AF35	RSFR	URR	RSFE	RSF-1	RSF-2	RSF-4	RMF-5	RMF-8	RMF-12	RMF-16	RMF-24	R-O	B-1	B-2	C-1	C-2	I-1	I-2	TIER #1	TIER #2	MU-OTC	MUR	MUC	Area A	Area B	
	All Others	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	
	Community Solar Garden	<u>A</u>																										<u>6.02</u>
<u>Utility,</u>	Private Energy System	<u>A</u>	A	<u>A</u>	A	<u>A</u>	A	<u>A</u>	A	<u>A</u>	A	<u>A</u>	A	<u>A</u>	A	A	A	A	A	<u>A</u>	A	<u>A</u>	<u>A</u>	A	A	A	A	<u>6.02</u>
<u>Production</u>	Energy Generation/Production Facility	<u>c</u>																		<u>c</u>								<u>6.02</u>



COMMUNITY DEVELOPMENT DEPARTMENT

BUILDING – PLANNING – OWTS – CODE COMPLIANCE

200 S. Spruce Street • PO Box 20,000-5022 • Grand Junction, Colorado • 81502 Telephone: 970.244.1636 • www.mesacounty.us

HEARING LEGAL AD

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NOTICE OF PUBLIC HEARING MESA COUNTY PLANNNG COMMISSIONERS: March 21, 2023 @ 6:00 P.M. MESA COUNTY BOARD OF COMMISSIONERS: April 23, 2024 @ 9:00 A.M.

All hearings are held in the Mesa County Courthouse, Public Hearing Room, 544 Rood Avenue, 2nd Floor, Grand Junction.

PRO2024-0022 TXT LAND DEVELOPMENT CODE AMENDMENT

- Representative: Mesa County Community Development Department
- Planner: Sean Norris, 970-254-4183, sean.norris@mesacounty.us
- Request: The Mesa County Planning Division is proposing amendments to the following Sections and Tables of the Mesa County 2020 Land Development Code (as amended): Section 6.01 Use Table, 6.02 Use Specific Standards Section 12.01 General and Section 12.04 Institutional and Civic Use Categories

Proposed amendments to the Land Development Code (LDC): LDC amendments to create a new category for Utility Production and establish specific use requirements and definitions to manage electrical energy production within the Mesa County for utility scale, private scale and community solar garden energy production facilities.

I. PROJECT DESCRIPTION:

Amendments to the Mesa County Land Development Code to codify specific use requirements for Utility Generation/Production Facilities, Private Energy Facilities, and Community Solar Gardens. Prior to the creation of this new text, Utility Production was not well defined within the LDC. In response to the concerns of citizens within the County, on January 9, 2024, the Board of County Commissioners placed a temporary moratorium on applications for energy generation projects, more specifically solar facilities, in order to give the Community Development Department, and the Planning Division, time to prepare new code language to be included in the LDC. The recommended amendments to the LDC include the following tables, sections and definitions:

SECTION 6.01 | USE REGULATIONS

TABLE 6-1: USE TABLE																												
Principal Uses Allowed																												
Use Category (Section)	Specific Use Type	Rural		Urban Residential Nonresidential								Mack Overlay	Districts	Mix Di	ed istric	Use cts	Gate Ove Dis	eway erlay trict	Site Specific Standards									
		AFT/AF35	RSFR	URR	RSFE	RSF-1	RSF-2	RSF-4	RMF-5	RMF-8	RMF-12	RMF-16	RMF-24	R-O	B-1	B-2	C-1	C-2	-1	1-2	TIER #1	TIER #2	MU-OTC	MUR	MUC	Area A	Area B	
				In	stit	utic	ona	&	Civ	ic ((<u>Se</u>	ctic	on 1	12.0)4)													
	Cemetery	А	Γ			1		1		С	С	С			1	Τ	А	А			А	А			С	А	С	
Barks and Open	Golf Course	А	А	А	А	А	А	А	А	А	А	А	А		Α	А	А	А				С		А	А	С	С	
Space	Golf Driving Ranges	А	С	С	С	С	С	С	С	С	С	С	С		1	А	А	А	А	А	А	А		С	С	С	С	
<u>12.04 E.</u>	Parks/Lakes/Reservoirs	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	
	All Other	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	С	А	С	
Religious Institutions 12.04 F.	All	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	А	А	А	A	Α	
Public Safety Facilities	Jails, Honor Camps, Reformatories, Rehabilitation Centers															С		С	С	С		С						
<u>12.04 G.</u>	Police Station & Sub- Station/Fire Station/Ambulance	A	A	A	А	A	A	A	А	A	А	A	A	А	A	A	А	А	A	A	A	A	А	А	A	A	A	
	Boarding School	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	А	А			А	А	А	А	А	С	С	
Schools 12.04 H.	Elementary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А				А	А	А	А	А	А	С	
	Secondary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А			А	А	А	А	А	А	С	
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	Utility Service Facilities (underground)	A	А	А	А	А	А	А	А	Α	Α	А	А	А	А	А	А	Α	А	А	А	А	А	А	А	А	А	
Utility, Basic <u>12.04 I.</u>	Utility Treatment, Production or Service Facility	С																	С	С		С	С	С	С			
	Minor Basic Utilities	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	A	А	А	А	А	А	А	А	Α	А	
	Basic Utilities	С	С	С	С	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	С	С	С	С	А	С	С	
	Transmission lines (above ground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	<u>6.02 F.</u>
Utility Corridors <u>12.04 J.</u>	Transmission lines (underground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	A	А	А	С	С	А	А	А	С	С	
	Minor Utility Facility	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	Α	А	А	
	All Others	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	
	Community Solar Garden	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	Α	A	Δ	A	A	<u>6.02</u>
Utility Production	Private Energy System	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	Α	A	Δ	A	A	<u>6.02</u>
Charly, 11000Clion	Energy Generation/Production Facility	<u>c</u>																		<u>c</u>								<u>6.02</u>

SECTION 6.02 | USE SPECIFIC STANDARDS

CC. Utility, Production

- 1. Applicability
 - a. The following standards shall apply to all new energy production facilities to regulate the development and surface impacts that these facilities may have on the public health, safety, and welfare for any of the following:
 - (1) Private energy facilities
 - (2) Community solar garden as defined by CRS 40-2-127;
 - (3) Energy generation/production facility.
 - b. Any facility that exceeds the definition of a private energy facility or community solar garden shall be processed as an energy generation/production facility.
- 2. Submittal Requirements for Energy Generation/Production Facilities
 - a. Narrative

The applicant will provide a narrative describing the proposed facility including but not limited to; general description of the proposal, the height and location of equipment and ancillary structures, health and safety, decommissioning, traffic analysis, construction schedule, type and location of interconnection, rated capacity,

b. Site plan

The site plan map shall be provided in a legible format and shall include but not be limited to the location and arrangement of screening, fencing, existing and proposed structures, equipment, roadways and access points, wildlife corridors, floodplain, easements, existing utilities, and connection to the electrical grid.

- c. Setbacks
 - (1) One quarter (1/4) mile from a designated Scenic By-way.
 - (2) A minimum of one hundred fifty (150) feet from the nearest outside wall of residential occupied structure on adjacent properties.
- d. Fire Prevention and Safety Procedures
 - (1) The relevant Fire Protection District's adopted standards, based on current fire code, shall apply.
 - (2) A fire break or other facility perimeter design acceptable to the fire district shall be required to reduce or eliminate the interface risk from wildfire.
 - (3) If fenced, egress gates should be installed approximately every 300 feet along any perimeter fencing.
 - (4) A vegetation management plan shall describe the operator's methods to maintain vegetation inside the facility to address wildfire which may include treatment, mowing, agrivoltaics or other methods of fuel reduction.
- e. Visual Mitigation

Reasonable efforts to mitigate visual impacts of an energy generation/production facility will be detailed in the project narrative. Visual impact mitigation may include opaque fencing, screening, berming, use of existing or planted vegetation of landscaping either on-site, or off-site.

(1) Solar System equipment shall be no higher than fifteen (15) feet at the solar panel mounting point. The height of the interconnection equipment may exceed 15 feet. Solar System Facilities within 50 feet of a property line of a residential zoned property should be designed

with some form of visual mitigation, to include but not be limited to, opaque fencing, or landscaping.

- (2) Agrivoltaics are exempt from height restrictions.
- f. Wildlife, Wetlands, Riparian Areas and Stream Channel Measures
 - (1) The Operator shall address the recommendations of Colorado Parks & Wildlife (CPW) that address any site-specific site conditions. The Applicant shall avoid constructing in CPW-mapped High Priority Habitats (HPH) to the maximum extent possible.
 - (2) Operator shall inspect the interior of the facility at least once weekly, to potentially free any trapped animals.
 - (3) When fencing is necessary, the use of wildlife friendly fencing is encouraged.
- g. Decommissioning Plan

At the time of application, Operator shall include a decommissioning plan for the facility which will include detailed plans for management and removal of equipment, mounting systems, above and underground utilities, equipment and facilities as follows:

- (1) Within twelve (12) months of ceasing operations, the operator shall complete decommissioning of the facility which may include removal of all aboveground and belowground equipment and structures and removal of any access roads and fire breaks unless previous agreements have been made with the property owner.
- (2) Any equipment that cannot be recycled shall be properly disposed in accordance with all State and Federal regulations.
- (3) The site shall be revegetated in compliance with the property owner's specifications or to a minimum of 70% of predevelopment vegetative cover whichever is less.
- h. Insurance

The owner/operator shall provide proof of general liability insurance with commercially reasonable amounts of coverage for the permitted facility. Facility owners/operators shall maintain such insurance in place through all times the facility is in operation.

3. Approval Criteria

In evaluating the proposal, the request shall consider conditions of approval and all applicable requirements of this LDC, including, but not limited to:

- a. The health, safety and welfare of the citizens of this jurisdiction will be protected and served;
- b. The facility will not unreasonably impact the physical, economic, or social environment, except as permitted in Chapter 6 Use Regulations as applicable.
- c. When an impact is expected to occur, reasonable modifications and programs and other reasonable mitigating actions will be implemented and maintained to minimize the degree of adversity of the impact;
- d. There exists a need, or a reasonably foreseeable need, for the facility as proposed.

SECTION 12.01 | GENERAL

Energy Generation/Production Facility. A facility designed to generate electricity by the conversion of natural resources such as light, natural gas, nuclear or water which is directly connected to the utility grid supplying electricity serving a wide customer base without being connected to specific end-users.

Private Energy Facility. A residential or business-scale energy conversion facility designed to generate electricity by the conversion of natural resources such as light, natural gas, nuclear, biomass or water which produces electricity for on-site uses or to nearby off site facilities under the same ownership, for which the private facility is intended to provide electrical power and is a behind-the-meter installation.

Community Solar Garden: A solar power generating facility designed to produce electricity as defined in C.R.S 40-2-127. A community solar garden may include battery storage equipment as accessory equipment.

Agrivoltaics: Agrivoltaics, agrophotovoltaics, agrisolar, or dual-use solar is the simultaneous use of areas of land for both solar panels and agriculture.

Behind-the-meter: Means an energy resource that is interconnected on the property owner's side of the utility meter providing electric energy primarily to serve the property owner's loads and shall be sized to supply no more than two hundred (200%) percent of the reasonably expected average annual total consumption of electricity at all properties owned or leased by the property owner.

Fire Protection District: A Fire Protection District within Mesa County is defined as one which has been recognized by resolution as per C.R.S 32-1-102 (2022) by the BoCC.

Residential Occupied Structure: See Building, Principle see also Dwelling Unit.

SECTION 12.04 | GENERAL

K. Utilities, Production

1. Characteristics

A facility designed and operated for the generation, and distribution of electricity which use fossil fuels, solar energy, hydroelectric energy, geothermal energy, nuclear, biomass energy or wind energy as a resource for the primary purpose of selling electricity generated to the electric power grid.

2. Accessory Uses

Accessory uses may include parking and control, monitoring, data or transmission or battery storage equipment and agrivoltaics.

- 3. Exceptions
 - a. Does not apply to on-site generation equipment when such use is an accessory use as described in Section 6.02 CC of this LCD.
 - b. Transmission lines, substations, and pipelines.
 - c. Utility production facilities with no occupied structures or full-time on-site employees are exempt from the requirements for potable water required in Section 8.09.

II. TEXT AMENDMENT APPROVAL CRITERIA:

Section 1.05 Purpose:

This Land Development Code is adopted for the purpose of preserving and improving the public health, safety, and general welfare of the citizens and businesses of Mesa County. More specifically, it is the purpose of this Land Development Code to:

A. Implement the purposes, goals, and policies of the Mesa County Master Plan;

The Master Plan is implemented in part through the development review process. The proposed text amendments do not conflict and are consistent with the purposes, goals and policies of the Master Plan.

Criterion has been met

B. Promote predictability, consistency, and efficiency in the land development process for residents, neighborhoods, businesses, and agricultural and development interests;

The amendments promote predictability, consistency, and efficiency in the land development process.

Criterion has been met

C. Provide appropriate opportunities for participation and involvement in the development process by all affected parties;

The proposed amendments do not affect the opportunities for participation and involvement in the development process.

Criterion has been met

D. Promote development that is consistent and compatible with that of the municipalities within Mesa County within the joint municipal planning areas;

The proposed amendments were provided to all municipalities for review.

Criterion has been met; and:

E. Be fair to all by giving due consideration to protecting private property rights, the rights of individuals, and the rights of the community as a whole. In instances where an application to develop does not meet all applicable criteria of this Code, and unique or special circumstances exist which would warrant the approval of the application to develop, and provided the proposed development: (a) poses no threat to health or safety; (b) provides for the mitigation of impacts to the maximum extent reasonable; and (c) is generally consistent and compatible with the allowed uses in the applicable Zoning District, the application to develop may be approved.

Protection of private property rights, the rights of individuals and the interests of the community as a whole were considered during the drafting of the proposed text amendments and it is staff's opinion that the proposed amendments do not diminish these rights.

Criterion has been met

III. REVIEW AGENCY COMMENTS

No opposition from review agencies were received. A report of agenciy review comments is attached to the file.

I. PUBLIC COMMENTS:

Over the course of the project review, many public comments were collected during meetings, open houses andvia email. Every effort to filter through the abundant comments was made to add what was codifiable and to respond to that which is of concern to residents but not codifiable. Copies of all public comments are attached to the project file.

II. STAFF RECOMMENDATION

Recommend approval of the proposed text amendments.

Basis: The amendments meets the purpose statements in Section 1.05 of the Mesa County 2020 Land Development Code (as amended) and do not conflict with other sections in the Land Development Code. The proposed text amendments meet the basic goals of the Mesa County Master Plan and do not conflict with State Statutes regulating County Planning.

Summary

Purpose

1.05.A (implement Master Plan purposes, goals, and policies)	is met
1.05.B (promote predictability, consistency and efficiency)	is met
1.05.C (provide opportunities for participation and involvement)	is met
1.05.D (development compatible with the municipalities)	is met
1.05.E (give due consideration to protecting rights)	is met

V. MCPC RECOMMENDATION: March 21, 2024

VI. BoCC ACTION: April 23, 2024

REVIEW AGENCY COMMENTS



Community Development Department Planning Division

200 S. Spruce Street • PO Box 20,000-5022 • Grand Junction, Colorado • 81502

Telephone: 970.244.1636 • www.mesacounty.us/planning

Project ID: PRO2024-0022

Project Name: Utility, Production LDC Amendment

Review Cycle:1/31/2024 - 2/21/2024

Agency Review Comments and Feedback

Your project has been reviewed. Comments from plan reviewers are compiled below for your reference. Please respond to the comments and submit necessary documents.

		General Project Comments	
Agency/ Department	Comment Date	<u>Comment</u>	Applicant Response
Water- Ute	1/31/2024	No comments.	
MC- Floodplain	1/31/2024	If there is a solar project proposed in the floodplain, a floodplain development permit ill be required.	
Irrigation- Grand Valley Drainage	1/31/2024	GVDD has no comment or objections to the proposed Production LDC Ammendment.	
Fire- Lower Valley Fire Department	1/31/2024		
MC- Surveyor	2/1/2024	I have no comments.	
MC- Code Compliance	2/1/2024	2024-02-01 No comment	
MC- Building	2/2/2024	No comment	
State- CO DOT Region 3	2/5/2024	CDOT Access Unit has no comment. It's suggested that this be submitted to the CDOT Utility Engineer, Joe Carter. Thanks.	
Irrigation- Grand Valley	2/5/2024		
MC- Traffic	2/5/2024	No comments.	

Planner LDC Review	2/6/2024	This is all new code. Review of this proposed code to the existing code needs to be done to identify potential future conflicts in interpretation. Some new State Statuessuch as CRS 40 -2-127 have control over what Mesa County can and can not impose without, as I understand it, enacting 1041 rules. In addition, there is new pending legislation coming from the Colorado Energy Office titled: Connecting Colorado Renewable Energy in Colorado which is defining terms and creating standards for commercial wind solar energy facilities access to roads, consultation with State agencies such as Energy and Carbon Management Commission (ECMC) and Colorado Parks and Wildlife (CPW), decommissioning plans and timing, financial assurance and updates to transmission systems. Direction as to deferance to surrounding property owners who do not want change, versus property owners who want to exert their proerty rights and develop their land within the confines of the existing code, from the BoCC would be helpful.	
Power- GV Rural Power	2/7/2024	No comment	
MC- TIFF	2/7/2024	Transportation Impact Fees will not apply to this code ammendment.	
MC- Stormwater	2/8/2024	Mesa County Stormwater Division has no comments, nor objections to this proposed LDC Amendment.	
Fire- Grand Junction Fire Department	2/12/2024		
Fire- Grand Junction Rural Fire Department	2/12/2024		
Irrigation- Grand Valley Water Users	2/16/2024	GVWUA is opposed to Solar Operations replacing productive farm ground. Kris Aldrich	
State- CO Geological Survey	2/18/2024	The Colorado Geological Survey has no comments on the proposed Utility, Production LDC Amendment(s)	
Jurisdiction- Palisade	2/20/2024	No comments at this time.	
Irrigation- Redlands Water & Power	2/20/2024	no comments	
MC- Addressing	2/22/2024	No comment	
Sanitation- MC PID	2/22/2024	No Exceptions Taken.	
Federal- Aviation Administration	2/22/2024	No response recieved.	34

Federal- BLM	2/22/2024	No response recieved.	
Federal- Colorado National Monument	2/22/2024	No response recieved.	
Federal- US Army Corp of Engineers	2/22/2024	No response recieved.	
Federal- US Fish & Wildlife	2/22/2024	No response recieved.	
Federal- US Forest Service	2/22/2024	No response recieved.	
Fire- Central Orchard Mesa Department	2/22/2024	No response recieved.	
Fire- Clifton Department	2/22/2024	No response recieved.	
Fire- DeBeque Fire Department	2/22/2024	No response recieved.	
Irrigation- Collbran Conserve	2/22/2024	No response recieved.	
Fire- East Orchard Mesa Fire Department	2/22/2024	No response recieved.	
Fire- Gateway Fire Department	2/22/2024	No response recieved.	
Fire- Glade Park Fire Department	2/22/2024	No response recieved.	
Fire- Lands End Fire Department	2/22/2024	No response recieved.	
Fire- Palisade Fire Department	2/22/2024	No response recieved.	
Fire- Plateau Valley Fire Department	2/22/2024	No response recieved.	
GJ Regional Airport	2/22/2024	No response recieved.	
Irrigation- Bluestone	2/22/2024	No response recieved.	
Irrigation- Brown & Campion	2/22/2024	No response recieved.	
MC- Assessor	2/22/2024	No response recieved.	
Irrigation- Mesa County	2/22/2024	No response recieved.	
Irrigation- Orchard Mesa	2/22/2024	No response recieved.	
Irrigation- Palisade	2/22/2024	No response recieved.	
Jurisdiction- Collbran	2/22/2024	No response recieved.	
Jurisdiction- DeBeque	2/22/2024	No response recieved.	
Jurisdiction- Fruita	2/22/2024	No response recieved.	
Jurisdiction- Grand Junction	2/22/2024	No response recieved.	35

MC- Health (Restaurant)	2/22/2024	No response recieved.	
MC- Liquor Licensing	2/22/2024	No response recieved.	
MC- OWTS	2/22/2024	No response recieved.	
MC- Public Works	2/22/2024	No response recieved.	
MC- ROW Vacation	2/22/2024	No response recieved.	
MC- Road & Bridge	2/22/2024	No response recieved.	
MC- Sheriff	2/22/2024	No response recieved.	
MC- Treasurer	2/22/2024	No response recieved.	
MC-Development Engineer	2/22/2024	No response recieved.	
Power- Black Hills Corp.	2/22/2024	No response recieved.	
State- CDPHE- Solid Waste Division	2/22/2024	No response recieved.	
Power- Tri State	2/22/2024	No response recieved.	
Power- Xcel Energy	2/22/2024	No response recieved.	
Sanitation- Clifton Sanitation	2/22/2024	No response recieved.	
Sanitation- Grand Mesa Metro	2/22/2024	No response recieved.	
Sanitation- Mesa Water & Sanitation	2/22/2024	No response recieved.	
Sanitation- Persigo	2/22/2024	No response recieved.	
School- DeBeque School District 49JT	2/22/2024	No response recieved.	
School- Delta Joint School District 50J	2/22/2024	No response recieved.	
School- Mesa County Valley School Distict 51	2/22/2024	No response recieved.	
School- Plateau Valley School District 50	2/22/2024	No response recieved.	
State- CO Parks & Wildlife NW	2/22/2024	No response recieved.	
State- CO Parks & Wildlife SW	2/22/2024	No response recieved.	
State- CO State Engineer- Water Supply	2/22/2024	No response recieved.	
State- CO State Forest Service	2/22/2024	No response recieved.	
Water- Clifton	2/22/2024	No response recieved.	36
Water- DeBeque	2/22/2024	No response recieved.	
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Water- Grand Junction (Watershed)	2/22/2024	No response recieved.	
Water- Grand Junction/ Kannah Creek	2/22/2024	No response recieved.	
Water- Grand Mesa Metro	2/22/2024	No response recieved.	

SOLAR OPEN HOUSE

PUBLIC SOLAR OPEN HOUSE 2/28/24

1. Q: Has anything changed?

A: There will be a change made to add before and after the meter

A: Solar gardens will be allowed in all zoning districts up to 5 MW (subscribers) per state statute

2. Q: How is a microgrid defined?

A: All the homes in that development are tied to a single point connected to the grid A: The idea is to have isolation so if the grid goes down, they will still have power

- 3. Q: When power goes out on the grid during the day, why does his power go down?
 - A: 69 kV system on house

A: Electric company can't send someone out if there is electricity flowing both ways for safety reasons

- 4. Steve (Atlasta dude): If one panel is out or is under shade, the rest of the panel will only produce at the capacity as the lowest-producing panel
- 5. Q: Would Talbott's system even though it's "behind the meter" would his system go directly to him (ex: power his own property to maintain "behind the meter" status), or would it go back into the grid?
 - A: One meter cannot send electricity to another building
 - A: GVP has a limit of how big the systems can be
- 6. Q: Why is a fire protection plan removed as a requirement?A: Not required by code for other uses
- 7. Q: Any there any other codes where insurance is required?
 - A: No, it's redundant
 - A: If someone has that much invested, they're going to be insured
 - A: That may change before the final draft
- 8. Q: Wildlife-friendly fencing Will they have jump out accesses
 - A: Specific type of fencing may address this
- 9. Q: Do the As mean allowed? What do the Cs mean?
 - A: As are allowed
 - A: Cs are conditional use permits
 - A: Blank boxes means it's not allowed
- 10. Q: What percentage of the County is AFT?
 - A: About 60 70%
- 11. Comment: BLM Maps for Solar explains....
 - Where development may occur over 20 years
 - How BLM will give solar permits
 - Kind of recommends where these things should occur
- 12. Comment: Setbacks
 - From occupied residential structure we would need an improvement survey plat from each property surrounding subject parcel to determine those distances

13. Q: Grading and drainage – is it not required?

A: Is scratched out in this code amendment because there are other sections of the code that address that

- 14. Sean: Drainage goes by impervious area like solar panels
- 15. Sean: We picked and chose parts of other counties' solar codes but we also have other out-ofstate things to look at
- 16. Q: Shouldn't community solar gardens allow for public comment?A: State protects community solar gardens, so they will only require a site plan review which doesn't(?) allow for public comments
- 17. Q: Are we going to add in language about in front of the meter and behind the meter? A: Yes
- 18. Sean: In front of the meter is a CUP except for solar gardens
- 19. Q: What is the technique for delivering to the home owner and how much goes into the grid?
 - Power goes to power company and then
- 20. Q: Are there mineral rights for the properties?
 - A: Those are addressed with applications and review
 - A: Only mineral rights are beneath the surface
- 21. Comment: The definition for private energy facility says capacity less than 130% of the demand of the property or facility
 - Response: This will be removed
 - Response: It's actually 200%
- 22. Sean: The 6-month moratorium is not on private systems
- 23. Q: Is there anything that would prevent an adjoining land owner that would prevent sabotaging a solar facility by building something or planting trees to block the sunlight
 - A: You can purchase a solar easement from a neighbor
- 24. Sean: The Fruit and Wine Byway is being proposed as a scenic byway
- 25. Q: When is this code going into effect?
 - A: Scheduled 5/23 for BoCC
- 26. Sean: Moratorium expires 6/6
 - We can ask for an extension
 - If code is done sooner, moratorium will end sooner (Sean will have a resolution prepared to rescind the moratorium)
- 27. Q: The visual mitigation Does this mean AFT zoned properties don't have any rights to visual mitigation?
 - A: No, there is a 150' in AFT (? didn't catch all of this)
- 28. Comment: Subscription can be anywhere in CO that is served by that energy company
- 29. Q: Is it mostly big developers coming in to do this or people wanting a lot of small gardens? A: Some big companies
 - A: Mostly small-scale solar gardens
- 30. Q: Are we hearing anything from FDs on this?

A: Only "no objection" comments

31. Q: Have electric and building codes caught up with this?

A: Yes

32. Q: If there is a house fire are you supposed to shut off your gas?

A: Usually dispatch will reach out to the utility companies to shut off power and gas to the residence

- 33. Q: At this time, is most of our renewable power from the front range?A: Unsure
- 34. Comment: Localized systems will help the County be more resilient
- 35. Q: How many projects are we looking at that would need to go through this process?A: We have approved 1 conditional use permit, but they can't apply for the site plan review until the moratorium ends

A: Another company is in the process of having neighborhood meetings for a proposed project

- 36. Q: Why do you think xcel will reject some projects even after planning approval?A: I don't know what their evaluation criteria is, but I would assume that it might come down to cost for xcel.
- 37. Comment: Selling it to nearby consumers would benefit the community
- 38. Comment: EOM Fire's biggest concern is that they don't know how to fight a fire on a solar facility

Response: Because they are not technical a fire district and they don't have the training for it

- 39. Lithium batteries are an accessory use
 - Battery backup systems to provide enough power to give time to shut stuff everything off properly, so some of them are being requested/required
 - Battery storage as a primary use would be under storage
- 40. Sean: The ½ exemption will be removed and the exempt facilities will fall under before/after the meter
- 41. Important Dates
 - March 7th there will be a meeting with Bobbie Daniels (neighbors from Palisade)
 - Planning Commission Workshop 14th
 - Planning Commission Hearing 21st
 - Board of County Commissioners 23rd of April (Decision date)
- 42. Comment: Look into the legal aspect of the subscriptions and find out if it can be a requirement

UTILITY PRODUCTION OPEN HOUSE – Notes

PRO2024-0022 Utility, Production LDC Amendment

- Solar will fall under the category of Utility Production
- Timeline
- Jan. 30 Public Open House
- Feb. 7 Code Focus Group (now public)
- Feb. 8 Planning Commission Workshop
- March 21 Planning Commission Hearing
- April 23 County Commissioner Public Hearing
- Comments from public should be in writing
- Community solar gardens are allowed in every zoning by state statute Up to 5 MW
- C.R.S 32-1-102 defines a fire protection district
- State legislature may allow community solar gardens in every zone district

Public Questions

- Q: Is this something that needs to be voted on twice by the BoCC? A: No
- Q: Is this process similar to other processes for other types of development? A: Yes
- Q: Should we better define the firebreak acceptable by the FD so we aren't giving another agency land use power?
 A: FD district is defined later
- 4. Q: Would East Orchard Mesa FD fall under the category (definition) of a Fire Protection District?A: We haven't looked into that yet.
- Q: Was one of the reasons for opposition for the OneEnergy facility, was it because of solar subscriptions?
 A: Yes
- Q: Ancillary activities on a energy production facility does it include agrovoltaics?
 A: That will need to be worked into the code.
- If One Energy came in after this was passed, they wouldn't need have needed a CUP? A: Yes

Q: So there will be even less oversight? A: On solar gardens, yes

- 8. Q: The state doesn't put a restriction on local subscribers, can the County add a restriction so a certain percentage is local subscribers?A: If we use 1041 powers, yes. Will talk to the County attorney.
- Q: Are subscribers individuals or can it be companies?
 A: We will need to look into it.
- 10. Q: What's to prevent all 15 acres around me to be developed with solar facilities?A: Overlay districts help prevent some of that and our Master Plan helps to protect agricultural lands. But at the same time is a private landowner comes in with an application, we have to consider it.
- 11. Q: What about transmission lines that need to be extended to the area of a solar facilities?A: Will be addressed in the course of review.
- 12. Q: How would access be evaluated during construction?A: This is addressed in the review process by our engineering department.
- 13. Q: Are there currently any decommissioning requirements for things like oil and gas?A: Not within Mesa County's code, but the state does have decommissioning requirements.
- 14. Q: Are your eyes the only eyes that see the public comments?A: No, the County Commissioners will have their eyes on this too.
- 15. Q: How was the code focus group established?A: It was established years ago. The original group was appointed by the Board of County Commissioners.
- 16. Q: How do you ensure that the people in the code focus group don't come in with their own agenda?A: It's self-regulated.
- 17. Q: Is the code focus group open to the public?A: Generally, it's not noticed, but the public is more than welcome to come.
- 18. Q: Who would be responsible for damage to infrastructure like roads and water lines?A: Mesa County would not be involved with that. But road and bridge can verify whether or not the load is OK for road.
- 19. What kind of weight does another municipality have to weigh in to these projects?

A: If this is in Palisade town limits, the County has no jurisdiction. If there was an MOU between the town and the County, the town has more authority. If the project is in unincorporated Mesa County, the town's comment are just advisory.

- 20. Q: Will the power company just be a review agency?A: The planning project is a pre-requisite to the power company's project. They comment in the position of whether or not they can provide electricity to the site, but not about whether or not they will approve connection to their system.
- 21. Q: Are land owners not usually the developer for the solar facilities?A: No.Q: If there's an issue with the development, does the County go after the developer or the property owner? Who's responsible?A: The property owner. Which is why you have to have a good lease. It's a civil issue.
- 22. Q: Are batteries a part of this code?A: No, that has not been addressed yet.
- 23. Q: How many people are on the code focus group?A: There used to be 12, but normally about 10 or 8 people.
- 24. Q: Are there statistics for how many operators own the land underneath the panels and are performance bonds required?A: We do not have those statistics. And no, because we cannot determine how much costs to decommission will be in the future.
- 25. Q: Can you expand on the fire protection aspect of this?A: They will be required to have a fire protection plan as a part of the review process.
- 26. Q: Does a volunteer FD fall under the definition of a Fire Protection District?A: It depends on if they have the appurtenances necessary to fit the definition.
- 27. Q: Is the fire protection district a concern because fire protection is needed to respond to solar facilities?A: This will apply to everything that falls under utility production.
- 28. Q: Why are power plants listed as an exception for 12.04(K)(3)(a)A: Because they call under the PUC.
- 29. Q: The project in Palisade was offering subscriptions. Did they do that so they fall under the bucket of a community solar garden?A: Yes, but they will have to jump through hoops to get that designation.
- 30. Q: Are any setbacks being considered from homes for this?

A: Yes, 200 feet from a home and ¼ mile from scenic byways.

Q: Where does that number come from?

A: It's just a starting point. Looking for feedback from public on this.

Q: What about from other facilities?

A: It wouldn't make sense to have big setbacks between another facility.

- 31. Q: Is there something to preventing facilities from being built right next to each other so the entire area isn't developed with these facilities?A: There's nothing in the proposed code now, but if you think there should be, provide written comment.
- 32. Q: There are other counties with moratoriums on solar, so how did they get around the community solar gardens?

A: They don't. The state could sue them.

Q: Does the moratorium halt solar gardens from being applied for?

- A: It halts utility-scale solar. I don't think the moratorium halts community solar gardens.
- 33. Q: There is a private easement that will be used to access a solar facility, so how do we manage that?

A: We have not seen the easement to know what it allows, but access will be evaluated by staff in the course of review.

Public Comments/Concerns

- 1. A bill has been proposed to provide more support for solar.
- 2. Most of the counties in Eastern Colorado have done a code amendment process similar to this, so we should consider reaching out to them.
- 3. Removing (decommissioning) the equipment can do more damage to the land.
- 4. For nuclear, 6 months to decommission is not enough time.
- 5. State allows application to PUC to go up to 10 MW
- 6. Ancillary activities on a energy production facility does it include agrovoltaics?
- 7. We should add contingencies to the project because utility companies won't approve the facilities until after our process is done.
- 8. There is such thing as a community microgrid which prioritizes a certain community it generated regardless of how it's connected to a public utility. In 2022, legislature created energy resiliency effort changing some of those rules about how public utilities can mandate connections to.
- 9. Encourage a waiver process if you're converting ag land to a production facility to allow for a less-restrictive setbacks. (Variance)
- 10. Solar facilities are not taxed very much.
- 11. There should be language in the code that speaks to the liability of the developer.
- 12. Concerns about how industrial-sized solar could negatively impact other industries close by, such as tourism.

- 13. Would like for something to be worked into the code to discuss economic impact to industries the valley relies on
- 14. There was mention of a 3-mile limit around the town that's shares between the town and county....not sure what this is talking about.
- 15. Study in 2023 from 6 random states showed that this didn't have a strong impact on property values. Copy of the article will be sent to Sean.
- 16. Definition for private energy facility should not include nuclear

Unsolicited Feedback from Sam

- 1. Maybe clarify what kind of roof-mounted system....are we allowing roof-mounted nuclear facilities? It seems like this is intended specifically for roof-mounted photovoltaic systems.
- 2. The "residential occupied structure" is confusing. Consider changing this to "dwelling unit." The current proposed definition for "residential occupied structure" includes structures that are not necessarily occupied as a residence because the definitions references the definition for principal buildings. Changing this to just say "dwelling unit" voids the need for a new, confusing definition.
 - Residential Occupied Structure See Building, Principle see also Dwelling Unit
 - "Building, Principal: The building or structure that is occupied by the principal use."
 - "Dwelling Unit: A building or portion of it designed and used for residential occupancy by a single household and that includes exclusive sleeping, cooking, eating and sanitation facilities. Buildings with more than one kitchen shall be considered multi-dwelling structures."
- 3. Approval Criteria e. is confusing. "Adequate resources, (e.g. schools, utilities, roads) exist for the construction and efficient operation of the facility." What does this mean?
- 4. Is the list of submittals going to be codified for this? We don't currently don't have any list of project submittals in our LDC. I know other jurisdictions do, but ours does not. I think it would benefit us to work that into the code eventually so people don't think we're requiring extra stuff, as we're often accused of.
- 5. Should we add an exception for community solar gardens under the setbacks?

1/30/24 Sign In Please PRO 2024-0022 Public Open House Utility Production Name Email Code Amendment. Nicholes RAranda Chris Weaver s. chris. Wower @ gmail.com Charlie + Mary Sealing Charlie + Jourie Post Sealings @ acsol, net Chasmop@bresnen.net Steve Allerton Tom MSaosko Shaller ton Q gunail. con THOSMCCLOSKEY @ GNAIL. COM Carol Hawkins charlee. brady @gmail. com Brain Johnson brent. got @ mencounty. US elaine. johnson craig@gmail.com charlee.brady@gmail.com mike Hawkins 07 Plevon Daol. com /villaire gmail. com wastre colorado etoros No C bres Nami N.Y. Peter LeVon Lou Villaire Frank Nemanich Ø Dan Gaug clarine jourson cring aby mail.com Kanga 424 @msn. cim Shann Ferry EVSadre Egmail wm ERIKA SATIS Like Ryne Like. Rome on Such. com -sug Wlist cully and krista @gmail.com yllen & Krista How ARd Rondowerlde 6mail.com RONDO BURCHEIER Jim & MAURCEN DelAny Jolelany 58 eguail.com Scat Geilfuss scotthe Qqueity. org



2024-0022 Utility, Production LDC Amendment Sean T. Norris, Planning Manager

Mesa County Public Open House January 30, 2024

COUNTY Community Development Department Planning Division



An amendment to the Mesa County 2020 Land Development Code to add the category of Utility, Production and associated definitions to the Land Development Code.

The purpose of this code amendment is to clarify what is and is not allowed for Utility Production with respect to the production and generation of electricity, including but not limited to solar facilities. PRO2024-0022 Utility, Production LDC Amendment



Community Development Planning Division

Schedule for the Code Amendment Process

SOLA		MELINE	
JAN. 30, 2024 Public Open House	① 1 - 7 p.m. ∰ ♀ 200 S. Spruce	Presentations 1:30, 3:30, 5:30 p.m. e St., Main Conference Room	
FEB. 7, 2024 Code Focus Group Re	view		
FEB. 8, 2024 Planning Commissior Workshop	1 () 5:45 p.m.	200 S. Spruce St., Main Conference Room	
MARCH 21, 2024 Planning Commissior Hearing	0 () 6 p.m.	544 Rood Ave., Public Hearing Room	
APRIL 23, 2024 County Commissione Public Hearing	r 🕔 9 a.m. 🕻	544 Rood Ave., Public Hearing Room	

CC. Utility, Production

- 1. Applicability
 - a. The following standards shall apply to all new energy production facilities to regulate the development and surface impacts that these facilities may have on the public health, safety, and welfare for any of the following:
 - (1) Private energy facilities, with the following exception;
 - (a) Roof mounted systems;
 - (b) Facilities with a rated capacity of less than 100 kW, occupying no more than one half (.5) acre of land that will be used to produce electricity to on-site uses.
 - (2) Community solar garden; and
 - (3) Energy generation/production facility.
 - b. Any facility that exceeds the definition of a private energy facility or community solar garden shall be processed as an energy generation/production facility.

PRO2024-0022 Utility, Production LDC Amendment



Community Development Planning Division

- 1. Submittal Requirements
 - a. Narrative

The applicant will provide a narrative describing the proposed facility including but not limited to; general description of the proposal, the height and location of equipment and ancillary structures, health and safety, decommissioning, traffic analysis, construction schedule, type and location of interconnection, rated capacity,

b. Site plan

The site plan map shall be provided in a legible format and shall include but not be limited to the location and arrangement of screening, fencing, existing and proposed structures, equipment, roadways and access points, wildlife corridors, floodplain, easements, existing utilities, and connection to the electrical grid.

- c. Setbacks
 - (1) All structures must meet minimum street, side, and rear setback requirements for the zone district in which the proposed facility is to be located.
 - (2) One quarter (1/4) mile from a designated Scenic By-way.
 - (3) A minimum of two hundred (200) feet from any residential occupied structure.

PRO2024-0022 Utility, Production LDC Amendment



Community Development Planning Division

- a. Grading plan
- b. Elevations
- c. Traffic Study
- d. Fire Prevention and Safety Procedures
 - (1) The relevant Fire Protection District's adopted standards, based on current fire code, shall apply unless.
 - (2) A fire break or other facility perimeter design acceptable to the fire district shall be required to reduce or eliminate the interface risk from wildfire.
 - (3) Locked gates shall be installed every 300 feet on the inside of the perimeter fencing.
 - (4) A vegetation management plan shall describe the operator's methods to maintain vegetation inside the facility to a minimum level, which may include treatment, mowing, agrivoltaics or other methods of fuel reduction.

PRO2024-0022 Utility, Production LDC Amendment



Community Development Planning Division

a. Visual Mitigation

Reasonable efforts to mitigate visual impacts of an energy generation/production facility will be detailed in the project narrative. Visual impact mitigation may include opaque fencing, screening, berming, use of existing or planted vegetation of landscaping.

- (1) Solar System equipment shall be no higher than fifteen (15) feet at the solar panel mounting point. The height of the interconnection equipment may exceed 15 feet. Solar System Facilities within 50 feet of a property line of a property containing a residential occupied structure shall be designed with some form of visual mitigation, to include but not be limited to, opaque fencing, berming, or landscaping.
- b. Wildlife, Wetlands, Riparian Areas and Stream Channel Measures
 - (1) The Operator shall address the recommendations of Colorado Parks & Wildlife (CPW) that address any site-specific site conditions. The Applicant shall avoid constructing in CPW-mapped High Priority Habitats (HPH) to the maximum extent possible.
 - (2) Operator shall inspect the interior of the facility at least once weekly, to potentially free any trapped animals.

PRO2024-0022 Utility, Production LDC Amendment



Community Development Planning Division

a. Decommissioning Plan

At the time of application, Operator shall include a decommissioning plan for the facility which will include detailed plans for management and removal of equipment, mounting systems, above and underground utilities, equipment and facilities as follows:

- (1) Within six (6) months of ceasing operations, the operator shall complete decommissioning of the facility which will include removal of all aboveground and belowground equipment and structures and removal of any access roads and fire breaks.
- (2) Any equipment that cannot be recycled shall be properly disposed in accordance with all State and Federal regulations.
- (3) The site shall be revegetated in compliance with the property owner's specifications.

PRO2024-0022 Utility, Production LDC Amendment



Community Development Planning Division

a. Insurance

The owner/operator shall provide proof of general liability insurance with commercially reasonable amounts of coverage for the permitted facility. Facility owners/operators shall maintain such insurance in place through all times the facility is in operation.

b. Referral

Once a complete application has been submitted, County staff will refer the application for review to appropriate review agencies which may include; law enforcement, state and federal agencies, local municipalities, fire districts utility providers and others as may be deemed appropriate.

PRO2024-0022 Utility, Production LDC Amendment



Community Development Planning Division

1. Approval Criteria

In evaluating the proposal, the request shall comply with any conditions of approval and all applicable requirements of this LDC, including, but not limited to:

- a. The health, safety and welfare of the citizens of this jurisdiction will be protected and served;
- b. The facility will not adversely impact the physical, economic, or social environment, except as permitted in Chapter 6 Use Regulations as applicable. 6.
- c. When an adverse impact is expected to occur, reasonable modifications and programs and other reasonable mitigating actions will be implemented and maintained to minimize the degree of adversity of the impact;
- d. There exists a need, or a reasonably foreseeable need, for the facility as proposed;
- e. Adequate resources (e.g., schools, utilities, roads) exist, or will exist, for the construction and efficient operation of the facility;

PRO2024-0022 Utility, Production LDC Amendment



Community Development Planning Division

Amendment to Section 12.01 General

Fire Protection District: A Fire Protection District within Mesa County is defined as one which has been recognized by resolution as per C.R.S 32-1-102 (2022) by the BoCC.

Residential Occupied Structure: See Building, Principle see also Dwelling Unit.

Amendment to Section 12.04 Institutional And Civic Use Categories

- K. Utilities, Production
 - 1. Characteristics

A facility designed and operated for the generation, and distribution of electricity which use fossil fuels, solar energy, hydroelectric energy, geothermal energy, biomass energy or wind energy as a resource for the primary purpose of selling electricity generated to the electric power grid.

2. Accessory Uses

Accessory uses may include parking and control, monitoring, data or transmission equipment.

- 3. Exceptions
 - a. Does not apply to on-site generation equipment when such use is an accessory use as described in Section 6.02 A of this LCD.
 - b. Transmission lines, power plants, substations, and pipelines.
 - c. Utility production facilities with no occupied structures or full-time on-site employees are exempt from the requirements for potable water required in Section 8.09.

PRO2024-0022 Utility, Production LDC Amendment



Community Development Planning Division

Proposed Code Definitions

Additions to Section 12.01 Definitions

Energy Generation/Production Facility. A facility designed to generate electricity by the conversion of natural resources such as light, natural gas, or water with a rated capacity of more than two (2) Megawatts and/or occupying more than five (5) acres of land.

Private Energy Facility. A residential or business-scale energy conversion facility designed to generate electricity by the conversion of natural resources such as light, natural gas, nuclear, biomass or water with a rated capacity of two (2) Megawatts or less, occupying no more than five (5) acres of land, that produces electricity to on-site uses.

Community Solar Garden: A solar power generating facility designed to produce electricity with a maximum rated capacity of five (5) Megawatts or less and meets the definition contained within C.R.S 40-2-127. A community solar garden does not include battery storage equipment.

PRO2024-0022 Utility, Production LDC Amendment



Community Development Planning Division

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	Utility Service Facilities (underground)	٨	Å	A	Å	A	A	4	A	A	Å	A	A	A	Å	A	A	A	A	٨	٨	A	A	٨	A	A	A	
Utility, Basic 12.04 L	Utility Treatment, Production or Service Facility	c																	c	с		С	с	с	с			
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	Minor Utility Facility	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	А	A	A	A	A	A	A	A	A	

Proposed Code Table 6-1

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	All Others	С	С	C	С	С	c	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	c	С	С	
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PRO2024-0022 Utility, Production LDC Amendment



Community Development Planning Division

Questions?

2023-0244 CUP Rolling Hills Gravel Pit CUP



Community Development Planning Division

Comments and Contacts

Thank You

Public Comments are welcome and written comments are best.

Via the Mesa County Customer Portal https://www.mesacounty.us/departments-and-services/community-development/customer-portal



Or email to:

Sean Norris Mesa County Planning

Sean.Norris@mesacounty.us

PRO2024-0022 Utility, Production LDC Amendment



Community Development Planning Division

PUBLIC COMMENTS



Fwd: Mesa County Comment Form - Thomas Acker - 5875797734965304833

1 message

Linda Frasier <linda.frasier@mesacounty.us>

Mon, Apr 1, 2024 at 9:26 AM

To: mcbocc <mcbocc@mesacounty.us> Cc: Greg Moberg <greg.moberg@mesacounty.us>, Sean Norris <sean.norris@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, Amy Russell <amy.russell@mesacounty.us>, Rene Romero <rene.romero@mesacounty.us>

The comments below came in through the website Friday evening.

------ Forwarded message -------From: Anne Linger <anne.linger@mesacounty.us> Date: Mon, Apr 1, 2024 at 8:09 AM Subject: Fwd: Mesa County Comment Form - Thomas Acker - 5875797734965304833 To: MCAdmin <mcadmin@mesacounty.us>

This came into the website.

Thank you, Anne Linger

Web Administrator | Mesa County IT 970-683-4335 office or 970-589-0040 cell anne.linger@mesacounty.us

------ Forwarded message ------From: Jotform <noreply@jotform.com> Date: Fri, Mar 29, 2024 at 9:49 PM Subject: Re: Mesa County Comment Form - Thomas Acker - 5875797734965304833 To: <webmaster@mesacounty.us>



Mesa County Comment Form

Full Name	Thomas Acker
E-mail	ocoa_1953@yahoo.com
Phone Number	(970-) 260-9465
Subject	Section 6.02 CC Utility Production
Comment or question	As was pointed out in a missive by Concerned Citizens of Mesa County, The plan that you propose lacks some important features. Specifically: 1- There is no requirement for a bond to be put up for the rights to develop of an energy production facility for decommissioning. You should have learned from the plague of abandoned NG wells in our state and the efforts that the state and federal government is going to in order to remedy this situation, you as the County board should be acting to prevent similar

occurrences with this energy industry. 2- There is no height requirement for the panels. If an agricultural property owner is to produce ground crops or livestock while generating electricity (agrivoltaic) through photovoltaic cells, there needs to be a height requirement so agricultural production may proceed. 3- There is no fire prevention such as the "IFC regulations to safeguard life and property" and the need for proper commissioning and decommissioning and the guaranteeing bond. Given the terrible fires that occurred in CA and other locations due to poorly maintained power equipment, this document must prevent such occurrences here in Mesa County. Mesa County must be responsible in guaranteeing that solar energy production is done as safely and responsibly as possible.

Respectfully, Linda Frasier Administrative Assistant Mesa County Administration 544 Rood Avenue, Floor 3A Grand Junction, CO 81501 (970) 244-1885 mcadmin@mesacounty.us



Solar and Agriculture

2 messages

Wed, Feb 14, 2024 at 12:06 PM

Sean Norris <sean.norris@mesacounty.us>

Kathryn Bedell <kathy@roancreekranch.com>

To: Sean Norris <sean.norris@mesacounty.us>, cody.davis@mesacounty.us, Janet Rowland <janet.rowland@mesacounty.us>, "bobbie.daniel@mesacounty.us"

sobbie.daniel@mesacounty.us"

cody.davis@mesacounty.us, Janet Rowland <janet.rowland@mesacounty.us>, "bobbie.daniel@mesacounty.us"

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to a sobbie.daniel@mesacounty.u

I know the county is exploring the rulemaking of solar panel placements in the county. As an agricultural county and with the importance of agriculture to our community as demonstrated in the new county master plan, I have some suggestions as we move forward. When permitting panels on agricultural zoned land require that it is developed such that the land is sremains in agriculture and the water stays in place. For example, build panels high enough off the ground so grazing and/or farming can still take place under the panels. Crops and cattle or other livestock actually will appreciate the shade from our hot days. Do not leave the design up to the solar companies because they will do what is least expensive and leave us with blighted land, full of weeds or a dust bowl type situation. Write it in the rules. Attached is a recent opinion from a land manager in Chaffee County.

driving the solar train wisely.pdf 1552K

Janet Rowland <janet.rowland@mesacounty.us> To: Kathryn Bedell <kathy@roancreekranch.com>, Sean Norris <sean.norris@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Bobbie Daniel <bobbie.daniel@mesacounty.us> Wed, Feb 14, 2024 at 3:33 PM

Thanks for the feedback, Kathryn. We recently approved a solar farm that was an agrivoltaic system. I am anxious to hear how it does.

Sean can include your comments with the rest, to be reviewed in the public discussion.

Take care,

Janet

[Quoted text hidden]



Fwd: Feedback in Support of Future Solar Development

1 message

Bobbie Daniel

 bobbie.daniel@mesacounty.us>

 To: Sean Norris <sean.norris@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>

Tue, Jan 30, 2024 at 7:31 AM

------ Forwarded message ------From: Ben Murphy <bcmurphy21@gmail.com> Date: Mon, Jan 29, 2024 at 6:59 PM Subject: Feedback in Support of Future Solar Development To: <cody.davis@mesacounty.us>, <Bobbie.Daniel@mesacounty.us>, <janet.rowland@mesacounty.us>

Bobbie, Cody, and Janet,

As a resident of Mesa County and a climate conscious citizen, I am writing with the following requests and suggestions as related to future solar development in Mesa County. I hope the Commission expeditiously drives to a resolution which enables solar energy projects to proceed within reason, enabling the economic benefits to the local community and climate benefits to the world.

My preferred resolution:

- Changes to the Mesa County Land Development Code (LDC), including the addition of solar energy production projects to Sections 6 and 12, which allow reasonable development of solar energy projects.
- No extension of the existing moratorium, enabling local residents and businesses to capture the benefits of solar energy in the near term.
 - There is currently momentum behind advancing solar projects throughout the United States. This momentum is driven by consumer demand for renewable electricity, federal incentives, and local initiatives, among others.
 - Localities which adopt favorable but reasonable policies will capture a larger market share of projects and the associated benefits, while late movers may be entirely passed over as projects are sited elsewhere.

Local Benefits:

- County residents and businesses stand to benefit the local economy by reducing electricity costs. Per the DOE, new solar projects have achieved electricity costs at less than \$0.06/kWh and dropping.
 - In particular, projects supporting underserved communities, local schools, and municipal buildings help empower these communities and improve equitability.
- Solar power production projects further benefit the local economy by creating jobs.
 - The operation of solar power production facilities require limited upkeep, so the job creation is largely temporary. However, if Mesa County becomes an early adopter, ongoing projects could sustain a sizable workforce.
- Including solar power development in the LDC respects the rights of residents by giving landowners the ability to develop or sell their land as they see fit (within the bounds of the LDC)
- · Solar power developments are much lower in visual, community noise, and environmental impact than many other uses currently allowed in the LDC

Tenet to Consider:

- All conversions related to solar project moratoriums and changes to the Land Development Code should be fact based.
 - There is considerable misinformation around solar projects, leading to some hesitation from a small but vocal minority of county residents. Subject matter experts should be consulted to validate statements and allay concerns.
 - Additionally, the provisions required in the Use Specific Standards and Section 12 to ensure reasonable guidelines are included for development will require subject matter experts, potentially including input from project developers.

I appreciate your time and consideration on this matter.

Best regards, Benjamin Murphy 129 Majestic Ct Palisade, CO 81526 563-581-7225

Sincerely

Mesa County Commissioner (970) 244-1604







Comments for the Amendment to Section 6.02 Use Specific Standards

2 messages

Rondo Buecheler <rondoworld@gmail.com> To: Sean Norris <Sean.Norris@mesacounty.us>

To: Sean Norris, Mesa County Planning Comments for the Amendment to Section 6.02 Use Specific Standards

I am a member of the Palisade Tourism Advisory Board, My comment is as an individual and not representing the Tourism Advisory Board.

Please consider the following comments:

- Change 2. C. Setbacks (2) One quarter (¼) mile from a designated Scenic Byway to include local Scenic By-Ways.
 Local businesses and the Palisade Tourism Advisory Board are working to turn The Palisade Fruit and Wine Byway into an official designated Scenic Byway. The Board and local businesses have put considerable time and money into getting the Byway where it is today and is working on getting it an official designation. I feel that the economic benefit this Scenic Byway designation would provide Mesa County should be considered in this process.
- I would like to see the set back from a neighboring residential occupied structure increased, possibly consistent with oil and gas development. I feel that both the rights of the landowner and the rights of neighboring landowners need to be considered.
- Is it possible for Mesa County to be proactive in designating areas where this type of development is allowed and designate areas where it is not recommended? The County could consider access, view sheds, agrotourism, neighborhood density, connectivity, existing fire protection and a host of other considerations in creating this document.

Sincerely,

Rondo Buecheler 49271 KE Road Mesa, CO. 81643

Sean Norris <sean.norris@mesacounty.us> To: Rondo Buecheler <rondoworld@gmail.com> Tue, Feb 6, 2024 at 10:59 PM

Wed, Feb 7, 2024 at 7:36 AM

Thank you for the comments Rondo. Your concern for Palisade is important to us. I would point out that this amendment is not specific to Palisade, as it will apply to all of Mesa County.

Sean T. Norris

Manager

Planning Department

970-254-4183

[Quoted text hidden]



Fwd: Mesa County Utility Production Draft Comments

2 messages

Rondo Buecheler <rondoworld@gmail.com> To: Sean Norris <sean.norris@mesacounty.us>

Sorry this is so late, thanks for all your hard work on this code. Rondo

Land Development Code Utility Production Final Draft Comments for Mesa County Planning and the Mesa County Commissioners:

Mesa County Planning Department has worked closely with both Solar representatives and community members during many public forums to create a drafted amendment for the Land Development Code that regulates solar development. I feel that several issues need to be readdressed before this code is adopted.

Fire Prevention and Safety Procedures

(1) The relevant Fire Protection District's adopted standards, based on current fire code, shall apply.

There are no fire protection requirements to prevent wildfires and protect surrounding properties for any developments that lay outside an incorporated fire district, nor any automatic shutoff requirements to contain large electrical fires. I would ask that something is added to require Solar operators to work with the incorporated fire districts to create fire protection requirements and a plan.

Decommissioning Plan

The proposed plan states: At the time of application, Operator shall include a decommissioning plan for the facility which will include detailed plans for management and removal of equipment, mounting systems, above and underground utilities, equipment and facilities as follows:

I would like to see a bond requirement for decommissioning/cleanup to prevent vast tracts of land from becoming waste sites when companies go bankrupt or choose to leave. I personally had a gas well on my property in Mesa County and when the company finished production they sold the well to a company that went bankrupt. It then took 5 years to get the well site reclaimed and the state ended up paying for it.

Agrovoltaics

New definition: Agrivoltaics: Agrivoltaics, agrophotovoltaics, agrisolar, or dual-use solar is the simultaneous use of land for both solar panels and agriculture.

I feel the definition of "Agrovoltaics" has been stripped of the "agricultural production" requirement, allowing solar electricity production to replace agricultural production anywhere in the valley. Result: if you can perform any type of agricultural production on your land, you can now also develop any size solar utility plant as your land will fit – even hundreds of acres. It can be as tall as you want too since agrivoltaics are exempt from height restrictions.

Thank you for your careful consideration in this matter vital to our community.

Rondo Buecheler 49271 KE Road Mesa, CO 81643

Sean Norris <sean.norris@mesacounty.us> To: Rondo Buecheler <rondoworld@gmail.com>

Thank you Rondo

This is included in the public comments for consideration.

Sean T. Norris

Manager Planning Department 970-254-4183 Thu, Apr 4, 2024 at 2:12 PM

Fri, Apr 5, 2024 at 8:55 AM



[Quoted text hidden]



E-mail copy of comments

1 message

chasmop@bresnan.net <chasmop@bresnan.net> To: sean.norris@mesacounty.us

Tue, Jan 30, 2024 at 5:27 PM

Hi Sean,

Very informative meeting today, thanks for that! I feel much better to know that the planning dept. is so strongly involved in this. I sometimes worry about the politics involved with this sort of issue. I DID get a chuckle when you said you knew you were doing your job right when EVERYBODY was mad at you! As suggested, here is an electronic copy of my comments. Thanks, Charlie Post 653 N. Terrace Drive Grand Jct. CO 81507 970-241-1383

To: Mesa County Commissioners, Mesa County Planning Commission, et al

From: Charlie Post, Mesa County resident since May, 1979. (Orchard Mesa and Redlands areas)

RE: Solar Moratorium

I appreciate the work entailed in opening this can of worms. That having been said, I would hope that this moratorium can be kept quite brief. It SHOULD be recognized as a dynamic process while a significant amount of land use planning is developed and implemented. Rules that are too brittle will inhibit the progress we so drastically need to move to "utility scale solar" applications.

I believe that the main points are as follows:

1) Development of this "perfect fit" resource is critical to moving us into a cleaner energy future. Mesa County is well suited to the development of solar energy facilities.

2)Updating the land use codes and allowing Utility Scale Solar (USS) projects to move forward is a significant benefit to consumers as well as assisting in the issue of climate change.

3) The new codes should strike a balance between the rights of the property owner and the rights of those impacted. Throughout my interactions with the planning commission over the years, it has been decidedly in the favor of those who wish to develop. I would simply ask that, since that has been the view in the past, it be allowed to be applied to USS projects.

4) Solar projects provide immediate benefits by the creation of short term jobs to construct them. Long term benefits include tax revenue and reduced costs to the consumer. It should also be noted that the "remediation" of a solar project at the end of it's usable life span is significantly easier and less expensive than remediation of a petroleum extraction site.

5) We must limit the moratorium to the 6 month time frame. If it lasts longer than that, there is significant potential to lose out on current Federal funding that could pump a good amount of money into the local economy.

6) Examine the documentation of nearby Counties who have developed solar land use codes. By doing so, you can build on the work that has already been done and move forward quickly

I would like to respond to a comment Ms Rowlands made in response to my questioning why we even needed a moratorium since we hadn't had one for oil and gas production. She stated that we had "many rules in place for oil and gas". That is correct. But the point is, we never saw a moratorium while those land use codes were waiting to be updated. Therefore, we should treat solar the same way. You should be fair in the application of rules.

Another point that needs to be raised is that I would really like to see the BOCC work to develop a public/private partnership with some USS. We truly are in a great geographic location for the development of solar energy. If the County worked with incoming groups from the outset, you would have the ability to pick and choose the most beneficial, least intrusive siting of projects. I really think this point needs to be examined every bit as closely as the welcoming of the Cost to the Grand Valley. The results could be equally beneficial.
To: Mesa County Commissioners, Mesa County Planning Commission, et al

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Charlie Post 653 NiTerrace Drive Grand tet. Co 81502



Fwd: Feedback in support of future solar energy development in Mesa County

1 message

Bobbie Daniel

 sobbie.daniel@mesacounty.us>
 To: Sean Norris <sean.norris@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>

Tue, Jan 30, 2024 at 7:32 AM

------ Forwarded message -------From: Cody Davis <cody.davis@mesacounty.us> Date: Tue, Jan 30, 2024 at 7:17 AM Subject: Re: Feedback in support of future solar energy development in Mesa County To: Chloe Rittenhouse <chloerittenhouse@gmail.com> Cc: <Bobbie.Daniel@mesacounty.us>, <janet.rowland@mesacounty.us>

Chloe, Thank you for your thoughts. It's much appreciated! Cody Davis | Mesa County Commissioner



Office: 970-244-1605 Cell: 970-640-4330 Email: cody.davis@mesacounty.us 544 Rood Ave | Grand Junction | CO 81501

On Mon, Jan 29, 2024 at 7:09 PM Chloe Rittenhouse <<u>chloerittenhouse@gmail.com</u>> wrote: Hi Commissioners,

As a resident of Mesa County and climate conscious citizen, I am writing to share my thoughts and suggestions on future solar development in the county. I truly hope that the Commission is able to capture the local economic benefits and regional/global climate benefits, by quickly moving past the current moratrum and deploying a well defined plan for solar development.

As you consider your next steps, I would ask you to pursue the following actions:

- Not extend the existing moratorium, which will ensure that local businesses and residents are able to capture the benefits of increased solar energy production in the short-term. Given the current momentum in advancing solar projects in the US, including federal incentives and local initiatives, there is great time sensitivity to making progress quickly in order to capture the most gain. Delaying may negatively impact consumer sentiment, and would mean missing out on the most lucrative financial benefits, which will likely not be continued indefinitely.
- Including the addition of solar energy production projects to Sections 6 and 12 in the Mesa County Land Development Code (LDC)

There are many local benefits of increased solar production to consider.

- County residents and businesses stand to benefit the local economy by reducing electricity costs. Per the DOE, new solar projects have achieved electricity costs at less than \$0.06/kWh and dropping. In particular, projects supporting underserved communities, local schools, and municipal buildings help empower these communities and improve equitability.
 - Note: Not all solar projects are developed to support local communities; some are developed through Power Purchase Agreements in which third parties receive the cost savings and environmental
 attributes. These projects still provide second order benefits to the local community.
- Solar power production projects further benefit the local economy by creating jobs.
 - Note: The operation of solar power production facilities require limited upkeep, so the job creation is largely temporary. However, if Mesa County becomes an early adopter, ongoing projects could sustain a sizable workforce.
- Including solar power development in the LDC respects the rights of residents by giving landowners the ability to develop or sell their land as they see fit (within the bounds of the LDC)
- Solar power developments are much lower in visual, community noise, and environmental impact than many other uses currently allowed in the LDC

Additional reflections in observing the current discussion:

• All conversions related to solar project moratoriums and changes to the Land Development Code should be fact based.

- There is considerable misinformation around solar projects, leading to some hesitation from a small but vocal minority of county residents. Subject matter experts should be consulted to validate statements and allay concerns.
- Additionally, the provisions required in the Use Specific Standards and Section 12 to ensure reasonable guidelines are included for development will require subject matter experts, potentially including input from project developers.

Thanks for your consideration, Chloe Rittenhouse Palisade Resident- 129 Majestic Ct. Palisade, CO 81526

Sincerely,

Bobbie Daniel Mesa County Commissioner (970) 244-1604





Re: Comments on the Drafted Amendment to Section 6.02 Use Specific Standards in Mesa County's Land Development Code

To: Mesa County Board of County Commissioners and Staff

My name is Jeremiah Garrick and I am the Manager of Community Engagement with the Colorado Solar and Storage Association (COSSA). COSSA is extremely familiar with Colorado land use codes and regulations that impact solar development, and actively tracks proposed changes that impact the industry. We appreciate that there has been a recent interest from counties in revisiting land use for renewable energy. We also appreciate that there will be additional opportunity for input as the first draft of the amendment to Section 6.02 evolves.

Overall, the drafted amendment to Section 6.02 – Use Specific Standards – is written well and addresses many important aspects of development. The purpose of these comments is to underscore some initial concerns and provide suggestions on the first draft. There are some requirements in the drafted code that are open-ended and could benefit from clarification. COSSA wanted to send over suggestions on the initial draft to provide suggestions as the County staff and BOCC move forward with edits at the February 7th Working Group.

Every community is different and has different priorities, however land use codes should be written in a manner that protects the rights of an individual to do what they choose with their private property, as long as they operate within reasonable and clear guidelines. As the mix of energy on the grid is changing and will continue to do so in the coming decades, there is a need for the development of renewable energy across the state to meet our energy demand, goals, and to protect Colorado's air, wildlife, and environment.

Comments on Drafted Language:

Applicability

CC.1.a.(1)(2) – Applicability

- 1. Why are community solar gardens (CSGs) written in as an exception to these provisions? CSGs are functionally no different than any other solar facility. They utilize the same equipment, have the same appearance, require the same operations and maintenance, etc.
 - a. COSSA suggests removing the size threshold and reference the CRS 40-2-127 for CSG definitions and sizes. See notes in Definitions, below.

Submittal Requirements

CC.2.b. - Site Plan

1536 Wynkoop St. Suite 104, Denver, CO 80202

(303)333-7342

- 2. The submittal requirement of including "wildlife corridors" in the site plan map would benefit from clarification on what the definition of "wildlife corridors" is, to avoid any debate or confusion.
 - a. Is this determined by Colorado Parks and Wildlife (CPW) or some other method?

CC.2.c.(2) - Setbacks

- 3. COSSA suggests revising CC.2.c.(2) to "(2) One quarter (1/4) mile from a designated Scenic Byway. Unless existing or installed screening consistent with the surroundings exists or is planned."
 - a. The simple setback may be too restrictive given the likelihood of robust infrastructure following the byway and the byway's disregard for the differentiation between irrigated and unirrigated lands.
 - i. Solar is one of the best uses on unirrigated lands.

CC.2.c.(3) – Setbacks

- 4. Similar to above, COSSA suggests revising CC.2.c.(3) to "(3) A minimum of two hundred (200) feet from any residential occupied structure. Unless written consent from impacted residence owners is received, or adequate screening is installed."
 - a. This provision (and the above) is akin to that of Weld County and has been successful in practice.

CC.2.d. – Grading Plan

5. Is the grading plan to be completed by a professional engineer? At what submittal stage in the design process is this to be presented? (e.g. 30%, 60%, etc.)

CC.2.g.(3) Fire Prevention and Safety Procedures

- 6. The requirement of gates installed every 300 feet on the inside of the perimeter fencing is not a practical blanket provision. COSSA suggests expanding and/or revisiting this provision.
 - a. Emergency access is a critical safety consideration, but one entrance large enough for a wildland fire truck with appropriate turnarounds inside the fence should be sufficient.
 - i. A qualified engineer can assess specific requirements for emergency vehicle access and design to find effective solutions.
 - 1. This approach is commonly accepted in many jurisdictions and aligns with firefighting best practices.
 - ii. Allowing for flexibility in design and site-specific considerations can help in determining the most practical approach. Every effort could be made to also provide a through passage (i.e. ability to exit the fenced area without turning around).

CC.2.h.(1) – Visual Mitigation

7. "Solar System Facilities within 50 feet of a property line of a property containing a residential occupied structure shall be designed with some form of visual mitigation, to include but not be limited to, opaque fencing, berming, or landscaping."

1536 Wynkoop St. Suite 104, Denver, CO 80202 (303)333-7342

COSSA.CO

- a. While this drafted language allows for some creativity and flexibility in visual mitigation, it is overall too broad. The use of the term "property line" would require screening even if the residence is thousands of feet away from the solar facility.
- b. To align with best practices, COSSA suggests addressing this via a provision such as the above suggestion, see above suggestion on CC.2.c.(3) Setbacks.
 - i. This would already require a certain setback from a residential occupied structure and allow flexibility if "written consent from impacted residence owners is received, or adequate screening is installed."
- c. Additionally, the use of the term "landscaping" here is too broad. Solar is commonly installed on unirrigated land, which in much of the drier regions in Colorado can realistically be home to some species of native grasses, but limited vegetation that would be tall enough to screen the solar facility. COSSA suggests changing or clarifying "landscaping" within this provision.

CC.2.i.(2) – Wildlife, Wetlands, Riparian Areas and Stream Channel Measures

- 8. Rather than require a weekly inspection for animals or wildlife, a better solution would be to require wildlife friendly fencing where possible.
 - a. In nearly all situations if the animals can get in, they can get out.
 - Sending a solar operator into an array to free potentially trapped animals could be very dangerous for the animals and the people, especially without the proper expertise.
 Wildlife friendly fencing solves this issue.
 - c. Solar facilities have been experimenting with different forms of wildlife friendly fencing for years and have seen great success with wildlife permeable fencing that has larger holes than chain link fence allowing racoons, rabbits, squirrels, foxes, etc. to pass through. These fences are also compliant with National Electrical Code requirements.

CC.2.j.(1) – Decommissioning Plan

- 9. To align with common practice and industry standards, COSSA suggests revising CC.2.j.(1) to the following:
 - a. "(1) Within twelve (12) months of ceasing operations, the operator shall complete decommissioning of the facility which will include removal of all aboveground and belowground equipment to a depth of at least 12" and structures and removal of any access roads and fire breaks, excepting those requested to remain by the property owner."

CC.2.j.(3) – Decommissioning Plan

- 10. Revegetation of the site is a common part of a decommissioning plan. COSSA suggests revising CC.2.j.(3) to the following:
 - a. "(3) The site shall be revegetated in compliance with the property owner's specifications. Not to exceed the extent of vegetation that existed prior to development of the facility."

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Approval Criteria

Overall, the intent and purpose of this section seem good. We had a couple of questions regarding the purpose of including the specific language below. The broad approval criteria may lead to subjective interpretations. Clearer and more specific criteria will provide developers with a better understanding of the standards they need to meet for approval.

CC.3.b. – "The facility will not adversely impact the physical, economic, or social environment, except as permitted in Chapter 6 Use Regulations as applicable."

- 11. The drafted language in CC.3.b is not seen in other approval criteria within Mesa County's Land Development Code, aside from subdivision provisions including the social environment piece.
 - a. Is there reason to believe a solar facility will have impacts on the physical, economic, or social environment above other forms of development with more real and intensive impacts? Solar is broadly regarded as one of the least intensive land uses.
- **12**. Does this language open up approval decisions to discretionary arguments even if a developer feels they have met all other provisions in this code?
- CC.3.d. "There exists a need, or a reasonably foreseeable need, for the facility as proposed;"
 - 13. Similar to above, this language does not appear in approval criteria of other uses in Mesa County's Land Development Code. It seems odd for a developer or property owner to have to prove that there is a need for the facility.
 - a. What realistically would qualify as a "need" or a "reasonably foreseeable need"?
 - i. Does economic growth and the need for locally generated renewable energy check the box? What are the expectations here that a developer is supposed to meet?
 - ii. COSSA suggests providing guidance on what the County is looking for here and clarification of the intent of this provision. This will help developers better understand and address this criterion.
 - 1. Otherwise, COSSA suggests removing CC.3.d.

CC.3.e. – "Adequate resources (e.g., schools, utilities, roads) exist, or will exist, for the construction and efficient operation of the facility;"

- 14. Similar to the other approval criteria, this language does not appear in other parts of the Mesa County Land Development Code. For that reason, more clarification here would be beneficial.
 - a. Who determines "adequate resources"?
 - b. Solar development makes limited long-term demands on local community resources, so this approval criteria feels overly burdensome given the projected social impact.
 - c. Is the developer expected to create some sort of report regarding available resources within the County? If so, why would this include schools?
 - i. COSSA suggests removing or clarifying CC.3.e

Additions to Section 12.01 – Definitions

Energy Generation/Production Facility – "A facility designed to generate electricity by the conversion of natural resources such as light, natural gas, or water with a rated capacity of more than two (2) Megawatts and/or occupying more than five (5) acres of land."

- 15. How are projects outside of these boundaries permitted?
 - a. It would be useful to lay out the procedure or point to the correct section to permit projects between 100kW and 2MW and projects on <5 acres.
- **16.** Additionally, given how technology changes, referencing electrical output in a land development code can become outdated. COSSA believes it is best practice to reference the size of the project in acreage and point developers to the process for projects of that land size.

Private Energy Facility – "A residential or business-scale energy conversion facility designed to generate electricity by the conversion of natural resources such as light, natural gas, nuclear, biomass or water with a rated capacity of two (2) Megawatts or less, occupying no more than five (5) acres of land, that produces electricity to on-site uses."

- 17. COSSA suggests revisiting or updating the term "Private Energy Facility" to avoid confusion.a. Any non-utility energy facility is likely "private."
- 18. Additionally, see above for sizing recommendations.

Community Solar Garden – "A solar power generating facility designed to produce electricity with a maximum rated capacity of five (5) Megawatts or less and meets the definition contained within C.R.S 40-2-127. A community solar garden does not include battery storage equipment."

- 19. COSSA has a few concerns about the definition provided for Community Solar Gardens.
 - a. As stated above CSGs are functionally no different than any other solar facility. They utilize the same equipment, have the same appearance, require the same operations and maintenance, etc.
 - b. If a size is going to be specified, it should be in "alternating current" rating or acres.
 - i. COSSA suggests removing the electrical output size threshold and reference the <u>CRS 40-2-127</u> for CSG definitions and sizes. This will eliminate issues of changes in technology in the future.
 - c. Using the updated definition COSSA suggests CSGs be allowed uses in the industrial zone districts and conditionally permitted uses in business, commercial, and MUC zone districts.
 - d. Finally, lithium-ion battery storage equipment is likely to be included with CSGs in Colorado in the near future. The impact on additional area is minimal, and it improves the reliability of the facility, allowing it to generate power when its most needed and allows more control over the energy.
 - i. If not here, where are battery energy storage systems coupled with CSG contemplated?

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ii. Similarly, is there a separate process for permitting battery energy storage systems for Energy Generation/Production Facilities in the existing Mesa County Land Development Code?

Conclusion

In conclusion, I want to express my gratitude for your time and consideration of the comments provided on the drafted amendment to Section 6.02 of Mesa County's Land Development Code. COSSA aims to contribute constructively to the dialogue surrounding land use regulations and their impact on the solar industry. Our intent is to foster a collaborative process that ensures the effective development of renewable energy projects while respecting the unique priorities of each community.

We appreciate the opportunity to provide initial feedback on the draft, recognizing that this is an ongoing process subject to further refinement. COSSA appreciates the opportunity to be a part of this process thus far and going forward. In summary, these comments are offered with the intention of fostering an environment that supports responsible solar development while respecting community priorities. We look forward to continued collaboration and appreciate your dedication to refining land use codes with a balanced approach.

Thank you for your attention to these matters, and COSSA welcomes further discussions to enhance the clarity and effectiveness of the proposed amendments.

Sincerely, Jeremiah Garrick COSSA – Manager of Community Engagement



Mon, Feb 19, 2024 at 12:12 PM

A few clarifying questions...

3 messages

Cully and Krista <cullyandkrista@gmail.com>

To: Sean Norris <sean.norris@mesacounty.us>

Hi Sean,

Thanks for sending out the updated draft! We're getting caught up with the various changes that have been made and want to make sure we are understanding the changes thus far....

A few questions...

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2) Regarding this section:

image.png

How does one find out the "relevant Fire Protection Districts adopted standards, based on current fire code" -- in other words, where would we go/who would we talk to to understand this more? And, does this also apply to "Community Solar Gardens" (if not already answered in the first question).

3) Regarding this section:

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Can you explain a bit more what this means: "the health, safety and welfare of the citizens of this jurisdiction will be protected and served" -- in other words, what would be considered appropriate/not appropriate as it relates to the health, safety and welfare of the citizens.... And, does this also apply to "Community Solar Gardens" (if not already answered in the first question).

Thanks! Krista

Utility Production LDC Amendment v.2-16-24.docx

Sean Norris <sean.norris@mesacounty.us> To: Cully and Krista <cullyandkrista@gmail.com>

Krista,

Your images did not come through. I want to be sure I am answering the right questions. Could you resend please. We use Microsoft products.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]

Cully and Krista <cullyandkrista@gmail.com> To: Sean Norris <sean.norris@mesacounty.us>

Apologies!

Tue, Feb 20, 2024 at 11:32 AM

Tue, Feb 20, 2024 at 11:04 AM

- d. Fire Prevention and Safety Procedures
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Question #3 image:

3. Approval Criteria

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Thanks, Krista

[Quoted text hidden]



Thu, Feb 1, 2024 at 8:31 AM

Follow Up Questions re: Community Solar

2 messages

Cully and Krista <cullyandkrista@gmail.com> To: Sean Norris <sean.norris@mesacounty.us>

Hi Sean,

Thanks again for the informative meeting on Tuesday night. It was great meeting you!

We're reviewing the files and can't remember what was said about this

1) For community solar gardens - if we remember correctly, the state says they cannot be processed as a "basic utility" -- is that correct? If yes, can you please remind me what they will be processed as? And what are the requirements of that category?

2) Will community solar gardens be required to meet all Fire Protection standards outlined in section 8.10 of the Land Development code? If so, will there be any fire code exceptions for them?

To elaborate, below are three specific examples that come to mind...

- IFC states "an approved fire apparatus access road with asphalt, concrete or other approved during surface capable of supporting the imposed load of the fire apparatus weighing up to 75,000 pounds" does this mean the applicant will be required to pave a road if the only current way to access the site is via a dirt road with road base?
- IFC states that the requirements for a dead-end fire apparatus access road that is over 750 ft long will require "special approval" when it comes to the width of the road and the turnaround required is there a standard used here? Or how is the special approval determined?
- Section D104.2 (Buildings exceeding 62,000 square feet in area) states that any "buildings or facility having a gross building area of more than 62,000 square feet shall be provided with two separate and approved fire apparatus access roads" does this mean that any community solar farm that basically takes up about 1.5 acres or more (ie: over 62,000 square feet) will be required to have two separate and approved fire apparatus access roads?

Thanks again for everything! Krista and Cully

Sean Norris <sean.norris@mesacounty.us> To: Cully and Krista <cullyandkrista@gmail.com> Thu, Feb 1, 2024 at 1:17 PM

Great questions, many of which are not resolved as yet, so thank you.

Colorado Revised Statute for community solar gardens is C.R.S 40-2-127 if you want to read it directly.

Sean T. Norris

Manager Planning Department 970-254-4183



[Quoted text hidden]



Thu, Feb 1, 2024 at 8:31 AM

Follow Up Questions re: Community Solar

5 messages

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- Section D104.2 (Buildings exceeding 62,000 square feet in area) states that any "buildings or facility having a gross building area of more than 62,000 square feet shall be provided with two separate and approved fire apparatus access roads" does this mean that any community solar farm that basically takes up about 1.5 acres or more (ie: over 62,000 square feet) will be required to have two separate and approved fire apparatus access roads?

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Sean T. Norris

Manager Planning Department 970-254-4183



[Quoted text hidden]

Cully and Krista <cullyandkrista@gmail.com> To: Sean Norris <sean.norris@mesacounty.us>

Ah, gotcha and that makes sense. Thanks.

A part of the reasoning for our questions was to confirm that we are understanding code correctly. Let me ask the questions in a different way...

For the One Energy project that was recently approved...

Fri, Feb 2, 2024 at 8:33 AM

Thu, Feb 1, 2024 at 1:17 PM

85

To elaborate, below are three specific examples that come to mind...

- IFC states "an approved fire apparatus access road with asphalt, concrete or other approved during surface capable of supporting the imposed load of the fire apparatus weighing up to 75,000 pounds" does this mean that One Energy will be required to pave a road if the only current way to access the site is via a dirt road with road base?
- IFC states that the requirements for a dead-end fire apparatus access road that is over 750 ft long will require "special approval" when it comes to the width of the road and the turnaround required. I don't know if this is the case with One Energy, but lets say for sake of example purposes, it is is there a standard used here? Or how is the "special approval" determined?
- Section D104.2 (Buildings exceeding 62,000 square feet in area) states that any "buildings or facility having a gross building area of more than 62,000 square feet shall be provided with two separate and approved fire apparatus access roads" does this mean that since the solar farm will take up over 62,000 square feet, they will be required to have two separate and approved fire apparatus access roads?

Also, for what is worth, I could not find anything related to fire code in the Colorado Revised Statute, so I called the state (303.866.2045) and the rep said fire protection requirements are deemed by the county the community solar garden is in. I imagine you'll probably need more than just someone saying this, but wanted to pass that along in case it is helpful :)

Thanks! Krista [Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us> To: Cully and Krista <cullyandkrista@gmail.com> Fri, Feb 2, 2024 at 9:30 AM

Fri, Feb 2, 2024 at 10:06 AM

Krista,

One Energy has not submitted an application for a site plan. As such, we are not going to speculate on what they will be submitting and then speculate what will be required. Our reviews look at each application when it is submitted and evaluated based on the Code that is in place at that time. As you know, we are currently not accepting new applications until we have new code. So it is impossible to say what will be required until the Commissioners rule on the amendments, and totally unfair to an applicant to predetermine the requirements of an application that has not been submitted to comply with Code that is as yet unapproved.

So, at this time, I can not answer these questions with speculative answers.

Thanks for making me think though.

Sean T. Norris

Manager Planning Department 970-254-4183



[Quoted text hidden]

Cully and Krista <cullyandkrista@gmail.com> To: Sean Norris <sean.norris@mesacounty.us>

Thanks. I get it.

Similar questions, but let's use the solar farms that have been approved/gone through the process....

1) We're the approved solar farms required to follow Fire Protection standards outlined in section 8.10 of the Land Development code? If not, why not?

- IFC states "an approved fire apparatus access road with asphalt, concrete or other approved during surface capable of supporting the imposed load of the fire apparatus weighing up to 75,000 pounds" when applicable with the approved solar farms, was the solar farm required to pave the road when the only way to access it was via a dirt road with road base? If yes, what is/are the location(s) of the solar farm(s)?
- IFC states that the requirements for a dead-end fire apparatus access road that is over 750 ft long will require "special approval" when it comes to the width of the road and the turnaround required. When applicable with the approved solar farms, what were the terms of the special approval? What are the location(s) of the approved solar farm(s) that had this requirement?
- Section D104.2 (Buildings exceeding 62,000 square feet in area) states that any "buildings or facility having a gross building area of more than 62,000 square feet shall be provided with two separate and approved fire apparatus access roads" for approved solar farms that were over 62,000 square feet in size, did this rule apply to them? If so, what is/are the location(s) of these approved solar farm(s)

Thanks! Krista [Quoted text hidden]



Mon, Feb 19, 2024 at 12:12 PM

A few clarifying questions...

7 messages

Cully and Krista <cullyandkrista@gmail.com>

To: Sean Norris <sean.norris@mesacounty.us>

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Utility Production LDC Amendment v.2-16-24.docx

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Apologies!

Tue, Feb 20, 2024 at 11:32 AM

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Thanks, Krista

[Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us>

Tue, Feb 20, 2024 at 1:38 PM

To: Cully and Krista <cullyandkrista@gmail.com>

Krista,

1. All site plans go through the same approval process. The only difference would be the Conditional Use Permit process for utility scale (not Solar Garden or Private) which is step 1. Then those also go through a site plan approval process.

2. There are no specific fire codes for solar installations. The fire and building codes for electrical are most relevant. One would have to discuss with the relevant Fire Protection District as to the application of fire code and to the building department as to electrical and building codes.

3. Health, Safety and Welfare refer to proven hazards to the community. Specific examples might be a long and not necessarily inclusive list, but might include risk of explosion, chemical exposure of proven toxicity, and other such risks from more industrial applications, wherein those are relegated to industrial zoning districts to protect the general public.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



On Mon, Feb 19, 2024 at 12:12 PM Cully and Krista <cullyandkrista@gmail.com> wrote: [Quoted text hidden]

Cully and Krista <cullyandkrista@gmail.com> To: Sean Norris <sean.norris@mesacounty.us>

Cully and Krista <cullyandkrista@gmail.com>

Sean-

Is Mesa County considering the same items of opposition received for the Sobre El Rio CUP process for this moratorium?

If not, will concerned citizens need to resubmit the same documentation sent for that project to be considered for the current moratorium?

Thank you.

[Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us> To: Cully and Krista <cullyandkrista@gmail.com> Wed, Feb 21, 2024 at 3:14 PM

The moratorium was established to give Planning time to create new code to regulate utility production. What we are preparing is that new code, not a moratorium.

That said, several of the residents that were opposed to the One Energy CUP amendment near Sobre El Rio are making comments with respect to the creation of this new code, so in effect, those concerns are represented in the dialog. I believe you understand that. Also, this code will, as you know, cover all of Mesa County and is not specific to any particular area.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



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Public Comments to be Added and Considered for Next Workshop (PRO2024-0022)

2 messages

Cully and Krista <cullyandkrista@gmail.com> To: Sean Norris <sean.norris@mesacounty.us> Mon, Feb 26, 2024 at 9:31 AM

Sean,

The dialogue on fire protection during last week's workshop failed to hit the mark. The immediate dismissal of legitimate public apprehensions and unwarranted acceptance of solar companies' perspectives was alarming. It's clear that the county's bias towards solar farms overlooked community concerns. We must revisit fire protection for the people of Mesa County when a solar facility is proposed near residential structures.

Please include the attached public comments for consideration at the next workshop. Though we might not be able to participate live, our points are clearly articulated in the document, including suggestions for code revision. All comments are backed with what we've found in our research and all sources are cited in the document.

-Cully and Krista

Solar Facility Public Comments_ Fire Protection .pdf 1271K

Sean Norris <sean.norris@mesacounty.us> To: Cully and Krista <cullyandkrista@gmail.com>

Thank you for the comments.

Here are some interesting certification testing that solar panels are required to undergo for your information.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



Planning Department

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2 attachments

Piec_61730-2_firetest_tuv-solar-modules.pdf 255K

☐ Solar Panel Flammabiltiy video.url

Mon, Feb 26, 2024 at 9:34 AM



Utility Production Draft

3 messages

Cully and Krista <cullyandkrista@gmail.com> To: Sean Norris <sean.norris@mesacounty.us>

Good Morning Sean,

Can we please get an electronic copy of the Utility Production Draft that was presented at the Planning Commission meeting on 3/21/24?

We may be missing it in the portal, but we only see a draft from 3/22/24 then another one from 3/26/24 (screenshot attached for clarity).

Thanks!

Record: PRO2024-0022

cand bevelopment code Ameridment

Document Type	File	Date
Other	🔁 Norris transmittal - Energy Production Amendment final draft.pdf	Added Mar 26, 2024
Other	Utility Production Final Draft 3-26-2024 (1).docx	Added Mar 26, 2024
Other	Energy Production Amendments - Draft 3-22-24.docs	Added Mar 26, 2024
Other	Utility Production (1).docx	Added Mar 26, 2024
Citizen Comment Letter	EP Gerrick 3-26-24 - Clarification Regarding Solar Code and PUD Parcels in Mess County.pdf Other versions	Added Mar 26, 2024
Other	C PlanningCommission03.21.24.mp4 Other versions	Added Mar 26, 2024
Citizen Comment Letter	Talbott 3-14-2024 - Fwdpdf	Added Mar 20, 2024
Citizen Comment Letter	🖾 mail.google.jpg	Added Mar 20, 2024
Citizen Comment .etter	COSSA Response to Mesa County Community Letter 3.12.pdf	Added Mar 14, 2024
		A

Sean Norris <sean.norris@mesacounty.us>

To: Cully and Krista <cullyandkrista@gmail.com>

That is because what you are looking for was published on March 8th as part of the legal ad for the Public Notice..

Fri, Mar 29, 2024 at 8:41 AM

Fri, Mar 29, 2024 at 10:30 AM

	-The original communication				
	Lawson 3-7-2024 - #PRO2024-0022.pdf	1 by sean.norris on Mar 11 Pages: 2	Status: Active External Access Public Access	Ξ	
	PRO2024-0022 TXT Land Development C	<u>1</u> by <u>rose lafoya</u> on Mar 8 Pages: 7	Status: Active External Access Public Access	Ξ	
0	Hutchins 3-8-2024 - project # PRO22U	1 by sean.norris on Mar 8 Pages: 1	Status: Active External Access Public Access	≡	

I would direct you to the document in MaintStar there.

https://h9.maintstar.co/mesacounty/api/AttachmentFile/GetOriginalFile/cfeb2a31-4846-4835-a4c7-4f38ac512e63/1

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]

Cully and Krista <cullyandkrista@gmail.com> To: Sean Norris <sean.norris@mesacounty.us>

Thanks! [Quoted text hidden]



Mon, Feb 19, 2024 at 12:12 PM

A few clarifying questions...

4 messages

Cully and Krista <cullyandkrista@gmail.com>

To: Sean Norris <sean.norris@mesacounty.us>

Hi Sean,

Thanks for sending out the updated draft! We're getting caught up with the various changes that have been made and want to make sure we are understanding the changes thus far....

A few questions...

1) Will "Community Solar Gardens" be held to everything bulleted in sections 2 (Submittal Requirements) and 3 (Approval Criteria) of the draft?

2) Regarding this section:

image.png

How does one find out the "relevant Fire Protection Districts adopted standards, based on current fire code" -- in other words, where would we go/who would we talk to to understand this more? And, does this also apply to "Community Solar Gardens" (if not already answered in the first question).

3) Regarding this section:

image.png

Can you explain a bit more what this means: "the health, safety and welfare of the citizens of this jurisdiction will be protected and served" -- in other words, what would be considered appropriate/not appropriate as it relates to the health, safety and welfare of the citizens.... And, does this also apply to "Community Solar Gardens" (if not already answered in the first question).

Thanks! Krista

Utility Production LDC Amendment v.2-16-24.docx

Sean Norris <sean.norris@mesacounty.us> To: Cully and Krista <cullyandkrista@gmail.com>

Krista,

Your images did not come through. I want to be sure I am answering the right questions. Could you resend please. We use Microsoft products.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]

Cully and Krista <cullyandkrista@gmail.com> To: Sean Norris <sean.norris@mesacounty.us>

Apologies!

Tue, Feb 20, 2024 at 11:32 AM

Tue, Feb 20, 2024 at 11:04 AM

- d. Fire Prevention and Safety Procedures
 - (1) The relevant Fire Protection District's adopted standards, based on current fire code, shall apply.

If the image does not come through again, I am referring to:

- 2. Submittal Requirements
- d. Fire Prevention and Safety Procedures
- (1) The relevant Fire Protection District's adopted standards, based on current fire code, shall apply

Question #3 image:

3. Approval Criteria

In evaluating the proposal, the request shall comply with any conditions of approval and all applicable requirements of this LDC, including, but not limited to:

a. The health, safety and welfare of the citizens of this jurisdiction will be protected and served;

If the image does not come through again, I am referring to:

3. Approval Criteria

a. The health, safety and welfare of the citizens of this jurisdiction will be protected and served;

Thanks, Krista

[Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us> To: Cully and Krista <cullyandkrista@gmail.com> Tue, Feb 20, 2024 at 1:38 PM

Krista,

1. All site plans go through the same approval process. The only difference would be the Conditional Use Permit process for utility scale (not Solar Garden or Private) which is step 1. Then those also go through a site plan approval process.

2. There are no specific fire codes for solar installations. The fire and building codes for electrical are most relevant. One would have to discuss with the relevant Fire Protection District as to the application of fire code and to the building department as to electrical and building codes.

3. Health, Safety and Welfare refer to proven hazards to the community. Specific examples might be a long and not necessarily inclusive list, but might include risk of explosion, chemical exposure of proven toxicity, and other such risks from more industrial applications, wherein those are relegated to industrial zoning districts to protect the general public.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



On Mon, Feb 19, 2024 at 12:12 PM Cully and Krista <cullyandkrista@gmail.com> wrote: [Quoted text hidden]



Public Comments to be Added and Considered for Next Workshop (PRO2024-0022)

4 messages

Cully and Krista <cullyandkrista@gmail.com> To: Sean Norris <sean.norris@mesacounty.us> Mon, Feb 26, 2024 at 9:31 AM

Sean,

The dialogue on fire protection during last week's workshop failed to hit the mark. The immediate dismissal of legitimate public apprehensions and unwarranted acceptance of solar companies' perspectives was alarming. It's clear that the county's bias towards solar farms overlooked community concerns. We must revisit fire protection for the people of Mesa County when a solar facility is proposed near residential structures.

Please include the attached public comments for consideration at the next workshop. Though we might not be able to participate live, our points are clearly articulated in the document, including suggestions for code revision. All comments are backed with what we've found in our research and all sources are cited in the document.

-Cully and Krista

Solar Facility Public Comments_ Fire Protection .pdf

Sean Norris <sean.norris@mesacounty.us> To: Cully and Krista <cullyandkrista@gmail.com>

Thank you for the comments.

Here are some interesting certification testing that solar panels are required to undergo for your information.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



Planning Department

[Quoted text hidden]

2 attachments

iec_61730-2_firetest_tuv-solar-modules.pdf

☐ Solar Panel Flammabiltiy video.url

Cully and Krista <cullyandkrista@gmail.com> To: Sean Norris <sean.norris@mesacounty.us> Mon, Feb 26, 2024 at 11:27 AM

Thanks, Sean.

Naturally, it makes sense that solar panels, like many other consumer products, require certain certifications and safeguards against fire risk. However, no product can assure a 0% fire risk, including solar panels. Given the potential for greater destruction due to a solar facility's size, our concerns remain valid. The certification, while important, doesn't fully address the issues and points raised in our comments.

Upon reviewing our suggestions, we think you'll find they're quite reasonable and viable for solar companies, while still safeguarding Mesa County residents. They only apply specifically to solar facilities proposed near or sharing road access with residences, often exempting many solar facility projects.

Mon, Feb 26, 2024 at 9:34 AM

When a proposed solar facility shares an access road with or is near residential structures, relying solely on the relevant Fire Protection District for fire protection is inadequate. Clear, unambiguous standards must be established for solar companies to know their minimum obligations. This will ensure a more efficient process, preventing solar companies from expending unnecessary time, energy, and money on unfeasible projects, while simultaneously safeguarding Mesa County residents.

We simply seek equal consideration in this process. So far, much of the code draft seems biased toward solar companies, leaving many of our community concerns unaddressed.

Here are some videos of solar panel fires (there are many more but we just grabbed the first few that came up):

https://www.youtube.com/watch?v=bU65JDcVTJI

https://www.youtube.com/watch?v=jC-q-g5DnSQ

https://www.youtube.com/watch?v=1tay5dhaLgU

https://www.youtube.com/watch?v=DgSDyhlug_c

Thanks again,

-Cully and Krista

[Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us> To: Cully and Krista <cullyandkrista@gmail.com> Mon, Feb 26, 2024 at 11:36 AM

Thank you. This has been included in the public record.

For information, Mesa County's Land Development Code, Engineering Design Standards and Buildung Codes do address many of these issues. And it is the practice of the County to not duplicate applicable regulations in every aspect they may apply, but instead, include them by reference as requiring development to comply with all those regulations. As applications for development are made, they pass through relevant departments for review and compliance with that departments requirements.

[Quoted text hidden] [Quoted text hidden] **OPINION**

Driving the Solar Train Wisely

We can do a better job of managing the solar-land dilemma

BY ANNA CLARE MONLEZUN



A ccording to the United States Department of Energy's Solar Futures Study of 2021, by 2050 up to 10.3 million acres of land will be required for solar energy production if we are to meet established clean energy goals. Global reliance on fossil fuels will continue to diminish as solar energy production will become more efficient and less expensive, reports Ember's Global Electricity Review 2023.

The point is that the solar energy train has left the station and there is no turning back. While DOE has identified enough "marginal," "disturbed" or "contaminated" lands to fulfill our solar power needs, in reality we are seeing arable farmland and even pristine native rangelands being converted to solar stations by developers who are not thinking ecologically or holistically. This is going to continue to happen.

The question becomes, do we re-

main on the station's platform and lament solar energy's downsides and pitfalls while continuing our reliance on fossil fuels, or do we jump on, hang on to our hats, and ensure this train goes somewhere better?

In 2018, one of the country's most progressive communities in terms of "greenness," Boulder County, Colorado, conducted an internal assessment that concluded that even if all the rooftops in the county were covered in solar panels, they still wouldn't provide enough energy to fuel the county's electrical usage. There are additional discouraging obstacles to large-scale rooftop and parking lot installations that make this idea prohibitive.

So, where will all the land for solar energy expansion come from? The current industry standard is to site solar power plants on sun-abundant landscapes near hubs of electricity systems and users — urban and residential areas. Unfortunately, these are the same criteria for good agricultural land. Both of these provisions for society — energy and food — need photons and proximity to people.

Solar development is a tough pill to swallow if you value farmland, natural landscapes and open spaces. Solar energy stations are typically not pretty. In contrast, in oil and gas production, most of the land disturbance is belowground, hidden from view. Last summer I was driving around Utah with my family on a trek to the state's national parks, and we passed what felt like miles of solar panels on top of once-intact native rangeland; it brought tears streaming down my face.

As an ecologist and landowner, the sight of such grand disregard for nature is appalling. I realized in that moment that the solar industry needs us. It has a lot to learn from the knowledge and expertise of scientists, land stewards, agrarians, ranchers and natural resource managers.

I live on a 100 percent off-grid working ranch in the Rocky Mountains. My animals and family rely on solar and wind power to stay alive. We raise cattle, sheep, hogs and poultry under this system, and I can vouch for how good it feels to produce food this way. It's the cleanest of the clean. I also happen to be a rangeland ecosystem scientist whose off-ranch work involves elevating ranching and agriculture into the new regenerative paradigm.

One of my current research projects is a large, integrated study on agrivoltaics - the integration of agriculture and solar energy generation. Funded by DOE, our team of top-notch scientists, engineers and ranchers are tasked with keenly observing and measuring the ecological dynamics of agrivoltaic grazing systems, specifically the integration of sheep and cattle. We are studying the soil, plant, animal, energy and economic dynamics of a utility-scale solar site that is managed in an agrivoltaic partnership. Our objective is to discover a holistic solution that is good for the land, good for the animal, and good for society.

There is momentum in the scientific community to produce new knowledge regarding the social-ecological dynamics and outcomes of agrivoltaics, both from the crop and livestock production sides. After having conducted a comprehensive review of the literature over this past year, I can safely say that the evidence is mounting in favor of agrivoltaics as a viable solution to reducing (I didn't say eliminating) the tradeoffs in land use between agriculture and renewable energy.

For comparison, approximately 40 million acres of U.S. land is currently used for corn ethanol production — another form of "renewable energy." As a society, are we okay with this monocultural land use system but not with a quarter of this amount of land being used for solar energy production? Solar energy production can much more easily co-exist in a biodiverse symphony with polyculture vegetable farming, livestock and pollinator habitat than can monocultural row crops.

But for wise use of solar to be broadly adopted, we have to put in much more effort. The agriculture and solar energy sectors have to remove themselves from their silos and jump on this train together. We need diverse hearts and minds at the same table — engineers, ranchers, farmers, policymakers, community members, ecologists, agronomists and tech innovators. If we perpetuate the "us versus them" script, the real meaningful work will never get done.

What types of solutions do we need, then? Broadly speaking, they must be both sensical and ethical.

We have to move forward with good common sense, and when we can't trust some players to do so, we need regulatory buffers to protect our interests and the interests of nature and ecological processes. For example, landscapes of prime agricultural or ecological value should not even be considered for solar siting, in my opinion. There are plenty of marginal or fallowed lands, not in someone's "backyard," that would make more sense. And according to recent research, the presence of solar panels may even help retain soil moisture, reduce evapotranspiration and increase vegetative productivity, therefore contributing to the restoration of depleted and degraded lands. At the same time, we have to find ways to install and manage solar power plants without raising the cost of energy to the consumer.

We also have to think and act ethically. It goes back to the golden rule; we must keep excess pride and the greed of a booming solar industry in check. We can do this by keeping what is honest, just and moral at the forefront of the permitting conversation. For example, solar developers should be talking directly with farmers and ranchers and all their neighbors, listening to their concerns and questions, sharing anecdotes and collaborating on management plans. There needs to be advocacy and education on the part of the landowner so that risk and the chance of unintended consequences are reduced. Farmers and ranchers are not obligated to comply with a solar developers' first pitch. There are



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OPINION

experts out there to help negotiate contracts so that the landowner isn't left alone with the clean-up and land reclamation.

Speaking of clean-up - one of the biggest criticisms of the solar industry - innovators are taking incredible strides to launch recycling programs for retired panels and other materials. SolarCycle in Odessa, Texas, for example, claims 95 percent of panels - including glass, silicon, copper, aluminum and silver - can be returned to the supply chain. Recycling must be part of the solar developer's plan. They have a responsibility to protect soils, plants and animals, to close the loop on waste, and to manage solar sites as ecosystems, all while producing clean energy. Not an easy task, but there are good people out there doing monumental work under extreme pressure. Let's keep up the pressure. It is an effective catalyst.

The desire for a sustainable future is the common ground we can all value and stand upon. This is the origin story of both the solar industry and the regenerative agriculture movement. As long as we remember we are all just humans working toward the same goal in different ways, we can stop incriminating each other and see through the noise. There are groundbreaking models we can follow, such as the successful, mutually beneficial agrivoltaics partnership between Silicon Ranch (solar developer) and White Oak Pastures (regenerative ranch) in Bluffton, Georgia, and the pioneering creativity behind Jack's Community Solar Garden in Longmont, Colorado.

Regenerative farmers and ranchers must do their part to ensure the solar energy train is driven wisely. ACRES.

Anna Clare Monlezun is a Colorado rancher and is the CEO of Rangeland Living Laboratory (*rangelandlivinglaboratory.org*). She has a Ph.D. in ecosystem science and sustainability.



Colorado's Community Solar Gardens statute

2 messages

Durkay - CEO She Her, Jocelyn <jocelyn.durkay@state.co.us> To: sean.norris@mesacounty.us

Fri, Feb 23, 2024 at 4:48 PM

Cc: jasonandrhi@hotmail.com

Good afternoon Mr. Norris,

I spoke with Ms. Lawson regarding Mesa County's code and understanding Colorado's statutory language on Community Solar Gardens (CSGs). I cannot provide a legal interpretation of statute or on behalf of the Colorado Energy Office. However, I wanted to note that certain statutes may help answer questions you had around CSGs.

First, CSGs are defined under Colo. Rev. Stat. 40-2-127(2)(b)(I)(A)-(D) as follows.

"(A) "Community solar garden" means a solar electric generation facility with a nameplate rating within the range specified under subsection (2)(b)(I)(D) of this section that is located in or near a community served by a qualifying retail utility where the beneficial use of the electricity generated by the facility belongs to the subscribers to the community solar garden. There shall be at least ten subscribers. The owner of the community solar garden may be the qualifying retail utility or any other forprofit or nonprofit entity or organization, including a subscriber organization organized under this section, that contracts to sell the output from the community solar garden to the qualifying retail utility. A community solar garden shall be deemed to be "located on the site of customer facilities".

(B) A community solar garden shall constitute "retail distributed generation" within the meaning of section 40-2-124, as amended by House Bill 10-1001, enacted in 2010.

(C) Notwithstanding any provision of this section or section 40-2-124 to the contrary, a community solar garden constitutes retail distributed generation for purposes of a cooperative electric association's compliance with the applicable renewable energy standard under section 40-2-124.

(D) A community solar garden must have a nameplate rating of five megawatts or less; except that the commission may, in rules adopted pursuant to subsection (3)(b) of this section, approve the formation of a community solar garden with a nameplate rating of up to ten megawatts on or after July 1, 2023."

While subsection (A) directly contains a definition, subsection (B) notes that CSGs are defined as retail distributed generation and subsection (D) sets size limitations.

Second, under Colorado Rev. Stat. 40-2-124(1)(a)(VIII) retail distributed generation is defined as "Except as provided in subsection (1)(c)(II)(D) of this section with respect to cooperative electric associations, "retail distributed generation" means a renewable energy resource or renewable energy storage that is located on any property owned or leased by the customer within the service territory of the qualifying retail utility and is interconnected on the customer's side of the utility meter. In addition, retail distributed generation shall provide electric energy primarily to serve the customer's loads and shall be sized to supply no more than two hundred percent of the reasonably expected average annual total consumption of electricity at all properties owned or leased by the customer within the utility's service territory."

Please let me know if I can provide further assistance and thank you for reaching out to our office. Best regards, Jocelyn

Jocelyn Durkay Associate Director of Regulatory Policy



C 720.762.3437 1600 Broadway, Suite 1960, Denver, CO 80202 jocelyn.durkay@state.co.us | energyoffice.colorado.gov

Sean Norris <sean.norris@mesacounty.us> To: Greg Moberg <greg.moberg@mesacounty.us> Mon, Feb 26, 2024 at 9:02 AM

Should we consider adding these definitions, or is the reference to the statues sufficient?

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]



agrivoltaic

1 message

Caspari,Horst <Horst.Caspari@colostate.edu> To: "westiecolorado@bresnan.net" <westiecolorado@bresnan.net> Cc: "sean.norris@mesacounty.us" <sean.norris@mesacounty.us>

Hello Frank.

Amanda forwarded your email to me. We are indeed working on a project to investigate the potential of agrivoltaic for vineyards (and by extension for orchards) in Western Colorado.

The concept of agrivoltaic is actually over 40 years old. However, it wasn't until about 15 years ago that researchers in France started looking at it. Initially the reason to look into this concept of coproduction of food and energy was the competition for land between energy (solar farms) and farming. In brief, the idea is that instead of converting one acre of farm land to a solar installation and continue to farm on another acre, raise the solar panels up higher so that you can continue to farm on two acres. Conceptually, if the solar panels are installed at half the density compared to a standard ground-mounted system, there is enough light for the crop to produce at least 85 % compared to a situation where there are no panels above the crop. Staying with our 2-acre example, the number of solar panels is the same so there is the same energy production compared to the standard ground-mounted system on one acre. However, as the farmer is now producing at least 85 % of the crop on two acres, the net effect is 170 % of crop and 100 % energy (versus 100 % crop on one acre and 100 % energy on the second acre). As the world transitions towards renewable energy the pressure on ag land is increasing. That's because the best farmland also is the land best suited for solar energy.

Research on agrivoltaic has increased dramatically in the past few years around the world. And it turns out, there are additional benefits depending on crop and region. With some crops there is no reduction in crop yield – in fact, yields of some crops are increased if grown under the partial and intermittent shade provided by the solar panels. A second benefit is that crop water use is reduced, i.e. there is less need for irrigation. Third, the temperature below the panels often remains warmer at night which reduces the risk of frost damage (in 2022 and 2023, vineyards in France covered with agrivoltaic systems did not get damaged by spring frosts while adjacent vineyards not covered had massive crop losses due to the frost). Fourth, with lower daytime temperatures due to the shading there is less heat stress to plants, and less sunburn to crops such as peppers and apples. Also, the water loss from the plants growing underneath the panels actually leads to lower panel temperatures, thus increasing the energy production. I could go on with other benefits but I will only mention one more. And that is the extra revenue that growers can get from the sale of energy to the grid and/or the use of that energy on the farm to offset purchasing power from the grid. Either way, it reduces the financial risk to the farm because even in a year with reduced or no crop (quite common around here with our fruit crops due to cold damage) there is still income for the farm from the sale of energy. In summary, it can be a win-win situation for food and energy production.

The key benefits for our fruit and vegetable crops here in Western Colorado are reduced heat stress, reduced water needs, reduced frost risks, reduced crop loss due to sunburn. With rising temperatures in the years to come, there will be more heat stress to crops, more crop loss from sunburn, and less water available for irrigation. Agrivoltaic might be a method to reduce all these problems and allow farmers to continue farming, and keep ag land as ag land rather than going to development.

One final comment – not everything that is called agrivoltaic is agrivoltaic. The folks who developed this strategy were very clear: it is "A" before "V". It is all about agriculture, and energy is secondary. Unfortunately, in this country there are no definitions yet what agrivoltaic is, and what it isn't. Several countries have adopted rules that specify how much agricultural crop has to be produced to be called agrivoltaic. Japan and South Korea have adopted 85 %, France 70 %, and Germany 65 %. Italy is soon to follow with their standards. What that means is that if a farmer doesn't meet at least that percentage of a crop underneath the solar panels compared to a standard field then it is no longer considered a farm, but a solar utility. Those thresholds are put in place to protect farmland for food production and limit the abuse by energy companies that claim to practice agrivoltaic but that are in reality focused on energy and treating any agricultural crop as a byproduct. And of course, it makes a big financial difference if a piece of land is zoned agriculture versus commercial.

Tschüss.

http://aes.colostate.edu/wcrc/stations/orchard-mesa/viticulture/

Frustra laborat qui omnibus placere studet.

Fri, Feb 2, 2024 at 11:28 AM



Public Comments for Energy/Solar Amendment Consideration

1 message

Sharon Bouse-Ferry <kanga424@msn.com>

To: Sean Norris <sean.norris@mesacounty.us>

Tue, Feb 6, 2024 at 3:21 PM

Sean,

I am emailing to summarize my comments shared at your presentation last week. I'd also like to request that they be added into the public record, and put before the focus group for consideration at tomorrow's meeting. I have one major point and two smaller points for consideration.

1. With respect to the code's overarching goal of considering impact on the individual property owner, neighbors, developer, and the county as a whole- how is the impact on other industries in proximity or directly impacted by proximity to a proposed or approved energy generating site being factored in? My specific concern comes from the agricultural and tourism industries as they exist in Palisade. Where, for example, view sheds are an important part of the economic impact on the town, it's residents, and the county itself (I think you shared 84 million dollars of revenue coming in because of the ag tourism in Palisade). Where would we safeguard these considerations in land use code? There are specific areas in our community where the landscapes and views need to be protected because of the revenue and livelihoods they offer residents and our community at large. How do we protect those areas/industries in code? An economic impact study was suggested as a possible safeguard to put into code to consider the ag tourism industry when looking at solar (and perhaps other) large energy generating plants. Where and how would that fit in?

2. When there are shared municipalities (like the 3 mile shared radius on the one energy project in Palisade), how can the code support infrastructure of small towns to ensure projects don't fall through the cracks during the planning and comment periods? The proposed amendments that would provide oversight for local fire authorities, appear to address the need for extra steps protecting smaller districts. How can we include shared municipalities with the same end goal in mind? Making their comments required and not just advisory? I'm not sure if MOU's cover this or if the code could mention additional oversight and communication needed in cases where there are shared municipalities...

3. The proposed amendments, although they do address decommissioning, as of now do not explicitly assign all responsibility to the developer and land owner. The language here could be more concrete (I've read other amended codes in other states that spell this out very plainly). I think Mesa County should make sure our code is VERY clear about who foots the bill and when. If a site is decommissioned but panels are left on site, that later leak chemicals into the ground and contaminate the nearby water supply, is the landowner responsibility then?

That's all! Thank you again for the time and efforts you've put in to making this process more accessible and understandable for our community.

Sharon



Mesa County Land Development Code Focus Group meeting

2 messages

Sean Norris <sean.norris@mesacounty.us>

Fri, Feb 16, 2024 at 4:14 PM

To: Sean Norris <sean norris@mesacounty.us> Cc: Greg Moberg <greg.moberg@mesacounty.us>

Bcc: Nicholas Aranda <aranada@jgmsinc.com>, Chris Weaver <s.chris.weaver@gmail.com>, sealings@acsol.net, chasmop@bresnan.net, sballerton@gmail.com, TMACK McCloskey <thosmccloskey@gmail.com>, Charlee.brady@gmail.com>, Charlee.brady@gmail.com>, Charlee.brady@gmail.com>, Brent Goff <brent.goff@mesacounty.us>, Mary Elaine Johnson <elaine.johnson.craig@gmail.com>, plevon@aol.com, lvillaire@gmail.com, Frank Nemanich <westiecolorado@bresnan.net>, Sharon Bouse-Ferry <kanga424@msn.com>, E Satie <evsatie@gmail.com>, Luke.rome@swca.com, Greg Motz <greg@sun-king.com>, Cully and Krista <cullyandkrista@gmail.com>, Rondo Buecheler <rondoworld@gmail.com>, jdelany58@gmail.com, scottb@gjcity.org, Janet Rowland <Janet.rowland@mesacounty.us>, Bobbie Daniel

susan.bassoon.hess@gmail.com>, Tanya Travis <ttravis1405@gmail.com>, Greg Brophy <senatorbrophy@gmail.com>, Nina Hutchins <hutchinsninas@yahoo.com>, Jason and Rhiannon Lawson <jason and Rhiannon Lawson </table>, State Taile@taile@tohtergy.net, Kathryn Bedell <kathy@roancreekranch.com>, KmklG ANDREWS <andremstrative@cossa.co>, jfitzpatrick@pivote.ergy.net, Kathryn Bedell <kathy@coancreekranch.com>, Kim Kerk <kimk355@outlok.com>, Charlie Talbott

Hello,

Please find the attached draft text we will be discussing on Wednesday at 4:45 p.m. in Training Room A, 3rd floor of 544 Rood. Please enter on the east side of the building and take the stairs to the third floor.

For the Public, the room is small, so if at all possible, please attend virtually.

If you will be joining virtually, the information below will get you to the meeting. To Access the virtual link, please copy the Video Call link and paste it in your browser search bar and hit ENTER.

MCCFG Utility Production Wednesday, February 21 · 4:45 – 6:15pm Time zone: America/Denver Google Meet joining info Video call link: https://meet.google.com/ikn-kwyz-zzs Or dial: (US) +1 417-719-7446 PIN: 131 213 217# More phone numbers: https://tel.meet/ikn-kwyz-zzs?pin=3733907193563

Please let me know if you have any trouble.

Thank you

Sean T. Norris

Manager Planning Department 970-254-4183

- 4	

Planning Department (970) 244-1636 www.mesacounty.us/planning

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Would you like to contact other Offices within Community Development?

Email mccomdev@mesacounty.us or Please call us at (970) 244-1636 or visit our online services for more information. Our websites are: https://www.mesacounty.us/services/community-development/. & www.mesacounty.us/

Utility Production LDC Amendment v.2-16-24.docx

Thank you for sending this, Sean. It looks like many of our community concerns have been factored in to what you have proposed.

With Gratitude,

Sharon

On Feb 16, 2024, at 4:14 PM, Sean Norris <sean.norris@mesacounty.us> wrote:

[Quoted text hidden] <Utility Production LDC Amendment v.2-16-24.docx>



Checking in on the Meeting and Code

2 messages

Jeremiah Garrick <JGarrick@cossa.co> To: Sean Norris <sean.norris@mesacounty.us> Fri, Feb 23, 2024 at 5:24 PM

Hey Sean,

I hope all is going well and I hope the meeting this week regarding the code went well. I wanted to follow up and see if there were any additional questions I could answer. Additionally I definitely will submit some comments on the next draft when it is ready, but from what I heard about the meeting and after discussing with you, I think they will be brief. Let me know which draft would be best to comment on.

One quick clarification - in my last comments when suggesting CSG zones using the Title 40 definition, those are just recommendations. COSSA suggests allowing CSGs in those zones, as long as you are using the title 40 definition. I apologize if this caused any confusion based on my wording.

Thanks again for your efforts here.

Best, Jeremiah Garrick COSSA - Manager of Community Engagement c: (720) 256-6060

Sean Norris <sean.norris@mesacounty.us> To: Jeremiah Garrick <JGarrick@cossa.co>

Jeremiah

Thanks for the comments.

The draft in MaintStar under PRO2024-0022 is what we are currently working on. I expect a new draft next week or so.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]

Mon, Feb 26, 2024 at 10:11 AM



COSSA Response to Mesa County Community Letter 3.12

2 messages

Jeremiah Garrick <JGarrick@cossa.co> To: Sean Norris <sean.norris@mesacounty.us>

Hey Sean,

Thank you for giving COSSA the chance to respond to this letter. I have attached a response to each of the points made by the community. Let me know if you have any questions and I am happy to talk through any of the points made in the response.

Please see attached.

Best, Jeremiah Garrick COSSA - Manager of Community Engagement c: (720) 256-6060

COSSA Response to Mesa County Community Letter 3.12.pdf

Sean Norris <sean.norris@mesacounty.us> To: Greg Moberg <greg.moberg@mesacounty.us>

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



Planning Department

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COSSA Response to Mesa County Community Letter 3.12.pdf 191K

Wed, Mar 13, 2024 at 7:30 PM

Thu, Mar 14, 2024 at 9:00 AM



Clarification Regarding Solar Code and PUD Parcels in Mesa County

6 messages

Jeremiah Garrick <JGarrick@cossa.co> To: Sean Norris <sean.norris@mesacounty.us>

Hello Sean,

I hope all is well with you. I wanted to ask for some clarification on PUD parcels. I understand that process is separate from the solar development code and it is not mentioned in the solar regulations. Would community solar gardens be able to be constructed in PUD parcels or would it only be allowed in AFT zones (consistent with the use table)? Can you elaborate on that process a bit and if solar would be an allowed use depending on the PUD parcel? Would this be case by case or would it not be allowed as written?

Thank you for your time and I look forward to hearing from you.

Best, Jeremiah Garrick COSSA - Manager of Community Engagement c: (720) 256-6060

Sean Norris <sean.norris@mesacounty.us> To: Jeremiah Garrick <JGarrick@cossa.co> Mon, Mar 25, 2024 at 11:28 AM

Mon, Mar 25, 2024 at 11:08 AM

Good questions. No, PUDs are not named in the use table because they are each a distinct zoning which is created for a specific reason.

Each PUD is distinct. Some would require an amendment of the PUD depending on whether there were specific uses named or if the wording from commercial zones was used. In some cases, one in particular comes to mind, a rezone of the PUD back to AFT would be the most desirable for the installation of a solar facility.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]

Jeremiah Garrick <JGarrick@cossa.co> To: Sean Norris <sean.norris@mesacounty.us>

Sean,

Thank you for the clarification. That answers my question.

I also wanted to ask how the Planning Commission Hearing went on 3/21? Any updates or new language we should expect before the next hearing in around a month? I found the agenda online, but did not see a recording or notes. I may be missing it, so please advise where to find that if possible.

Thank you for your time, Jeremiah Garrick COSSA - Manager of Community Engagement [Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us> To: Jeremiah Garrick <JGarrick@cossa.co> Tue, Mar 26, 2024 at 2:03 PM

Tue, Mar 26, 2024 at 1:55 PM
https://h9.maintstar.co/mesacounty/api/AttachmentFile/GetOriginalFile/f496230f-5f6b-4ef6-ac5b-61c63fd23237/1

Sean T. Norris Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



5 11 1

[Quoted text hidden]

Jeremiah Garrick <JGarrick@cossa.co> To: Sean Norris <sean.norris@mesacounty.us>

Thank you Sean.

For some reason, when I access the link through the customer portal and through the one you sent over email, it doesn't open anything. It does say "You need access" - so I requested it through the button. I think the link may be broken or permissions may need to be updated.

🛆 Google Drive	
You need access	
Request access, or switch to an account with access. Learn more	
Message (optional)	
Request access	
You're signed in as JGarrick@cossa.co	

Sean Norris <sean.norris@mesacounty.us> To: Jeremiah Garrick <JGarrick@cossa.co> Tue, Mar 26, 2024 at 3:29 PM

It is a huge file for a two and a half hour hearing.

PlanningCommission03.21.24.mp4

Sean T. Norris Manager

[Quoted text hidden]

Try this

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



Tue, Mar 26, 2024 at 2:15 PM

Planning Department

[Quoted text hidden]



Clarification Regarding Solar Code and PUD Parcels in Mesa County

14 messages

Jeremiah Garrick <JGarrick@cossa.co> To: Sean Norris <sean.norris@mesacounty.us>

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Sean Norris <sean.norris@mesacounty.us> To: Jeremiah Garrick <JGarrick@cossa.co> Tue, Mar 26, 2024 at 2:03 PM

Tue, Mar 26, 2024 at 1:55 PM

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Sean T. Norris Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



5 11 1

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Jeremiah Garrick <JGarrick@cossa.co> To: Sean Norris <sean.norris@mesacounty.us>

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🛆 Google Drive	
You need access	
Request access, or switch to an account with access. Learn more	
Message (optional)	
Request access	
You're signed in as JGarrick@cossa.co	

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Sean T. Norris Manager Planning Department 970-254-4183

[Quoted text hidden]

Try this

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]

Jeremiah Garrick <JGarrick@cossa.co> To: Sean Norris <sean.norris@mesacounty.us>

Thank you, Sean. That worked perfectly. The meeting was run very well and I applaud your efforts throughout the entire process.

Would it be possible to set up a quick meeting next week to chat about the PUD parcel aspect of this? It would be great to discuss the following.

I understand the process and that in many cases for a solar facility it would be most beneficial to rezone the PUD into a AFT so the code applies, however, is there some way through a variance process or a clause that could be added to ensure that those zone changes only go into place once the project is permitted to avoid rezoning without an end result? We have seen in many situations land-owners not want to rezone the property ahead of time, in case anything happens through the permitting process that impacts the project, as the land owner is left with for example an AFT parcel instead of a PUD parcel, still without development if permitting falls through for some reason.

Let me know if you would have time next week to set up a quick call to talk about this.

Best. Jeremiah Garrick COSSA - Manager of Community Engagement c: (720) 256-6060 [Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us> To: Jeremiah Garrick <JGarrick@cossa.co>

It's PUD specific as each is different. So without a specific site you want to discuss, there is no set answer.

[Quoted text hidden] [Quoted text hidden]

Jeremiah Garrick <JGarrick@cossa.co> To: Sean Norris <sean.norris@mesacounty.us>

I understand that, in a situation like this, what would be the next step for the land owner or the developer? To come speak with you and the planning department in regards to the specific parcel?

Best, Jeremiah

[Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us> To: Jeremiah Garrick <JGarrick@cossa.co>

Yes

[Quoted text hidden] [Quoted text hidden]

Jeremiah Garrick <JGarrick@cossa.co>

To: Sean Norris <sean.norris@mesacounty.us>

Sounds good, thank you for the response on that.

Would you still be willing to set up a meeting in a couple of weeks so that we can touch base on any changes and updates ahead of the BOCC Hearing? Potentially Thursday April 11th or Friday April 12th if either of those work for you? Thank you!

Best.

Jeremiah Garrick COSSA - Manager of Community Engagement c: (720) 256-6060 [Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us> To: Jeremiah Garrick < JGarrick@cossa.co>

Wed, Mar 27, 2024 at 9:50 AM

Wed. Mar 27, 2024 at 11:14 AM

Wed, Mar 27, 2024 at 11:17 AM

Wed, Mar 27, 2024 at 10:21 AM

Wed, Mar 27, 2024 at 10:25 AM

Wed, Mar 27, 2024 at 10:26 AM

Sean T. Norris Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



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Jeremiah Garrick <JGarrick@cossa.co> To: Sean Norris <sean.norris@mesacounty.us> Wed, Mar 27, 2024 at 12:16 PM

Does 1:30 pm work for you? I can send over a calendar invite. [Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us> To: Jeremiah Garrick <JGarrick@cossa.co>

How does Wednesday at 1:30 work for you?

I can do a Google Meeting if that helps.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



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Mon, Apr 1, 2024 at 10:38 AM



Clarification Regarding Solar Code and PUD Parcels in Mesa County

4 messages

Jeremiah Garrick <JGarrick@cossa.co> To: Sean Norris <sean.norris@mesacounty.us>

Hello Sean,

I hope all is well with you. I wanted to ask for some clarification on PUD parcels. I understand that process is separate from the solar development code and it is not mentioned in the solar regulations. Would community solar gardens be able to be constructed in PUD parcels or would it only be allowed in AFT zones (consistent with the use table)? Can you elaborate on that process a bit and if solar would be an allowed use depending on the PUD parcel? Would this be case by case or would it not be allowed as written?

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Sean Norris <sean.norris@mesacounty.us> To: Jeremiah Garrick <JGarrick@cossa.co> Tue, Mar 26, 2024 at 2:03 PM

Tue, Mar 26, 2024 at 1:55 PM

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Sean T. Norris Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183

MESA COUNTY Planning Department

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Mon, Feb 5, 2024 at 2:41 PM

The Western Way connection

2 messages

Greg Brophy <senatorbrophy@gmail.com> To: sean.norris@mesacounty.us

Sean:

Got your email from the TWW system. You asked about balancing economic development versus neighbors' concerns.

Good question; I'm going to rephrase it and hopefully get you the answers, from my perspective, that you deserve.

I appreciated your presentation last week, btw. I am the guy who suggested that leaving some of the buried equipment behind at decommissioning may be the best outcome.

As a person who has tried to craft good public policy for the last 20 years, I understand your work. I think, in this case, it's not about economic development, which I see as an important but secondary consideration. I think this is about recognizing and honoring property rights first and foremost.

You can acknowledge that there are competing interests in this area, but as long as a property owner is using their property in a generally accepted manner that is not specifically banned through a legal process, that property owner's interests should be supreme. Very few people have a legally protected view shed, for instance, and if they do, that is always recorded and known.

On the vast majority of property by area, energy production isn't and hasn't been prohibited. So most of the counties in eastern Colorado recognize the right to develop private property for energy production. Most of the limitations are based on the minimal needed for health and safety, for instance a set back of 1.1 times the maximum height of whatever energy production facility is used in construction or production. Any restriction greater than what is absolutely necessary for the immediate preservation of life and health is an unnecessary restriction of the rights of the developing property owner.

I also always recommend recognizing there is a difference between participating and non-participating property owners when considering additional restrictions, beyond what is absolutely necessary. For instance, some counties have a 1/3rd mile setback to non-participating landowners of wind farms instead of 1.1 times tip height. I still believe that is an unnecessary restriction.

I know you will hear from people who just oppose change. They moved here because they like it the way it is, and they don't want to see it change! We always owe it to them to listen intently and fully understand their concerns. It's entirely possible that they deserve some type of mitigation, within reason. But, I'd be furious if I lost control of the use of my property because my neighbor doesn't want my place to change.

Good luck with your updates. Happy to follow up if you need clarification or have other questions/concerns.

Greg Brophy 970-630-0852

Sean Norris <sean.norris@mesacounty.us> To: Greg Brophy <senatorbrophy@gmail.com> Tue, Feb 6, 2024 at 8:36 AM

Thank you Greg.

Sean T. Norris

Manager Planning Department 970-254-4183



[Quoted text hidden]



Moratorium

1 message

Carol Hawkins <charlee.brady@gmail.com>

Wed, Jan 31, 2024 at 2:41 PM

To: sean.norris@mesacounty.us

Mr. Norris,

We want to thank you for your informative presentation yesterday on the issue of the solar moratorium.

We have many concerns regarding solar, but the biggest issue is the distance from a residential area. Again, we do not want these solar farms in our back yard. The 200 yard distance is far from acceptable. Again we would like to see a distance of 5 miles with a minimum of 2 miles. There is much open space in Mesa County to accommodate these farms.

There was conversation about protecting AFT land, but we heard no mention of protecting residential areas.

As outlined in todays Daily Sentinel, we see that 13,000 areas could be allocated to solar in Mesa County. With those numbers, we need to have a solid code base to govern those facilities.

We have a couple questions.

• When was it discovered that Community Solar Gardens were exempt from CUP codes?

• Has One Energy filed a site plan? Have they completed all necessary requirements in order to begin construction?

Thank you,

Mike and Carol Hawkins 611 Sobre El Rio Drive Palisade, Colorado 81526

Sent from my iPhone



Re: Solar items due dates timeline

3 messages

Todd Hollenbeck <todd.hollenbeck@mesacounty.us> To: Bobbie Daniel

 Bobbie.daniel@mesacounty.us>

Cc: Janet Rowland </anet.rowland@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Greg Moberg </areg.moberg@mesacounty.us>, Sean Norris <Sean.norris@mesacounty.us>

I've included Sean in this thread as he may have access to the stakeholder emails list from yesterday's email.

On Mar 30, 2024, at 2:43 PM, Greg Moberg <greg.moberg@mesacounty.us> wrote:

Bobbie,

I'll see what we can do on Monday. I'm not sure how we store comments in MainStar. I don't think the comments are stored by sender, I think they are stored as just a comment.

Greg

On Mar 30, 2024, at 12:01 PM, Greg Moberg <greg.moberg@mesacounty.us> wrote:

Bobbie,

Attached is a copy of the Planning Commission binder that has all of the comments received prior to the Planning Commission meeting. On Monday, I will have Sean send you the comments we have received after the meeting.

03-21-24 MCPC Hearing Binder.pdf

Greg Moberg Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

On Fri, Mar 29, 2024 at 9:53 PM Bobbie Daniel <bobbie.daniel@mesacounty.us> wrote: Thanks, Greg Can you send me all the emails of all the stakeholders?

On Mar 29, 2024, at 6:57 PM, Greg Moberg <greg.moberg@mesacounty.us> wrote:

Bobbie,

The notice date for the April 23rd public hearing is April 5th. Here are the public hearing dates followed by the notice date:

Public Hearing Date	Notice Date
April 23rd	April 5th
May 28th	May 10th

Sat, Mar 30, 2024 at 3:55 PM

June 25th	June 7th
July 9th	June 21s

Even though the proposed language cannot be changed or modified once the notice has been sent, comments from the public can be submitted up to the day of the hearing. If comments are received before the day of the meeting, staff will email the comments to the Board for your review. If comments are submitted the day of the meeting, we will make copies and hand them out at the public hearing.

Once the public hearing is completed, the Board may consider the following actions:

- The Board could make a decision by approving or denying the proposed language; or
- The Board could ask for language to be changed or modified as a condition of approval; or
- The Board could table or continue the meeting and remand the proposal back to staff to rewrite the proposed amendment.

Please let me know if you have any other questions.

Greg Moberg

Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

On Fri, Mar 29, 2024 at 4:03 PM Bobbie Daniel bobbie.daniel@mesacounty.us wrote: So April 23rd would next public notice what day?

On Mar 29, 2024, at 3:44 PM, Greg Moberg <greg.moberg@mesacounty.us> wrote:

Bobbie,

Here are how the timelines would work:

Public Hearing - May 28th; Binder/Notice May 10th Public Hearing - June 25th; Binder/Notice June 7th Public Hearing - July 9th; Binder/Notice June 21st

Greg Moberg Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

On Fri, Mar 29, 2024 at 1:42 PM Bobbie Daniel

bobbie.daniel@mesacounty.us> wrote:

Greg,

Would you put together a timeline of "what is due when" items leading up to an April 23 Public Hearing date and a timeline leading up to an end of May date.

Please note the July deadline date as well.

Please give me a call with any questions or clarification needed on this request.

Sincerely,

Bobbie Daniel Mesa County Commissioner (970) 244-1604



Sean Norris <sean.norris@mesacounty.us>

To: Todd Hollenbeck <todd.hollenbeck@mesacounty.us>

Cc: Bobbie Daniel <bobbie.daniel@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>

Good afternoon.

All comments are stored in MaintStar my the senders last name, the date and the title of their email.

The following is the BCC list of the 40 + people who have submitted comments or attended a meeting.

Nicholas Aranda • naranda@jgmsinc.com Chris Weaver • s.chris.weaver@gmail.com sealings@acsol.net chasmop@bresnan.net sballerton@gmail.com TMACK McCloskey • thosmccloskey@gmail.com Charlee.brady@gmail.com Brent Goff • brent.goff@mesacounty.us Mary Elaine Johnson • elaine.johnson.craig@gmail.com plevon@aol.com Louis Villaire • Ivillaire@gmail.com Frank Nemanich • westiecolorado@bresnan.net Sharon Bouse-Ferry • kanga424@msn.com E Satie • evsatie@gmail.com Luke.rome@swca.com Greg Motz • greg@sun-king.com Cully and Krista • cullyandkrista@gmail.com Rondo Buecheler • rondoworld@gmail.com jdelany58@gmail.com scottb@gjcity.org Janet Rowland • Janet.rowland@mesacounty.us Bobbie Daniel • bobbie.daniel@mesacounty.us Cody Davis • cody.davis@mesacounty.us bcmurphy21@gmail.com chloerittenhouse@gmail.com Caspari,Horst • Horst.Caspari@colostate.edu Susan Hess • susan.bassoon.hess@gmail.com Tanva Travis • ttravis1405@gmail.com Greg Brophy • senatorbrophy@gmail.com Nina Hutchins • hutchinsninas@yahoo.com Jason and Rhiannon Lawson • jasonandrhi@hotmail.com ksundman@pivotenergy.net Mike Kruger • mkruger@cossa.co Jeremiah Garrick • jgarrick@cossa.co jfitzpatrick@pivotenergy.net Kathryn Bedell • kathy@roancreekranch.com Kim Kerk • kimk355@outlook.com Charlie Talbott • charlie@talbottfarms.com Ron Abeloe • ron@cwihomes.com KRAIG ANDREWS • andrews1201@msn.com Don Pettygrove • dgpengineeringllc@gmail.com Jim Pedersen • jim@timberlinebank.com Todd Hollenbeck • todd.hollenbeck@mesacounty.us

Have a nice evening

Sean T. Norris

Sat, Mar 30, 2024 at 3:59 PM

970-254-4183

[Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us> To: Todd Hollenbeck <todd.hollenbeck@mesacounty.us> Sat, Mar 30, 2024 at 4:07 PM

Cc: Bobbie Daniel <bobbie.daniel@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>

As far as Commissioner access to the MaintStarfiles, I thought we had this fixed so that each of the Commissioners can access the MaintStar file and thus read the comments electronically. At this point there are several hundred pages and as I recall, Commissioner Daniel wanted electronic access rather than printed copies a few weeks ago. Janika Harris spent a great deal of time setting up access for each Commissioner and I thought she has sent everyone instructions. I will work with her on Monday to resolve this issue. If in the meantime, anyone wants me too go in and email all the comments to you, please let me know.

[Quoted text hidden] [Quoted text hidden]



public input project # PRO2024-0022

1 message

Nina Hutchins <hutchinsninas@yahoo.com>

Tue, Feb 20, 2024 at 12:16 PM

To: Sean Norris <sean.norris@mesacounty.us>

Cc: Greg Moberg <greg.moberg@mesacounty.us>, Britt Dveris <britt.dveris@mesacounty.us>, "samantha.hoogland@mesacounty.us" <faye.hall@mesacounty.us" <faye.hall@mesacounty.us>

Hi Sean,

This is an article by Ron Heiniger, NCSU professor and extension specialist about the effects of solar farms on agricultural land. https://coastalagro.com/solar-farming-not-a-good-use-of-agricultural-land/ It supports Mesa county's stated goals strongly encouraging rural zoning districts to be used for agriculture or low density residential which are quoted below.

Area. A. Agricultural and Forestry District (AF-35) The Agricultural and Forestry District is primarily intended to provide for the protection and continuation of agriculture and forestry operations, and the preservation of environmentally sensitive lands, while allowing very low-density single-family residential development.

B. Agricultural, Forestry, Transitional District (AFT) The Agricultural, Forestry, Transitional District is primarily intended to accommodate agricultural operations and very low-density single-family residential development.

Amending the zoning district map and master plan for future land use to address the appropriate placement of renewables out side of prime agricultural land (which supports other industries) would be a long term investment in Mesa County.

Thank you for your time,

Nina Hutchins



project # PRO2024-0022

1 message

Nina Hutchins <hutchinsninas@yahoo.com>

Wed, Feb 21, 2024 at 11:34 AM

To: Sean Norris <sean.norris@mesacounty.us>

Cc: Greg Moberg <greg.moberg@mesacounty.us>, Britt Dveris <britt.dveris@mesacounty.us>, "samantha.hoogland@mesacounty.us" <samantha.hoogland@mesacounty.us>, "faye.hall@mesacounty.us" <faye.hall@mesacounty.us" </fa>

Dear Sean,

This is more public input regarding project # **PRO2024-0022**. After reading Utility Production LDC amendments some areas stood out where the county could provide protection for current and future residents while complying with the possible state bill, Connecting Renewable Energy in Colorado (CREC.)

The first is decommissioning. The CREC explicitly allows the requirement for financial backing to decommission a renewable energy facility. I have inserted their wording highlighted in the attached draft. Without this a plan, submitted by a renewable energy facility, is essentially empty words.

Tech changes fast, for example, hydrogen and nuclear have the potential to replace solar for greater amounts carbon neutral energy that don't require backup when the sun isn't shining. The potential that these facilities become obsolete or are abandoned is a real possibility. They contain hazardous materials which can't be recycled in the US and need to be transported to special landfills for hazardous materials. This could lead to massive amounts of hazardous waste left lying around with tax payers left footing the bill for cleanup or having such degraded land that whole communities are impacted and brought down.

Besides financial backing for decommissioning, protections need to be in place for prime irrigated farm land which is some of the most valuable land in Mesa County. As climate change makes food production more variable across the globe, irrigated land which isn't dependent on rainfall will become even more valuable. If this land is allowed to be developed without boundaries it could impact the Mesa County as an agricultural community in the long run as well as all the other economies which depend on it. Both Boulder County and Weld County have clear guidelines which allow some renewable development on significant agricultural land while also protecting the land for future use. I have inserted those guidelines highlighted in the attached draft.

The CREC also has language which allows a review process with a public for renewable energy facilities including Community Solar Gardens. I have inserted language from the CREC in the attached draft.

There are a few other points which I have highlighted in the attached LDC amendment which I think would generally make people more comfortable having renewable facilities as neighbors.

Thank you for your time,

Nina Hutchins

Utility Production LDC Amendment v.2-16-24.docx
 67K



decommissioning renewable facilities

Nina Hutchins <hutchinsninas@yahoo.com>

Mon, Mar 4, 2024 at 8:43 AM

To: Sean Norris <sean.norris@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>, "faye.hall@mesacounty.us" <faye.hall@mesacounty.us>, "samantha.hoogland@mesacounty.us" <samantha.hoogland@mesacounty.us> Cc: Bobbie Daniel <bobbie.daniel@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>

Public Input regarding project # PRO2024-0022

Mesa County is currently amending its land development code to address renewable energy facilities. This is an opportunity to follow best practices and write the requirements so they will protect the health and safety of everyone in the county now and in the future. I have been following the amendment process. There has been lots of pressure from the developers of solar facilities to keep the requirements as minimal as possible. Solar developers and others who share their interests have succeeded in keeping out requirements to provide assurance of financial ability to decommission their renewable energy facilities. Many Colorado Counties as well as other states require a decommissioning plan backed with financial surety. They require financial assurance in the form of a bond, line of credit etc.. from renewable energy companies to ensure they can decommission their facilities.

Many counties in Colorado require financial assurance to cover the cost of decommissioning and have clear guidelines as to what needs to be done at what time. These requirements include a decommissioning plan with continuous updating every 5 years. They require the decommission to be started within a certain amount of time and be complete within a certain amount of time. They all include land restoration requirements and requirements for financial backing to decommission. This is the only way to hold companies accountable. Following are some examples in Colorado:

Weld County which has detailed decommissioning requirements including a bond posting. https://www.weld.gov/files/sharedassets/public/v/10/departments/planning-and-zoning/documents/land-use-applications/1041-sef.pdf

Routt county has such requirements as well. https://www.co.routt.co.us/AgendaCenter/ViewFile/Item/21327?fileID=19804

San Miguel County has similar requirements in draft of the land use codes they are writing for renewable. https://www.sanmiguelcountyco.gov/DocumentCenter/View/11444/ Draft-Regulations-for-Solar-Energy-Systems-PDF?bidId

This is just an example of a few local codes which include such requirements to protect their current and future residents. There are more.

The state of Colorado is also taking decommissioning seriously. The pending Connecting Renewable Energy in Colorado Bill will limit local power to regulate renewable energy facilities. One of the few areas the draft allows Counties to hold renewable energy companies accountable is with decommissioning. They allow everything the above counties are doing including a surety bond.

Nationally 33 states now have some sort of requirements for decommissioning renewable energy facilities and the number is increasing. See attached (Lewis Roca Report SRDESREP)

State and Local governments are proactively addressing this issue due to the large amount of renewable facilities coming online and the large amount of waste which they will soon be producing. According to the Harvard Business review "The International Renewable Energy Agency (IRENA)'s official projections assert that "large amounts of annual waste are anticipated by the early 2030s" and could total 78 million tonnes by the year 2050." https://hbr.org/2021/06/the-dark-side-of-solar-power

Experts in the renewable industry also agree that solid decommissioning plans with financial backing are important. For example a panel of experts from 2 renewable energy companies as well as representative from the solar energy industry association help up Texas bill SB760 https://www.jdsupra.com/legalnews/texas-legislature-expands-4566455/

as the gold standard for balancing the needs of local residents and renewable energy companies. It includes requirements for removal of equipment, restoration of the land and evidence of financial assurance. Solar Experts Weigh in on Decommissioning RequirementsÔgº | Leyline Renewable Capital





Solar Experts Weigh in on Decommissioning RequirementsÔø° | Leyline Rene...

When I brought up requiring financial backing at the recent focus group meeting put together by Sean Norris, I was countered that it was too difficult to calculate what future decommission costs would be. The representative from a solar energy company said it was too expensive and a waste of money to require financial backing. However the same company, whose representative was speaking at the meeting, has facilities or is building them in Colorado Counties (Weld County, Routt County) that require bonds and other states (Virginia) that require bonds. When looking at the energy representative's report, from another Colorado county (Morgan County) they are building in, they explicitly stated they will do a surety bond. See attached (BCC Board Packet 05-16-2023) In an email questioning the Pivot representative about this, replied that they are open to doing some sort of financial assurance. See attached (email from Pivot Energy)

Given how this issue is starting to be addressed both by neighboring counties the state of Colorado, and by a majority of other states, there is obviously a need for these requirements. If the requirement for financial backing for decommissioning isn't put into the amendment Mesa County is leaving itself open to being taken advantage of by unscrupulous companies who have no intention or ability to pay for decommissioning. For companies who do have the ability to provide financial guarantee, not requiring it is putting their financial gain before the safety and health of Mesa County residents.

3 attachments

lewis roca report SRDESREP.pdf 1213K

BCC Board Packet 05-16-2023 Additional Info Pivot Energy.pdf

Email from Pivot Energy.docx



Nina Hutchins <hutchinsninas@yahoo.com>

Fri, Mar 8, 2024 at 9:33 AM

To: Sean Norris <sean.norris@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>, "faye.hall@mesacounty.us" <faye.hall@mesacounty.us>, "samantha.hoogland@mesacounty.us" <samantha.hoogland@mesacounty.us> Cody Davis <cody.davis@mesacounty.us>, Janet Rowland </anet.rowland@mesacounty.us>

Public Input regarding project # PRO2024-0022

I talked to Destry Smith, Grand Valley Power's, Energy Services Administrator yesterday after our meeting with Bobbie Daniel. I wanted to ask him what a power company would recommend for best practices in the renewable energy amendment of the land use code.

He responded that he would really like to see a requirement for any, "in front of the meter" project, to fill out an application with GVP prior to doing anything else, like looking for subscribers, to make sure the project can be tied into the grid.

There is precedent for this in other counties codes. San Miguel is planning a requirement that says companies,

Must provide copies of agreements to interconnect with a utility, a copy of a "letter of intent to interconnect" or an interconnection agreement signed by the utility

Destry Smith asked me to pass this information onto the planning commission working on this, and also to pass on his phone number to talk about it more if there are questions. His number is 970-623-8581

Thank you,

Nina Hutchins

To: Nina Hutchins <hutchinsninas@yahoo.com>

Fri, Mar 8, 2024 at 11:15 AM

Cc: Greg Moberg <greg.moberg@mesacounty.us>, "faye.hall@mesacounty.us" <faye.hall@mesacounty.us>, "samantha.hoogland@mesacounty.us" <samantha.hoogland@mesacounty.us>, Bobbie Daniel <bobbie.daniel@mesacounty.us>, Cody Davis <<cody.davis@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>

Thank you for your comments.

This will be included in the public comment portion of the project file.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]



project # PRO2024-0022

Nina Hutchins <hutchinsninas@yahoo.com>

1 message

Cc: Sean Norris <sean.norris@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>, "faye.hall@mesacounty.us" <faye.hall@mesacounty.us>, "samantha.hoogland@mesacounty.us" <samantha.hoogland@mesacounty.us>

To: Bobbie Daniel <bobbie.daniel@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>

Tue, Mar 12, 2024 at 12:21 PM

Dear BOCC and planning commission,

Please take the considerations of concerned citizens regarding the amendments to the land use code seriously. What we have been presenting is information from other areas that have had more experience with solar development. The rapid advance in technology and growth hasn't allowed for that consequences to play out, or clearly be seen everywhere, yet, in a new and developing industry. The industry isn't clearly regulated on a state or national level, yet, and there are strong political forces encouraging rapid expansion without thoroughly evaluation of the consequences. Let's not jump on that bandwagon.

There are resources out there for those who take the time to look at what best practices are and want to follow them. The American Planning Association has a memo which outlines what a locality should take into consideration when developing their plans for solar energy facilities. To briefly quote the article,

While public officials tend to focus on the economics(and in the case of Colorado, politics,) of these facilities and their overall fiscal impact to the community, the emphasis for planners is on the direct land-use considerations that should be carefully evaluated (e.g., zoning, neighbors, viewsheds, and environmental impacts).

The PAS Memo regarding utility scale solar facilities has a thorough, evidence based, breakdown of the impacts of these facilities on a locality. The Memo emphasizes the importance of locating the facility appropriately.

The location of utility-scale solar facilities is the single most important factor in evaluating an application because of the large amount of land required and the extended period that land is dedicated to this singular use, as discussed above.

Solar facilities can be appropriately located in areas where they are difficult to detect, the prior use of the land has been marginal, and there is no designated future use specified (i.e., not in growth areas, not on prime farmland, and not near recreational or historic areas). Proposed facilities adjacent to corporate boundaries, public rights-of-way, or recreational or cultural resources are likely to be more controversial than facilities that are well placed away from existing homes, have natural buffers, and don't change the character of the area from the view of local residents and other stakeholders.

A brief summary of other important factors in this memo, which we concerned citizens have been trying to bring to the attention of the planners are: Change in use/future land use, agricultural/forestry use, residential use, industrially zoned land, location, concentration of uses, visual impacts, decommissioning, environmental impacts, wildlife corridors, storm water, erosion and sediment control, cultural, environmental and recreational resources. Concerned citizens have given input on all these areas. Some have been incorporated like fire, others have been disregarded.

The purpose of this letter isn't to take away more hours of your day but to reiterate that what we have been presenting in numerous letters and at various meetings are issues that are prevalent across America and the code amendments we are suggesting are backed by other localities hard earned experience with these facilities. Please incorporate our suggested code amendments in the new Land Development Code. Please don't give in to industry and political pressure at the expense of the wellbeing of the actual residents of the county.

Thank you,

Nina Hutchins

Below is a copy of the memo, (it's worth reading)

Planning for Utility-Scale Solar Energy Facilities PAS Memo — September/October 2019 Download PDF version (pdf)

By Darren Coffey, AICP

Solar photovoltaics (PV) are the fastest-growing energy source in the world due to the decreasing cost per kilowatt-hour — 60 percent to date since 2010, according to the U.S. Department of Energy (U.S. DOE n.d.) — and the comparative speed in constructing a facility. Solar currently generates 0.4 percent of global electricity, but some University of Oxford researchers estimate its share could increase to 20 percent by 2027 (Hawken 2017). Utility-scale solar installations are the most cost-effective solar PV option (Hawken 2017).

Transitioning from coal plants to solar significantly decreases carbon dioxide emissions and eliminates sulfur, nitrous oxides, and mercury emissions. As the U.S. Department of Energy states, "As the cleanest domestic energy source available, solar supports broader national priorities, including national security, economic growth, climate change mitigation, and job creation" (U.S. DOE n.d.). As a result, there is growing demand for solar energy from companies (e.g., the "RE100," 100 global corporations committed to sourcing 100 percent renewable electricity by 2050) and governments (e.g., the Virginia Energy Plan commits the state to 16 percent renewable energy by 2022).

Federal and state tax incentives have accelerated the energy industry's efforts to bring facilities online as quickly as possible. This has created a new challenge for local governments, as many are ill-prepared to consider this new and unique land-use option. Localities are struggling with how to evaluate utility-scale solar facility applications, how to update their land-use regulations, and how to achieve positive benefits for hosting these clean energy facilities.

As a land-use application, utility-scale solar facilities are processed as any other land-use permit. Localities use the tools available: the existing comprehensive (general) plan and zoning ordinance. In many cases, however, plans and ordinances do not address this type of use. Planners will need to amend these documents to bring some structure, consistency, and transparency to the evaluation process for utility-scale solar facilities.

Unlike many land uses, these solar installations will occupy vast tracts of land for one or more generations; they require tremendous local resources to monitor during construction (and presumably decommissioning); they can have significant impacts on the community depending on their location, buffers, installation techniques, and other factors (Figure 1); and they are not readily adaptable for another industrial or commercial use, hence the need for decommissioning.

Figure 1. Utility-scale solar facilities are large-scale uses that can have significant land-use impacts on communities. Photo by Flickr user U.S. Department of Energy/Michael Faria.

While solar energy aligns with sustainability goals held by an increasing number of communities, solar industries must bring an overall value to the locality beyond the clean energy label. Localities must consider the other elements of sustainability and make deliberate decisions regarding impacts and benefits to the social fabric, natural environment, and local economy. How should a locality properly evaluate the overall impacts of a large-scale clean energy land use on the community?

This PAS Memo examines utility-scale solar facility uses and related land-use issues. It defines and classifies these facilities, analyzes their land-use impacts, and makes recommendations for how to evaluate and mitigate those impacts. While public officials tend to focus on the economics of these facilities and their overall fiscal impact to the community, the emphasis for planners is on the direct land-use considerations that should be carefully evaluated (e.g., zoning, neighbors, viewsheds, and environmental

impacts). Specific recommendations and sample language for addressing utility-scale solar in comprehensive plans and zoning ordinances are provided at the end of the article.

The Utility-Scale Solar Backdrop

In contrast to solar energy systems generating power for on-site consumption, utility-scale solar, or a solar farm, is an energy generation facility that supplies power to the grid. These facilities are generally more than two acres in size and have capacities in excess of one megawatt; today's utility-scale solar facilities may encompass hundreds or even thousands of acres. A solar site may also include a substation and a switchyard, and it may require generator lead lines (gen-tie lines) to interconnect to the grid (Figure 2).

Figure 2. Components of a solar farm: solar panels (left), substation (center), and high-voltage transmission lines (right). Photos courtesy Berkley Group (left, right) and Pixabay (center).

From 2008 to 2019, U.S. solar photovoltaic (PV) installations have grown from generating 1.2 gigawatts (GW) to 30 GW (SEIA 2019). The top 10 states generating energy from solar PV are shown in Figure 3. For many of these initial projects, local planning staff independently compiled information through research, used model ordinances, and relied on professional networks to cobble together local processes and permit conditions to better address the adverse impacts associated with utility-scale solar.

However, each individual project brings unique challenges related to size, siting, compatibility with surrounding uses, mitigating impacts through setbacks and buffers, land disturbance processes and permits, financial securities, and other factors. This has proven to be a significant and ongoing challenge to local planning staff, planning commissions, and governing bodies.

Figure 3. Utility solar capacity in the United States in 2019. Courtesy Solar Energy Industry Association.

Some localities have adopted zoning regulations to address utility-scale solar facilities based on model solar ordinance templates created by state or other agencies for solar energy facilities. However, these ordinances may not be sufficient to properly mitigate the adverse impacts of these facilities on communities. Many of these initial models released in the early 2010s aimed to promote clean energy and have failed to incorporate lessons learned from actual facility development. In addition, the solar industry has been changing at a rapid pace, particularly regarding the increasing scale of facilities. Planners should therefore revisit any existing zoning regulations for utility-scale solar facilities to ensure their relevance and effectiveness.

Rapid growth of utility-scale solar facilities has emerged for rural communities, particularly those that have significant electrical grid infrastructure. Many rural counties have thousands of acres of agricultural and forested properties in various levels of production. Land prices tend to be much more cost-effective in rural localities, and areas located close to high-voltage electric transmission lines offer significant cost savings to the industry. Figure 4 shows the extent of existing electric transmission lines in one rural Virginia county.

Figure 4. Electric transmission lines in Mecklenburg County, Virginia. Courtesy Berkley Group.

Federal and state tax incentives have further accelerated the pace of utility-scale solar developments, along with decreasing solar panel production costs. These factors all combine to create land-use development pressure that, absent effective and relevant land-use regulatory and planning tools, creates an environment where it is difficult to properly evaluate and make informed decisions for the community's benefit.

Solar Facility Land-Use Impacts

As with any land-use application, there are numerous potential impacts that need to be evaluated with solar facility uses. All solar facilities are not created equal, and land-use regulations should reflect those differences in scale and impact accordingly.

Utility-scale solar energy facilities involve large tracts of land involving hundreds, if not thousands, of acres. On these large tracts, the solar panels often cover more than half of the land area. The solar facility use is often pitched as "temporary" by developers, but it has a significant duration — typically projected by applicants as up to 40 years.

Establishing such a solar facility use may take an existing agricultural or forestry operation out of production, and resuming such operations in the future will be a challenge. Utility-scale solar can take up valuable future residential, commercial, or industrial growth land when located near cities, towns, or other identified growth areas. If a solar facility is close to a major road or cultural asset, it could affect the viewshed and attractiveness of the area. Because of its size, a utility-scale solar facility can change the character of these areas and their suitability for future development. There may be other locally specific potential impacts. In short, utility-scale solar facility proposals must be carefully evaluated regarding the size and scale of the use; the conversion of agricultural, forestry, or residential land to an industrial-scale use; and the potential environmental, social, and economic impacts on nearby properties and the area in general.

To emphasize the potential impact of utility-scale solar facilities, consider the example of one 1,408-acre (2.2-square-mile) Virginia town with a 946-acre solar facility surrounding its north and east sides. The solar project area is equal to approximately 67 percent of the town's area. A proposed 332.5-acre solar facility west of town increases the solar acres to 1,278.5, nearly the size of the town. Due to its proximity to multiple high-voltage electrical transmission lines, other utility-scale solar facilities are also proposed for this area, which would effectively lock in the town's surrounding land-use pattern for the next generation or more.

The following considerations are some of the important land-use impacts that utility-scale solar may have on nearby communities.

CHANGE IN USE/FUTURE LAND USE

A primary impact of utility-scale solar facilities is the removal of forest or agricultural land from active use. An argument often made by the solar industry is that this preserves the land for future agricultural use, and applicants typically state that the land will be restored to its previous condition. This is easiest when the land was initially used for grazing, but it is still not without its challenges, particularly over large acreages. Land with significant topography, active agricultural land, or forests is more challenging to restore.

It is important that planners consider whether the industrial nature of a utility-scale solar use is compatible with the locality's vision. Equally as important are imposing conditions that will enforce the assertions made by applicants regarding the future restoration of the site and denying applications where those conditions are not feasible.

Agricultural/Forestry Use. Agricultural and forested areas are typical sites for utility-scale solar facility uses. However, the use of prime agricultural land (as identified by the USDA or by state agencies) and ecologically sensitive lands (e.g., riparian buffers, critical habitats, hardwood forests) for these facilities should be scrutinized.

For a solar facility, the site will need to be graded in places and revegetated to stabilize the soil. That vegetation typically needs to be managed (e.g., by mowing, herbicide use, or sheep grazing) over a long period of time. This prolonged vegetation management can change the natural characteristics of the soil, making restoration of the site for future agricultural use more difficult. While native plants, pollinator plants, and grazing options exist and are continually being explored, there are logistical is with all of them, from soil quality impacts to compatibility of animals with the solar equipment.

A deforested site can be reforested in the future, but over an additional extended length of time, and this may be delayed or the land left unforested at the request of the landowner at the time of decommissioning. Clearcutting forest in anticipation of a utility-scale solar application should be avoided but is not uncommon. This practice potentially undermines the credibility of the application, eliminates what could have been natural buffers and screening, and eliminates other landowner options to monetize the forest asset (such as for carbon or nutrient credits).

For decommissioning, the industry usually stipulates removal of anything within 36 inches below the ground surface. Unless all equipment is specified for complete removal and this is properly enforced during decommissioning, future agricultural operations would be planting crops over anything left in the ground below that depth, such as metal poles, concrete footers, or wires.

Residential Use. While replacing agricultural uses with residential uses is a more typical land-use planning concern, in some areas this is anticipated and desired over time. "People have to live somewhere," and this should be near existing infrastructure typical of cities, towns, and villages rather than sprawled out over the countryside. This makes land lying within designated growth areas or otherwise located near existing population centers a logical location for future residential use. Designated growth areas can be important land-use strategies to accommodate future growth in a region. Permitting a utility-scale use on such land ties it up for 20–40 years (a generation or two), which may be appropriate in some areas, but not others.

Industrially Zoned Land. Solar facilities can be a good use of brownfields or other previously disturbed land. A challenge in many rural areas, however, is that industrially zoned land is limited, and both public officials and comprehensive plan policies place a premium on industries that create and retain well-paying jobs. While utility-scale solar facilities are not necessarily incompatible with other commercial and industrial uses, the amount of space they require make them an inefficient use of industrially zoned land, for which the "highest and best use" often entails high-quality jobs and an array of taxes paid to the locality (personal property, real estate, machinery and tool, and other taxes).

LOCATION

The location of utility-scale solar facilities is the single most important factor in evaluating an application because of the large amount of land required and the extended period that land is dedicated to this singular use, as discussed above.

Solar facilities can be appropriately located in areas where they are difficult to detect, the prior use of the land has been marginal, and there is no designated future use specified (i.e., not in growth areas, not on prime farmland, and not near recreational or historic areas). Proposed facilities adjacent to corporate boundaries, public rights-of-way, or recreational or cultural resources are likely to be more controversial than facilities that are well placed away from existing homes, have natural buffers, and don't change the character of the area from the view of local residents and other stakeholders.

CONCENTRATION OF USES

A concentration of solar facilities is another primary concern. The large scale of this land use, particularly when solar facilities are concentrated, also significantly exacerbates adverse impacts to the community in terms of land consumption, use pattern disruptions, and environmental impacts (e.g., stormwater, erosion, habitat). Any large-scale homogenous land use should be carefully examined — whether it is rooftops, impervious surface, or solar panels. Such concentrated land uses change the character of the area and alter the natural and historic development pattern of a community.

The attraction of solar facilities to areas near population centers is a response to the same forces that attract other uses — the infrastructure is already there (electrical grid, water and sewer, and roads). One solar facility in a given geographic area may be an acceptable use of the land, but when multiple facilities are attracted to the same geography for the same reasons, this tips the land-use balance toward too much of a single use. The willingness of landowners to cooperate with energy companies is understandable, but that does not automatically translate into good planning for the community. The short- and medium-term gains for individual landowners can have a lasting negative impact on the larger community.

VISUAL IMPACTS

The visual impact of utility-scale solar facilities can be significantly minimized with effective screening and buffering, but this is more challenging in historic or scenic landscapes. Solar facilities adjacent to scenic byways or historic corridors may negatively impact the rural aesthetic along these transportation routes. Buffering or screening may also be appropriate along main arterials or any public right-of-way, regardless of special scenic or historic designation.

The location of large solar facilities also needs to account for views from public rights-of-way (Figure 5). Scenic or historic areas should be avoided, while other sites should be effectively screened from view with substantial vegetative or other types of buffers. Berms, for example, can provide a very effective screen, particularly if combined with appropriate vegetation.

Figure 5. This scenic vista would be impacted by a solar facility proposed for the far knoll. Photo courtesy Berkley Group.

DECOMMISSIONING

The proper decommissioning and removal of equipment and other improvements when the facility is no longer operational presents significant challenges to localities.

Decommissioning can cost millions in today's dollars. The industry strongly asserts that there is a significant salvage value to the solar arrays, but there may or may not be a market to salvage the equipment when removed. Further, the feasibility of realizing salvage value may depend on who removes the equipment — the operator, the tenant, or the landowner (who may not be the same parties as during construction) — as well as when it is removed.

Providing for adequate security to ensure that financial resources are available to remove the equipment is a significant challenge. Cash escrow is the most reliable security for a locality but is the most expensive for the industry and potentially a financial deal breaker. Insurance bonds or letters of credit seem to be the most acceptable forms of security but can be difficult to enforce as a practical matter. The impact of inflation over decades is difficult to calculate; therefore, the posted financial security to ensure a proper decommissioning should be reevaluated periodically — usually every five years or so. The worst possible outcome for a community (and a farmer or landowner) would be an abandoned utility-scale solar facility with no resources available to pay for its removal.

Additional Solar Facility Impacts

In addition to the land-use impacts previously discussed, there are a number of significant environmental and economic impacts associated with utility-scale solar facilities that should be addressed as part of the land-use application process.

ENVIRONMENTAL IMPACTS

While solar energy is a renewable, green resource, its generation is not without environmental impacts. Though utility-scale solar facilities do not generate the air or water pollution typical of other large-scale fossil-fuel power production facilities, impacts on wildlife habitat and stormwater management can be significant due to the large scale of these uses and the resulting extent of land disturbance. The location of sites, the arrangement of panels within the site, and the ongoing management of the site are important in the mitigation of such impacts.

Wildlife Corridors. In addition to mitigating the visual impact of utility-scale solar facilities, substantial buffers can act as wildlife corridors along project perimeters. The arrangement of panels within a project site is also important to maintain areas conducive to wildlife travel through the site. Existing trees, wetlands, or other vegetation that link open areas should be preserved as wildlife cover. Such sensitivity to the land's environmental features also breaks up the panel bay groups and will make the eventual

restoration of the land to its previous state that much easier and more effective. A perimeter fence is a barrier to wildlife movement, while fencing around but not in between solar panel bays creates open areas through which animals can continue to travel (Figure 6).

Figure 6. A conceptual site plan for a 1,491-acre utility-scale solar facility showing wildlife corridors throughout the site. Courtesy Dominion Energy.

Stormwater, Erosion, and Sediment Control. The site disturbance required for utility-scale solar facilities is significant due to the size of the facilities and the infrastructure needed to operate them. These projects require the submission of both stormwater (SWP) and erosion/sediment control (ESC) plans to comply with federal and state environmental regulations.

Depending on the site orientation and the panels to be used, significant grading may be required for panel placement, roads, and other support infrastructure. The plan review and submission processes are no different with these facilities than for any other land-disturbing activity. However, such large-scale grading project plans are more complex than those for other uses due primarily to the scale of utility solar. Additionally, the impervious nature of the panels themselves creates stormwater runoff that must be properly controlled, managed, and maintained.

Due to this complexity, it is recommended that an independent third party review all SWP and ESC plans in addition to the normal review procedures. Many review agencies (local, regional, or state) are under-resourced or not familiar with large-scale grading projects or appropriate and effective mitigation measures. It is in a locality's best interest to have the applicant's engineering and site plans reviewed by a licensed third party prior to and in addition to the formal plan review process. Most localities have engineering firms on call that can perform such reviews on behalf of the jurisdiction prior to formal plan review submittal and approval. This extra step, typically paid for by the applicant, helps to ensure the proper design of these environmental protections (Figure 7).

Figure 7. Example of compliance (left) and noncompliance (right) with erosion and sediment control requirements. Photos courtesy Berkley Group.

The successful implementation of these plans and ongoing maintenance of the mitigation measures is also critical and should be addressed in each proposal through sufficient performance security requirements and long-term maintenance provisions.

Cultural, Environmental, and Recreational Resources. Every proposed site should undergo an evaluation to identify any architectural, archaeological, or other cultural resources on or near proposed facilities. Additionally, sites located near recreational, historic, or environmental resources should be avoided. Tourism is recognized as a key sector for economic growth in many regions, and any utility-scale solar facilities that might be visible from a scenic byway, historic site, recreational amenity, or similar resources could have negative consequences for those tourist attractions.

ECONOMIC IMPACTS

This PAS Memo focuses on the land-use impacts of utility-scale solar facilities, but planners should also be aware of economic considerations surrounding these uses for local governments and communities.

Financial Incentives. Federal and state tax incentives benefit the energy industry at the expense of localities. The initial intent of industry-targeted tax credits was to act as an economic catalyst to encourage the development of green energy. An unintended consequence has been to benefit the solar industry by saving it tax costs at the expense of localities, which don't receive the benefit of the full taxable rate they would normally receive.

Employment. Jobs during construction (and decommissioning) can be numerous, but utility-scale solar facilities have minimal operational requirements otherwise. Very large facilities may employ one or two full-time-equivalent employees. During the construction phase there are typically hundreds of employees who need local housing, food, and entertainment.

Fiscal Impact. The positive fiscal impact to landowners who lease or sell property for utility-scale solar facilities is clear. However, the fiscal impact of utility-scale solar facilities to the community as a whole is less clear and, in the case of many localities, may be negligible compared with their overall budget due to tax credits, low long-term job creation, and other factors.

Property values. The impact of utility-scale solar facilities is typically negligible on neighboring property values. This can be a significant concern of adjacent residents, but negative impacts to property values are rarely demonstrated and are usually directly addressed by applicants as part of their project submittal.

Solar Facilities in Local Policy and Regulatory Documents

The two foundational land-use tools for most communities are their comprehensive (general) plans and zoning ordinances. These two land-use documents are equally critical in the evaluation of utility-scale solar facilities. A community's plan should discuss green energy, and its zoning ordinance should properly enable and regulate green energy uses.

THE COMPREHENSIVE PLAN

The comprehensive plan establishes the vision for a community and should discuss public facilities and utilities. However, solar facilities are not directly addressed in many comprehensive plans.

If solar energy facilities are desired in a community, they should be discussed in the comprehensive plan in terms of green infrastructure, environment, and economic development goals. Specific direction should be given in terms of policy objectives such as appropriate locations and conditions. If a community does not desire such large-scale land uses because of their impacts on agriculture or forestry or other concerns, then that should be directly addressed in the plan.

Some states, such as Virginia, require a plan review of public facilities — including utility-scale solar facilities — for substantial conformance with the local comprehensive plan (see Code of Virginia §15.2-2232). This typically requires a review by the planning commission of public utility facility proposals, whether publicly or privately owned, to determine if their general or approximate locations, characters, and extents are substantially in accord with the comprehensive plan.

Most comprehensive plans discuss the types of industry desired by the community, the importance of agricultural operations, and any cultural, recreational, historic, or scenic rural landscape features. An emphasis on tourism, job growth, and natural and scenic resource protection may not be consistent with the use pattern associated with utility-scale solar facilities. If a plan is silent on the solar issue, this may act as a barrier to approving this use. Plans should make clear whether utility-scale solar is desired and, if so, under what circumstances.

This plan review process should precede any other land-use application submittal, though it may be performed concurrently with other zoning approvals. Planners and other public officials should keep in mind that even if a facility is found to be substantially in accord with a comprehensive plan, that does not mean the land-use application must be approved. Use permits are discretionary. If a particular application does not sufficiently mitigate the adverse impacts of the proposed land use, then it can and should be denied regardless of its conformance with the comprehensive plan.

Similarly, in Virginia, a utility-scale solar facility receiving use permit approval without a comprehensive plan review may not be in compliance with state code. The permit approval process is a two-step process, with the comprehensive plan review preferably preceding the consideration of a use permit application.

THE ZONING ORDINANCE

While a community's comprehensive plan is its policy guide, the zoning ordinance is the regulatory document that implements that policy. Plans are advisory in nature, although often upheld in court decisions, whereas ordinance regulations are mandatory. In addition to comprehensive plan amendments, the zoning ordinance should specifically set forth the process and requirements necessary for the evaluation of a utility-scale solar application.

In zoning regulations, uses may be permitted either by right (with or without designated performance measures such as use and design standards) or as conditional or special uses, which require discretionary review and approval. Solar facilities generating power for on-site use are typically regulated as by-right uses depending on their size and location.

Utility-scale solar facilities, however, should in most cases be conditionally permitted regardless of the zoning district and are most appropriate on brownfield sites, in remote areas, or in agriculturally zoned areas. This is particularly true for more populated areas due to the more compact nature of land uses. There are, however, areas throughout the country where utility-scale solar might be permitted by right under strict design standards that are compatible with community objectives.

To better mitigate the potential adverse impacts of utility-scale solar facilities, required application documents should include the following:

Concept plan

Site plan

Construction plan

Maintenance plan

Erosion and sediment control and stormwater plans

Performance measures should address these issues:

Setbacks and screening

Plan review process

Construction/deconstruction mitigation and associated financial securities

Signage

Nuisance issues (glare, noise)

The model specific planning and zoning recommendations below outline comprehensive plan and zoning ordinance amendments, the application process, and conditions for consideration during the permitting process.

The Virginia Experience

The recommendations presented in this PAS Memo are derived from research and the author's direct experience with the described planning, ordinance amendment, and application and regulatory processes in the following three Virginia localities, all rural counties in the southern or eastern parts of the state. 136

MECKLENBURG COUNTY

When Mecklenburg County began seeing interest in utility-scale solar facilities, the county's long-range plan did not address solar facilities, and the zoning ordinance was based on an inadequate and outdated state model that did not adequately regulate this land use.

The town of Chase City is located near the confluence of several high-voltage utility lines, and all proposed facilities were located near or within the town's corporate limits. The county approved the first utility-scale solar facility application in the jurisdiction without any conditions or much consideration. When the second application for a much larger facility (more than 900 acres) came in soon after, with significant interest from other potential applicants as well, the county commissioned the author's consulting firm, The Berkley Group, to undertake a land-use and industry study regarding utility-scale solar facilities.

As Mecklenburg officials continued with the approval process on the second utility-scale solar facility under existing regulations, they received the results of the industry study and began considering a series of amendments to the comprehensive plan and zoning ordinance. Though county officials were particularly worried about the potential concentration of facilities around Chase City, town officials expressed formal support for the proposed land use. Other Mecklenburg communities expressed more concern and wanted the facilities to be located a significant distance away from their corporate boundaries. These discussions led to standards limiting the concentration of facilities, encouraging proximity to the electrical grid, and establishing distances from corporate boundaries where future solar facilities could not be located.

Since the adoption of the new regulations, numerous other utility-scale solar applications have been submitted and while some have been denied, most have been approved. Solar industry representatives' concerns that the new regulations were an attempt to prevent this land use have therefore not been realized; these are simply the land-use tools that public officials wanted and needed to appropriately evaluate solar facility applications. Many of the examples and best practices recommended in this article, including the model language provided at the end of the article, are a result of the utility-scale solar study commissioned by the county (Berkley Group 2017) and the subsequent policies and regulations it adopted.

SUSSEX COUNTY

Sussex County is located east and north of Mecklenburg, and the interest in utility-scale solar projects there has been no less immediate or profound. The announcement of the new Amazon headquarters in Arlington, Virginia, along with the company's interest in offsetting its operational energy use with green energy sources furthered interest in this rural county more than 100 miles south of Arlington.

As in Mecklenburg County, local regulations did not address utility-scale solar uses, so public officials asked for assistance from The Berkley Group to develop policies and regulations appropriate for their community. Sussex County officials outlined an aggressive timeline for considering new regulations regarding solar facilities and, within one month of initiation, swiftly adopted amended regulations for solar energy facilities.

The same metrics and policy issues examined and adopted for Mecklenburg County were used for the initial discussion in Sussex at a joint work session between the board of supervisors (the governing body) and the planning commission. Public officials tailored the proposed standards and regulations to the county context based on geography, cultural priorities, and other concerns. They then set a joint public hearing for their next scheduled meeting to solicit public comment.

Under Virginia law, land-use matters may be considered at a joint public hearing with a recommendation from the planning commission going to the governing body and that body taking action thereafter. This is not a typical or recommended practice for local governments since it tends to limit debate, transparency, and good governance, but due to the intense interest from the solar industry, coupled with the lack of land-use regulations addressing the proposed utility-scale solar uses, county officials utilized that expedited process.

No citizens and only two industry officials spoke at the public hearing, and after two hours of questions, discussion, and some negotiation of proposed standards, the new regulations were adopted the same evening.

Since the new regulations have been put into place, no new solar applications have been received, but informal discussions with public officials and staff suggest that interest from the industry remains strong.

GREENSVILLE COUNTY

Greensville County, like Mecklenburg, lies on the Virginia-North Carolina boundary. The county has processed four solar energy applications to date (three were approved and one was denied) and continues to process additional applications. Concurrently, the county is in the process of evaluating its land-use policies and regulations, which were amended in late 2016 at the behest of solar energy interests.

The reality of the land-use approval process has proved more challenging than the theory of the facilities when considered a few years ago. As with other localities experiencing interest from the solar energy industry, the issues of scale, concentration, buffers/setbacks, and other land-use considerations have been debated at each public hearing for each application. Neighbors and families have been divided, and lifelong relationships have been severed or strained. The board of supervisors has found it difficult in the face of their friends, neighbors, and existing corporate citizens to deny applications that otherwise might not have been approved.

County officials have agreed that they do want to amend their existing policies and regulations to be more specific and less open to interpretation by applicants and citizens. One of their primary challenges has been dedicating the time to discuss proposed changes to their comprehensive plan and zoning ordinance. A joint work session between the board of supervisors and planning commission is being scheduled and should lead to subsequent public hearings and actions by those respective bodies to enact new regulations for future utility-scale solar applicants.

Action Steps for Planners

There are four primary actions that planners can pursue with their planning commissions and governing bodies to ensure that their communities are ready for utility-scale solar.

REVIEW AND AMEND THE PLAN

The first, and most important, step from a planning viewpoint is to review and amend the comprehensive plan to align with how a community wants to regulate utility-scale solar uses. Some communities don't want them at all, and many cities and towns don't have the land for them. Larger municipalities and counties around the country may have to deal with this land use at some point, if they haven't already. Local governments should get their planning houses in order by amending plans before the land-use applications arrive.

REVIEW AND AMEND LAND-USE ORDINANCES

Once the plan is updated, the next step is to review and amend land-use ordinances (namely the zoning ordinance) accordingly. These ordinances are vital land-use tools that need to be up to date and on point to effectively regulate large and complex solar facilities. If local governments do not create regulations for utility-scale solar facilities, applications for these projects will occupy excessive staff time, energy, and talents, resulting in much less efficient and more open-ended results.

EVALUATE EACH APPLICATION BASED ON ITS OWN MERITS

This should go without saying, but it is important, particularly from a legal perspective, that each project application is evaluated based on its own merits. All planners have probably seen a project denied due to the politics at play with regard to other projects: "That one shouldn't have been approved so we're going to deny this one." "The next one is better so this one needs to be denied."

The focus of each application should be on the potential adverse impacts of the project on the community and what can be done successfully to mitigate those impacts. Whether the applicant is a public utility or a private company, the issues and complexities of the project are the same. The bottom line should never be who the applicant is; rather, it should be whether the project's adverse impacts can be properly mitigated so that the impact to the community is positive.

LEARN FROM OTHERS

Mecklenburg County's revised solar energy policies and regulations began with emails and phone calls to planning colleagues to see how they had handled utility-scale solar projects in their jurisdictions. The primary resources used were internet research, other planners, and old-fashioned planner ingenuity and creativity.

While it is the author's hope and intent that this article offers valuable information on this topic, nothing beats the tried and true formula of "learn from and lean on your colleagues."

Conclusion

The solar energy market is having major impacts on land use across the country, and federal and state tax incentives have contributed to a flood of applications in recent years. While the benefits of clean energy are often touted, the impacts of utility-scale solar facilities on a community can be significant. Applicants often say that a particular project will "only" take up some small percentage of agricultural, forestry, or other land-use category — but the impact of these uses extends beyond simply replacing an existing (or future) land use. Fiscal benefit to a community is also often cited as an incentive, but this alone is not a compelling reason to approve (or disapprove) a land-use application.

The scale and duration of utility-scale solar facilities complicate everything from the land disturbance permitting process through surety requirements. If not done properly, these uses can change the character of an area, altering the future of communities for generations.

Local officials need to weigh these land-use decisions within the context of their comprehensive plan and carefully consider each individual application in terms of the impact that it will have in that area of the community, not only by itself but also if combined with additional sites. The concentration of solar facilities is a major consideration in addition to their individual locations. A solar facility located by itself in a rural area, close to major transmission lines, not prominently visible from public rights-of-way or adjacent properties, and not located in growth areas, on prime farmland, or near cultural, historic, or recreational sites may be an acceptable land use with a beneficial impact on the community.

Properly evaluating and, to the extent possible, mitigating the impacts of these facilities by carefully controlling their location, scale, size, and other site-specific impacts is key to ensuring that utility-scale solar facilities can help meet broader sustainability goals without compromising a community's vision and land-use future.

Specific Planning and Zoning Recommendations for Utility-Scale Solar

ABOUT THE AUTHOR

Darren K. Coffey, AICP, is co-owner and chief executive officer of The Berkley Group, a local government consulting firm in Virginia. Prior to forming The Berkley Group, he worked as a land-use planner for various localities in North Carolina and Virginia. The Berkley Group began working on utility-scale solar planning issues in early 2017 as that industry began to take off in Virginia. Coffey has bachelor of science degrees in economics and geography from James Madison University and a master of arts in geography from Rutgers University, and he attained AICP certification in 2000. He may be reached at darren@bgllc.net.

The author would like to thank Denise Nelson, PE, CFM, ENV SP, Berkley Group Environmental Engineer, for her contributions to this article.

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Public Comment - Utility Production Land Development Code (PRO2024-0022)

2 messages

Eli Jennings <ejennings@cliftonsanitation.com> To: Sean Norris <sean.norris@mesacounty.us> Mon, Feb 26, 2024 at 11:44 AM

Mesa County Planning Commission,

The Clifton Sanitation District appreciates the opportunity to provide written public comment regarding Utility Production Land Development Code (PRO2024-0022). For the record, the District is the primary wastewater collection and treatment utility for the urbanized area known as Clifton, Colorado. Clifton is the largest unincorporated population center in Mesa County, with a population of approximately 21,000 residents.

Clifton Sanitation District (District) has identified solar and onsite energy storage (using batteries) to be an important strategy to stabilize customer rates, reduce operational risk, and meet its established climate goals. To accomplish this, the District views an appropriate category for this Land Development Code (LDC) to be the a private "behind-the-meter" system, where power generated is for sole use by and for the benefit of the property owner, but in a commercial/industrial application. For the District's wastewater treatment facility, solar production of 1.0 MW (ac), approximately 5 acres in size, would be necessary to support the power demand of the current infrastructure. The District also recognizes a notably larger size may be required in other applications or for future expansion of the District's existing facilities.

In addition, for this proposed project to be capable of providing direct offset of energy usage resulting in redundancy and resiliency for the treatment facility the interconnection must be "behind-the-meter" and requires a backup energy storage system (BESS). The District respectfully requests that BESS in this type of interconnection be considered in the LDC revisions that are currently in process.

The District appreciates the consideration of the Commission and is available to provide further comment.

Regards,

Eli Jennings, Manager - Clifton Sanitation District

Eli Jennings

District Manager

Clifton Sanitation District

3217 D Road

Clifton, CO 81520

Office: 970-434-7422

ejennings@cliftonsanitation.com

www.cliftonsanitation.com

Thank you for your comments Eli. They will be included in the project public comments file. Mon, Feb 26, 2024 at 2:20 PM

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



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Public Comment - Utility Production Land Development Code (PRO2024-0022)

4 messages

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Manager Planning Department 970-254-4183

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Eli Jennings <ejennings@cliftonsanitation.com> To: Sean Norris <sean.norris@mesacounty.us>

Thu, Feb 29, 2024 at 1:26 PM

Thank you Sean! Do these LDC revisions go in front of the BOCC or will it be the Planning Commission that makes the final decision?

Thanks,

Eli

Eli Jennings

District Manager

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Cell: 970-433-5451

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Sean Norris <sean.norris@mesacounty.us> To: Eli Jennings <ejennings@cliftonsanitation.com>

Eli,

The process is that the amendment goes before the Planning Commission for a hearing, they make a recommendation to the BoCC, and the item then proceeds to a hearing in front of the Board of County Commissioners who make the final decision.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



Mon, Mar 4, 2024 at 10:54 AM
Planning Department

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Fwd: Solar Moratorium Comments

2 messages

Linda Frasier <linda.frasier@mesacounty.us> To: mcbocc <mcbocc@mesacounty.us> Cc: Greg Moberg <greg.moberg@mesacounty.us>, Sean Norris <sean.norris@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us>

Please see below.

From: <clayscapes7@bresnan.net> Date: Tue, Jan 30, 2024 at 12:19 PM Subject: Solar Moratorium Comments To: <mcadmin@mesacounty.us>

Dear County Commissioner.

Thank you for taking input on how best to implement more solar power in Mesa County.

Through my investigation into renewable energy sources I have learned western Colorado is one of the best places in the entire United States to generate solar power. The number of sunny days, quality of the sun we receive make it the most effective type of renewable energy for our location.

I urge you to use this time to put thoughtful, fact based rules and regulations into the Mesa County Land Development Code. The time is now to take advantage of federal incentives for renewable energy development.

Benefits of new large scale solar projects is lower costs per kWh, installations have a lower environmental impact on wildlife and mineral leaching, and creating new jobs.

Lets get this done without an extension on the moratorium and be part of the solution of how to generate more electricity.

Joanie Post

653 N Terrace Drive

Grand Junction, CO 81507

Tue, Jan 30, 2024 at 12:40 PM

Janet Rowland <janet.rowland@mesacounty.us>

To: clayscapes7@bresnan.net Cc: Greg Moberg <greg.moberg@mesacounty.us>, Sean Norris <sean.norris@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us>, Linda Frasier <linda.frasier@mesacounty.us>, mcbocc <mcbocc@mesacounty.us>

Thanks for your input, Joannie. We will include it in our public hearing packets.

Thanks,

Janet Rowland

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energy code update

5 messages

Jason and Rhiannon Lawson <jasonandrhi@hotmail.com> To: Sean Norris <sean.norris@mesacounty.us>

Fri, Jan 19, 2024 at 3:18 PM

Thank you so much for taking the time to speak with me at length today Sean, I truly appreciate it.

As I will be unable to attend the community input meeting on the 30th, I appreciate this opportunity to share my input via email. This email is coming from myself and my husband and is not representative of the entire community group out here. I will let them speak for themselves going forward when it comes to the Code updates - as there are various ideas/opinions that are all valid in the brainstorming process as opposed to a necessarily unified approach (such as when we were trying to halt our own neighborhood's project).

I understand the foremost needs for any code update to be quantifiable in its criteria/requirements, be applicable to any project on any AFT-zoned land in the valley and to be fair as possible to developers and affected residents at the same time. With these parameters in mind (and personal bias aside), I only have a few criteria ideas that I hope will be considered:

- Screening and buffering requirements that would offer some sort of protection for neighboring properties. I would hope that these requirements would protect all residences to a practical degree, not just residential-zoned properties. Most all Mesa residents put their savings and their hearts into their properties and their homes, and they all deserve reasonable protection from industrial development regardless of the AFT-zoning of their homes. I would hope that the planning team would look at the code that already exists for industrial development, recognize that "green" energy development is still industrial in nature and in many cases (solar, wind) that it is even more visually impactful (size) than some other industrial developments.
- 2. Along that line, making sure that appropriate set-backs are considered and included into the code would be important as well.
- 3. Consideration of a bond requirement for decommissioning of facilities. This would be applicable to any energy production facility, and I know that your team is looking at updating the code to include all energy production types. Corporations that build/operate utilities, in practice, open a Limited-Liability Company (LLC) that only owns one particular project. By nature, that limited-liability status creates a situation where if the project were abandoned, destroyed by natural disaster, etc., the parent company holds limited liability and could, by law, dissolve the LLC and walk away relatively unscathed. A bond would ensure that the county and the community members are not left with an abandoned project and this requirement would not put an undue financial burden on project developers.
- 4. Working closely with fire authority experts to make sure that the code requires appropriate fire protection standards for the different energy types. All energy production/storage facilities carry increased fire danger, some more than others I know that there is talk of a large lithium battery storage facility being applied for out in Palisade for example. I would sincerely hope that fire experts will weigh in on how to protect the community from the risks associated with that type of "green" energy. Further, weighing and mitigating the dangers of toxic chemicals released from the different energy production types in the case of wildfire would be vital; as many of these facilities will be slated for the outskirts of higher-density residential areas, in the AFT-zoned lands that consist of larger plots of land and often abut high-wildfire risk areas. I am sure that fire authority experts, leaning heavily on the International Fire Code, will have practical input into the kinds of fire breaks, road updates, water availability, etc. that would keep our community safe from the multiple facilities to be developed in the future.

Thank you again for helping me to understand the way the county plans to move forward with Code updates around energy production and for hearing my voice among the many who will give input into this process.

Sincerely,

Rhiannon Lawson

Fri, Jan 19, 2024 at 3:47 PM



[Quoted text hidden]

Jason and Rhiannon Lawson <jasonandrhi@hotmail.com> To: Sean Norris <sean.norris@mesacounty.us> Fri, Jan 19, 2024 at 3:51 PM

Please do, and I do not mind my name shared. This is close to my heart, and I would love to be as much a part of it as would be valuable/welcomed by your department.

I just cc'ed you on the email that I sent out to the group - so that you know how they will be kept apprised, but again stress that I am stepping down as coordinator.... It is better for the process that we don't try to unify into a coherant message, but instead just help in the brainstorming 🙂

-Rhiannon

From: Sean Norris <sean.norris@mesacounty.us> Sent: Friday, January 19, 2024 3:47 PM To: Jason and Rhiannon Lawson <jasonandrhi@hotmail.com> Subject: Re: energy code update

[Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us> To: Jason and Rhiannon Lawson <jasonandrhi@hotmail.com>

Thank you and I concur.

Sean T. Norris

Manager Planning Department 970-254-4183



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Jason and Rhiannon Lawson <jasonandrhi@hotmail.com> To: Sean Norris <sean.norris@mesacounty.us>

PRO2024-0022 Code amendment re: Energy Production, Mesa County 2024 Notes on proposed amendment to sections 6.02,12.01& Use Table

Hi Sean!

I am getting up to date and have a few comments/questions that I would like added to the record for the above referenced code amendment. Also, could you please add my original communication (below). Thank you and see you tomorrow at the Code Focus Group 🕲

Tue, Feb 6, 2024 at 2:48 PM

Section 12.01 Definitions define an Energy Generation/Production Facility as "more than two (2) megawatts and/or occupying more than five (5) acres of land. This same section also defines Community Solar Garden as "a maximum rated capacity of five (5) megawatts and (defined by) CRS 40-2-127"

This seems inconsistent, and a vital question since the rest of the proposed amendment seems to only lay out mitigation/screening/safety requirements as pertaining to Energy Generation/Production. It seems that Community Solar Gardens are exempt from the requirements? I am specifically referring to:

h. Visual Mitigation "Reasonable efforts to mitigate visual impacts of an energy generation/production facility"

Will a Community Solar Garden be required to provide visual mitigation for affected neighborhoods? Will they be held to the same standards of wildlife measures, decommissioning, insurance, etc??

For a Community Solar Garden to meet the definition of 40-2-127 as of July 1, 2023, it must now be only under 10 megawatts (~22,000 panels spanning ~50 acres of land). This is a very large utility facility, and I would sincerely hope that such a development would be held to the same health/safety standards as a defined Energy Generation/Production Facility. However, in reading this amendment – it appears that Community Solar Gardens will not be held to those new standards, and in fact will even now be exempt from the Conditional Use Permit (CUP) requirements that existed before the amendment.

This means that *the public will no longer have input into the development of any solar utility plant development up to 22,000 panels/50 acres of land.* This is tragic and I hope that, since the amendment is still in the draft process that this can be remedied.

Sincerely,

Rhiannon Lawson

From: Jason and Rhiannon Lawson <jasonandrhi@hotmail.com> Sent: Friday, January 19, 2024 3:18 PM To: Sean Norris <<u>sean.norris@mesacounty.us></u> Subject: energy code update

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PRO2024-0022

2 messages

Jason and Rhiannon Lawson <jasonandrhi@hotmail.com> To: Sean Norris <sean.norris@mesacounty.us>

Tue, Feb 13, 2024 at 12:19 PM

Good morning Sean!

I am writing this email to follow up on our phone conversation yesterday. Firstly, thank you for once again taking the time to lend insight into this very important process for creating the Development Code for energy production (especially solar) in our valley, and for weighing our community's input as you make these important changes to our Code.

I recognize that this process is made especially difficult as the multiple concerns of citizens and businesses, along with land conservation and agri-tourism effects are balanced with the need for curbing climate change and the political push for a drastic increase in green energy production. I do not envy your department's task, but I do appreciate that all of the voices are being heard as you try to find that balance.

Yesterday's conversation focused on clarifying questions, some of which were answered and some of which are sparking more research and thought...

Clarified/answered:

- Lithium battery storage is not to be addressed at this time. The short moratorium does not allow for the research necessary to ensure a Code that addresses the possible safety issues around battery storage. No applications will be processed in this area of development until a comprehensive Code can be developed for battery storage.
- As of this time, Colorado State is *allowing* counties to define a Community Solar Garden as up to 10mw capacity (approx ~22,000 panels and ~50acres with current solar technology). Since the Colorado Statutes only *require* defining the Community Solar Garden as up to 5mw, Mesa County will define only the smaller arrays as such.
- The insurance requirement for the solar corporations is likely redundant, no corporation would have a multi-million dollar facility that does not carry insurance for damage. However, it would not hurt to leave that in the code and it would help the community understand that the large utility will not just be abandoned if major damage from natural disaster were to occur.
- New LDC Section CC.2.h. Visual Mitigation reads: "Reasonable efforts to mitigate visual impacts *of an energy generation/production facility* will be detailed in the project narrative" We discussed possibly removing the bold/italic type from that sentence. The Visual Mitigation requirements are intended be for all energy production facilities not specifically exempted in section CC.1: Applicability. However, the language *could* possibly be translated as only applying to the energy generation/production facility category and not to the other large-scale utility types (such as agri-voltaics and Community Solar Garden).

Needing further discussion/research/thought:

- Further clarification of Colorado State's definition of Community Solar Garden is necessary. Statute 40-2-127 can be tricky to translate, especially paragraph 2.1.a. that describes the Garden "where the beneficial use of the electricity generated by the facility belongs to the subscribers to the community solar garden. There shall be at least ten subscribers".

Does this mean that definition of Community Solar Garden is satisfied as long as there are at least ten subscribers (a very low percentage of the electricity produced as 10 residential households = ~750kw) or does this mean that 100% of the energy generated must be used by subscribers *and* that there must be at least 10 subscribers (meaning Walmart cannot be the only subscriber and still call it a Community Solar Garden).

The statute further specifies (Paragraph 2.III) that the community solar garden's generating capacity must "supply no more than one hundred twenty percent of the average annual consumption of electricity of each subscriber at the premises to which the subscription is attributed." This strengthens the position that the intention is to have every bit of energy produced be utilized by subscribers to the facility, and not just sold by the developing corporation into the electric "grid" for their own profit.

This definition clarification is vital when creating the new Development Code. Community Solar Gardens are allowed to produce up to 5mw of electricity. With current solar technology, this equates to ~11,000 solar panels spanning ~25 acres of land. These facilities are very large and very impactful to surrounding residents, businesses, community, tourism and wildlife. Every developer would love to have their project defined as "Community Solar Garden" because our Colorado State mandates that counties must allow the development with a minimum amount of development requirements.

However, projects defined as "Energy Generation/Production Facility" (any development over 2mw and/or 5 acres of land that does not meet the definition of "Community Solar Garden") allow for more community concerns to be addressed as far as placement/visual impact mitigation/etc. since there are far fewer mandated protections by Colorado State.

I hope that this question sparks much research and conversation. I am looking forward to attending the next Code Development Team meeting to see what is brought out in the conversation this time!

-Rhiannon

Jason and Rhiannon Lawson <jasonandrhi@hotmail.com> To: Sean Norris <sean.norris@mesacounty.us> Tue, Feb 13, 2024 at 12:40 PM

FYI

From: Jason and Rhiannon Lawson <jasonandrhi@hotmail.com>

Sent: Tuesday, February 13, 2024 12:40 PM

To: abs1@bresnan.net <abs1@bresnan.net>; Robert Hansen <bob@funway.com>; catstory622@aol.com <catstory622@aol.com>; Carol Hawkins <charlee.brady@gmail.com>; coryjo2005@gmail.com <coryjo2005@gmail.com>; daleandpatjens@hotmail.com <daleandpatjens@hotmail.com>; dcfshr2003@bresnan.net <dcfshr2003@bresnan.net>; d-s-wilmore@hotmail.com <d-s-wilmore@hotmail.com>; dulcesview@icloud.com <dulcesview@icloud.com>; dutchrv@gmail.com>; fletch631@aol.com <fletch631@aol.com>; Fred Judson <fmjudson@gmail.com>; greg@brumfieldtaxidermy.com <greg@brumfieldtaxidermy.com>; hrguest2013@gmail.com <hrguest2013@gmail.com>; Nina Hutchins <hutchinsninas@yahoo.com>; jenny2shoes@yahoo.com <jenny2shoes@yahoo.com>; jtskinny2@gmail.com <itskinnv2@amail.com>: iudandien@amail.com<iudandien@amail.com>: KASS4170@vahoo.com <KASS4170@vahoo.com>: kbechtel@bresnan.net <kbechtel@bresnan.net>: magbert2000@hotmail.com <magbert2000@hotmail.com>; peter.g.forte@gmail.com craig@gmail.com; peter.g.forte@gmail.com; peter.g.forte@gma tennisforpeggy@hotmail.com <tennisforpeggy@hotmail.com>; terrimikeracette@aol.com <terrimikeracette@aol.com>; thekidcruz@yahoo.com <thekidcruz@yahoo.com>; tnjkt@bresnan.net <tnjkt@bresnan.net>; Nathan Walker <walk49@gmail.com>; dkinnes64@gmail.com>; dkinnes64@gmail.com>; dustyeholman@gmail.com <dustyeholman@gmail.com>; Dmitry smushkov <Cory anji@yahoo.com>; Christian Rish <crish727@yahoo.com>; Lorrie Wallace <lorriesheley@icloud.com>; Vickie Knob <vickieknob@gmail.com>; Debbie Rudd <debbierudd@hotmail.com>; Kyle Sanders <sanders.kylew@gmail.com>; Dean Roller <deanroller@comcast.net>; David Talbott <dave@talbottfarms.com>; kevennye@gmail.com <kevennye@gmail.com>; Jason and Rhiannon Lawson <jasonandrhi@hotmail.com>; librarianshelp@gmail.com kevennye@gmail.com>; Jon Lyon <iwiyon3552@gmail.com>; DENNIS BRENDA <toxichill@msn.com>; kurttron <kurttron2@gmail.com>; equntle2017@gmail.com>; dentle2017@gmail.com>; ksmushkov@gmail.com>; ksmushkov@gmail.com<</p> tvidelock@yahoo.com <tvidelock@yahoo.com>; terricom@aol.com>; jeff.berino@gmail.com <jeff.berino@gmail.com>; kanga424@msn.com <kanga424@msn.com>; jzadrozny.fnp@gmail.com <izadrozny.fnp@gmail.com>; Chris Ferry <christferry@gmail.com>; coloradawendy@gmail.com <coloradawendy@gmail.com>; tvidelock@yahoo.com <tvidelock@yahoo.com>; juru1170@gmail.com <imur1170@gmail.com>; khoward0115@yahoo.com<khoward0115@yahoo.com>; Christine Murphy <a href="cital-active-comparis-com-state-active-comparis-com-state-active-co <micakentz@gmail.com>; tmkentz2005@gmail.com>; utmkentz2005@gmail.com>; suzannesanders.colorado@gmail.com>; utmkentz2005@gmail.com>; Melissa Bilyeu <mlmihpiego@gmail.com>; James Fletcher
jforcolorado@gmail.com>; Charlie Talbott <charlie@talbottfarms.com>; Rondo Buecheler <rondoworld@gmail.com>; Charlayne <Chigginson0919@gmail.com>; Bruce Talbott

struce@talbottfarms.com>; Nancy Lewis <nancy@nblewis.com>; frazrak@yahoo.com <frazrak@yahoo.com>; naomiviognier@icloud.com <naomiviognier@icloud.com>; lauriwelch14@gmail.com Subject: Fw: PRO2024-0022

Good morning everyone!

I know that there is some dismay around the current Code Development and how the County does not seem to be doing nearly enough to protect Mesa County citizens from the solar development projects of the future. I have been researching quite a bit, speaking with the planning department and attending their meetings as this code is developed and there is a piece of information that I think is vital to our understanding off this process.....

The State of Colorado has a big voice in what is happening here. State mandates around development overrule any local mandates, and our state is pushing for green energy development very hard.

Our stance has always been that green energy development is very much a net-positive, but that maximizing corporate profit should not be prioritized over the well-being of our community. Developing large-scale solar *outside* of our residential areas, in the miles of unusable land surrounding our valley should absolutely be encouraged, but checkerboarding our neighborhoods with large-spanning solar arrays takes unnecessarily from our aesthetic, our home values, our viewsheds and our agricultural heritage.

If a corporation comes here to develop a "Community Solar Garden," which must be close-in to infrastructure by definition, there is not a lot that the county can say. The State dictates that development requirements must be minimized and that this type of development must be encouraged. Period. As you can read from my conversation recap below, the definition of "Community Solar Garden" must be clarified before the new Code is finalized.

Please understand, every developer wants the definition of "Community Solar Garden" granted because it means a streamlined process with little mitigation expense for surrounding neighborhoods/communities. We, as concerned citizens, need to make sure that our County holds to the strictest interpretation of that State definition as they possibly can. This is all that they can do really.

-Rhiannon

From: Jason and Rhiannon Lawson <jasonandrhi@hotmail.com> Sent: Tuesday, February 13, 2024 12:19 PM To: Sean Norris <sean.norris@mesacounty.us> Subject: PRO2024-0022

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#PRO2024-0022

2 messages

Jason and Rhiannon Lawson <jasonandrhi@hotmail.com>

Thu, Mar 7, 2024 at 4:27 PM To: "bobbie.daniel@mesacounty.us"

coubbie.daniel@mesacounty.us>, "cody.davis@mesacounty.us" <cody.davis@mesacounty.us>, Janet Rowland

janet.rowland@mesacounty.us>, Sean Norris <sean.norris@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>

For addition into the public comments re: Code Amendment #PRO2024-0022

Dear Commissioners Rowland, Davis and Daniels,

I have been very involved in the cooperative effort that has produced the new LDC section "CC. Utility, Production." Overall, I feel that the code is reflective of the values and priorities of our Mesa County and I greatly appreciate the efforts of all of those whose thoughtful and researched input went into this code creation.

As it is written now, there is one large loophole remaining that has me very concerned. Since the draft has been finalized by the planning department, the sole power to change the code amendment is now in the hands of the BoCC. I am writing today to expose that loophole and offer a suggestion that would close it.

Section CC.2.d. Fire prevention and Safety Procedures

1. The relevant Fire Protection District's adopted standards, based on current fire code, shall apply.

I understand that Fire Protection Districts operate under adopted standards for fire

safety laid out in the International Fire Code (IFC). This is the adopted fire code in our County and is what each incorporated fire district uses to ensure the health and safety of our residents in regard to all new developments.

There is a loophole that exists for the areas of Mesa County that are not under the jurisdiction of any Fire Protection District. If a Utility Production Facility is to be developed in an area not covered by a Fire Protection District, the development is not to be held to any IFC standards whatsoever. I recognize that there is a lot of contradictory information around increased fire danger of green energy facilities, especially solar facilities. I will not get in depth with this argument except to say it is quite common sense that producing large amounts of electricity, in any manner, is going to have an inherent fire danger. Our building department will certainly oversee the wiring, lithium battery bank, inverters, actuators, etc. that go into building large-megawatt electric production facilities. However, there are zero fire standards for any utility production facility developed outside of an established fire protection district. This is frightening.

Changing this section of the code to read something like this would be prudent:

(1) The applicant is required to apply for annexation into the nearest incorporated Fire Protection District. The relevant Fire Protection District's adopted standards, based on current fire code, shall apply. If annexation is not approved by the nearest Fire Protection District. Mesa County Sheriff's Office shall hold jurisdiction and ensure current fire codes are followed in any Utility Production development.

If the Fire Protection District annexes the development, it will be subject to the IFC standards and therefore close that loophole of immunity. If

the Fire Protection District determines that they cannot annex them, then it should fall to the Mesa County Sheriff's Office, with their authority over all unincorporated areas, to ensure that large-scale utility developments are held to the applicable IFC standards to protect the health and safety of all Mesa County residents.

Thank you so much for your thoughtful consideration of this code amendment change

Sean Norris <sean.norris@mesacounty.us>

Thu, Mar 7, 2024 at 4:33 PM

To: Jason and Rhiannon Lawson <jasonandrhi@hotmail.com>

Cc: "bobbie.daniel@mesacounty.us"

cbobbie.daniel@mesacounty.us>, "cody.davis@mesacounty.us" <cody.davis@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>

Rhiannon

Thank you for your comments and suggestion of language for the code amendment. This will be part of the public comments on this project.

Sean T. Norris Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



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community letter re: code amendment additions

1 message

Jason and Rhiannon Lawson <jasonandrhi@hotmail.com>

Tue, Mar 12, 2024 at 1:02 PM To: Janet Rowland </area trowland@mesacounty.us>, "cody.davis@mesacounty.us>, "cody.davis@mesacounty.us>, "bobbie.daniel@mesacounty.us" </bobbie.daniel@mesacounty.us>, Sean Norris </area trowland@mesacounty.us>, "cody.davis@mesacounty.us>, Greg Moberg <area.mobera@mesacountv.us>

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March 12, 2024

Commissioners Rowland, Davis and Daniel:

After meeting with Commissioner Daniel on March 7th, we understood that we need to directly, and in writing, ask the Board of County Commissioners to add language to the amendment in the Mesa County Land Development Code and submit by Tuesday, March 12th for consideration. Due to the time constraints of getting this letter to you, we were unable to distribute yet another letter for signatures, though we did circulate the letter for review and suggestions to 75+ concerned citizens. This letter represents the consensus of our community group.

General Fire Safety

There is much contradictory information to be found on the internet around the guestion of increased fire danger by solar utility plants (both fires started within the facility and wildfires reaching the facility). In the end, it is quite common sense that producing large amounts of electricity, in any manner, is going to have an inherent fire danger.

As currently written, there is a loophole in the Code Amendment: any solar utility located outside of an incorporated fire district will not be held to the International Fire Code (IFC) standards for fire protection. It is vital for the health and safety of Mesa County residents to ensure that all solar utility facilities are held to the IFC. We therefore request the following change:

Section CC.2.d. Fire prevention and Safety Procedures

1. The applicant is required to apply for annexation into the nearest incorporated Fire

Protection District. The relevant Fire Protection District's adopted standards, based on current fire code, shall apply. If annexation is not approved by the nearest Fire Protection District, Mesa County Sheriff's Office shall hold jurisdiction and ensure any and all current IFC fire codes are followed in any Utility Production development.

Rapid Shutdown Systems

Second, the 2023 National Electric Code (NEC), as adopted as standard by Colorado State, only requires a Rapid Shutdown System on roof-mounted solar, not on ground-mounted. This is of great concern because of the implications to the health and safety of the surrounding community. By definition, a Community Solar Garden can produce up to 5 megawatts of electricity. This equates to ~11,000 solar panels plus lithium batteries, inverters, converters, solar panel actuators, etc. spanning ~25 acres of land. Our civilian research reveals only contradictory and unclear information on how to extinguish a solar farm in the absence of a Rapid Shutdown System.

Speaking with fire department officials and a licensed electrician, the dangers inherent if an electrical fire at a large solar facility were to occur are alarming. Mesa County does not have the quantity of foam/foam trucks necessary to put out an electrical fire at a multi-acre level. Even if they did, the foam is so carcinogenic that the process of extinguishing a fire of that size could well be even more harmful to surrounding civilians than the fire itself.

We cannot depend on the developer to properly inform our fire department on how to extinguish a solar farm fire. The recently approved OneEnergy site's "Emergency Response and Fire Safety Plan" suggests that the correct fire response is to allow the fire to burn within the facility and protect the surrounding civilians properties. The problem with this is, again, quite common sense.... **If you allow large acreage to just burn, you put all surrounding civilians and properties in danger.** Especially in the case of agrivoltaics systems, where there is a large quantity of fire fuel underneath the panels, or in any development that is not surrounded by easily-defendable and flat terrain, such as abutting the Bookcliffs for example – where containment would be very difficult if not impossible.

We must, for the health and safety of our citizens, require a Rapid Shutdown system on any high-voltage solar plant. A Rapid Shutdown system quickly reduces the electrical production to a level that makes fire extinguishment safe for our firefighters and allows them to properly protect the surrounding civilians and properties. This is especially vital since a Community Solar Garden, again - producing up to 5mw of electricity, is to become an allowable development in ANY land-use zone and can be located a mere 150 feet from any residential building.

We therefore request this addition of Section CC.2.d. Fire prevention and Safety Procedures:

CC.2.d. (5) A rapid shutdown system shall be installed on any electrical facility producing a live current that would be fatal upon contact.

Decommissioning Bond

-

Colorado State is passing down legislation that requires all counties have minimal restrictions in place in the quest for increased green energy development. However, the State does allow counties to create requirements around decommissioning; many states and Colorado counties have created strong decommissioning requirements, recognizing this as a cost-effective way to ensure proper decommissioning of a facility by new-technology companies that most likely have not yet even had to complete the decommissioning of a large-scale utility.

We therefore request that a decommissioning surety bond be required for the development of a Community Solar Garden or Energy Production Facility:

CC.4. Decommissioning/Reclamation Surety. Valid surety shall be a condition of operating a Community-Scale or Utility-Scale Solar Facility.

i. Surety for the decommission and reclamation of the site shall be required within ten (10) years of commercial operation. The surety shall be third-party engineer cost estimates , net of salvage value and resale value .

shall be an amount equal to the estimated cost of decommissioning based on approved

ii. The surety amount shall be updated every five (5) years.

Public Nuisance Mitigation

OneEnergy's self-reporting narrative in their recently approved Community Solar Garden states that the facility will produce a constant noise during daylight hours of 80db at the source of inverters. Colorado State Statute 25-12-103 disallows noise over 55db (50db 7pm-7am) at the property border. We would like to suggest that the Colorado noise statute is strictly adhered to, and if code compliance finds the noise level to be above allowable levels, electrical production will cease and desist immediately until brought into compliance.

We request that the following section be added into the Code Amendment:

CC.2.f. Noise, Dust, Fumes, Vibration and Odor Mitigation

1. The solar development will not interfere with the use and enjoyment of property nor cause a risk to public health and safety.

Glare issues are addressed in most all existing solar codes throughout the country and the State of Colorado. Mesa County should have a section to address this public nuisance. As per OneEnergy's submittals, panels are treated with an Anti-Reflective (A/R) coating, but there are no plans for maintenance of this coating. According to our civilian research, A/R coating has a relatively short viability timeline (2-5 years). Glare can become an issue for neighboring properties, roads and other community sites at which the panels are facing. We would like to suggest that the code address glare throughout the lifespan of the panels, not just at the point of construction completion.

CC.2.e. Glare shall not unreasonably interfere with the use and enjoyment of existing highways, byways, public roads, trails, driveways, scenic vistas, recreational sites, airplane landing strips or adjacent residential lots nor result in a risk to public health and safety.

We are very proud of the countless hours and tireless effort that our residents have given to this issue. It truly shows how much we all care about our communities and about the thoughtful development of our Valley. We have addressed as many concerns as time and civilian research would allow. We are sincerely hoping that our commissioners not only adopt what we have suggested here, but that they expand upon it by calling in different expertise such as county officials who are grappling with the same questions and problems around this new type of development, and fire/ems professionals who have experience with the unique issues of large solar facilities. The health, safety and welfare of our Valley depends upon gathering expertise from sources other than solar developers and concerned citizens.

Thank you for your careful consideration in this matter vital to all of our futures.

Document created cooperatively by:

Nina Hutchins, Krista Howard, Cully Howard, Christine Murphy, Jim Murphy, Lauri Welch, Mary Elaine Johnson, Dan Craig, Tom Welch, Wendy Videlock, Rhiannon Lawson, Jason Lawson

With review, research and input from 75+ Mesa County community members

References

What is Rapid Shutdown and why was it implemented in the United States? - AC Solar Warehouse

NFPA 70 (NEC) Code Development

Maintstar Permit Public 24.2.20.1444

Section 25-12-103 - Maximum permissible noise levels, Colo. Rev. Stat. § 25-12-103 | Casetext Search + Citator

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https://www.jdsupra.com/legalnews/texas-legislature-expands-4566455/

Hidden Danger: Why solar farm fire risk could be greater than you think

Fire a major hidden danger for solar farms

Solar facility fires brochure (with sources)



Fwd: 4-2 meeting with commissioners

1 message

Greg Moberg <greg.moberg@mesacounty.us> To: Sean Norris <sean.norris@mesacounty.us>

FYI

Greg Moberg

Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

------ Forwarded message -------From: Bobbie Daniel <bobbie.daniel@mesacounty.us> Date: Fri, Mar 29, 2024 at 12:51 PM Subject: Re: 4-2 meeting with commissioners To: Janet Rowland <a hete: rowland@mesacounty.us> To: Janet Rowland <a hete: rowland@mesacounty.us> Co: Jason and Rhiannon Lawson <a hete: hete: hete: rowland@mesacounty.us>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us>, Greg Moberg <a hete: hete:

Thank you Rhiannon we appreciate this and will prepare. Looking forward to our conversation. Bobbie

On Mar 29, 2024, at 12:01 PM, Janet Rowland <janet.rowland@mesacounty.us> wrote:

Thank you, Rhiannon.

See you Tuesday!

Janet

From: Jason and Rhiannon Lawson <jasonandrhi@hotmail.com> Sent: Friday, March 29, 2024 11:53 AM To: Janet Rowland <janet.rowland@mesacounty.us>; cody.davis@mesacounty.us; bobbie.daniel@mesacounty.us Subject: Fw: 4-2 meeting with commissioners

Dear Commissioners,

I am forwarding this email to you as Ms. Frasier is out of the office until Monday and I want to be sure that you receive this summary agenda for our upcoming meeting 🙂

Fri, Mar 29, 2024 at 1:11 PM

From: Jason and Rhiannon Lawson <jasonandrhi@hotmail.com> Sent: Friday, March 29, 2024 11:50 AM To: linda.frasier@mesacounty.us <linda.frasier@mesacounty.us> Subject: 4-2 meeting with commissioners

Re: April 2, 2024 Meeting with Commissioners

Dear Ms. Frasier,

It was requested that I send an agenda of sorts re: the specifics I would like to discuss on Tuesday during my meeting with Commissioners Davis, Rowland and possibly Daniel. This is a brief bullet-point agenda of what I would like to discuss. Please pass on to the commissioners that I am very thankful for their being willing to meet with me in such a timely manner. It is very much appreciated and I am looking forward to understanding the decision-making process of our BoCC.

Sincerely,

Rhiannon Lawson

Recent changes made to Section 6.02 and 12.01 in the new Utility, Production code re: solar developments.

In particular:

- Fire protection and oversight for electric utility developments outside of an incorporated fire district (not addressed yet)
- Bond requirements (added and then removed)
- Large-scale electrical production facilities now "Use by Right" in C-1, C-2, I-1, I-2.
- Definition of Agrivoltaics changed to no longer mirror the Federal definition in S.1778: Agrivoltaics Research and Demonstration Act of 2023.
- The granting of "in front of the meter" for-profit electricity production as a "Use by Right" to any agricultural land, without requirement of continued agricultural production.



Request to enter these comments into the public record regarding PRO2024-0022

3 messages

Mary Elaine Johnson <elaine.johnson.craig@gmail.com> To: sean.norris@mesacounty.us

Mon, Feb 5, 2024 at 4:49 PM

Hello Sean -

Thank you again for holding the series of open houses Jan. 30th for community members to engage in the county's process to create a new Land Development Code amendment addressing solar and other alternative energy production facilities. I attended the 1:30 session, and my husband came to the 3:30 session.

After hearing your presentation, asking questions, and thoroughly reading through the proposed Amendment to Section 6.02 Use Specific Standards, we have several concerns with the draft amendment, and would like to suggest some changes for consideration:

- We feel that the designated setbacks should be increased substantially. One-quarter mile from a designated Scenic By-way should be more like three miles, considering the potential economic impact that one or more 10-megawatt, 22,000-panel "community solar gardens" could have on Palisade's vital and thriving tourism and agri-tourism industries. And the suggested minimum of 200 feet from any residential occupied structure should be expanded to 1,000 ft. (While apparently there is no one definition of an optimum distance for a personal residence to be situated away from a solar utility facility, some studies have suggested that a distance of at least 300 meters (984 feet) can help mitigate potential issues like viewshed, reflective glare, and noise.)

- We didn't see any mention in the draft addressing potential noise problems (like maximum decibels produced, how to address neighbor complaints, etc.). That should be added.

- There isn't any mention of a performance bond requirement for the facility owner/operator if they abandon the project; only proof of general liability insurance is mentioned.

- Under the Visual Mitigation section, the maximum solar system equipment height is listed as 15 feet at the solar mounting point, but the height of the interconnection equipment may exceed 15 feet. It's our understanding that a typical height for opaque fencing around a community solar garden is only 10 feet.

- The inclusion of some specific fire prevention and safety procedure requirements is certainly important and welcomed. However, we are concerned that - according to the open house discussion - in the proposed, related "Amendment to Section 12.01 General", the definition of a Fire Protection District will be changed, and local districts will need to be certified and recognized by the BoCC before their input is taken into consideration.

- Of perhaps of most concern to us is the removal entirely of a CUP application/approval process for community solar gardens in not only AFT, but potentially ALL principal use zones in Mesa County. This certainly would seem to open the floodgates of a checkerboard pattern of 5-10 megawatt facilities throughout our unique and beautiful landscape.

Re the Feb. 7th code focus group review, we were under the impression it is open to the public; if so, when and where will that be held? Re the Feb. 8th planning commission workshop at 5:45 p.m. in the Spruce St. main conference room, that is a public meeting that we can attend, correct?

Thank you again for soliciting citizen input early on in the process -

Mary Elaine Johnson and Daniel C. Craig 3853 Montana Vista Ct., Palisade elaine.johnson.craig@gmail.com

Elaine.

Sean Norris <sean.norris@mesacounty.us> To: Mary Elaine Johnson <elaine.johnson.craig@gmail.com> Mon, Feb 5, 2024 at 4:59 PM

Thank you for your comments and they will be part of the public record.

Bear in mind this amendment is for all of Mesa County and not targeted at the Palisade area.

State Statue is driving several of these sections and Mesa County can not prohibit solar gardens as defined by Statue.

There is a Code Focus Group meeting on Wednesday that you are welcome to attend.

Mesa County Planning Division will be hosting a Mesa County Land Development Code Focus Group meeting to discuss the current Utility Code amendment, 4:45 p.m. in Room 40 (Main) of the MCCS at 200 S. Spruce Street on February 7th, 2024. This meeting will be accessible via virtual attendance as well as in person, by the Public.

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183

Video call link: https://meet.google.com/cig-jnic-rmp Or dial: (US) +1 470-210-0447 PIN: 381 082 606# More phone numbers: https://tel.meet/cig-jnic-rmp?pin=5749692580744

Sean T. Norris

Manager Planning Department 970-254-4183



[Quoted text hidden]

Mary Elaine Johnson <elaine.johnson.craig@gmail.com> To: Sean Norris <sean.norris@mesacounty.us> Mon, Feb 5, 2024 at 5:33 PM

Sean, thank you so much for your prompt reply and details about the Feb. 7th public meeting; I look forward to attending and learning more -

Elaine Johnson [Quoted text hidden]



Wed, Feb 14, 2024 at 1:14 PM

Follow up on MC LDC Focus Group/CPC meetings

2 messages

TMACK McCloskey <thosmccloskey@gmail.com>

To: sean.norris@mesacounty.us

Sean,

Was there a follow up meeting planned in the near future regarding changes in the energy production facilities amendments to the LDC? If it's possible to attend any of those, please let me know. Thanks in advance. Tom McCloskey 970-270-8810

------ Forwarded message ------From: Sean Norris <sean.norris@mesacounty.us> Date: Mon, Feb 5, 2024, 4:43 PM

Subject: Invitation from an unknown sender: MC LDC Focus Group @ Wed Feb 7, 2024 4:45pm - 7:45pm (MST) (thosmccloskey@gmail.com)

To: <thosmccloskey@gmail.com>, <andrews1201@msn.com>, Bobbie Daniel <bobbie.daniel@mesacounty.us>, Brent Goff <brent.goff@mesacounty.us>, <charlee.brady@gmail.com>, <charlie@talbottfarms.com>, <chasmop@bresnan.net>, Cody Davis <cody.davis@mesacounty.us>, <cullyandkrista@gmail.com>, <dgpengineeringllc@gmail.com>, <elaine.johnson.craig@gmail.com>, <evsatie@gmail.com>, Janet Rowland <janet.rowland@mesacounty.us>, <jdelany58@gmail.com>, <jim@timberlinebank.com>, <kanga424@msn.com>, <lvillaire@gmail.com>, <plevon@aol.com>, <ron@cwihomes.com>, <rondoworld@gmail.com>, <s.chris.weaver@gmail.com>, <greg@sun-king.com>, <kimk355@outlook.com>, <luke.rome@swca.com>, <naranda@jgmsinc.com>, <sballeton@gmail.com>, <scottb@gjcity.org>, <sealings@acsol.net>, <westiecolorado@bresnan.net>

Unknown sender

This event from sean.norris@mesacounty.us won't appear in your calendar unless you say you know the sender.

Know this sender?

Join with Google Meet

Meeting link

meet.google.com/cig-jnic-rmp

Join by phone

(US) +1 470-210-0447

PIN: 381082606

More phone numbers

Attachments

E Notes - MC LDC Focus

Mesa County Planning Division will be hosting a Mesa County Land Development Code Focus Group meeting to discuss the current Utility Code amendment, 4:45 p.m. in Room 40 (Main) of the MCCS at 200 S. Spruce Street on February 7th, 2024. This meeting will be accessible via virtual attendance as well as in person, by the Public.

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183

When

Wednesday Feb 7, 2024 · 4:45pm - 7:45pm (Mountain Time - Denver)

Location

G2R - MCCS View map

Guests

Sean Norris - organizer andrews1201@msn.com **Bobbie Daniel** Brent Goff charlee.brady@gmail.com charlie@talbottfarms.com chasmop@bresnan.net Cody Davis cullyandkrista@gmail.com dgpengineeringllc@gmail.com elaine.johnson.craig@gmail.com evsatie@gmail.com Janet Rowland jdelany58@gmail.com jim@timberlinebank.com kanga424@msn.com lvillaire@gmail.com plevon@aol.com ron@cwihomes.com rondoworld@gmail.com s.chris.weaver@gmail.com thosmccloskey@gmail.com greg@sun-king.com kimk355@outlook.com luke.rome@swca.com naranda@jgmsinc.com sballeton@gmail.com scottb@gjcity.org sealings@acsol.net westiecolorado@bresnan.net

View all guest info

Reply for thosmccloskey@gmail.com

Yes No Maybe

More options

You are receiving this email because you are subscribed to calendar notifications. To stop receiving these emails, go to Calendar settings, select this calendar, and change "Other notifications".

Forwarding this invitation could allow any recipient to send a response to the organizer, be added to the guest list, invite others regardless of their own invitation status, or modify your RSVP. Learn more

☐ invite.ics 7K

Sean Norris <sean.norris@mesacounty.us> To: TMACK McCloskey <thosmccloskey@gmail.com>

Tom,

At this time, we have just set a meeting date for the next MCLDCFG (Code Focus Group) meeting. It will be February 21st at 4:45 In Room A, 3rd floor of 544 Rood Ave. Enter via the east door off 6th St. Proceed up the stairs to the 3rd floor.

Sean T. Norris Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]

Wed, Feb 14, 2024 at 2:35 PM



Mon, Jan 29, 2024 at 9:28 AM

Moratorium concerns

1 message

Carol Hawkins <charlee.brady@gmail.com>

To: sean.norris@mesacounty.us

Mr. Norris,

My husband and I would like to address the issue of building a solar farm near a residential area. We would like to see a code restricting the distance a solar farm could be built near a residential area. Ideally, a 5 mile distance with a minimum of 2 miles would be perfect. With as much open space that Mesa County has this would allow that no solar facility would affect local residents. We are concerned about the many health issues involved with solar as well as the loss of property value and increased fire insurance premiums; plus the ugly aesthetics that the solar farm would have on our beautiful valley. Please include a distance restriction in planning some new codes for solar construction.

Thank you, Mike and Carol Hawkins 611 Sobre El Rio Drive Palisade, Colorado 81526 Sent from my iPhone

167



Fwd: 4-2 meeting with commissioners

1 message

Greg Moberg <greg.moberg@mesacounty.us> To: Sean Norris <sean.norris@mesacounty.us>

FYI

Greg Moberg

Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

------ Forwarded message ------From: Bobbie Daniel <bobbie.daniel@mesacounty.us> Date: Fri, Mar 29, 2024 at 12:51 PM Subject: Re: 4-2 meeting with commissioners To: Janet Rowland <a het:anet.rowland@mesacounty.us, To: Janet Rowland <a het:anet.rowland@mesacounty.us, Co: Jason and Rhiannon Lawson jasonandrhi@hotmail.com, Cody Davis <cody.davis@mesacounty.us, Greg Moberg greg.moberg@mesacounty.us, Todd Hollenbeck <todd.hollenbeck@mesacounty.us

Thank you Rhiannon we appreciate this and will prepare. Looking forward to our conversation. Bobbie

On Mar 29, 2024, at 12:01 PM, Janet Rowland <janet.rowland@mesacounty.us> wrote:

Thank you, Rhiannon.

See you Tuesday!

Janet

From: Jason and Rhiannon Lawson <jasonandrhi@hotmail.com> Sent: Friday, March 29, 2024 11:53 AM To: Janet Rowland <janet.rowland@mesacounty.us>; cody.davis@mesacounty.us; bobbie.daniel@mesacounty.us Subject: Fw: 4-2 meeting with commissioners

Dear Commissioners,

I am forwarding this email to you as Ms. Frasier is out of the office until Monday and I want to be sure that you receive this summary agenda for our upcoming meeting 🙂

Fri, Mar 29, 2024 at 1:11 PM

From: Jason and Rhiannon Lawson <jasonandrhi@hotmail.com> Sent: Friday, March 29, 2024 11:50 AM To: linda.frasier@mesacounty.us <linda.frasier@mesacounty.us> Subject: 4-2 meeting with commissioners

Re: April 2, 2024 Meeting with Commissioners

Dear Ms. Frasier,

It was requested that I send an agenda of sorts re: the specifics I would like to discuss on Tuesday during my meeting with Commissioners Davis, Rowland and possibly Daniel. This is a brief bullet-point agenda of what I would like to discuss. Please pass on to the commissioners that I am very thankful for their being willing to meet with me in such a timely manner. It is very much appreciated and I am looking forward to understanding the decision-making process of our BoCC.

Sincerely,

Rhiannon Lawson

Recent changes made to Section 6.02 and 12.01 in the new Utility, Production code re: solar developments.

In particular:

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- The granting of "in front of the meter" for-profit electricity production as a "Use by Right" to any agricultural land, without requirement of continued agricultural production.



Fwd: Solar items due dates timeline

4 messages

Greg Moberg <greg.moberg@mesacounty.us> To: Collin Rode <collin.rode@mesacounty.us>, Sean Norris <sean.norris@mesacounty.us>

Could I get some assistance with these timeline questions?

Greg Moberg

Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

------ Forwarded message -------From: Bobbie Daniel <bobbie.daniel@mesacounty.us> Date: Fri, Mar 29, 2024 at 1:42 PM Subject: Solar items due dates timeline To: Greg Moberg <greg.moberg@mesacounty.us> To: Greg Moberg <greg.moberg@mesacounty.us> Cc: Janet Rowland <janet.rowland@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us>

Greg,

Would you put together a timeline of "what is due when" items leading up to an April 23 Public Hearing date and a timeline leading up to an end of May date.

Please note the July deadline date as well.

Please give me a call with any questions or clarification needed on this request.

Sincerely,

Bobbie Daniel Mesa County Commissioner (970) 244-1604





Sean Norris <sean.norris@mesacounty.us> To: Greg Moberg <greg.moberg@mesacounty.us> Cc: Collin Rode <collin.rode@mesacounty.us>

Greg

The timeline that we are working on is based on a schedule that Commissioner Rowland created for this code amendment. To get to the April 23rd BoCC hearing date, the LDC requires 15 days public notice of a land use hearing. In an effort to allow staff the required time to create the package for the required public notice, we have an inhouse policy that the binder be prepared and created 17 days in advance, which is 2 days longer than the required Public Notice period. That 15 day period would require the notice to have gone out on April 7th. As the 7th is a Sunday, we need to create and publish this notice on the first work day ahead of that, which in this case is Friday April 5, 2024.

Fri, Mar 29, 2024 at 1:46 PM

Fri, Mar 29, 2024 at 3:04 PM

The following is the published timeline mandated by the BoCC for this process back in January.



Everything we have done for the last 3 months has been scheduled and conducted with the April 23rd date for a BoCC hearing in mind.

Is there something more we need to be looking at?

Sean T. Norris Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]

Greg Moberg <greg.moberg@mesacounty.us> To: Sean Norris <sean.norris@mesacounty.us> Cc: Collin Rode <collin.rode@mesacounty.us>

What she is asking for is a timeline for a meeting in May and June. Does this look right?

Public Hearing - May 21st; Binder May 3rd Public Hearing - June 18th; Binder May 31st

Greg Moberg Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

[Quoted text hidden]

To: Greg Moberg <greg.moberg@mesacounty.us> Cc: Collin Rode <collin.rode@mesacounty.us>

Yes. That is the same timing required and those dates look correct.

Sean T. Norris Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



Planning Department

[Quoted text hidden]



4 messages

Christine Murphy <cmurphy22003@gmail.com>

To: sean.norris@mesacounty.us

Dear Mr.Norris,

I followed your instructions and tried to attend the meeting virtually. We couldn't because you did not let us in. Then we tried to listen on the phone only to hear you disregard what the community members had to say about the fire probability. You have become very disrespectful to the taxpayers. The solar companies will not be honest about anything. If you plan to follow what you have sent out then on the possible code change I believe that you need more research. Believing a company versus caring about the people that pay for everything is irresponsible.

The state says that the county can determine what a community solar garden is and you have decided that it doesn't matter what we think. To be disingenuous toward the land and homeowners goes against what Mesa County says they do. I would like to request to have one meeting where research and facts are presented and not ignored.

There is research that shows that solar panels catch fire. A fire break is not a thirty foot dirt easement. Centennial Colorado had a fire where the fire jumped the paved road. Two years ago a fire jump I 70 in the canyon. A dirt road is not a fire break. These are important facts and you choose to disregard them.

Please let me know when the next meeting is and I will bring plenty of research to back up my claims.

Regards

Christine and Jim Murphy

Sent from my iPhone

Sean Norris <sean.norris@mesacounty.us> To: Greg Moberg <greg.moberg@mesacounty.us>

Sean T. Norris

Manager

Planning Department

970-254-4183

[Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us> To: Christine Murphy <cmurphy22003@gmail.com>

Thank you for your comments and your opinion. This will be included in the public comments for the project.

The next meeting is a Public Open House on February 28th, 2024 in the first floor conference room of the Old County Courthouse at 544 Rood Avenue. The Open House will begin at 1:30 and run until 7:00 p.m.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]

Fri, Feb 23, 2024 at 8:11 AM

Thu, Feb 22, 2024 at 8:10 PM

Fri, Feb 23, 2024 at 9:03 AM

Sean,

Here are a couple of comments from a very quick "Google" search:

International Association of Certified Home Inspectors

Do solar panels cause fires?

Installed properly, PV solar panels do not cause fires. Most PV modules are tested by Underwriters Laboratories (UL), which subjects them to the rigors of everyday use before they are certified. In the rare cases where PV modules have been implicated in house fires, the cause has been electrical arcing due to improper installation, faulty wiring or insufficient insulation.

And this was from a news report:

There isn't clear data but according to Energy Efficiency & Renewable Energy, the United States has about 1.8 million solar panels installed. It states in a report from Germany they have about 1.7 million installed, resulting in about 430 fires involving solar panels. Of those 430, 210 fires were caused by the solar panel itself, the rest had been damaged as a result of a fire.

Greg Moberg Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

[Quoted text hidden]



General email notification of the Utility Production Final Draft 3-26-2024

5 messages

Sean Norris <sean.norris@mesacounty.us>

Fri, Mar 29, 2024 at 4:41 PM

To: Sean Norris <sean.norris@mesacounty.us>

Bcc: Nicholas Aranda <naranda@jgmsinc.com>, Chris Weaver <s.chris.weaver@gmail.com>, sealings@acsol.net, chasmop@bresnan.net, sballerton@gmail.com, TMACK McCloskey <thosmccloskey@gmail.com>, Charlee.brady@gmail.com>, Brent Goff <brent.goff@mesacounty.us>, Mary Elaine Johnson <elaine.johnson.craig@gmail.com>, plevon@aol.com, Louis Villaire <lvillaire@gmail.com>, Frank Nemanich <westiecolorado@bresnan.net>, Sharon Bouse-Ferry <kanga424@msn.com>, E Satie <evsatie@gmail.com>, Luke.rome@swca.com, Greg Motz <greg@sun-king.com>, Cully and Krista <cullyandkrista@gmail.com>, Rondo Buecheler <rondoworld@gmail.com>, jdelany58@gmail.com, scottb@gjcity.org, Janet Rowland <Janet.rowland@mesacounty.us>, Bobbie Daniel <bobbie.daniel@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, bcmurphy21@gmail.com, chloerittenhouse@gmail.com, "Caspari,Horst" <Horst.Caspari@colostate.edu>, Susan Hess <susan.bassoon.hess@gmail.com>, Tanya Travis <ttravis1405@gmail.com>, Greg Brophy <senatorbrophy@gmail.com>, Nina Hutchins <hutchinsninas@yahoo.com>, Jason and Rhiannon Lawson <jasonandhi@hotmail.com>, ksundman@pivotenergy.net, Mike Kruger <mkruger@cossa.co>, Jeremiah Garrick <jgarrick@cossa.co>, jfitzpatrick@pivotenergy.net, Kathryn Bedell <kathy@roancreekranch.com>, Kim Kerk <kimk355@outlook.com>, Charlie Talbott <charlie@talbottfarms.com>, Ron Abeloe <ron@cwihomes.com>, KRAIG ANDREWS <andrews1201@msn.com>, Don Pettygrove <dgpengineeringllc@gmail.com>, Jim Pedersen <jim@timberlinebank.com>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us>

All.

If you have not already accessed the Utility Production Final Draft 3-36-2024 on MaintStar, here is a copy for your information.

You may recall that in January, 2024, Mesa County posted a timeline for the adoption of a Land Development Code amendment on Utility Production (Solar) which was as follows.

SOLA	RTI	MELINE		
JAN. 30, 2024 (Public Open House) 1 - 7 p.m. 🏠 200 S. Spruce	Presentations 1:30, 3:30, 5:30 p.m. St., Main Conference Room		
FEB. 7, 2024 Code Focus Group Rev	FEB. 7, 2024 Code Focus Group Review			
FEB. 8, 2024 Planning Commission Workshop	🕔 5:45 p.m.	200 S. Spruce St., Main Conference Room		
MARCH 21, 2024 Planning Commission Hearing	🕓 6 p.m. 🏼	544 Rood Ave., Public Hearing Room		
APRIL 23, 2024 County Commissioner Public Hearing	🕚 9 a.m. 🛛	544 Rood Ave., Public Hearing Room		

In an effort to meet the schedule, we are preparing to create the Binder for the April 23, 2024 BoCC Land use Hearing, which requires Public Noticing of the hearing, 15 days prior to that hearing. As that date is on Sunday the 7th, we will be creating the BoCC Binder and publishing the Public Notice on Friday April 5th, 2024.

As with all Public Hearings, and Binders, public comments received before the creation of the Binder will be included in the Binder. Comments received after that publication date are still included in the public record, and are emailed to the BoCC for their review, as well as printed to be available at the public hearing. In fairness to the BoCC and to allow them time to consider all comments before the hearing, Mesa County would ask that all efforts be made to deliver those comments to Sean Norris at sean.norris@mesacounty.us, as many days before the hearing as possible, so that I can get them in front of the Commissioners for their review.

As always, Thank you for your interest and involvement in the development of this code amendment.

Sean T. Norris Manager Planning Department 970-254-4183

Planning Department (970) 244-1636 www.mesacounty.us/planning **CONFIDENTIALITY NOTICE**: The contents of this email message and any attachments are intended solely for the addressee(s) and may contain confidential and/or privileged information and may be legally protected from disclosure. If you are not the intended recipient of this message or their agent, or if this message has been addressed to you in error, please immediately alert the sender by reply email and then delete this message and any attachments. If you are not the intended recipient, you are hereby notified that any use, dissemination, copying, or storage of this message or its attachments is strictly prohibited.

Would you like to contact other Offices within Community Development?

Email mccomdev@mesacounty.us or Please call us at (970) 244-1636 or visit our online services for more information. Our websites are: https://www.mesacounty.us/services/community-development/. & www.mesacounty.us/services/community-development/.

Utility Production Final Draft 3-26-2024.docx

Sean Norris <sean.norris@mesacounty.us> To: Greg Moberg <greg.moberg@mesacounty.us>

FYI [Quoted text hidden] [Quoted text hidden]

Utility Production Final Draft 3-26-2024.docx 48K

Kim Kerk <kimk355@outlook.com>

To: Sean Norris <sean.norris@mesacounty.us>

Hi Sean,

Looks great, I only have just one question.

A fire break or other facility perimeter design acceptable to the fire district shall be required to reduce or eliminate the interface risk from wildfire.

Will the detail of what is "acceptable to the fire dept." be added to the Fire Code? I could not find a reference in the fire code.

Thanks

Kím

Kim Kerk, PM

Land Consulting & Dev., LLC

342 North Ave.

Grand Junction, CO 81501

kimk355@outlook.com

970-640-6913

From: Sean Norris <sean.norris@mesacounty.us> Sent: Friday, March 29, 2024 4:41 PM To: Sean Norris <sean.norris@mesacounty.us> Subject: General email notification of the Utility Production Final Draft 3-26-2024

All,

If you have not already accessed the Utility Production Final Draft 3-36-2024 on MaintStar, here is a copy for your information.

Fri, Mar 29, 2024 at 5:19 PM

Tue, Apr 2, 2024 at 1:10 PM

176

SOLAR TIMELINE

JAN. 30, 2024 Public Open House	① 1 - 7 p.m. ഹ	Presentations 1:30, 3:30, 5:30 p.m. St., Main Conference Room	
FEB. 7, 2024 Code Focus Group Review			
FEB. 8, 2024 Planning Commissio Workshop	n 🕚 5:45 p.m.	200 S. Spruce St., Main Conference Room	
MARCH 21, 2024 Planning Commissio Hearing	n 🕚 6 p.m. 🍳	544 Rood Ave., Public Hearing Room	
APRIL 23, 2024 County Commissione Public Hearing	er 🕔 9 a.m. 🏼	544 Rood Ave., Public Hearing Room	

[Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us> To: Kim Kerk <kimk355@outlook.com>

Likely not. The County does not control the Fire Code.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]

Ben Murphy <bcmurphy21@gmail.com> To: Sean Norris <sean.norris@mesacounty.us>

Cc: Susan Hess <susan.bassoon.hess@gmail.com>, Aaron Hoffman <hoffman.aaron@gmail.com>, Tyler McDermott <tyler@westerncoloradoalliance.org>, McCloskey Tom <thosmccloskey@gmail.com>

Hi Sean,

We appreciate all the time and effort you've put into this process. On behalf of Grand Valley Citizens' Climate Lobby and members of the Western Colorado Alliance, please find a letter attached for inclusion in the binder.

Let us know if you have any questions.

Thank you, Ben [Quoted text hidden]

 $\mathop{\boxtimes}\limits_{\rm 61K}$ GVCCL and WCA Letter to Mesa County Commissioners.pdf

Fri, Apr 5, 2024 at 1:20 PM

Fri, Apr 5, 2024 at 1:47 PM

177



Becoming Utility-Scale Solar Ready Guide & APPS Grant Program

1 message

Moledina - CEO She Her, Ari <ari.moledina@state.co.us> To: sean.norris@mesacounty.us

Hi Sean,

Great speaking with you just now!

Here (and attached) is the "Becoming Utility-Scale Solar Ready" Guide I mentioned. Let me know if there are other questions I can help with.

Also, I wanted to make you aware of a grant program I'm running to assist local governments with any costs associated with adopting an automated permitting platform. These platforms can help save staff time by reviewing code compliance on residential solar systems, and the grant covers any associated costs for integration, staff time, consultant, training, etc. The grants are non-competitive, first-come, first-served and applications open April 2nd. If there's a building official who might be interested, please feel free to pass this information along.

Thanks! Ari

Ari Moledina | She/Her/Hers | *Why Pronouns Matter* Renewable Energy Program Manager



P: 720.955.7796 1600 Broadway, Suite 1960, Denver, CO 80202 <u>ari.moledina@state.co.us</u> | energyoffice.colorado.gov

Under the Colorado Open Records Act (CORA), all messages sent by or to me on this state-owned e-mail account may be subject to public disclosure.

Utility-Scale-Best-Practices-for-Colorado-Govts-220301-1.pdf

Wed, Feb 7, 2024 at 12:24 PM



3 messages

Christine Murphy <cmurphy22003@gmail.com>

To: sean.norris@mesacounty.us

Dear Mr.Norris,

Sean Norris <sean.norris@mesacounty.us>

I followed your instructions and tried to attend the meeting virtually. We couldn't because you did not let us in. Then we tried to listen on the phone only to hear you disregard what the community members had to say about the fire probability. You have become very disrespectful to the taxpayers. The solar companies will not be honest about anything. If you plan to follow what you have sent out then on the possible code change I believe that you need more research. Believing a company versus caring about the people that pay for everything is irresponsible.

The state says that the county can determine what a community solar garden is and you have decided that it doesn't matter what we think. To be disingenuous toward the land and homeowners goes against what Mesa County says they do. I would like to request to have one meeting where research and facts are presented and not ignored.

There is research that shows that solar panels catch fire. A fire break is not a thirty foot dirt easement. Centennial Colorado had a fire where the fire jumped the paved road. Two years ago a fire jump I 70 in the canyon. A dirt road is not a fire break. These are important facts and you choose to disregard them.

Please let me know when the next meeting is and I will bring plenty of research to back up my claims.

Regards

Christine and Jim Murphy

Sent from my iPhone

Sean Norris <sean.norris@mesacounty.us> To: Greq Moberg <greg.moberg@mesacounty.us>

Sean T. Norris

Manager

Planning Department

970-254-4183

[Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us> To: Christine Murphy <cmurphy22003@gmail.com>

Thank you for your comments and your opinion. This will be included in the public comments for the project.

The next meeting is a Public Open House on February 28th, 2024 in the first floor conference room of the Old County Courthouse at 544 Rood Avenue. The Open House will begin at 1:30 and run until 7:00 p.m.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]

Fri, Feb 23, 2024 at 8:11 AM

Thu, Feb 22, 2024 at 8:10 PM



project # PRO2024-0022

2 messages

Nina Hutchins <hutchinsninas@yahoo.com> To: Sean Norris <sean.norris@mesacounty.us> Tue, Feb 6, 2024 at 9:43 AM

Cc: Greg Moberg <greg.moberg@mesacounty.us>, Britt Dveris <britt.dveris@mesacounty.us>, "samantha.hoogland@mesacounty.us" <samantha.hoogland@mesacounty.us>, "faye.hall@mesacounty.us>, "faye.hall@mesacounty.us>, "samantha.hoogland@mesacounty.us" <faye.hall@mesacounty.us>, "faye.hall@mesacounty.us>, "samantha.hoogland@mesacounty.us" <faye.hall@mesacounty.us>, "faye.hall@mesacounty.us>, "faye.hall@mesacounty.us>, "samantha.hoogland@mesacounty.us" <faye.hall@mesacounty.us>, "faye.hall@mesacounty.us>, "samantha.hoogland@mesacounty.us" <faye.hall@mesacounty.us>, "faye.hall@mesacounty.us>, "faye.hall@mesacounty.us" <faye.hall@mesacounty.us" <faye.hall@mesacounty.us" <faye.hall@mesacounty.us" <faye.hall@mesacounty.us" <faye.hall@mesacounty.us" <faye.hall@mesacounty.us" </fa>

Hi Sean,

This is public input to project number PRO2024-0022.

I am a third generation Mesa County resident and have heard stories of the oil shale booms and refineries, uranium processing and mining, government projects.....the list goes on of industries and projects which were going to remake mesa county or help an imperative national interest. Where are many of these industries now? Past and current residents have paid for this hurried development without proper safe guards with negative impacts to their surrounding environment, financial wellbeing, health and even their lives sometimes. I think this is our opportunity to prevent history repeating itself, to guide development in renewable energy so the public interest, infrastructure, natural resources, and public values are protected.

These are inputs on renewable energy and the direction I would like to see the county taking their policy or code. All the suggestions I have comes from other counties' plans regarding renewable energy that I have researched. They seem like sensible ideas which would protect our land and natural resources for current and future use. They would prevent long term damage and degradation to local economies, specifically agriculture and tourism and future development. Mesa County has some highly productive and unique irrigated agricultural land which can not be replaced once it gets dried up and taken out of agriculture. These standards would help preserve our agricultural heritage, our rural and scenic view shed and the character of our county which I think most residents value.

Below are general requirements that other counties have, or are proposing, in their land use codes regarding renewable energy that seem relevant to Mesa County. The specific requirements are elaborated on in the land use code drafts of San Miguel County, Delta County, and Culpeper County (Virginia) attached below. One detail from the proposed San Miguel land use code which I think is important is the classification of Solar into different sizes. The following rules would only apply for solar power plants greater than ½ acre in size. These lager utilities would be required to go through a review process rather than an administrative review.

https://web.culpepercounty.gov/sites/default/files/fileattachments/planning_and_zoning/page/3488/02072023_solar_ordinance_article_17-7_adopted_and_signed.pdf https://www.deltacountyco.gov/DocumentCenter/View/16005/2023-Delta-County-DRAFT-Land-Use-Code https://www.sanmiguelcountyco.gov/DocumentCenter/View/11444/Draft-Regulations-for-Solar-Energy-Systems-PDF?bidId=

Encouraging renewable utilities to build in areas designated by Mesa County's master plan for the development of renewable energy is the first step. The following requirements and standards would help determine the appropriate placement of renewable power plants following that. These requirements would help protect the counties natural resources for current and future residents. This includes resources such land, water, wildlife and air as well as less tangible assets such as desirable current and future economic activity, housing development, and quality of life. These are things which will attract and keep people living in Mesa County.

-Feasibility study

-Alternative use analysis

-Water quality conditions impact
-Impact on flood plains, wetlands, and riparian areas

- -storm water management
- -wildlife impact
- -terrestrial plants impact
- -grading, erosion, sediment control
- -revegetation, weed management
- -current and future housing impact
- -protection of historical and archeological sites
- -decommission and restoration plan with a surety bond or line of credit
- -protection of agricultural and irrigated land
- -recreational resources impact
- -prevention of interference in 3 mile area plan of any municipality
- -interconnection agreement with utility provider in place

Solar utility plants are also disruptive to adjacent property owners and the surrounding community. A study done by UC Berkeley found properties, neighboring solar power plants, drop in value by as much as 5.8%. Do Solar Farms Lower Property Values? A New Study Has Some Answers - Inside Climate News



Do Solar Farms Lower Property Values? A New Study Has Some Answers - Ins... Katelyn Weisbrod A new study finds that houses within a half-mile of a utility-scale solar farm have resale prices that are, on a...

Implementing the following standards and safe guards would help mitigate the diminishment in value, of adjacent properties. They would also help local municipalities and residents deal with the problems associated with renewables in fire prone and extremely open high desert environment. Most things are visible for miles and miles in Mesa County so careful placement of something as large as a powerplant which can take up many acres of land should be of utmost importance.

-large setbacks from property lines and residences

-height limits

-liability coverage

-noise limits, dust and fume mitigation

-glare and glint mitigation

- -visual impact assessment
- -fire mitigation (following international fire code)
- -water services ability (fire hydrants)
- -government services impact
- -construction traffic routes impact mitigation
- -hazardous materials plan

Thank you for taking the time to listen to public input. Below is a picture of a situation which I think we can avoid with the right standards and requirements for renewable energy.

Nina Hutchins



solar wreckage.jpg

Sean Norris <sean.norris@mesacounty.us>
Tue, Feb 6, 2024 at 10:55 AM
To: Nina Hutchins <hutchinsninas@yahoo.com>
Cc: Greg Moberg <greg.moberg@mesacounty.us>, Britt Dveris <britt.dveris@mesacounty.us>, "samantha.hoogland@mesacounty.us" <samantha.hoogland@mesacounty.us>, "faye.hall@mesacounty.us" <faye.hall@mesacounty.us>

Thank you. This will be some interesting reading. Your comments are in the public comments for the project.

Sean T. Norris Manager

Planning Department 970-254-4183





Utility, Production (solar) LDC Amendment schedule with respect to the Moratorium

8 messages

Sean Norris <sean.norris@mesacounty.us>

Thu, Jan 25, 2024 at 3:13 PM To: Bobbie Daniel <Bobbie.Daniel@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, Peter Baier cpeter.baier@mesacounty.us>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us>, David Schwenke <david.schwenke@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us> Cc: Rose Tafoya <rose.tafoya@mesacounty.us>, Collin Rode <collin.rode@mesacounty.us>

Commissioners,

In response to the Mesa County Resolution No. MCM 2024-3, imposing a temporary moratorium on accepting or processing applications for commercial solar farms, I have prepared the following timeline for milestones related to the development of LDC amendments. The process forward will involve our regular project processing of a code amendment through MaintStar, with the additional outreach opportunity of a public open house, a review by the Code Focus Group and a Planning Commission workshop and hearing followed by a BoCC hearing. At the conclusion of each of these milestones, you can expect a briefing of any information we have gained from the most recent events and how we intend to move forward from that point.

We will begin with the initiation of the code amendment project in MaintStar. That action should be completed by the end of day Friday the 26th.

We are scheduled for a public open house on Tuesday 1/30 from 1:00 p.m. to 7:00 p.m. in the Main conference room at MCCS, 200 S. Spruce.

I will convene the CFG on Wednesday 2/7 at 4:15 in the West conference room at MCCS.

The Planning Commission will have a workshop on 2/8 at 5:45. The location is in conflict with elections so we are working on that issue.

The Planning Commission Hearing for the Code amendment will be 3/21 at 6:00 p.m. in the 544 Hearing room.

The item will then come before the BoCC on 4/23. At that time, I anticipate that an item to rescind the Moratorium will appear on your agenda immediately following the adoption of the code amendment.

The Code amendment can and likely will be modified throughout the process as necessary up until and including the BoCC hearing on 4/23. I will send a draft of the current amendment to you as soon as I have it in MaintStar.

Short summary of the schedule is as follows:

MaintStar project filed 1/26 Open House 1/30 Code Focus Group 2/7 PC Workshop 2/8 Planning Commission 3/21 BoCC 4/23

Please feel free to reach out as we go through this with any questions.

Thank you.

Sean T. Norris

Manager Planning Department 970-254-4183

Planning Department (970) 244-1636 www.mesacounty.us/planning **CONFIDENTIALITY NOTICE**: The contents of this email message and any attachments are intended solely for the addressee(s) and may contain confidential and/or privileged information and may be legally protected from disclosure. If you are not the intended recipient of this message or their agent, or if this message has been addressed to you in error, please immediately alert the sender by reply email and then delete this message and any attachments. If you are not the intended recipient, you are hereby notified that any use, dissemination, copying, or storage of this message or its attachments is strictly prohibited.

Would you like to contact other Offices within Community Development?

Email mccomdev@mesacounty.us/services/community-development/. & www.mesacounty.us/services/community-development/. & www.mesacounty.us/services/community-development/.

Bobbie Daniel <bobbie.daniel@mesacounty.us>

To: Sean Norris <sean.norris@mesacountv.us>

Cc: Cody Davis <cody.davis@mesacounty.us>, Janet Rowland <ianet.rowland@mesacounty.us>. Todd Starr <todd.starr@mesacounty.us>. Peter Baier cody.davis@mesacounty.us>. Todd Hollenbeck@mesacounty.us>. David Schwenke <david.schwenke@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us>, Rose Tafoya <rose.tafoya@mesacounty.us>, Collin Rode <collin.rode@mesacounty.us>

Thank you, Sean. Appreciate everyone's hard work on this.

On Jan 25, 2024, at 3:14 PM, Sean Norris <sean.norris@mesacounty.us> wrote:

[Quoted text hidden]

Rose Tafoya <rose.tafoya@mesacounty.us>

To: Sean Norris <sean.norris@mesacounty.us> Cc: Bobbie Daniel <Bobbie.Daniel@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, Peter Baier <peter.baier@mesacounty.us>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us>, David Schwenke <david.schwenke@mesacounty.us>, Greq Moberg <greq.moberg@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us>, Collin Rode <collin.rode@mesacounty.us>

Hi all.

We have confirmation that Feb. 8th is scheduled in the Main Conference Room (formerly known as Room 40) at 200 S. Spruce St. (West Entrance). This is how it is noticed to the public

Thank you, Rose Tafoya Mesa County Community Development P.O. Box 20,000-5022 Grand Junction, CO 81502 Phone: (970) 244-1761 Fax: 970-244-1769 rose.tafoya@mesacounty.us

[Quoted text hidden]

Janet Rowland <janet.rowland@mesacounty.us>

To: Rose Tafoya <rose.tafoya@mesacounty.us>, Sean Norris <sean.norris@mesacounty.us>

Cc: Bobbie Daniel <bobbie.daniel@mesacountv.us>. Cody Davis <cody.davis@mesacountv.us>. Todd Starr <todd.starr@mesacountv.us>. Peter Baier <peter.baier@mesacountv.us>. Todd Hollenbeck@mesacountv.us>. David Schwenke <david.schwenke@mesacountv.us>. Greg Moberg <greg.moberg@mesacountv.us>. MCAdmin <mcadmin@mesacountv.us>. Collin Rode <collin.rode@mesacountv.us>

Thanks, Rose.

[Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us> To: Janet Rowland <janet.rowland@mesacounty.us>

Cc: Rose Tafoya <rose.tafoya@mesacounty.us>, Bobbie Daniel <bobbie.daniel@mesacounty.us>, Todd Davis <cody.davis@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, Peter Baier <peter.baier@mesacounty.us>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us>, David Schwenke <david.schwenke@mesacounty.us>, Greq Moberg <greq.moberg@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us>, Collin Rode <collin.rode@mesacounty.us>

Please find attached the red line draft of the Utility, Production LDC amendment. I have just initiated a project in MaintStar on this project.

This is all new code, so view it with respect to the sections that it applies to, and at this point, no other areas of the code outside these sections have been amended.

Thank you and have a nice weekend.

Fri, Jan 26, 2024 at 2:23 PM

Fri, Jan 26, 2024 at 9:53 AM

Thu, Jan 25, 2024 at 3:21 PM

Fri. Jan 26. 2024 at 2:31 PM

Manager Planning Department 970-254-4183



[Quoted text hidden]

Utility Production LDC Amendment.docx 53K

Cody Davis <cody.davis@mesacounty.us>

To: Sean Norris <sean.norris@mesacounty.us>

Mon, Jan 29, 2024 at 2:17 PM

Cc: Janet Rowland <janet.rowland@mesacounty.us>, Rose Tafoya <rose.tafoya@mesacounty.us>, Bobbie Daniel <bobbie.daniel@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, Peter Baier <peter.baier@mesacounty.us>, Todd Hollenbeck

<todd.hollenbeck@mesacounty.us>, David Schwenke <david.schwenke@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us>, Collin Rode <collin.rode@mesacounty.us>

When defining characteristics Utilities, in Section 12.04-CC-4, should we include nuclear as an option? We list every other type of energy. Or maybe that's a conversation to have later? **Cody Davis** | **Mesa County Commissioner**



Office: 970-244-1605 Cell: 970-640-4330 Email: cody.davis@mesacounty.us 544 Rood Ave | Grand Junction | CO 81501

[Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us>

To: Cody Davis <cody.davis@mesacounty.us>

Cc: Janet Rowland <janet.rowland@mesacounty.us>, Rose Tafoya <rose.tafoya@mesacounty.us>, Bobbie Daniel <bobbie daniel@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, Peter Baier <peter.baier@mesacounty.us>, Todd Hollenbeck

<todd.hollenbeck@mesacounty.us>, David Schwenke <david.schwenke@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us>, Collin Rode <collin.rode@mesacounty.us>

I have no problem with that. [Quoted text hidden]

[Quoted text hidden]

Bobbie Daniel <bobbie.daniel@mesacounty.us>

To: Sean Norris <sean.norris@mesacounty.us>

Mon, Jan 29, 2024 at 2:35 PM

Mon, Jan 29, 2024 at 2:22 PM

Cc: Cody Davis <cody.davis@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>, Rose Tafoya <rose.tafoya@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, Peter Baier <peter.baier@mesacounty.us>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us>, David Schwenke <david.schwenke@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us>, Collin Rode <collin.rode@mesacounty.us>

I like that addition

On Jan 29, 2024, at 2:23 PM, Sean Norris <sean.norris@mesacounty.us> wrote:

[Quoted text hidden]



General email notification of the Utility Production Final Draft 3-26-2024

2 messages

Sean Norris <sean.norris@mesacounty.us>

Fri, Mar 29, 2024 at 4:41 PM

To: Sean Norris <sean.norris@mesacounty.us>

Bcc: Nicholas Aranda <naranda@jgmsinc.com>, Chris Weaver <s.chris.weaver@gmail.com>, sealings@acsol.net, chasmop@bresnan.net, sballerton@gmail.com, TMACK McCloskey <thosmccloskey@gmail.com>, Charlee.brady@gmail.com, Brent Goff <brent.goff@mesacounty.us>, Mary Elaine Johnson <elaine.johnson.craig@gmail.com>, plevon@aol.com, Louis Villaire <lvillaire@gmail.com>, Frank Nemanich <westiecolorado@bresnan.net>, Sharon Bouse-Ferry <kanga424@msn.com>, E Satie <evsatie@gmail.com>, Luke.rome@swca.com, Greg Motz <greg@sun-king.com>, Cully and Krista <cullyandkrista@gmail.com>, Rondo Buecheler <rondoworld@gmail.com>, jdelany58@gmail.com, scottb@gjcity.org, Janet Rowland <Janet.rowland@mesacounty.us>, Bobbie Daniel <bobbie.daniel@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, bemurphy21@gmail.com, chloerittenhouse@gmail.com, "Caspari,Horst" <Horst.Caspari@colostate.edu>, Susan.bassoon.hess@gmail.com>, Tanya Travis <ttravis1405@gmail.com>, Greg Brophy <senatorbrophy@gmail.com>, Nina Hutchins <hutchinsninas@yahoo.com>, Jason and Rhiannon Lawson <jasonandrhi@hotmail.com>, ksundman@pivotenergy.net, Mike Kruger <mkruger@cossa.co>, Jeremiah Garrick <jgarrick@cossa.co>, jfitzpatrick@pivotenergy.net, Kathryn Bedell <kathy@roancreekranch.com>, Kim Kerk <kimk355@outlook.com>, Charlie Talbott <charlie@talbottfarms.com>, Ron Abeloe <ron@cwihomes.com>, KRAIG ANDREWS <andrews1201@msn.com>, Don Pettygrove <dgpengineeringllc@gmail.com>, Jim Pedersen <jim@timberlinebank.com>, Todd Hollenbeck

All.

If you have not already accessed the Utility Production Final Draft 3-36-2024 on MaintStar, here is a copy for your information.

You may recall that in January, 2024, Mesa County posted a timeline for the adoption of a Land Development Code amendment on Utility Production (Solar) which was as follows.

SOLA	RŢI	MELINE
JAN. 30, 2024 Public Open House	① 1 - 7 p.m. क्ति ♀ 200 S. Spruce	Presentations 1:30, 3:30, 5:30 p.m. St., Main Conference Room
FEB. 7, 2024 Code Focus Group Rev	view	
FEB. 8, 2024 Planning Commission Workshop	() 5:45 p.m.	Q 200 S. Spruce St., Main Conference Room
MARCH 21, 2024 Planning Commission Hearing	🕲 6 p.m. 🏼	544 Rood Ave., Public Hearing Room
APRIL 23, 2024 County Commissioner Public Hearing	🔍 9 a.m. 🗣	544 Rood Ave., Public Hearing Room

In an effort to meet the schedule, we are preparing to create the Binder for the April 23, 2024 BoCC Land use Hearing, which requires Public Noticing of the hearing, 15 days prior to that hearing. As that date is on Sunday the 7th, we will be creating the BoCC Binder and publishing the Public Notice on Friday April 5th, 2024.

As with all Public Hearings, and Binders, public comments received before the creation of the Binder will be included in the Binder. Comments received after that publication date are still included in the public record, and are emailed to the BoCC for their review, as well as printed to be available at the public hearing. In fairness to the BoCC and to allow them time to consider all comments before the hearing, Mesa County would ask that all efforts be made to deliver those comments to Sean Norris at sean.norris@mesacounty.us, as many days before the hearing as possible, so that I can get them in front of the Commissioners for their review.

As always, Thank you for your interest and involvement in the development of this code amendment.

Sean T. Norris Manager Planning Department 970-254-4183

Planning Department (970) 244-1636 www.mesacounty.us/planning **CONFIDENTIALITY NOTICE**: The contents of this email message and any attachments are intended solely for the addressee(s) and may contain confidential and/or privileged information and may be legally protected from disclosure. If you are not the intended recipient of this message or their agent, or if this message has been addressed to you in error, please immediately alert the sender by reply email and then delete this message and any attachments. If you are not the intended recipient, you are hereby notified that any use, dissemination, copying, or storage of this message or its attachments is strictly prohibited.

Would you like to contact other Offices within Community Development?

Email mccomdev@mesacounty.us/services/community-development/. & www.mesacounty.us/services/community-development/. & www.mesacounty.us,

Utility Production Final Draft 3-26-2024.docx

Sean Norris <sean.norris@mesacounty.us> To: Greg Moberg <greg.moberg@mesacounty.us> Fri, Mar 29, 2024 at 5:19 PM

FYI [Quoted text hidden] [Quoted text hidden]

Utility Production Final Draft 3-26-2024.docx 48K



Energy Production Amendment

3 messages

Greg Moberg <greg.moberg@mesacounty.us> To: Sean Norris <sean.norris@mesacounty.us>

Sean,

Take a look.

Greg Moberg Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

Utility Production.docx 49K

Sean Norris <sean.norris@mesacounty.us> To: Greg Moberg <greg.moberg@mesacounty.us>

Greg,

Attached is the Utility Production Final Draft 3-26-2024 of the PRO2024-0022 TXT

Below, I am summarizing the recommendations from the MCPC on 3/21/2024, and the direction we received from the BoCC at a public briefing 3/25/2024, I have tracked the changes to develop a clear guide to the attached Final Draft which is expected to be presented to the BoCC for adoption in August.

Table 6-1

Corrected Label for Utilities (Section 12.04)

Removed C from Energy Production in I2 and Added "A" allowed by right to C1, C2, I1 and I2 zone districts.

Added Agrivoltaics to Utility Production as "A" allowed by right.

CC. Utility, Production

Added 1.a. (4) Agrivoltaics.

Removed 1.b. b. Any facility that exceeds the definition of a private energy facility or community solar garden shall be processed as an energy generation/production facility.

CC. 2.g.(1) Added

A cost estimate for the decommissioning of the facility and restoration of the site prepared by a Professional Engineer or contractor who has expertise in removal of such facilities.

CC. 2.h.(1) Removed

Securities

(1) Reclamation and Bonding

Mon, Mar 25, 2024 at 3:49 PM

Tue, Mar 26, 2024 at 11:02 AM

Prior to construction, the developer is required to submit an irrevocable standby letter of credit, bond, or alternative form of Security in an amount sufficient to fund the estimated decommissioning/reclamation costs with the County as beneficiary. Decommissioning/reclamation cost estimates, which shall be updated and delivered to the Planning and Development Director or designee every five (5) years from the establishment and submittal of the Security, shall include costs associated with the dismantlement, recycling, and safe disposal of facility components and site reclamation activities, and afford credit for "scrap value". The developer's irrevocable standby letter of credit, bond, or alternative form of Security shall be updated to match any changes in the cost estimates every five (5) years.

Section 12.01

Definition of Agrivoltaics remains basically unchanged.

Please circulate this to the BoCC and Leadership to see if there are any items we missed. I will need to prepare the Binder on Thursday of next week, April 4th, for the BoCC April 23rd hearing for publication and notice. Any comments will need to be back to me before then to make it into the Final version of the amendment.

Sean T. Norris Manager Planning Department

970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]

Utility Production Final Draft 3-26-2024.docx

Greg Moberg <greg.moberg@mesacounty.us> To: Sean Norris <sean.norris@mesacounty.us>

Sean,

Attached is the 3/22/24 draft that we used for yesterday's meeting.

Greg Moberg Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

[Quoted text hidden]

Energy Production Amendments - Draft 3-22-24.docx 51K

Tue, Mar 26, 2024 at 11:50 AM



General email notification of the Utility Production Final Draft 3-26-2024

1 message

Sean Norris <sean.norris@mesacounty.us>

Fri, Mar 29, 2024 at 4:41 PM

To: Sean Norris <sean.norris@mesacounty.us>

Bcc: Nicholas Aranda <naranda@jgmsinc.com>, Chris Weaver <s.chris.weaver@gmail.com>, sealings@acsol.net, chasmop@bresnan.net, sballerton@gmail.com, TMACK McCloskey <thosmccloskey@gmail.com>, Charlee.brady@gmail.com>, Brent Goff <brent.goff@mesacounty.us>, Mary Elaine Johnson <elaine.johnson.craig@gmail.com>, plevon@aol.com, Louis Villaire <lvillaire@gmail.com>, Frank Nemanich <westiecolorado@bresnan.net>, Sharon Bouse-Ferry <kanga424@msn.com>, E Satie <evsatie@gmail.com>, Luke.rome@swca.com, Greg Motz <greg@sun-king.com>, Cully and Krista <cullyandkrista@gmail.com>, Rondo Buecheler <rondoworld@gmail.com>, jdelany58@gmail.com, scottb@gjcity.org, Janet Rowland <Janet.rowland@mesacounty.us>, Bobbie Daniel <bobbie.daniel@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, bcmurphy21@gmail.com, chloerittenhouse@gmail.com, "Caspari,Horst" <Horst.Caspari@colostate.edu>, Susan Hess <susan.bassoon.hess@gmail.com>, Tanya Travis <ttravis1405@gmail.com>, Greg Brophy <senatorbrophy@gmail.com>, Nina Hutchins <hutchinsninas@yahoo.com>, Jason and Rhiannon Lawson <jasonandhi@hotmail.com>, ksundman@pivotenergy.net, Mike Kruger <mkruger@cossa.co>, Jeremiah Garrick <jgarrick@cossa.co>, jfitzpatrick@pivotenergy.net, Kathryn Bedell <kathy@roancreekranch.com>, Kim Kerk <kimk355@outlook.com>, Charlie Talbott <charlie@talbottfarms.com>, Ron Abeloe <ron@cwihomes.com>, KRAIG ANDREWS <andrews1201@msn.com>, Don Pettygrove <dgpengineeringllc@gmail.com>, Jim Pedersen <jim@timberlinebank.com>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us>

All.

If you have not already accessed the Utility Production Final Draft 3-36-2024 on MaintStar, here is a copy for your information.

You may recall that in January, 2024, Mesa County posted a timeline for the adoption of a Land Development Code amendment on Utility Production (Solar) which was as follows.

SOLA	RTI	MELINE
JAN. 30, 2024 (Public Open House) 1 - 7 p.m. 👬 200 S. Spruce	Presentations 1:30, 3:30, 5:30 p.m. St., Main Conference Room
FEB. 7, 2024 Code Focus Group Rev	iew	
FEB. 8, 2024 Planning Commission Workshop	🕔 5:45 p.m.	200 S. Spruce St., Main Conference Room
MARCH 21, 2024 Planning Commission Hearing	🕓 6 p.m. 🏼	544 Rood Ave., Public Hearing Room
APRIL 23, 2024 County Commissioner Public Hearing	🕚 9 a.m. 🛛	544 Rood Ave., Public Hearing Room

In an effort to meet the schedule, we are preparing to create the Binder for the April 23, 2024 BoCC Land use Hearing, which requires Public Noticing of the hearing, 15 days prior to that hearing. As that date is on Sunday the 7th, we will be creating the BoCC Binder and publishing the Public Notice on Friday April 5th, 2024.

As with all Public Hearings, and Binders, public comments received before the creation of the Binder will be included in the Binder. Comments received after that publication date are still included in the public record, and are emailed to the BoCC for their review, as well as printed to be available at the public hearing. In fairness to the BoCC and to allow them time to consider all comments before the hearing, Mesa County would ask that all efforts be made to deliver those comments to Sean Norris at sean.norris@mesacounty.us, as many days before the hearing as possible, so that I can get them in front of the Commissioners for their review.

As always, Thank you for your interest and involvement in the development of this code amendment.

Sean T. Norris Manager Planning Department 970-254-4183

Planning Department (970) 244-1636 www.mesacounty.us/planning **CONFIDENTIALITY NOTICE**: The contents of this email message and any attachments are intended solely for the addressee(s) and may contain confidential and/or privileged information and may be legally protected from disclosure. If you are not the intended recipient of this message or their agent, or if this message has been addressed to you in error, please immediately alert the sender by reply email and then delete this message and any attachments. If you are not the intended recipient, you are hereby notified that any use, dissemination, copying, or storage of this message or its attachments is strictly prohibited.

Would you like to contact other Offices within Community Development?

Email mccomdev@mesacounty.us/services/community-development/. & www.mesacounty.us/services/community-development/. & www.mesacounty.us/

Utility Production Final Draft 3-26-2024.docx 48K



Fw: Flammability of Solar Panels

2 messages

Mon, Feb 26, 2024 at 7:46 AM

Sean Norris <sean.norris@mesacounty.us>

ODonohue, John <Jack.ODonohue@us.panasonic.com> To: "sean.norris@mesacounty.us" <sean.norris@mesacounty.us>

Best regards,

Jack

Jack O'Donohue, LEED AP

Sr. Sales & Business Development Manager - U.S. Central Region & The Caribbean Panasonic Life Solutions Company of America

o | c 312-764-7226

The Grand Solar + Storage Promotion | Panasonic North America - United States



From: ODonohue, John <Jack.ODonohue@us.panasonic.com> Sent: Monday, February 26, 2024 8:42 AM To: sean.morris@mesacounty.us <sean.morris@mesacounty.us>; Lou Villaire <lou@atlastasolar.com> Subject: Flammability of Solar Panels

Hi Sean,

Below link explains that all solar panels are tested for fire resistance:

https://www.renewsysworld.com/post/how-are-pv-modules-tested-for-fire-resistance#:~:text=Key%20requirements%20according%20to%20IEC,flame%20spread%20should%20be%20limited.

The specific UL certificate for fire resistante is UL61730, see screenshot from our specsheet:

Certifications	IEC61215-2:2016 [Hailstone 35mm]
	Fire Type 2 (UL 61730)
	Salt Mist [IEC 61701]
	PID [IEC 62804]
	Ammonia Resistance [IEC 62716]
	Lead-free acc. to RoHS EU 863/2015 [IEC 62321]

And as you requested, here is a "video showing someone lighting up a solar panel with a weed burner': https://www.youtube.com/watch?v=aEhuFu7iys0

Jack O'Donohue, LEED AP

Sr. Sales & Business Development Manager - U.S. Central Region & The Caribbean Panasonic Life Solutions Company of America

o | c 312-764-7226

The Grand Solar + Storage Promotion | Panasonic North America - United States



Sean Norris <sean.norris@mesacounty.us> To: "ODonohue, John" <Jack.ODonohue@us.panasonic.com> Mon, Feb 26, 2024 at 8:03 AM

Thank you John.

Sean T. Norris Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183

MESA COUNTY Planning Department

[Quoted text hidden]

Submitted 2.26.24 by John O'Donahue in correspondence with Sean Norris

Solar Panel Flammability video -

https://www.youtube.com/watch?v=aEhuFu7iys0



RE: General email notification of the Utility Production Final Draft 3-26-2024

1 message

chasmop@bresnan.net <chasmop@bresnan.net>
To: Sean Norris <sean.norris@mesacounty.us>

Hi Sean,

I read over the whole LDC and I think it looks good. I think the BOCC will like it, or at least they should. Thanks for the updated information

Charlie Post



1 message

Sammy Roth - L.A. Times <boilingpoint@mail.latimes.com> Reply-To: boilingpoint@latimes.com To: sean.norris@mesacounty.us

Los Angeles Times Beiling Point

February 01, 2024

An America flag flutters in the breeze at the Daggett solar farm in San Bernardino County, seen in October. (Irfan Khan / Los Angeles Times)

A single federal agency oversees nearly a quarter-billion acres of public lands and those acres could play a key role in fighting climate change by hosting vast fields of solar panels and wind turbines that limit our need to burn fossil fuels.

The American public could embrace this latest evolution of our shared domain.



Or we could reject further industrial development of our public lands and instead preserve them for the sake of wildlife habitat, healthy ecosystems and scenic hikes — while requiring renewable energy companies to find other places to build.

So which should we choose: clean energy or conservation?

Right now, President Biden is trying to thread the needle.

The Biden administration released its long-awaited Western Solar Plan last month, laying out a vision for where sprawling solar farms should be allowed — and where they should be blocked — across 11 Western states, including California. The plan covers 162 million acres overseen by the U.S. Bureau of Land Management and tentatively concludes that companies should be able to propose solar projects across 22 million acres — an area roughly the size of Maine.

That's a whole lot of land. If you hadn't noticed, though, global warming is fueling a whole lot of harm: heat waves surpassing 120 degrees in Los Angeles County, Lake Mead falling to record lows, catastrophic megafloods doubling in likelihood. Plants and animals are feeling the strain too, with fast-rising temperatures pushing many species toward extinction.

"It's going to take everything to meet the climate challenge," said Laura Daniel-Davis, a top official at the U.S. Interior Department. "It's important that our shared public lands be part of meeting our clean energy goals."



Those goals are ambitious. President Biden wants to transition the U.S. power grid to 100% clean energy by 2035, 10 years ahead of California's target and in line with what scientists say is needed to avoid the worst consequences of the climate crisis.



President Biden drives a Cadillac Lyriq electric vehicle through a showroom at the Detroit Auto Show in 2022. (Evan Vucci / Associated Press)

To be clear, nobody expects 22 million acres of public lands to be gobbled up by solar panels. The Bureau of Land Management projects that just 700,000 acres under its Western purview will be needed to meet the nation's climate targets.

But if you want to cover 700,000 acres with solar panels — that's an area smaller than Rhode Island, by the way — you can't just circle 700,000 acres on a map and tell solar developers to go build there. There are too many complications that can get in the way once developers actually zoom in and examine possible project sites.

For instance, the land may be more important for desert tortoises or other creatures protected by the Endangered Species Act than was previously understood. There could be opposition from neighboring landowners who don't want to live next to a solar farm. There could be bottlenecks on nearby power lines that make it difficult to send electricity to the cities that need it. Hence Biden's strategy: Take a high-level look at which lands are most suitable for solar farms; offer companies a wide array of options; and then examine the merits and drawbacks of individual projects before deciding whether to approve them.

"Every single project, every single time, still is going to get that robust, site-specific look," Daniel-Davis told me.

It makes sense, at least in theory. But we live in practice, not in theory.

In practice, there are many conservationists who love our public lands and want to keep them as pristine as possible — even if that means putting more solar panels in places where development is more expensive or more technically challenging, such as household rooftops, irrigation water canals or former mines. In practice, there's plenty of disagreement over the right balance between solar on public lands and solar on some of those lower-impact, higher-cost places.

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So what kind of balance does President Biden's plan strike?

I've spent the last few weeks evaluating that question. Here's what I've learned.



The Los Angeles Department of Water and Power's Pine Tree Wind Farm and Solar Project in the Tehachapi Mountains of Kern County. (Irfan Khan / Los Angeles Times)

Let's start with the solar industry, which sounds relatively pleased with Biden's road map.

Ben Norris, vice president of regulatory affairs at the Solar Energy Industries Assn., described the plan as "mostly good," saying it should allow companies to propose projects across 30 times as many acres as are currently designated solar priority zones.

The Biden administration would accomplish that in part by opening up public lands across five states — Idaho, Montana, Oregon, Washington and Wyoming — that aren't part of the current federal solar plan, finalized more than a decade ago.

"Twenty-two million acres is getting us a lot closer to the numbers that oil and gas currently enjoy," Norris said.

Even if the administration moves ahead with the 22 million acres more on that in a minute — there's a big difference between opening up land for renewable energy and seeing that land get built out, as developers are well aware.

Solar and wind farms can spend years going through rigorous environmental analyses required by federal law — analyses that sometimes end in rejection,

especially if a project stirs up opposition from conservation activists or nearby towns.

Even for developers who don't face environmental hurdles or local opposition, finding a buyer for their power — and financing to build their projects — can be impossible if there are no transmission lines nearby with capacity to ship out electricity.

Peter Weiner, a lawyer who represents solar companies, said Biden's plan could do more to help bring projects to fruition.

For one thing, the plan would limit new solar farms to public lands within 10 miles of existing or planned power lines. In theory, that's a good way to direct companies to the best spots. But do federal officials really know every electric line that will be built in the years to come? What if a developer is willing to spend a bit more money to connect to a line 12 or 15 miles away?

Those may sound like minor details. But they could help determine the fate of the planet.



Smoke from the 2020 Bobcat fire casts a pall over power lines running through the Mojave Desert in northern Los Angeles County. (Irfan Khan / Los Angeles Times)

Weiner also described the federal government's maps as "grainy," saying they offer "more of a 30,000-foot view than a ground-level view" of which public lands are

suitable for solar. It will be up to developers to study specific sites themselves.

Federal officials "don't have the resources to do that level of planning," Weiner told me.

I was intrigued to hear a similar observation from one of the most vocal critics of solar on Western public lands.

That would be Patrick Donnelly, who lives near Death Valley National Park and is Great Basin director at the Center for Biological Diversity, an advocacy group. He told me his biggest problem with Biden's plan is that it's a "desktop exercise" that uses "a pretty arbitrary set of criteria" to determine which lands should be closed off to solar. Federal officials, he said, failed to take advantage of "on-the-ground knowledge" to more precisely map out appropriate development zones and protected areas.

As an example, Donnelly pointed to the desert lands surrounding Nevada's Ash Meadows National Wildlife Refuge, which he said the Biden administration's plan would leave open to solar development — even though federal officials recently classified several solar projects proposed for those lands as "low priority" due to potential harm to the wildlife refuge.

The federal government's criteria for deciding which areas should be off limits to solar — including endangered species habitat, popular hiking spots and places sacred to Indigenous tribes — "didn't flag areas that should be obvious," Donnelly said.



Crystal Springs boardwalk at Ash Meadows National Wildlife Refuge, seen in January 2023. (Brian van der Brug / Los Angeles Times)

As I talked with Donnelly, Weiner and others, I kept thinking back to something that Tracy Stone-Manning, the Bureau of Land Management's director, told me when I interviewed her at an environmental journalism conference in April.

To speed up solar and wind development on public lands, she said, her agency needs a lot more money from Congress to hire additional staff members, who can more thoroughly map out the best spots and conduct environmental analyses.

"The biggest problem is having enough people to do the work," Stone-Manning said.

At the time, that sounded to me like a bit of an excuse. Now I find myself nodding along.

As long as Republicans retain at least partial control of Congress — they currently run the House — more money for clean energy isn't likely. It almost certainly won't happen if Donald Trump returns to the White House. Elections have consequences.

Whatever happens in November, though, some solar developers and conservationists will keep looking for common ground.

I wrote in the fall about "Uncommon Dialogue," a Stanford University initiative that produced a first-of-its-kind agreement in which a dozen prominent developers and environmental groups pledged to work together to limit ecosystem damage from solar farms. Their dialogue continues, with six working groups crafting development guidelines and policy recommendations.

One of their goals is to come up with incentive programs that encourage companies to build fewer solar farms on pristine public lands and more on already disturbed areas such as Superfund sites, landfills, former mines and water reservoirs — places where it's typically more expensive to build. The "Uncommon Dialogue" partners also hope to promote solar development on farmland, which helps save water in drought-stressed regions but can provoke opposition from neighboring farmers.

Dan Reicher, the Stanford University researcher and former Clinton administration official who launched and leads the initiative, told me he expects most solar projects in the United States to be built on private lands, rather than public lands.

"The vast proportion is going to be on private agricultural lands," he predicted.

President Biden's solar plan forecasts a different outcome, at least for the American West.



Solar panels surrounding farmland in California's Imperial Valley. (Robert Gauthier / Los Angeles Times)

The Bureau of Land Management estimates that over the next 20 years, solar projects will be built across nearly 1 million acres under its jurisdiction in the West — the 700,000 acres I mentioned above, plus an additional 280,000 already open to solar developers in the California desert under an Obama-era federal plan. That's three times as many acres as the agency estimates will need to be dedicated to solar on all other lands, public or private, in the 11 Western states included in the new plan.

Does that make sense? Should public lands be responsible for hosting three-quarters of the West's solar farms?

As a lover of those gorgeous landscapes — some of my most cherished memories include backpacking Wyoming's Teton Crest Trail and camping in Death Valley — my gut reaction is, "No." Even the federal officials behind the Western Solar Plan seemed to agree, writing that the amount of public land they assumed would be needed for solar was "likely an overestimate."

For some conservationists, those questionable numbers are one of several reasons the idea of opening 22 million acres of public lands to possible solar development "doesn't really pass the laugh test," in the words of Matt Kirby, senior director of energy and landscape conservation at the National Parks Conservation Assn., an advocacy group.

"Why open up all that land and let industry choose?" he asked.

Kirby would prefer to see the Biden administration ditch its current "preferred alternative" — the one with the 22 million acres — and instead select Alternative 5, which would limit solar applications to 8 million acres of previously disturbed lands.

"We're now in a situation that essentially puts industry in the driver's seat," Kirby said.

Members of the public can still weigh in. Before finalizing the Western Solar Plan, the Bureau of Land Management will host eight public meetings to gather input, including two Zoom meetings, the first of them this Monday at 10 a.m. PT.

Federal officials are also finalizing a regulation that would dramatically reduce the fees paid by renewable energy companies with projects on public lands. Another regulation nearing completion would put ecosystem protection on an equal footing

with energy development — one more effort to strike the right balance between clean power and conservation on federal lands.

I wish I could tell you what the right balance looks like. But these are complex challenges with no easy answers.



A construction worker pulls wiring at the site of the Gemini solar farm, on public lands outside Las Vegas, in January 2023. (Brian van der Brug / Los Angeles Times)

I sympathize with the solar and wind executives who recognize global warming as the greatest threat facing humanity and have asked for as much land as possible — even if they're motivated largely by profit. I also sympathize with the conservation activists who have dedicated their lives to protecting public lands and sensitive ecosystems — even the harder-core activists who oppose almost all renewable energy development on public lands and instead see rooftop solar as the true climate solution.

Donnelly, from the Center for Biological Diversity, says we'll need for at least some solar on public lands. But he thinks we should do everything we can to limit the conflicts — even if it "costs a few more bucks" to support rooftop solar installations.

"There is no doubt that the cheapest thing to do is to bulldoze pristine desert," he said. "But is the cheapest thing always the right thing to do?

We're taking the cheapest possible approach to our healthcare system, and how's that going?"

Biden administration officials say they've made rooftop solar a priority too — even if California has not.

When I spoke last week with President Biden's clean energy advisor, John Podesta, for an unrelated story on lithium extraction, I ended our call by asking him what he thought about Gov. Gavin Newsom's appointees slashing rooftop solar incentives.

He said he didn't want to "second-guess" their decision. But he did list several steps the Biden administration has taken to make rooftop solar more affordable, and to encourage small "community solar" installations that serve nearby communities.

"We're doing everything we can to incentivize deployment of rooftop and community solar," Podesta said.

Rooftop solar won't solve all our problems — not if we want to transition away from coal, oil and gas fast enough to avoid a harrowing future of ever-more-devastating heat, fire, flood and drought. We need to go on an infrastructure building spree unlike anything seen in this country since the dawn of the interstate highway system. We need to embrace change.

And as for the role America's public lands should play in that change?

Donnelly has opposed dozens of solar projects across the desert. But when I asked him whether it makes sense for public lands to bear the brunt of the burden of solar development in the West, his answer surprised me. Basically, he said yes.

"Let's make public lands part of the solution," he said. "But we can do that in a restrained fashion and still achieve our goals."

I hope he's right.

But in case he's wrong, I hope we err on the side of not quite enough restraint.

ONE MORE THING



City planner Robert Moses sits with blueprints for various fair buildings. (Truman Moore / Getty Images)

I recently started reading "The Power Broker," journalist Robert Caro's classic biography of Robert Moses, the urban planner and public works czar at least partially responsible for the construction of hundreds of infrastructure projects across the state of New York during the 20th century — highways, parks, playgrounds, bridges, tunnels, hydroelectric dams and more.

At least through the first 100 pages, Caro has done an excellent job exploring the political power required to build such sweeping public works projects — and also the downsides those project can bring without sufficient foresight and careful study.

I was especially struck by Caro's description of New York City's Riverside Park, where I spent a bunch of time as a college student. As Moses walked through the park more than a century ago, he saw "a wasteland six miles long," Caro writes:

"The 'park' was nothing but a vast low-lying mass of dirt and mud. Running through its length was the four-track bed of the New York Central, which lay in a right-of-way that had been turned over to the railroad by the city half a century before. Unpainted, rusting, jagged wire fences along the tracks barred the city from its waterfront.... The engines that pulled trains along the tracks burned coal or oil; from their smokestacks a dense black smog rose toward the apartment houses, coating windowsills with grit."

Moses had a vision for how the park could be improved — a vision he eventually made a reality:

"...the ugly [railroad] tracks completely hidden by [a] great highway, cars traveling slowly along it, their occupants enjoying the view, and along the highway stretching green parks filled with strollers, tennis players and families on bicycles."

The green park filled with strollers and bicycles? That sounds wonderful. The highway along the river? Not so much.

I can only imagine that 100 years ago, a highway sounded like a cleaner, quieter, more pleasant alternative to train cars burning coal — and that certainly would have been the case. But with time comes understanding. We now know that living near freeways is terrible for your health, and that gasoline-fueled cars and trucks are one of the biggest causes of climate change.

I hope that 50 years from now, I'll look back at my stories calling for big solar and wind farms and see them as wildly outdated, given the even-cleaner energy technologies we'll have developed by then. But there are no guarantees. We've got to work with what we have — and right now, we have a climate emergency for which solar and wind farms are some of the best solutions.

So let's tear down coal plants, stop expanding highways and keep building solar — until something better comes along.

We'll be back in your inbox Tuesday. To view this newsletter in your web browser, click here. And for more climate and environment news, follow @Sammy_Roth on X.

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Note: items highlighted in light orange were talking points brought up at the 2/21/24 workshop

Upon listening in on the 2/21/24 workshop, we're moved to address the misleading information presented concerning solar facility fires. It was suggested that such incidents "don't happen as much as we think", yet the reality is, <u>their occurrences are untracked</u> [1 A-B]. Asserting "rarity" without concrete data is misleading and unhelpful. Furthermore, adopting "rarity", without data, as fact and using it as a way to develop code is irresponsible and one sided.

While solar companies often assert that the likelihood of a solar facility catching fire is less than 1% (with ZERO data to back this since solar fires are not tracked), we must remember that residential electric fires also constitute less than 1% of home fires [2 A-B]. Yet, we mandate real estate developers and residents to adhere to numerous fire protection codes. Proposing that solar facilities are exempt from such precautions is both biased and reckless. Just as we prioritize home safety, <u>we must enforce comparable safety measures for solar facilities when they are near residential structures.</u>

There was also mention that International Fire Codes apply only to inhabited structures. When a solar company wants to <u>establish a facility in an area near residential structures</u>, it's imperative that they adhere to the additional fire protection standards, just as all real estate developers and surrounding homes have.

The central point raised at the meeting was that in the event of a fire at a solar facility, firefighters would prioritize protecting surrounding homes rather than the solar facility itself. However, a crucial question arises - <u>how can firefighters effectively safeguard these homes if</u> <u>there's no adequate water source?</u> While water may not be effective in combating a solar facility fire, it is crucial for extinguishing residential fires. Without the proper water source, the firefighters may not stand a chance saving the homes surrounding the solar facility. This mirrors a significant oversight and potentially compromises the safety of Mesa County residents.

As responsible Mesa County residents, we've complied with fire protection measures for our homes and expect no less from a solar facility proposed near us. <u>We demand equal compliance</u>.

It is critical to acknowledge that solar facilities, like any other electrical infrastructure, are susceptible to fires. For every instance that concerned citizens highlight about solar fires, it's likely a solar company would offer explanations or justifications for the occurrence. However, the reality remains that these facilities <u>can catch fire</u>, have caught fire, and continue to have the potential to catch fire in the future, [3 A-F].

Fires can occur due to system failures with no specific fault. Compliance with electrical codes in solar facilities <u>doesn't guarantee zero risk of system failure</u>. Failures can occur due to manufacturing defects, installation errors, human error, wildlife destruction, or factors beyond anyone's control which are impossible to anticipate.

We're not debating code compliance but the inherent risk of failure. Given the potential for catastrophic consequences to nearby residences from a solar facility fire, prioritizing the safety of Mesa County residents isn't negotiable when considering such facilities near our homes.

It's unreasonable and biased to solely rely on the word of a solar company representative claiming that all solar panels are safe and devoid of toxic materials, when there are many sources that claim otherwise [4 A-E]. This person directly profits from these facilities. Moreover, accepting their claim, <u>or any individual's similar claim</u>, as fact implies that every solar panel manufacturer globally uses 100% non-toxic materials, even when the internal materials are released into the air during a fire. How can any individual (especially those who are not closely involved with the manufacturing process of solar panels) confidently vouch for the practices of over 350 [5 A] solar manufacturers worldwide? That's implausible.

Based on the information gathered, there is a clear controversy surrounding the toxicity of solar panels. With various manufacturers worldwide, data on this subject remains inconsistent and impossible to track. Given this disparity in data and the potential risks involved, it is crucial to proceed with caution when installing solar facilities near homes.

We've invested millions of our own hard-earned money into our real estate properties county-wide. We won't just "take the word" of profit-seeking solar companies about the "rare" occurrence of a solar facility fire when our investments are at risk.

The conversation around fire protection has been largely one-sided, favoring the solar companies. We must ensure a balanced dialogue that equally represents the concerns of Mesa County residents. This isn't about fault-finding but about <u>recognizing risks and addressing them proactively.</u>

What would this code look like?

Enforcing fire protection rules on all commercial solar facilities, including Community Solar Gardens, is the initial step towards safeguarding Mesa County residents.

But for those at higher risk due to residential structure proximity to proposed solar facilities, we <u>must go further</u>. We need to consider adopting codes akin to the International Fire Code and the Fire Protection outlined in the current Land Development Code.

PART ONE:

Keep the existing fire code protection as it is written in the recent draft under section 2. Submittal Requirements (screenshot below in addition to text)

D. Fire Protection and Safety Procedures

(1) The relevant Fire Protection District's adopted standards, based on current fire code, shall apply

- d. Fire Prevention and Safety Procedures
 - The relevant Fire Protection District's adopted standards, based on current fire code, shall apply unless.

PART TWO:

In addition to Part One, additional fire protection requirements shall be required when a solar facility (ie: Solar Generation Facility, Community Solar Garden, etc...) is <u>accessible by way of an</u> <u>access road that is shared with one or more residential structures</u> OR is proposed <u>1.500 feet or</u> <u>less</u> [<u>6 A-B] to a residential structure</u>.

When the proposed solar facility is 1,500 feet or less from a residential dwelling <u>OR</u> shares an access road with one or more residential structures, the following <u>minimum</u> fire protection requirements apply (unless a waiver is signed by all affected parties). If the local fire dept requires more than what is listed, the solar facility must adhere to the local standards.

- Access and loading: facilities constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt or concrete surface capable of supporting the imposed load of fire apparatus weighing up to 75,000 pounds.
- 2) Grade: Fire apparatus access roads shall not exceed 10 percent in grade.
- 3) Turning radius: the minimum turning radius shall be determined by the fire code official.
- 4) Dead ends: Dead end fire apparatus access roads in excess of 150 feet shall be provided width and turnaround provisions in accordance with the IFC table D103.4

TABLE D103.4 REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS

LENGTH (feet)	WIDTH (feet)	TURNAROUND'S REQUIRED
0–150	20	None required
151–500	20	120-foot Hammerhead, 60-foot "Y" or 96-foot-diameter cul-de-sac in accordance with Figure D103.1
501-750	26	120-foot Hammerhead, 60-foot "Y" or 96-foot-diameter cul-de-sac in accordance with Figure D103.1
Over 750	Special approval required	

For SI: 1 foot = 304.8 mm.

5) Fire apparatus access road gate shall comply with international fire code as outlined in D103.5 (screenshot below).

Gates securing the fire apparatus access roads shall comply with all of the following criteria:

- 1. Where a single gate is provided, the gate width shall be not less than 20 feet (6096 mm). Where a fire apparatus road consists of a divided roadway, the gate width shall be not less than 12 feet (3658 mm).
- 2. Gates shall be of the horizontal swing, horizontal slide, vertical lift or vertical pivot type.
- 3. Construction of gates shall be of materials that allow manual operation by one person.
- 4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
- 5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the fire code official.
- 6. Methods of locking shall be submitted for approval by the fire code official.
- 7. Electric gate operators, where provided, shall be listed in accordance with UL 325.
- Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.
- 6) Solar facilities that take up over 62,000 square feet (ie: proposed site is greater than approximately 1.5 acres) shall be provided with <u>two separate and approved</u> fire apparatus access roads
 - a) The placement of these roads shall be built in a way that no person (ie: one or more residences) would be "trapped" from escaping their property by vehicle should a solar facility fire break out
 - Exception to this is if the proposed solar facility is located at the dead end of an access road where it would not be trapping any residents should a fire occur and the nearest residence is at least 1,500 feet away.
- 7) Overhead utility and power lines shall not be located over the fire apparatus access road or between the fire apparatus road and the facility. Other obstructions shall be permitted to be placed with approval of the fire code official.
- 8) Solar facilities shall comply with the following sections of the Land Development Code:

a) Section 8.10 - Fire Protection

i) C. Water Supply Standards, sections 1. Fire Hydrant and 2. Alternate Fire Protection plan

(Screenshot below for easy reference)

C. Water Supply Standards

1. Fire Hydrants

Fire hydrants shall be installed in any Subdivision or Planned Unit Development where dwellings will be separated by a distance of two hundred (200) feet or less, or in any commercial and industrial development, and shall comply with the following standards:

a. Fire Flows

Water supply shall comply with the standards adopted by the applicable fire protection district. In cases where the local fire authority has not adopted specific standards, water supply shall comply with the fire flow standards set out in the most recent edition of the Uniform Fire Code.

b. Minimum Pipe Size

The minimum pipe size serving the system shall be six (6) inches for development comprised solely of single-family and duplex dwellings, and eight (8) inches for all other development, unless the applicant submits evidence, prepared by a registered professional engineer, demonstrating that the minimum fire flow requirements may be met with a six (6) inch line.

c. Maximum Distance Between Hydrants

The maximum distance between hydrants in all developments shall be five hundred (500) feet.

d. Hydrant Locations

Fire hydrants shall be located as specified by the responsible fire chief. Generally, fire hydrants shall be located in the public rights-of-way at road intersections.

2. Alternative Fire Protection Plan

Whenever installation of fire hydrants is not practical, as determined by the responsible fire chief, the applicant shall agree to an alternative fire protection plan. Applicants for any type of development that is not required to install fire hydrants pursuant to <u>Section 8.10</u> shall also agree to an alternative fire protection plan.

a. Alternatives

An alternative fire protection plan may include, but not be limited to, providing on-site fire flows, or installing sprinklers within proposed structures. Water may be supplied by a natural water body, or by man-made facilities, such as a cistern, above ground tank, or man-made water body, provided the supply is available year-round.

b. Review by Fire Chief

The alternative fire protection plan shall only be allowed when the responsible fire chief determines it will afford the same level of fire protection to the proposed development as would strict compliance with the fire flow standards of this Section, or will comply with the adopted fire code of the district or volunteer fire department.

c. Accessibility

The location of the alternative firefighting supply and fire protection facilities shall be easily accessible to fire protection personnel and vehicles and shall be identified with a visible sign.

d. Fitting and Connections

All fittings and connections to the fire hydrants or to the alternative water supply shall be provided by the applicant, and shall be compatible with specifications established by the applicable district.

The proposed changes will <u>ensure a fair balance between</u> fire safety for Mesa County citizens, solar companies' growth and private property owner rights on both sides of the equation. These guidelines will safeguard residents and permit the responsible and safe development of solar facilities across the county's vast lands. Achieving this is not an insurmountable task, and we must prioritize the safety of Mesa County's inhabitants over the sole interests of solar companies.

Sources

Sources 1 A-B

A) Fire a major hidden danger for solar farms: <u>https://www.insurancebusinessmag.com/us/risk-management/news/fire-a-major-hidden-danger-for-solar-farms-419868.aspx?fbclid=IwAR3oMhQaiP3qSeuCGagY5mv7IT15fntrh</u> <u>ISvtl02lhwNDusUt1RMbaz4WJM</u>

> "With the expected exponential growth of renewable energy as well as aging infrastructure, the number of fire occurrences will only increase. One thing that operators tend to overlook is addressing these fire risks with fire mitigation strategies. Often, owners will simply rely on their insurance provider to cover a loss, if that does occur, rather than implementing the likes of fire suppression technology."

> According to Paznokas, solar asset owners and major OEMs are reluctant to discuss or publicly acknowledge a loss attributable to fire. This means that there is a lack of data and definitive case studies to draw insights from.

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Meanwhile, a study conducted by the BRE National Solar Centre found that more than a quarter of fires involving solar power systems were caused by the photovoltaics and those fires were all "serious fires," meaning fires that were "difficult to extinguish and spread beyond the area of origin."

B) Firetrace Report: Hidden Danger - Why solar farm fire risk could be greater than you think: https://www.firetrace.com/hubfs/reports/Firetrace-Report-Hidden-Danger-Solar-Farms.pd
What is certain is that solar farm fire risk is an issue that the solar industry needs to take more seriously. This is particularly the case when you consider how rapidly the global solar industry is expanding.

There is a severe lack of data on the prevalence of solar farm fires.

Indeed, some studies have concluded that there is a high likelihood that instances of solar farm fires are underreported.

Sources 2 A-B

A) Home Electrical Fires: <u>https://www.esfi.org/home-electrical-fires/#:~:text=Facts%20and%20Statistics,%241.3%</u> <u>20billion%20in%20property%20damage</u>.

Facts and Statistics

- Home electrical fires account for an estimated 51,000 fires each year, nearly than 500 deaths, more than 1,400 injuries, and \$1.3 billion in property damage.
- B) The number of housing units in 2022 was approximately 144,000,000 take 51,000/144,000,000 and you get 0.00035% - or less than a 1% chance of electrical fire

Number of U.S. housing units and annual increase 1975-2022

The number of housing units in the United States has been growing year-on-year and in 2022, there were approximately 144 million homes. That was an increase of about 1.1 percent from the previous year - the highest annual increase recorded in the past 15 years. Oct 17, 2023

Statista https://www.statista.com > ... > Residential Real Estate : Number of U.S. housing units 1975-2022 - Statista

Sources 3 A-F

- A) Solar farm fire sends possible toxic smoke billowing into surrounding community: <u>https://www.cbsnews.com/news/solar-farm-battery-fire-upstate-new-york-possible-toxic-s</u> <u>moke-shelter-in-place-lyme-jefferson-county/</u>
- B) Mitigating Risks of solar fires: <u>https://www.linkedin.com/pulse/mitigating-risks-fires-overheating-solar-facilities-fibre-torr</u> <u>e/</u>

The environmental pollution caused by the fire smoke and the toxic materials that could leak and contaminate the ground have a serious impact on biodiversity and can be hard to measure. All these consequences are unlikely to be reversed after a fire has happened and the remoteness of solar farm locations can make it hard for firefighting brigades to access the area. The fire started because of a bird wing that touched multiple electrical conductors that were at a high temperature, starting a fire almost immediately. The fire spread quickly and destroyed 1,127 acres of land before it could be controlled and extinguished. This episode reveals how critical it is to have technology in places to detect fires early as most of its locations are unmanned.



Solar farm fire in California destroys 1,127 acres

- C) Brochure with various solar fires and more solar facility destruction: https://nosolarwind.com/infusions/news/images/brochure-solar-pg1-small.jpg
- D) Solar Farm Fire: El Paso County in the Perry Park area: https://www.kktv.com/video/2023/07/28/solar-farm-fire/ https://www.wwnytv.com/2023/07/31/officials-solar-farm-fire-is-contained/ https://www.youtube.com/watch?v=CN6PH2nYiZM NOTE: this solar fire was due to <u>equipment failure</u>

"Nothing scares me until you wash heavy metals into my groundwater due to lack of proper training and equipment to handle these things as they build them at a record-breaking speed all over our lands. Green is good but not at the cost of citizen and property safety."

John Rook TOWN OF LYME RESIDENT

CONCERNED NEIGHBORS

- E) Jefferson County Solar Facility fire: <u>https://stopsolarfarms.org/posts/senator-calls-for-pause-on-solar-farms-until-safety-quest</u> <u>ions-are-answered</u>
- F) Many more solar facility fires can be found here: <u>https://stopsolarfarms.org/tags/fires</u>

Sources 4 A-E

Just a few (of many) articles speaking to the toxins in solar panels

- A) <u>https://www.quora.com/What-components-of-Solar-panels-are-toxic-to-the-environment-1#:~:text=to%20the%20environment%3F-,The%20toxic%20chemicals%20in%20solar%20panels%20include%20cadmium%20telluride%2C%20copper.%2C%20lead%2C%20and%20polyvinyl%20fluoride</u>
- B) <u>https://www.wired.com/story/solar-panels-are-starting-to-die-leaving-behind-toxic-trash/</u>

Solar panels are composed of photovoltaic (PV) cells that convert sunlight to electricity. When these panels enter landfills, valuable resources go to waste. And because solar panels contain toxic materials like lead that <u>can leach out</u> as they break down, landfilling also creates new environmental hazards.

C) <u>https://scdhec.gov/sites/default/files/Library/OR-1695.pdf</u>

Hazardous Waste or Not?

Solar panel waste can include heavy metals such as silver, lead, arsenic and cadmium that – at certain levels – **may be classified as hazardous waste**.

D) <u>https://fee.org/articles/solar-panels-produce-tons-of-toxic-waste-literally/</u>

According to cancer biologist David H. Nguyen, PhD, toxic chemicals in solar panels include cadmium telluride, copper indium selenide, cadmium gallium (di)selenide, copper indium gallium (di)selenide, hexafluoroethane, lead, and polyvinyl fluoride. Silicon tetrachloride, a byproduct of producing crystalline silicon, is also highly toxic.

- 0
- E) Many other articles related to toxins in solar panels can be found here: <u>https://stopsolarfarms.org/tags/hazardous-materials</u>

Sources 5 A

A) <u>https://www.renewableenergyhub.co.uk/main/solar-panels/solar-panel-manufacturers-an</u> <u>d-products#:~:text=There%20are%20more%20than%20350%20companies%20worldwi</u> <u>de%20which%20manufacture%20PV%20cells</u>.

The top 5 manufacturers at this point were First Solar, Yingli, Trina, Suntech and Canadian. These companies possessed 51.3% of the market share in solar PV modules. (According to PVinsights' market intelligence report.) There are more than 350 companies worldwide which manufacture PV cells.

Sources 6 A-B

Articles listing the safe distance to live from a solar facility. For the calculation in this document, the average distance was used.

- A) 200 500 meters (656 1640 feet)
 - https://climatecafes.org/what-is-a-safe-distance-to-live-from-a-solar-farm/
- B) 300 1000 meters (984 3280 feet)
 - <u>https://www.quora.com/What-is-a-safe-distance-to-live-from-a-solar-farm#:~:text=</u> <u>However%2C%20some%20studies%20suggest%20that.feet</u>



Industry resource for next focus group

1 message

Kyle Sundman <ksundman@pivotenergy.net>

Sean Norris <sean.norris@mesacounty.us>

Thu, Feb 8, 2024 at 10:40 AM

To: Sean Norris <sean.norris@mesacounty.us> Cc: Mike Kruger <mkruger@cossa.co>, Jeremiah Garrick <jgarrick@cossa.co>, Jonathan Fitzpatrick <jfitzpatrick@pivotenergy.net>

Sean -

Thank you for hosting the focus group last night, it was interesting to hear the questions from the room (albeit stressful that I couldn't chime in a few times!). Acknowledging that the group is appointed by the Commissioners and that it wouldn't make sense for me to be formally part of the task force, I would be happy to drive out there and be a resource to answer any questions they may have, as I mentioned in the chat. I know it was discussed that similar "industry experts" have been brought in to discuss past code, so hopefully a precedent for this.

To clear a couple specific things up which were discussed last night:

- 1MW is about 4-5acres, not 1:1 like the group concluded. Typically codes that we've seen differentiate projects at land usage rather than MW size because the technology can change, program size/allowances can change etc.. Weld County
 goes under 5 acres is small (administrative review), 5-160 acres is medium/community scale (typically conditional approval/use by special review, depending on the zoning), and above 160 acres is large/utility scale and a 1041.
- The solar (electrons themselves, or bill credits) cannot be exported to Texas/Minnesota/other Xcel energy markets. The actual energy produced is physically consumed by the closest electrical loads (i.e the neighbor turning on their dishwasher) and bill credits are prioritized for local subscribers (at least this is Pivot's SOP), but technically can go to anyone in Xcel territory in Colorado. I can explain more about the intricacy of how this works if anyone is interested.
- You had a good answer to the question about glare and are correct that new technology is covered in anti-reflective coating to make the panels more efficient, significantly reducing glare. We have tools that we can use to provide a glare study
 for the surrounding area as well (same one that is used for evaluating projects at or near airports).
- We can certainly submit decommissioning plans and the questions about "restoring it to the Owner's liking" (paraphrasing) is something that would be agreed upon in the lease. Typically the language is something like "restore to a commercially reasonable state that is the same or better than it is today". I think COSSA may have proposed some language around that. I can further explain how these types of projects are bankruptcy remote due to the way they are financed at the project level (i.e. there is value legally tied to the specific project company itself no matter who owns it).
- Agreed on your comment about Mesa County not having a significant wind resource, and that we should keep the conversation focused on Solar to the extent possible.
- To the extent that setbacks are established, there should be a mechanism to allow the developer to unilaterally mitigate the impact through visual screening (i.e. opaque fencing, landscaping or a waiver from the neighbor) and thus not be beholden to it. There are limited areas in Mesa County that "work" for solar and requiring a specific setback without a mechanism to "cure" would likely result in a de-facto ban on the projects we develop.

Those are the things that come to mind immediately. As you acknowledged, COSSA submitted thoughtful comments so please make sure the group reviews those. Let me know if you have other questions. I want to be respectful of the process and not overstep, but also be a resource and make sure that the Code that comes out of this works for both industry and constituents.

We appreciate Mesa County working to update the code as it relates to solar. Please let me know when and where I can attend the meeting and be a resource.

Thanks, Kyle

KYLE SUNDMAN | Senior Director, Project Development ksundman@pivotenergy.net D 719.233.4322 | LinkedIn

Pivot Energy | *Clean Energy. Clear Choice* pivotenergy.net

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Fwd: Input regarding solar moratorium

1 message

Tue, Jan 30, 2024 at 8:26 AM

Linda Frasier <linda.frasier@mesacounty.us> To: mcbocc <mcbocc@mesacounty.us>

Cc: Greg Moberg <greg.moberg@mesacounty.us>, Sean Norris <sean.norris@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us>

Please see the comments that came in yesterday.

------ Forwarded message -------From: Susan Hess <susan.bassoon.hess@gmail.com> Date: Mon, Jan 29, 2024 at 5:00 PM Subject: Input regarding solar moratorium To: <mcadmin@mesacounty.us>

Dear County Commissioners,

Thank you for the serious thought and consideration you have put into the six-month moratorium on solar development. This pause on accepting new applications is appropriate in order for the county to develop land development codes that address solar installations.

I was encouraged to hear Cody Davis say he has no plans to vote for an extension - six months should be plenty of time to gather public input and develop appropriate codes for Mesa County. Also, keeping the moratorium to six months will reduce any possible losses of available federal incentives and losses of new solar projects and the tax revenue and energy savings associated with those projects.

I would like to point out that developing renewables within Mesa County will create energy independence from the eastern Slope and will allow more local control for our energy needs. Renewables are cost effective and can provide clean and efficient energy to Mesa County residents.

Thank you for considering my comments.

Susan Hess Volunteer - Citizens' Climate Lobby 499 Tiara Dr. Grand Junction

Respectfully, Linda Frasier Administrative Assistant Mesa County Administration 544 Rood Avenue, Floor 3A Grand Junction, CO 81501 (970) 244-1885 mcadmin@mesacounty.us



Comments on proposed code language for energy generation facilities

2 messages

Charlie Talbott <charlie@talbottfarms.com> To: Sean Norris <sean.norris@mesacounty.us> Tue, Feb 6, 2024 at 4:00 PM

Tue, Feb 6, 2024 at 4:31 PM

Sean,

I read the draft language in parallel with our proposed "over tree" agri-voltaic project. I made several notations regarding how our project would struggle to comply with the new code language as it does exceed the 100kW exemption. Though the proposed 15' max height for panel attachment might suffice, the design is intended to be sufficiently above the trees to allow for ideal tree height and no impediment to equipment driving under the panels. The project proposal is informed by experiences and research already conducted in France.

Perhaps the code language might appropriately be less restrictive if a project such as this one is not designed to deliver power to the grid in excess of the use of the landowner installing the project. Our project size was determined by the combined power use of both the packing house and the cider mill.

Thanks for your efforts on this,

Charlie Tallott

970-464-5656



- ``	Mesa Cty	Draft Co	ode besid	e Agrivoltaic	Proposal	02 2024	.pdf
\sim	1715K						

Sean Norris <sean.norris@mesacounty.us> To: Charlie Talbott <charlie@talbottfarms.com>

Interesting. Worth having a look with respect to the Agrivoltaics which is yet to be created.

Sean T. Norris Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]



Fwd:

2 messages

Bruce Talbott <bruce@talbottfarms.com>
To: Sean Norris <Sean.norris@mesacounty.us>

Thu, Mar 14, 2024 at 12:05 PM

Sean,

I ran across this article the other day and am guessing you are already well aware of what's in it, but just in case I'm sending it your way. With the feds pushing solar onto public lands and Colorado's desire to force the issue, we may see much less enthusiasm for using private ground taking some pressure off of the local community.

My feedback from Dane VanLoon in his discussion with yourself is that East Orchard Mesa Fire Protection District should delay any response to the "One Energy" solar farm application until Mesa County can give us direction on what codes or at least expectations of requirements for EMS and Fire management. If I'm misinterpreting the discussion, please get back with me.

Thanks. Bruce Talbott EOMFPD

------ Forwarded message ------From: Bruce Talbott <bruce@talbottfarms.com> Date: Wed, Mar 13, 2024 at 2:27 PM Subject: To: Bruce Talbott <bruce@talbottfarms.com>



20240313_142554.jpg 3753K

Sean Norris <sean.norris@mesacounty.us> To: Bruce Talbott <bruce@talbottfarms.com> Wed, Mar 20, 2024 at 3:44 PM

Thank you for the4 article and opinion. This will be entered into the public record for the file.

As far as the question about OneEnergy, if the Fire District wants to preemptively reach out to a developer and do some early engagement and due diligence, that is up to you. At present, OneEnergy does not have an application in front of the Mesa County Planning Division, so there is nothing for you to comment on. As with all our project applications, the appropriate review agencies are notified and comments requested soon after an application for a project is filed.

Sean T. Norris Manager

Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]









"It's time for action. It is a catastrophe, and it must stop." House Speaker Mike Johnson, reiterating that the president can take unilateral to secure the southern border.

Biden Admin Targets Millions of Acres of Public Land for Solar Farms

'Our public lands are playing a critical role in the clean energy transition,' says Interior Department official

By Nevin Etockila

Solar energy's appetite for vast amounts of land has prompted the Biden administration to propose designating as much as 55 million acres of public lands as potential sites for industrial-scale solar farms.

That's an area larger than 36 individ-ual states and similar in size to Idaho or Minnesota.

An updated initiative by the Bureau of Land Management (BLM), called the Western Solar Plan, proposes six alternatives for solar development.

In the most aggressive of these sce-narios, 55 million acres across 11 Western states would be made available for solar energy. The least aggressive alternative would designate 8 million acres for that purpose.

The BLM's "preferred alternative" falls halfway between the two, setting aside 22 million acres for solar development. In total, the BLM manages 162 million acres of public land designated as "multi-use." These multiple uses include farming, ranching, hunting and fishing, hiking and camping, drilling, and mining-and more recently, wind and solar installations and transmission lines to connect them to the grid. The BLM, a division of the Depart-

ment of the Interior, stated that, in order to carry out the Biden administration's goal of generating 25 gigawatts (GW) of electricity from wind and solar on public lands by 2025-and generating 100 percent "renewable" electricity by -solar panels would need to be 2035 sited on 700,000 acres of public land. More than 3 million solar panels are required to produce 1 GW of electricity, according to the Department of Energy. One GW can power 500,000 to 750,000



Laura Daniel-Davis, acting deputy secretary of the Interior



of the BLM's solar plan say that, despite assurances from environmental are concerned about the sheer scale of BLM's solar plan. "Nevada is hard-rock mining coun-

try," Andy Rieber, a public lands con-sultant residing in Nevada, told The Epoch Times, "but the average footprint in Nevada for mining disturbance is less

"Looking at the proposed solar de-velopments in the state of Nevada, there are a few small ones, but most of them are running around 4,000 to 5,000 acres. There's one standout project that is a complex of seven contiguous facilities and would encompass approximately 62,000 acres, which is a lot of land.

And while many climate activists wouldn't shed a tear at the loss of mining, drilling, and cattle farming, local communities say they depend on them for food, energy, jobs, and tax revenue. "With the oil and gas industry, there's

FDA Pulls Approval of Multiple Myeloma Drug

The Food and Drug Administra-tion (FDA) withdraw its aD proval of Oncoopptions's Pop-axto (melphaton flufenamide), if medication used in combination with contexpertanced development with corticosteroid dexametha some to treat certain multiple myeloma cases.

The decision was made on Feb. 23, about three years after the drug reconved accolorated approval for treating patients with multiple myoloma.

According to the FDA, the mitial approval was based on a single-arm phase 2 study. However, in a phase 3 study, trial results on the combination of epaxto and dexamethason failed to achieve pre-specified improvement in progressionfree survival rates; in fact, the combination of medications had a detrimental effect on patients

Gov. Newsom **Faces 2nd Recall** Effort

California Goy, Gavin Newsorri a Democrat, was served with recall documents on Feb. 26. and signature gathering is un-derway, according to Rescue California, the group that began the recall campaign.

About 1.5 million signatures are needed to ensure that enough will qualify for the bal-lot, organizers said.

Recall organizers cited the state budget deficit, crime, and the governor's pandemic policies as some of the reasons behind the effort. In addition, the group says, the roughly 700,000 ilegal immigrants who are newly eigible for free health care wou divert money isway from veter-ans, students, the homeless, a



JOBS

▶ The U.S. Army plans to cut 24,000 job openings by 2029 to refocus its warfighting efforts and adjust to One GW can power 500,000 to 750,000 homes on average, assuming a constant

supply of energy generation and use. The Interior Department's work ... i crucial to achieving the Biden-Harris administration's goal of a carbon pollution-free power sector by 2035," Laura Daniel-Davis, acting deputy secretary of the interior, said in a Jan. 17 statement. And this updated solar roadmap will

help us get there in more states and on more lands across the West," she said. "Our public lands are playing a criti-

cal role in the clean energy transition." The states targeted for solar develop-

ment include Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. This initiative is part of a wider effort to satiate the demand for land from solar companies

The sheer scope of the BLM plandesignating tens of millions of acres for solar development when the agency says 700,000 acres would suffice to meet Biden administration goals—is a red flag for many communities.

Dylan Hoyt, planning program manager in the Utah Public Lands policy coordinating office, called it "bad optics,"

"When I say bad optics, I mean when you tell me that I have 17,000 acres in Utah that's set aside for solar, and now we're going to jump to 3.7 or 1.5 mil-lion," he told The Epoch Times. "That looks terrible."

Environmental groups and advocates for wind and solar energy applauded the plan. The Wilderness Society issued a statement that "in the face of climate pressure and the injustices of our current fossil fuel-based energy system, a rapid transition to a renewable energy economy is necessary."

The Los Angeles Times published a supportive op-ed that states: "Biden's Western solar plan sounds scary, but It's better than climate change.

Amount of Land

Some who are on the receiving end

States didn't really have a say in the goals in the first place, which I think is disconcerting because the states represent the citizens.

Dylan Hoyt, planning program manager, Utah Public Lands policy coordinating office

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more than 250,000 square miles, or 160 million acres, of land, which is an area about the size of the state of Texas. Some communities that find them-

selves in the path of the wind and solar industries say this is too high a price to pay for an uncertain benefit.

spite assurances from environmental groups, they remain concerned about the scale of this government develop-

ment project and the amount of land that it would consume. A report by The Nature Conservan-

cy, published in May 2023, states that

reaching the goal of net-zero carbon dioxide (CO2) emissions by 2050 by

using wind and solar would require

Energy analyst Robert Bryce keeps a database of more than 600 local communities that have opposed wind and solar installations across the United States to date.

To subdue local resistance, some states, most recently Michigan, are writing new laws that prevent local communities from blocking wind and solar projects.

Some in the Western states say they expect significant pushback to the BLM

plan. "There's definitely going to be conflicts with ranchers, there could be conflicts with access to public lands depending on where it's built, and there could be potential conflicts with the mining industry," Mr. Hoyt said.

"States didn't really have a say in the goals in the first place, which I think is disconcerting because the states represent the citizens."

From Multi-Use to Single-Use

One of the prime target states for solar development is Nevada, both because of the amount of sunlight it receives and because of its proximity to California and Las Vegas.

The federal government owns 85 percent of Nevada's land, most of which is desert, but residents dispute the notion that it is devoid of wildlife and say they

a royalty on everything that comes out of the ground, and a percentage of that ends up going back to the counties," Mr. Hoyt said. "With solar, that doesn't exist.

Another issue that many cite is that solar farms crowd out other uses on the land.

Because utility-size solar installations such as the ones contemplated by BLM blanket entire areas with solar panels, often wiping out the vegetation and wildlife in those areas, both above ground and beneath it, they often displace farming, grazing, hunting, and recreation, while also preventing drilling and mining.

An Alternative Proposal

In response to the BLM's solar plans, several agencies in western states have developed their own proposal, called Smart from the Start.

The idea behind it is essentially to limit solar development to so-called brownfield sites, such as closed landfills, superfund sites, and shuttered mines.

According to the BLM's Western Solar Plan, the Smart From the Start alternative was dismissed as "substantially similar" to terms in its own plan.

But state officials say there are substantial differences, including more precise criteria of what land should qualify for development, and that it would make far less land available for development than the BLM's preferred alternative of 22 million acres

The Epoch Times reached out to the BLM for comment on this and other issues regarding its Western Solar Plan. The BLM responded with links to fact sheets and the plan, but declined an interview

The public comment period for the latest BLM initiative runs through April 18 and features a number of in-person and online hearings that are listed on the BLM website.

efforts and adjust to recruiting challenges.

GOP Rep. Calls to Block Biden's State of the Union

Rep. Scott Perry (R-Pa.) has called for the House to block President Joe Biden's annual State of the Union address over disagreements with the president's border security policies.

Mr. Perry said Republicans could instead "spend the time reminding America that on day one he countervailed the last administration's policies that

were securing our border." House Speaker Mike Johnson (R-La.) formally invited President Biden to deliver his address on March 7.

4 Universities Agree to \$166 Million Settlement

Dartmouth, Northwestern, Rice, and Vanderbilt universi ties agreed on Feb. 23 to a settlement collectively worth \$166 million that is part of a 2022 antitrust lawsuit filed by several former students and parents against 17 universities.

The complaint alleged that the universities violated U.S. antitrust laws by unlawfully considering a student's ability to pay tuition fees. It accused the institutions of reducing or eliminating financial aid provided to students from lower and middle-income families and inflated costs for students receiving financial aid.

The settlements still must be approved by a judge.

Reasonable efforts to mitigate visual impacts of an energy generation/production facility will be detailed in the project narrative. Visual impact mitigation may include opaque fencing, screening, berming, use of existing or planted vegetation of landscaping.

(1) Solar System equipment shall be no higher than fifteen (15) feet at the solar panel mounting point. The height of the interconnection equipment may exceed 15 feet. Solar System Facilities the solar panel mounting the solar between the solar panel mounting the solar system facilities the solar system facilities the solar system facilities the solar panel mounting the solar system facilities the solar sy

hight above trees

- i. Wildlife, Wetlands, Riparian Areas and Stream Channel Measures
 - (1) The Operator shall address the recommendations of Colorado Parks & Wildlife (CPW) that address any site-specific site conditions. The Applicant shall avoid constructing in CPW-mapped High Priority Habitats (HPH) to the maximum extent possible.
 - (9) Operator shall inspect the interior of the facility at least once weekly, to potentially free any trapped animals.
- j. Decommissioning Plan

At the time of application, Operator shall include a decommissioning plan for the facility which will include detailed plans for management and removal of equipment, mounting systems, above and underground utilities, equipment and facilities as follows:

- (1) Within six (6) months of ceasing operations, the operator shall complete decommissioning of the facility which will include removal of all aboveground and belowground equipment and structures and removal of any access roads and fire breaks. may want to Keep structures
- and removal of any access roads and fire breaks. may want to Kief structure to 3-fort over true tetting (10) Any equipment that cannot be recycled shall be properly disposed in accordance with all State and Federal regulations.
- (11) The site shall be revegetated in compliance with the property owner's specifications.

(C)

k. Insurance

The owner/operator shall provide proof of general liability insurance with commercially reasonable amounts of coverage for the permitted facility. Facility owners/operators shall maintain such insurance in place through all times the facility is in operation.

I. Referral

Once a complete application has been submitted, County staff will refer the application for review to appropriate review agencies which may include; law enforcement, state and federal agencies, local municipalities, fire districts utility providers and others as may be deemed appropriate.

3. Approval Criteria

In evaluating the proposal, the request shall comply with any conditions of approval and all applicable requirements of this LDC, including, but not limited to:

- a. The health, safety and welfare of the citizens of this jurisdiction will be protected and served;
- b. The facility will not adversely impact the physical, economic, or social environment, except as permitted in Chapter 6 Use Regulations as applicable. 6. ?
- When an adverse impact is expected to occur, reasonable modifications and programs and other reasonable mitigating actions will be implemented and maintained to minimize the degree of adversity of the impact;
- d. There exists a need, or a reasonably foreseeable need, for the facility as proposed;
- e. Adequate resources (e.g., schools, utilities, roads) exist, or will exist, for the construction and efficient operation of the facility;

Amendment to Section 6.02 Use Specific Standards

CC. Utility, Production

- 1. Applicability
 - The following standards shall apply to all new energy production facilities to regulate the development a. and surface impacts that these facilities may have on the public health, safety, and welfare for any of the following:
 - (1) Private energy facilities, with the following exception;
 - (a) Roof mounted systems;
 - Roof mounted systems, Facilities with a rated capacity of less than 100 kW, occupying no more than one half (.5) acre of land that will be used to produce electricity to on-site uses. nmunity solar garden: and Hard Capacity of less than 100 kW, occupying no more than one half (.5) acre of land that will be used to produce electricity to on-site uses. Hard Capacity of less than 100 kW, occupying no more than one half (.5) acre of land that will be used to produce electricity to on-site uses. Hard Capacity of less than 100 kW, occupying no more than one half (.5) acre of land that will be used to produce electricity to on-site uses. Hard Capacity of less than 100 kW, occupying no more than one half (.5) acre of land that will be used to produce electricity to on-site uses. Hard Capacity of less than 100 kW, occupying no more than one half (.5) acre Applied to produce electricity to on-site uses. Hard Capacity of less than 100 kW, occupying no more than one half (.5) acre Applied to produce electricity to on-site uses. Hard Capacity of less than 100 kW, occupying no more than one half (.5) acre Hard Capacity of less than 100 kW, occupying no more than one half (.5) acre Hard Capacity of less than 100 kW, occupying no more than one half (.5) acre Hard Capacity of less than 100 kW, occupying no more than one half (.5) acre Hard Capacity of less than 100 kW, occupying no more than one half (.5) acre Hard Capacity of less than 100 kW, occupying no more than one half (.5) acre Hard Capacity of less than 100 kW, occupying no more than one half (.5) acre Hard Capacity of less than 100 kW, occupying no more than one half (.5) acre Hard Capacity of less than 100 kW, occupying no more than 00 kW, occupying (b)
 - Community solar garden: and (2)

(3) Energy generation/production facility.

- Any facility that exceeds the definition of a private energy facility or community solar garden shall be b processed as an energy generation/production facility.
- Submittal Requirements 2.
 - a. Narrative

(meets power use of packing house + cider mill)

The applicant will provide a narrative describing the proposed facility including but not limited to; general description of the proposal, the height and location of equipment and ancillary structures, health and safety, decommissioning, traffic analysis, construction schedule, type and location of interconnection, rated capacity,

Site plan b.

> The site plan map shall be provided in a legible format and shall include but not be limited to the location and arrangement of screening, fencing, existing and proposed structures, equipment, roadways and access points, wildlife corridors, floodplain, easements, existing utilities, and connection to the electrical grid. none

- c. Setbacks
 - All structures must meet minimum street, side, and rear setback requirements for the zone district in which the proposed facility is to be located. west side adjacent to properly
 One quarter (1/4) mile from a designated Scenic By-way. 470' From F/4 Rd
 A minimum of two hundred (200) feet from any residential occupied structure. Fruit loop Grading plan
 Elevations
- d.
- Elevations e.
- Traffic Study f.
- Fire Prevention and Safety Procedures over forlgafe archand ground q
 - The relevant Fire Protection District's adopted standards, based on current fire code, shall apply (1)unless.
 - A fire break or other facility perimeter design acceptable to the fire district shall be required to (6)reduce or eliminate the interface risk from wildfire.
 - (7)
 - Locked gates shall be installed every 300 feet on the inside of the perimeter fencing. No Fences A vegetation management plan shall describe the operator's methods to maintain the constants of the perimeter is the state of the perimeter is the perimeter in the perimeter in the perimeter is the perimeter in the perimeter in the perimeter is the perimeter in the perimeter in the perimeter is the perimeter in the perimeter in the perimeter is the perimeter in the (8)the facility to a minimum level, which may include treatment, mowing, agrivoltaics or other methods of fuel reduction.
- Visual Mitigation h.

Amendment to Section 12.01 General

Fire Protection District: A Fire Protection District within Mesa County is defined as one which has been recognized by resolution as per C.R.S 32-1-102 (2022) by the BoCC.

Residential Occupied Structure: See Building, Principle see also Dwelling Unit.

Amendment to Section 12.04 Institutional And Civic Use Categories

- CC. Utilities, Production
 - 4. Characteristics

A facility designed and operated for the generation, and distribution of electricity which use fossil fuels, solar energy, hydroelectric energy, geothermal energy, biomass energy or wind energy as a resource for the primary purpose of selling electricity generated to the electric power grid.

5. Accessory Uses

Accessory uses may include parking and control, monitoring, data or transmission equipment.

- 6. Exceptions
 - a. Does not apply to on-site generation equipment when such use is an accessory use as described in Section 6.02 A of this LCD.
 - b. Transmission lines, power plants, substations, and pipelines.
 - c. Utility production facilities with no occupied structures or full-time on-site employees are exempt from the requirements for potable water required in Section 8.09.

Additions to Section 12.01 Definitions

Energy Generation/Production Facility. A facility designed to generate electricity by the conversion of natural resources such as light, natural gas, or water with a rated capacity of more than two (2) Megawatts and/or occupying more than five (5) acres of land.

Private Energy Facility. A residential or business-scale energy conversion facility designed to generate electricity by the conversion of natural resources such as light, natural gas, <u>nuclear</u>, biomass or water with a rated capacity of two (2) Megawatts or less, occupying no more than five (5) acres of land, that produces electricity to on-site uses.

Community Solar Garden: A solar power generating facility designed to produce electricity with a maximum rated capacity of five (5) Megawatts or less and meets the definition contained within C.R.S 40-2-127. A community solar garden does not include battery storage equipment.

J RDAN ENERGY

Talbott Farms: Solar Design & Budgetary Economics



Jordan Energy & Food Enterprises July 2023



(-photo is file photo, not representative of project-)

Solar Design: ≈420 kW (DC) – Secondary General



Project overview:

- System size: ≈420 kW (DC)
- Production: ≈750,000 kWh
- Percentage of usage: ≈100%
 - Sized for Xcel's REC policy
- Notes:
 - System production assumes Sun'Agri's management of system to optimize growing and solar production (control area shown).
 - Location to be finalized in consultation with Talbott Farms and Sun'Agri.

I D RDAN ENERGY EMPOWERING PROGRESS



ummary of position points submitted by Citizens' Climate Lobby and Western Colorado Alliance

nessage

IACK McCloskey (via Google Docs) <thosmccloskey@gmail.com> ply-To: TMACK McCloskey <thosmccloskey@gmail.com> ; sean.norris@mesacounty.us ; mcadmin@mesacounty.us Wed, Jan 31, 2024 at 7:49 F

TMACK McCloskey attached a document

TMACK McCloskey (thosmccloskey@gmail.com) has attached the following document:

Sean (Mr. Norris :-)).

I am sending a document outlining our groups' position on the existing solar moratorium and your efforts to develop and modernize our Land Development Code related to energy production facilities in our County. We appreciate your ongoing efforts to move this process forward and thank you for the opportunity to provide our input. Ben Murphy devised the original document and will likely submit additional commentary on the LDC in the near future. Once again, thanks for your work on this. Tom McCloskey Western Colorado Alliance citizen action volunteer

Summary Position Points

Google LLC, 1600 Amphitheatre Parkway, Mountain View, CA 94043, USA You have received this email because thosmccloskey@gmail.com shared a document with you from Google Docs.



Summary Position Points.pdf 42K

<u>Summary Position Points by Ben Murphy and Tom McCloskey</u> representing Citizens' Climate Lobby Grand Valley and Western Colorado Alliance

Preferred Resolution:

Changes to the Mesa County Land Development Code (LDC), including the addition of solar energy production projects to Sections 6 and 12. Utility scale solar (PV) installations <u>should be</u> <u>prioritized</u> in the near term and new or less than optimal technologies for our County (wind, geothermal, nuclear, gravity-based energy storage systems) should follow soon after in the process of updating the LDC.

No extension of the existing moratorium, enabling local residents and businesses to capture the benefits of solar energy in the near term and respecting land owners private property rights to use their land as it best fits their needs.

There is currently momentum behind advancing solar projects throughout the United States. This includes counties in Colorado where these projects have already improved the energy portfolio of their citizens. This momentum is driven by consumer demand for renewable electricity, federal incentives, and local initiatives, among others.

Localities which adopt favorable but reasonable policies will capture a larger market share of projects and the associated benefits (including significant economic impacts and regional tax revenues), while late or non-adopters may be entirely passed over as projects are sited elsewhere.

Local Benefits:

County residents and businesses stand to benefit the local economy by reducing electricity costs. Per the DOE, new solar projects have achieved electricity costs at less than \$0.06/kWh and dropping.

In particular, projects supporting underserved communities, local schools, and municipal buildings help empower these communities and improve equitability. This allows citizens with limited financial and/or housing resources to reap the benefits of the technology.

<u>Note:</u> Not all solar projects are developed to support local communities; some are developed through Power Purchase Agreements (PPAs) in which third parties receive the cost savings and environmental attributes. These projects still provide second order benefits to the local community including environmental and economic.

Solar power production projects further benefit the local economy by creating jobs.

<u>Note:</u> The operation of solar power production facilities require limited upkeep, so the job creation is largely temporary. However, if Mesa County becomes an early adopter, ongoing projects could sustain a sizable workforce.

Including solar power development in the LDC respects the rights of residents by giving landowners the ability to develop or sell their land as they see fit (within the bounds of the LDC)

Solar power developments are much lower in visual, community noise, and environmental impact than many other uses currently allowed in the Land Development Code. Recognizing the potential for a protectionist approach to maintaining the status quo is needed and should be avoided.

Tenet to Consider:

All conversions related to solar project moratoriums and changes to the Land Development Code should be fact based. New technologies should be incorporated based on benefits to citizens and balanced against the tendency to resist changes in energy economy. While cost are the main driver of economic decisions, environmental and quality-of-life effects of new technologies need to be considered. Proponents of Colorado's fossil fuel industry have represented existing regulations of methane emissions and fluid spills as onerous, but now portray these regs as a positive. Solar PV installations have much lower environmental impacts (metal leaching, wildlife displacement, etc.) and can be mitigated by the LDC.

There is considerable misinformation around solar projects, leading to some hesitation from a small but vocal minority of county residents. Subject matter experts (neutral, unbiased) should be consulted to validate statements and allay concerns. This should be a priority due to the recent experiences of solar "garden" projects in Palisade and larger projects in nearby counties.

Additionally, the provisions required in the Use Specific Standards and Section 12 to ensure reasonable guidelines are included for development will require subject matter experts, potentially including input from project developers.

USFWS Comments to Mesa County LDC Amendment, PRO2024-0022 February, 2024

The push for renewable energy development is stronger than ever. Within the United States, solar energy consumption has increased from 1,016 trillion BTU in 2019 to 1,519 trillion BTU in 2021 (a 49.51% increase) (USEIA 2022). Additionally, studies project solar to provide up to 40% of the nation's energy by 2035 (EERE 2022). The Great Plains states are likely to see the bulk of this growth (Shaffer, et al. 2022). Renewable energy helps reduce greenhouse gas emissions over coal or natural gas; however, placement of solar panels, especially at the utility-scale scope in formerly undeveloped land, can negatively impact species, their habitat, and ecosystems. This can result from habitat fragmentation and loss of functionality or destruction (Shaffer, et al. 2022).

The U.S. Fish and Wildlife Service (Service), Colorado Team appreciates the efforts to advance our state's renewable energy. Wildlife professionals and land use managers are asking developers of utility-scale solar projects to consider measures that ameliorate negative impacts on trust resources (CPW 2021). The siting of these large projects is multifaceted involving various processes before obtaining the required permits and construction initiation.

The Service of Western Colorado has many conservation considerations for photo voltaic (PV) utility and community-scale solar projects. Should the current LDC be amended to include utility, specifically solar, we ask that solar developers consider measures that ameliorate impacts on threatened and endangered species and their habitat.

This is not a complete list, and each project will be somewhat unique in scope. The Service hopes these considerations may assist with early planning for solar project siting decisions through the stages of development. Further, it may assist projects to move more quickly through the permitting process by avoiding Endangered Species Act-listed species and their habitats. The Service is always available to provide input early in project development and technical assistance at any point:

GENERAL LAND/BEST USE PRACTICES: PLANNING PHASE

Review Service Information for Planning and Consultation (<u>IPaC: Home (fws.gov)</u> site for federally listed threatened, endangered, and candidate species and critical habitats at the county and local level, coordinating with the Service local office. This would allow early planners to avoid Critical Habitat and streamline the permitting processes. Request the project proponent to arrange pre-application (Conditional Use Permit) meetings with wildlife managers to help with assessment for potential adverse effects (CPW 2021). Including key referral wildlife agencies like the Service and Colorado Parks and Wildlife (CPW) during the planning phase could allow for agency accelerated reviews at the permitting stage due to familiarity (COSSA 2022). Proposed siting locations could also be included in this meeting.

- Encourage or require the maintenance of vegetated buffers between projects and streams or wetlands;
 - Consider Low-Impact Development on wildlife habitat (SAS 2021):
 - Consider siting new solar fields on contaminated lands, brownfields, and previously tilled agricultural lands used in the past (been mowed/leveled), which generally lack high-quality wildlife habitat.
 - Avoid Environmentally sensitive areas (wetlands, Federal Endangered Species or State Species of Concern habitat)
- Examine possible mitigation of acquiring land to offset project impacts and contribute to its perpetual conservation and management. If this is considered, it should be at this phase of the project plan and considered reclaimed lands in the Decommissioning Phase.

SITE EVALUATION PHASE

- As stated earlier, siting has more to do with project success or failure than any other factor (COSSA 2022).
- Also stated earlier, wildlife managers could provide input at this phase to avoid unanticipated issues at the permitting stage. Avoiding Critical Habitats will support the conservation of atrisk species and reduce Service involvement in permitting processes see <u>USFWS Critical</u> <u>Habitat Map</u>. The Service is willing to work with County Planners to incorporate these habitats into their Master planning and development documents for reference.
- Development of larger facility (USSE) projects occur on private lands. This can result in fragmented landscapes for wildlife movement, which varies from site to site. The Nature Conservancy has a <u>Resilient and Connected Network (RCN)</u> mapping tool that can assist in siting locations *outside* areas that are designed to sustain biodiversity and ecological function into the future (TNC 2023). Please note, the RCN does NOT take into consideration USFWS Critical Habitat.
- Further Considerations:
 - Discourage or prohibit projects on sites with high levels of biodiversity, ecological connectivity, or endangered species. This is the single most important way to minimize and avoid impacts on sensitive fish, wildlife, and plants.
 - Check the accuracy of information by doing site visits, and including relevant external stakeholders.
 - Avoid siting criteria that fragment land uses especially existing or potential wildlife habitat. Consideration of the surrounding habitats and landscape context is important as well (BLM 2013).
- Good siting locations for consideration include previously disturbed lands such as sites that do not require extensive grading or vegetation removal (especially large trees). Pile driving through existing vegetation avoids a host of downstream impacts on soils, water quality, weeds, and visual appearance (COSSA 2022).

DESIGN PHASE

Co-Use Options:

- Agriculture-Pollinator inclusion: if 10-15% of facilities include co-use with pollinator habitat, they would produce \$1.9-\$5.7 billion in pollination benefits annually (COSSA 2022).
- Use locally sourced, native seeds in seed mixes to allow vegetation to grow beneath solar panels creating new habitats and food sources for various wildlife species and/or pollinators and helping with dust control. (Sinha, et al. 2018).
 - Agrivoltaic and or pollinator habitat inclusion can help with carbon sequestration and reduce fertilizer, herbicide, and pesticide applications to better soil and water health.
- Use low height native grasses and/or pollinator ground cover so as not to interfere with panels (USFWS 2022) (Seed a Legacy info@beeandbutteflyfund.org).
 - Co-use with certain irrigated crops and/or rotational grazing with sheep (sheep do not introduce or enhance invasive species and can reduce the need for herbicides) (DOE website 2022).
- Avoid unnecessary lighting that may attract migratory birds or other species and cause light pollution (BLM 2013). Low lighting and downward pointing lighting can also benefit Dark Sky counties.
- Use Conservation Corridors that enable certain species' free pass between various project blocks (array fields).
- Pre-development surveys for impacts on wildlife and their habitats (CFR 3668) (CPW 2021).
- Wildlife-friendly fencing allows some species protection from primary/top predators and enables challenged species to thrive. Also using fence reflectors and other devices to mitigate adverse avian contact and collision (CPW 2021). There are different types of options depending on the site. Most recent information on successful wildlife-friendly fencing includes (TNCNC 2023)(FPL 2024):
 - Using wood posts allowing certain species to climb for entrance, exit
 - Perimeter fencing that allows small to medium animals (turtles, raccoons, foxes, some ground foraging birds) to pass through (e.g. 4' to 6' tall; 12.5 gauge Fixed Knot Deer Busters; 17/75/6 deer mesh galvanized fence with three strands of 12.5 gauge 4 point barbed wire, Fortress Fencing), turned upside down such that bottom section of fence has a vertical wire space at least 7" apart. Another idea is to provide wildlife passage pipes (8" diameter HDPE) roughly 500' apart around the site, OR raise the fence 6".
 - This type of fencing is compatible with much of rural landscapes.
 - Adding fence and interim cameras along with trans-line cameras can be used for monitoring the site.



Photo credits: left FPL (2024); right TNC (2023)

CONSTRUCTION/DEVELOPMENT PHASE

- No gravel (if used, it requires herbicide use the life of the Solar farm).
- Bare soil under panels keeps the ground hot and makes panels less efficient. Native, non-invasive vegetation is recommended.
- Have a construction staging area to avoid excess traffic and associated dust (BLM 2013); Consolidate the road facilities to the extent possible to minimize the amount of land disturbance and habitat fragmentation.
- Dust Suppression for certain plants, weed management, surveys before work, use of strategic construction timing windows, and work area/staging considerations.

Transmission Line Development

• The Service recommends utilizing existing transmission lines or infrastructure corridors whenever possible to minimize additional impacts on wildlife, critical habitat, and habitat fragmentation; of high concern regarding electrical transmission lines is the potential for collisions and raptor electrocution (aplic.org) from lines. Proximity to rivers, reservoirs, and migratory stop-over habitats for bald eagle wintering roosts is also a factor in overall risk to birds (CPW). Finally, lines and some infrastructure can provide perching for certain omnivorous species that could increase ground-dwelling species mortality rates; recommend the use of collision and perching avoidance features, fence reflectors, and other devices to mitigate adverse avian contact and collision.

OPERATIONS PHASE

Co-Use Options:

- On-site vegetation maintenance by periodic pulse/rotational grazing by sheep. This applied with periodic herbicide application provides ongoing invasive weed control.
- Regular monitoring of fence integrity and any unexpected animal intrusions from unplanned openings;

DECOMMISSIONING PHASE

- Require decommissioning bond to account for reclamation cost near the project's end of life rather than at the beginning (COSSA 2022).
- Recommend reclamation of the site to the condition before the project, or plan possible incorporation of the site as an "open space" with newly created habitat (pollinators, ecosystems, etc.) upon panel and infrastructure removal and disposal.

Resources:

Avian Power Line Interaction Committee (APLIC) website: <u>https://www.aplic.org</u> (2022)

Bureau of Land Management (BLM) Best Management Practices for Reducing Visual Impacts of Renewable Energy Facilities on BLM Administered Lands, first ed. (2013)

Colorado Park and Wildlife (CPW) Best Management Practices for Solar Energy Development (May 27, 2021)

Colorado Solar and Storage Association (COSSA) Becoming Utility-Scale Solar Ready, Principles and Best Practices for Colorado's Local Governments (January 2022)

Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (OEERE), Solar and Agricultural co-location, website: <u>Solar and Agriculture Co-Location | Department of</u> <u>Energy</u> accessed 11/2/2022

Florida Power and Lighting (FPL) Solar Stewardship fact sheet. Available online: <u>FPL | Energy</u> <u>My Way | Solar</u>, accessed 2024, January 23

Shaffer, J.A., Loesch, C.R., Buhl, D.A. (2022) Understanding the Avian-Impact Offset Method-A Tutorial: U.S. Geological Survey Open-File Report

Sinha, P., B. Hoffman, J. Sakers, L. Althouse. (2018). Best Practices in Responsible Land Use for Improving Biodiversity at a Utility-Scale Solar Facility. Case Studies in the Environment State of Colorado Code of Regulations Section 723-3-3668-Section 4 Environmental Impacts (May 15, 2016)

Solar@Scale (SAS) A Local Government Guidebook for Improving Large-Scale Solar Development Outcomes (September 2021)

The Nature Conservancy (TNC) Principles of Low-Impact Solar Siting and Design – North Carolina (2023)

United States Office of Energy Efficiency and Renewable Energy, a Department of the U.S. Office of Energy (2022). Retrieved from website: <u>Solar Futures Study | Department of Energy</u>United States Energy Information Administration, Independent Statistics and Analysis (2022) Retrieved from website: <u>Homepage - U.S. Energy Information Administration (EIA)</u>United States Fish and Wildlife Service (USFWS) and Solar Pollinator Co-Use Fact Sheet (January 2022) *IMPORTANT LINKS*

Agrisolar Clearinghouse. A nationwide hub connecting business, landowners, and researchers with trusted resources to support the growth of co-located solar and sustainable agriculture AgriSolar Clearinghouse

Clean Energy Economy for the Region. Non-profit that brings together local government leaders and institution and help them with the steps necessary to achieve results <u>https://cleanenergyeconomy.net</u>

Colorado Brightfields. Free and publicly available mapping application that provides access to information about thousands of marginalized sites suitable for solar energy and wind power. https://coloradolab.org/wp-content/uploads/2021/05/Colorado-Brightfields-Report_Final.pdf

Colorado's GHG/pollution Reduction Road Map (goal 2030) https://energyoffice.colorado.gov/climate-energy/ghg-pollution-reduction-roadmap

Colorado Solar and Storage Association (COSSA) Guide for local governments to become large/utility-scale solar ready <u>https://cossa.co/wp-content/uploads/2022/03/Utility-Scale-Best-Practices-for-Colorado-Govts-220301.pdf</u>

Department of Energy, Office of Energy Efficiency and Renewable Energy (OEERE), Solar and Agricultural co-location:

Solar and Agriculture Co-Location | Department of Energy

Low Impact solar development, including agriculture, weed control, noise, and dust, continues to advance and is updated regularly.

https://www.energy.gov/eere/solar/articles/new-reports-highlight-AND best-practices-combining-solar-energy-and-agriculture AND

https://openei.org/wiki/InSPIRE (Agrisolar)

National Renewable Energy Laboratories (NREL) 7 steps to successful large-scale solar development

https://www.nrel.gov/state-local-tribal/blog/posts/nrels-seven-steps-to-successful-large-scale-solar-development.html

Nature Conservancy Resilient and Connected Network Resilient Land Mapping Tool. A proposed conservation network of representative climate-resilient sites designed to sustain biodiversity and ecological functions into the future under a changing climate. The network was identified and mapped over a 10-year period by Nature Conservancy scientists using public data available at the state and national scale, and an inclusive process that involved 289 scientists from agencies, academia, and NGOs across the US: Resilient Land Mapping Tool (tnc.org)

NREL's State and Local planning for Energy (SLOPE) maps and datasets. (web-map platform that helps jurisdictions explore energy data potential and projections to better understand opportunities and options in energy planning. SLOPE incorporates population and building area data)

https://maps.nrel.gov/slope

Solar@scale (SAS), A Local Government Guidebook for Improving Large-Scale Solar Development Outcomes. A must-read for any local government looking to maximize a project's benefits in 8 modules.

https://planning-org-uploaded-media.s3.amazonaws.com/publication/download_pdf/Solar-at-Scale-Guidebook.pdf

Sustainable SITES – a sustainability-focused framework that guides permitting, engineering, construction, and operations teams toward practices that enhance the mosaic of benefits that solar continuously provide our communities and ecosystems https://sustainablesites.org

Western Colorado Clean Energy Network. a collaboration of regional partners working together to accelerate progress toward these goals in ways that maximize community resilience, economic development, and environmental benefits. https://wccleanenergy.org

United States Fish and Wildlife Service (USFWS), Critical Habitat Map: <u>Critical Habitat for Threatened & Endangered Species [USFWS] (arcgis.com)</u>



Fri, Feb 2, 2024 at 12:03 PM

Solar field installation refs

1 message

Tanya Travis <ttravis1405@gmail.com> To: sean.norris@mesacounty.us Cc: CCL Grand Valley <cclgrandvalley@gmail.com>

Thank you for all you work on new guidelines for local renewable solar projects. I know the planning department and county commissioners understand the advantage for local solar access, making it more secure and affordable energy. I especially worry about vandalism with solar fields. How can they be protected from malicious players, like gunshots from the roads or other harm?

Tanya Travis 970 270 9375 ttravis1405@gmail.com

Utility Production LDC Amendment v.hutchins 2-21-2024

_Amendment to Section 6.02 Use Specific Standards

CC. Utility, Production

- 1. Applicability
 - a. The following standards shall apply to all new energy production facilities to regulate the development and surface impacts that these facilities may have on the public health, safety, and welfare for any of the following:
 - (1) Private energy facilities, with the following exception;
 - (a) Roof mounted systems;
 - (b) Facilities with a rated capacity of less than 100 kW, occupying no more than one half (.5) acre of land that will be used to produce electricity to on-site uses.
 - (2) Community solar garden as defined by CRS 40-2-127;
 - (2)(3) Agrivoltaics for related private on-site or related off site and facilities or distributed generation, and
 - (3)(4) Energy generation/production facility for distributed generation.
 - b. Any facility that exceeds the definition of a private energy facility or community solar garden shall be processed as an energy generation/production facility.

should undergo a review process which includes public hearing

(2) (a) After a county establishes standards under Subsection (1), before the county grants siting approval or a special use permit for a commercial wind energy facility or a commercial solar energy facility (as applicable), or modification of an approved siting or special use permit, the county board of the county in which the facility is to be sited or the zoning board of appeals for the county shall hold at least one public hearing.

above facilities <u>-except roof mounted systems and facilities less than 0.5 acres, including community solar gardens</u>,

(b) A county may conduct the public hearing described in Subsection (2)(a) not more than 60 days after the filing of the application for the facility.

(c) The county shall also allow public comment at the public hearing.

b. (d) At the public hearing described in Subsection (2)(a), the county shall consider whether the proposed solar or wind energy facility meets the standards established by the county under Subsection (1)(a). The county shall also balance its own interests with the statewide interest in advancing greenhouse gas emissions reduction goals while also protecting public health, safety, welfare, and the environment, including wildlife resources, and the interest of the public in reliable, clean, and cost-effective energy. (Connecting renewable energy in CO).

- 2. Submittal Requirements
 - a. Narrative

The applicant will provide a narrative describing the proposed facility including but not limited to; general description of the proposal, the height and location of equipment and ancillary structures, health and safety, decommissioning, traffic analysis, construction schedule, type and location of interconnection, rated capacity,

b. Site plan

The site plan map shall be provided in a legible format and shall include but not be limited to the location and arrangement of screening, fencing, existing and proposed structures, equipment,

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roadways and access points, wildlife corridors, floodplain, easements, existing utilities, and connection to the electrical grid.

c. Setbacks

- (1) All structures must meet minimum street, side, and rear setback requirements for the zone district in which the proposed facility is to be located.
- (2) One quarter (1/4) mile from a designated Scenic By-way.

(2) Require visual impact assessment and increase if visible within ¼ mile.

(3) A minimum of <u>two-one</u> hundred fifty (200150) feet from <u>any-the nearest outside wall of</u> residential occupied structure.

Grading plan

levations

Traffic Study

- d. Fire Prevention and Safety Procedures
 - The relevant Fire Protection District's adopted standards, based on current fire code, shall apply. unless.
 - (2) A fire break or other facility perimeter design acceptable to the fire district shall be required to reduce or eliminate the interface risk from wildfire.
 - (3) If fenced, Llocked gates shall be installed <u>approximately</u> every 300 feet on the inside of along the <u>any</u> perimeter fencing.
 - (4) A vegetation management plan shall describe the operator's methods to maintain vegetation inside the facility to <u>address wildfire a minimum level</u>, which may include treatment, mowing, agrivoltaics or other methods of fuel reduction.
- e. Visual Mitigation

Reasonable efforts to mitigate visual impacts of an energy generation/production facility will be detailed in the project narrative. Visual impact mitigation may include opaque fencing, screening, berming, use of existing or planted vegetation of landscaping.

(1) Solar System equipment shall be no higher than fifteen (15) fifteen (15) feet at the solar panel mounting point. The height of the interconnection equipment may exceed 15 feet. Solar System Facilities within 50 feet of a property line of a residential zoned property containing a residential occupied structure shall should be designed with some form of visual mitigation, to include but not be limited to, opaque fencing, berming, or landscaping.

<u>Panels placed so no glare onto rd or neighboring properties at any time of day (weld county</u>

(a) Agrivoltaics are exempt from height restrictions.

- f. Wildlife, Wetlands, Riparian Areas and Stream Channel Measures
 - (1) The Operator shall address the recommendations of Colorado Parks & Wildlife (CPW) that address any site-specific site conditions. The Applicant shall avoid constructing in CPWmapped High Priority Habitats (HPH) to the maximum extent possible.

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duc	tion LDC Amenament V.nutchins 2-21-2024	Commence i contri to pe
<u>(2)</u>	Operator shall inspect the interior of the facility at least once weekly, to potentially free any trapped animals.	
(2)	(3) When fencing is necessary, the use of wildlife friendly fencing is encouraged.	
g. [Decommissioning Plan	Formatted: Highlight
	At the time of application, Operator shall include a decommissioning plan for the facility which will include detailed plans for management and removal of equipment, mounting systems, above and underground utilities, equipment and facilities as follows:	
(1)	Within <u>six_twelve_(612)</u> months of ceasing operations, the operator shall complete decommissioning of the facility which will include removal of all aboveground and belowground equipment to a depth of 16 inches, and structures and removal of any access roads and fire breaks.	
(2)	Any equipment that cannot be recycled shall be properly disposed in accordance with all State and Federal regulations.	
<u>(3)</u>	The site shall be revegetated in compliance with the property owner's specifications or to a minimum of 70% of predevelopment vegetative cover whichever is less.	Formatted: Font color: Red
<u>mmissi</u>	oning Plan (from Connecting Renewable Energy in Colorado)	Formatted: Highlight
<u>mercia</u> ity unk mmiss	i solar or wind energy facility owner may not construct a commercial solar or wind energy facility or ess the facility owner submits a decommissioning plan to a relevant county authority, ioning plan shall mercial solar or wind energy facility owner is responsible for, at the facility owner's expense, the	Formatted: Highlight
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nercia ity unli mmiss a com g of the addition te the as und quirem mmissi	I solar or wind energy facility owner may not construct a commercial solar or wind energy facility or ess the facility owner submits a decommissioning plan to a relevant county authority; ioning plan shall mercial solar or wind energy facility owner is responsible for, at the facility owner's expense, the ie facility after the operational life of the commercial solar or wind energy facility si operational life of the commercial solar or wind energy facility; and er which a facility owner is required to decommission the commercial solar or wind energy facility; ent to provide financial assurance in accordance with Section 11, oning strategy that provides for the facility owner to either; cial solar or wind energy facility to operational life, including by repowering the energy facility's	Pormatted: Highlight
mercia ity unle mmiss a com ag of the ag of th	Lisolar or wind energy facility owner may not construct a commercial solar or wind energy facility or ess the facility owner submits a decommissioning plan to a relevant county authority, ioning olan shall mercial solar or wind energy facility owner is responsible for, at the facility owner's expense, the mercial solar or wind energy facility owner is responsible for, at the facility owner's expense, the mercial solar or wind energy facility owner is responsible for, at the facility owner's expense, the mercial solar or wind energy facility owner is responsible for, at the facility owner's expense, the mercial solar or wind energy facility owner is responsible for, at the facility owner's expense, the mercial solar or wind energy facility owner is required to decommission the commercial solar or wind energy facility; even to provide financial assurance in accordance with Section 11: oning strategy that provides for the facility owner to either: relat solar or wind energy facility to operational life, including by repowering the energy facility's ercial solar or wind energy facility and supporting facilities from participating or nonparticipating the property to a useful condition that is similar to the property's condition before construction of or wind energy facility.	Pormatted: Highlight
mercia ity unle mmiss a com ag of the ag of th	I solar or wind energy facility owner may not construct a commercial solar or wind energy facility or assite facility owner submits a decommissioning plan to a relevant county authority. Ioning plan shalls mercial solar or wind energy facility owner is responsible for, at the facility owner's expense, the refacility effer the operational life of the commercial solar or wind energy facility. Solar at the facility owner is responsible for, at the facility owner's expense, the refacility effer the operational life of the commercial solar or wind energy facility. Solar at the facility owner is required to decommission the commercial solar or wind energy facility. Inter to provide financial assurance in accordance with Section 11, oning strategy that provides for the facility owner to either. Inter to a useful condition that is similar to the property's condition before construction of or wind energy facility. Interpret to a useful condition that is similar to the property's condition before construction of or wind energy facility. Ioning strategy to remove a commercial solar or wind energy facility and restore participating or encount of an energy facility.	Pormatted: Highlight

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Utility Production LDC Amendment v.hutchins 2-21-2024				
(b) unless provided otherwise by the permitting county or under agreement with a participating or nonparticipating				
landowner, remove underground components of the commercial solar or wind energy facility and any supporting facilities that have no ongoing operational purpose to a depth of 3 feet below the surface; and				
(c) if agreed to by the owner of participating or nonparticipating property in advance, restore buildings, roads, or any other facilities				
(4) (a) A commercial solar or wind energy facility owner may petition a permitting county to amend a				
decommissioning plan described in Subsection (1).				
(b) A county shall permit a facility owner to amend a decommissioning plan if necessary to account for:				
(i) advancements in available technology;				
(ii) advancements in decommissioning, salvaging, or repowering processes or procedures; or				
iii) where otherwise in the best interest of the county and the facility owner.				
Section-8. Financial Assurance.				
(1) A decommissioning plan for a commercial solar or wind energy facility described in Section X shall include a requirement for the commercial solar or wind energy facility owner to provide the county with evidence of financial assurance that secures the facility owner's obligation to remove the commercial solar or wind energy facility in accordance with the decommissioning plan.				
(2) A facility owner may provide the financial assurance described in Subsection (1) in the form of one or more of:				
a) a surety bond.				
(b) a letter of credit:				
(c) a self-guarantee;				
(d) a parent guarantee:				
e) an escrow account. or				
(f) any other form of financial assurance reasonably acceptable to the developer.				
(3) (a) The required amount of financial assurance described in Subsection (1) is the estimated cost of decommissioning the commercial solar or wind energy system, net of estimated salvage value and resale value.				
(b) The evidence of financial assurance described in Subsection (1) shall include an estimate of the total cost of decommissioning the commercial solar or wind energy system, net of salvage value and resale value.				
(c) A individual is qualified to conduct the estimate described in this Subsection (3) if the individual:				
(i) is a registered professional engineer who is independent from the facility owner and the county; or				
(ii) if agreed to by the facility owner and county, has other experience in the decommissioning commercial solar or wind energy systems of the type in question suitable to the facility owner and county.				

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Formatted: Font: 16 pt Utility Production LDC Amendment v.hutchins 2-21-2024 (4) The facility owner shall post the financial assurance required under Subsection (1) in accordance with the following schedule: (a) An initial posting on or before the day ten years after the commercial operation date of the commercial solar or wind energy system no greater than 25% of the entire decommissioning cost calculated under Subsection (3); (b) Intermediary postings occurring no less frequently than one posting every five years after the date of the initial posting; and tc) a final posting on or before the day twenty five years after the commercial operation date of the commercial solar or wind energy system, such that the total amount posted is equal to the entire decommissioning cost calculated under Subsection (3). ____The commercial solar or wind energy facility owner and county shall determine by agreement the amount of each posting described in Subsection (4)(a) and 4(b). (6) In the event of a transfer of ownership of a commercial solar or wind energy facility, the transferor facility owner shall maintain the financial assurance required by this Section (11) until the transferee facility owner posts financial assurance that complies with this Section (11). Section 9. Decommissioning Timing A commercial solar or wind energy facility owner, to the extent practicable, and where required by this Section (1) and the decommissioning plan described in Section 10, shall complete decommissioning no later than 12 months after the end of the operational life of the commercial solar or wind energy facility. (2) For the purposes of this section, unless otherwise defined in a lease agreement between a facility owner and a andowner, the operational life of a commercial solar or wind energy facility ends no later than the day following a period of 24 consecutive months during which the commercial solar or wind energy facility fails to generate or store electricity. (3) Formatted: Font color: Auto Formatted: Normal, Indent: Left: 0", First line: 0" h. Insurance The owner/operator shall provide proof of general liability insurance with commercially reasonable amounts of coverage for the permitted facility. Facility owners/operators shall maintain such insurance in place through all times the facility is in operation. i. Referral Once a complete application has been submitted, County staff will refer the application for review to appropriate review agencies which may include; law enforcement, state and federal agencies, local municipalities, fire districts utility providers and others as may be deemed appropriate. 3. Approval Criteria In evaluating the proposal, the request shall comply with any conditions of approval and all applicable requirements of this LDC, including, but not limited to: a. The health, safety and welfare of the citizens of this jurisdiction will be protected and served; b. The facility will not adversely unreasonably impact the physical, economic, or social environment, except as permitted in Chapter 6 Use Regulations as applicable. 6-

Utility Production LDC Amendment v.hutchins 2-21-2024	Formatted: Font: 16 pt
c. When an adverse impact is expected to occur, reasonable modifications and programs and other reasonable mitigating actions will be implemented and maintained to minimize the degree of adversity of the impact;	
dThere exists a need, or a reasonably foreseeable need, for the facility as proposed;	
Increase protection for significant agricultural land	Formatted: Highlight
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- Identify significant (irrigated) agricultural land in master plan	
require Keeping irrigated ag land with use it or lose it water rights in production so as not to lose water rights.	Formatted: Normal
(Agrovortaics)	
-Limit amount of land allowed in renewables in significant agricultural land areas:	Formatted: Highlight
A facility >2.5 acres not permitted in forestry zoning district unless the land is otherwise damaged making it	Formatted: Normal, Indent: Left: 0.5"
unusable for agriculture or forestry: (boulder county)	Formatted: Highlight
	Formatted: Highlight
A facility >0.5 acres, on significant agricultural lands, located in agricultural zone or rural or estate residential	Formatted: Highlight
zone requires special review and is subject to additional requirements to maintain soil and agricultural integrity	Formatted: Highlight
Isted Below.	Formatted: Normal, Indent: Left: 0.5", Space Before: 12 pt
Facility Cannot exceed 7 acres on parcels < 70 acres (Boulder County)	Formatted: Highlight
	Formatted: Highlight
Facility Cannot exceed 14 acres or parcels > 70 acres. (Boulder County)	Formatted: Highlight
No other 5 acroscolar energy facility may be located immediately adjacent to another color energy facility (wold	Formatted: Highlight
No zchano acresolar energy racincy may be rocated infinediately adjacent to another solar energy racincy weid	Formatted: Highlight
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Adoquato resources (o.g. schools utilities roads) evist or will evist for the construction and	Formatted: Normal, Indent: First line: 0.5", Space Before: 12 pt
e. Adequate resources (e.g., schools, diffinites, roads) exist, of will exist, for the construction and efficient operation of the facility;	Formatted: Highlight
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Utility Production LDC Amendment v.hutchins 2-21-2024

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Amendment to Section 12.01 General

Energy Generation/Production Facility. A facility designed to generate electricity by the conversion of natural resources such as light, natural gas, <u>nuclear</u> or water-with a rated capacity of more than two (2) Megawatts and/or occupying more than five (5) acres of land. An Energy Generation/Production Facility may include battery storage equipment as accessory equipment. See also Distributed generation as defined in CRS 40-2-124.

Private Energy Facility. A residential or business-scale energy conversion facility designed to generate electricity by the conversion of natural resources such as light, natural gas, <u>nuclear</u>, biomass or water with a rated capacity of <u>less than 130% of the normal electrical power demand of the property or facility</u> <u>upon which it is sited two (2) Megawatts or less</u>, occupying no more than five (5) acres of land, that produces electricity tofor on-site uses or to nearby off site facilities under the same ownership, for which the private facility is intended to provide electrical power.

Community Solar Garden: A solar power generating facility designed to produce electricity <u>as defined in</u> with a maximum rated capacity of five (5) Megawatts or less and meets the definition contained within C.R.S 40-2-127. A community solar garden may include battery storage equipment <u>as accessory</u> equipment.

Agrivoltaics: Agrivoltaics, agrophotovoltaics, agrisolar, or dual-use solar is the simultaneous use of areas of land for both solar panels and agriculture. I.E. Agricultural production, such as crop or livestock production or pollinator habitats, underneath solar panels or adjacent to solar panels for the production of electricity while still producing revenue via continued agricultural operations.

Fire Protection District: A Fire Protection District within Mesa County is defined as one which has been recognized by resolution as per C.R.S 32-1-102 (2022) by the BoCC.

<u>Residential Occupied Structure</u>: See Building, Principle see also Dwelling Unit.

Utility Solar Energy Facility: Any energy production facility which is designed to produce electrical energy in excess of 130% of the normal electrical power demand of the property or facility upon which it is sited.

Amendment to Section 12.04 Institutional And Civic Use Categories

- K. Utilities, Production
 - 1. Characteristics

A facility designed and operated for the generation, and distribution of electricity which use fossil fuels, solar energy, hydroelectric energy, geothermal energy, <u>nuclear</u>, biomass energy or wind energy as a resource for the primary purpose of selling electricity generated to the electric power arid.

2. Accessory Uses

Accessory uses may include parking and control, monitoring, data or transmission or battery storage equipment and agrivoltaics.

3. Exceptions

a. Does not apply to on-site generation equipment when such use is an accessory use as described in Section 6.02 <u>CC</u>. A of this LCD.

Utility Production LDC Amendment v.hutchins 2-21-2024	Formatted: Font: 16 pt
b. Transmission lines, power plants, substations, and pipelines.	
c. Utility production facilities with no occupied structures or full-time on-site employees are exempt from the requirements for potable water required in Section 8.09.	Formatted: Highlight
c. Should be an exception to no potable water being required for an unoccupied facility, when the facility is next to	 Formatted: Normal
an urban residential zoning district	Formatted: Font color: Auto, Highlight
Utility Production LDC Amendment v.hutchins 2-21-2024

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ADDITIONS TO SECTION 12.01 DEFINITIONS

Utility Production LDC Amendment v.hutchins 2-21-2024

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							Pr	inc	ipa	l Us	es	Allo	owe	ed														
Use Category (Section)	Specific Use Type				ι	Jrb	an	Res	ide	ntic	ıl				Nonresidential								Mixed Use Districts			Gate Ove Dis	eway erlay trict	Site Specific Standards
		AFT/AF35	RSFR	URR	RSFE	RSF-1	RSF-2	RSF-4	RMF-5	RMF-8	RMF-12	RMF-16	RMF-24	R-O	B-1	B-2	ċ	C-2	Ξ	1-2	TIER #1	TIER #2	MU-OTC	MUR	MUC	Area A	Area B	
Institutional & Civic (Section														on 1	2.0	4)				1	1	1	I	1				
Colleges and Vocational	Colleges and Universities/Vocational/ Technical/ Trade Schools									A	A	А	А	А	A	A	A	A	A	А	с	с	А		А	с	с	
<u>12.04 A.</u>	All Other Educational Institutions									С	С	С	С	A	A	A	А	А	A	A	A	A	С		С	С	С	
Community	All Community Services	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А			А	А	С	С	С	А	С	
Service <u>12.04 B.</u>	Museums/Art Galleries/Opera House	A	А											A	А	А	А	А	A	А	A	A	А	А	А	А	С	
	Home-Based Day Care	А	А	А	А	А	А	А	А	А	А	А	А	А	А						А	А	С	С	С	А	С	
12.04 C.	Limited Day Care	С	С	С	А	А	А	А	А	А	А	А	А	А	А	А					А	А	С	С	С	А	С	
	General Day Care	С	С	С	С	С	С	С	С	А	А	А	А	А	А	А	С				С	С	А	С	С	А	С	
	Medical and Dental Clinics											А	А	А	А	А	А	А	А		А	А	А	С	А	А	С	
Hospital <u>12.04 D.</u>	Counseling/Rehabilitation Centers (nonresident)													A	А	А	А	А			A	A	А	С	А	А	С	
	Hospital/ Mental Hospital													А	А	А	А	А			С	С	С	С	С			
	Physical and Mental Rehabilitation (residential)													A	А	A	А	А			С	С	С	С	С	С	С	
	All Other															С	С	С			С	С	С		С	С	С	
	Cemetery	А								С	С	С					А	А			А	А			С	А	С	
Parks and Open	Golf Course	А	А	А	А	А	А	А	А	А	А	А	А		А	А	А	А				С		А	А	С	С	
Space	Golf Driving Ranges	А	С	С	С	С	С	С	С	С	С	С	С			А	А	А	А	А	А	А		С	С	С	С	
<u>12.04 E.</u>	Parks/Lakes/Reservoirs	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	
	All Other	А	А	А	А	А	A	А	А	А	А	А	A	А	А	А	А	А	А	А	А	А	С	С	С	Α	С	
Religious Institutions <u>12.04 F.</u>	All	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	А	А	A	A	A	A	А	А	А	A	А	
Public Safety	Jails, Honor Camps, Reformatories, Rehabilitation Centers															С		С	С	с		с						
12.04 G.	Police Station & Sub- Station/Fire Station/Ambulance	A	А	A	A	A	A	A	A	A	A	А	A	A	A	A	А	А	A	А	A	A	А	А	А	А	A	
	Boarding School	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	А	А			А	А	А	А	А	С	С	
Schools 12.04 H.	Elementary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А				А	А	А	А	А	А	С	
	Secondary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А			А	А	А	А	А	А	С	
							U	tiliti	es	(<u>Se</u>	ctic	on 1	2.)	<u>X)</u>														
	Utility Service Facilities (underground)	A	А	А	А	А	А	А	А	А	А	А	A	A	А	A	А	А	А	А	А	А	А	А	А	А	А	
Utility, Basic 12.04 I.	Utility Treatment, Production or Service Facility	С																	С	С		С	С	С	С			
	Minor Basic Utilities	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	A	А	А	A	A	
	Basic Utilities	С	С	С	С	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	С	С	С	С	А	С	С	
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Utility Production LDC Amendment v.hutchins 2-21-2024

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Fwd: West Slope Large Scale Industrial Solar, Dangerous Developments and Lack of Safety Measures

2 messages

Greg Moberg <greg.moberg@mesacounty.us> To: Sean Norris <sean.norris@mesacounty.us>

Not sure if you received a copy of the following.

Greg Moberg Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

------ Forwarded message -------From: Bobbie Daniel <bobbie.daniel@mesacounty.us> Date: Fri, Mar 29, 2024 at 12:49 PM Subject: Re: West Slope Large Scale Industrial Solar, Dangerous Developments and Lack of Safety Measures To: wendy <coloradawendy@gmail.com> Cc: Greg Moberg <greg.moberg@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>, Jay Seaton <jay.seaton@gjsentinel.com>, <annas@gjcity.org>, <bcarlson@townofpalisade.org>, <cody.davis@mesacounty.us>, <ale.shrull@gjsentinel.com>, <editor@palisadepost.com>, <etturner@townofpalisade.org>, <cody.davis@mesacounty.us>, <newsroom@kjct8.com>, <tchase@townofpalisade.org>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us></ale

Thank you, Wendy, I understand. Thank you for all the time you have put into this and the public comments. We will add them to the record.

On Mar 29, 2024, at 10:06 AM, wendy <coloradawendy@gmail.com> wrote:

Hello, Bobbie,

Of course we concerned citizens have attended several meetings in person, and as detailed above, those concerns were disregarded.

You might recognize some of us have full-time jobs and can't make every meeting that you, as a full-time employee of Mesa County attend.

Even those of us who are pro-solar, which is most of us, recognize the protracted fire danger and the need for regulation when it comes to large scale industry.

We continue to do the homework for you.

It is your job to take appropriate measures.

Our concerns are detailed above. They have been stated In person several times, as you know.

The above letter will continue to be sent out to concerned citizens, policy makers, angri-tourism reps and members of the media.

This back-and-forth serves no purpose, as you well know. We ask respectfully that you simply do your job.

Mon, Apr 1, 2024 at 11:32 AM

On Fri, Mar 29, 2024 at 8:12 AM Bobbie Daniel

bobbie.daniel@mesacounty.us> wrote:

 Good morning Wendy.

Love for you to attend the meeting to discuss your thoughts about the draft and if anyone else would like a meeting on the draft I am happy to meet. In-person conversations are beneficial to hear concerns from all sides and work through ideas. If anyone would like to submit draft amendments or concerns that can't attend a meeting please send them to Greg Moberg at greg.moberg@mesacounty.us

On Mar 29, 2024, at 7:29 AM, wendy <coloradawendy@gmail.com> wrote:

Thanks, Bobbie,

Is the purpose of this meeting to rigorously correct each of the serious issues addressed in the letter above?

Or is the purpose of the meeting more about appearances?

Please explain exactly what the board proposes to do about the serious issues raised above. And please understand that an invitation to another meeting, though an understandably political gesture, does not qualify as a meaningful acknowledgment of the serious issues raised above.

On Thu, Mar 28, 2024 at 8:08 PM Bobbie Daniel <a href="https://www.ebubble.com/bubble.co

Hi Wendi

Thank you for your letter. We will add this to public comments. We are hosting a solar code meeting on Tuesday, April 2nd at 11 am with Rhianna Lawson. Would you like to join us? We can set up another time to go over the draft code amendments if there is a better time/date for you. Thanks again Wendi we appreciate your feedback.

Bobbie Daniel

On Mar 28, 2024, at 7:09 PM, wendy <coloradawendy@gmail.com> wrote:

Dear Mesa County Citizens, Members of the Press and Mesa County Board of Commissioners,

We, Concerned Citizens of Mesa County, state for the record that those in charge of the political processes regarding commercial solar development and the risks they pose to the Grand Valley **have not been transparent** to the community who are directly affected. Furthermore, the safety of our citizens, our agriculture and our tourism is being placed in peril.

It's clear that a CORA request will occur after this process has finished and it will not reflect well on our County Commissioners.

Mesa County Planning Department has worked closely with both Solar reps and citizens during many public forums to create a drafted amendment for the Land Development Code that regulates solar development.

During these public meetings, there were no experts of any kind consulted outside of the solar developers themselves. Despite this obvious oversight a new Code was developed by the planning department.

The drafted code that went before the Planning Commission on March 21 did not address the concerns of the community.

The Planning Commission suggested that several areas of the LDC amendment be changed to address their concerns. Many of their concerns were the same as those expressed by Concerned Citizens in the community letter sent to the BoCC, et.al. on March 12. That letter is in the public record.

A briefing was held on March 25 with the BoCC to look at the drafted LDC amendment and review the suggestions by the Planning Commission. For reasons unknown, this meeting was not recorded and no minutes taken.

After the BoCC briefing, the planning department ignored some of those suggestions and actually changed a key protection that had been written into the LDC amendment. The results were shocking:

1) The BoCC decided that the loophole existing in fire protection for the high-voltage electrical facilities will not be addressed. This means that the elected Commissioners have decided that any large-scale solar utility developed on parcels outside of an *incorporated* fire protection district will need not be held to the International Fire Code standards regarding general fire safety. Many acres of land are not under the jurisdiction of an incorporated fire district, and high-voltage electricity plants will be allowed to develop there without fire regulation or oversight.

2) Despite pleas from the community, acquiescence from COSSA (Colorado Solar and Storage Association) and urging from their own Planning Commission – the Commissioners decided that there will not be a bond required to ensure that decommissioning of commercial-scale solar facilities occur in a safe and thorough manner. All language around bond requirements (3/22 version Section CC.2.h) were removed after the March 25 meeting with the BoCC.

3) A new loophole was created in the LDC amendment after the March 25 BoCC meeting that is most concerning. The LDC amendment that went in front of the Planning Commission specified the difference between a "behind the meter" and an "in front of the meter" system. "Behind the meter" being defined as electricity produced primarily for the use of the residential/commercial/agricultural establishment where the development is located, and "in front of the meter" being defined as electricity produced to be sold for profit. Every person involved in creating the LDC amendment agreed that there should be few restrictions on "behind the meter" developments – as it is the right of the consumer to offset their electric costs with solar development. We all agreed that restrictions should focus primarily on large utility-scale production of electricity to be sold into the "grid" solely for profit.

The 3-member BoCC overruled that differentiation when it comes to any "agrivoltaic" system. Result: if you can perform any type of agricultural production on your land, you can now also develop any size solar utility plant as your land will fit – even hundreds of acres. In addition, agrivoltaics are exempt from height restrictions. You can sell that electricity straight into the grid for profit.

They also demanded the loosening of definition on "agrivoltaics." The original LDC amendment specified that there had to be agricultural production occurring on the land alongside the electrical production. After the Commissioners' changes, "agrivoltaics" can now be defined by as little as having a cow in a field or a couple tomato plants alongside tens of thousands of panels.

This decision undermines the entire agriculture industry of our valley. How many farmers will allow their fields to stop producing in order to fill them with highly profitable (and zero-labor) electrical panels? This loophole is disastrous and must be addressed by returning the LDC language around "agrivoltaics" to its original form. That original language was carefully drafted by the input of many-- only to be thrown out by 3 politically motivated commissioners.

Please write to our elected Commissioners and let them know that:

1) The community is aware that they have undermined our agricultural heritage which will prove fatal to our unique economy, landscape and tourism industry

2) We demand the increased fire risks inherent in high-voltage electricity production be addressed for every development, not just those conveniently located within an incorporated fire district.

3) We demand that they put back the decommissioning bond which ensure we are not left with junkyards of thousands of glass and aluminum panels across the county when the lifespan of the utility plant is over.

With the new LDC code – large solar utility plants will be allowed in every single land zone in Mesa County. This is non-negotiable and mandated by Governor Polis' green energy legislation. Our Board of County Commissioners cannot dictate *where* solar is developed. They do, however, have the power to say *how* development can take place – urge them to set aside their political aspirations for a moment and attend to the health and safety of our community as a whole.

Please add this letter to the public record.

Sincerely,

Concerned Citizens of Mesa County

Upcoming Events wendyvidelock.com Writer, Artist, Teacher, Newspaper Columnist Poetry Foundation @wendyvidelock.inklings on Instagram

Sean Norris <sean.norris@mesacounty.us> To: Greg Moberg <greg.moberg@mesacounty.us>

Thank you. I did not.

Sean T. Norris Manager If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



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Bobbie Daniel <bobbie.daniel@mesacounty.us>

Thu, Feb 22, 2024 at 7:58 AM

To: wendy <coloradawendy@gmail.com>, Sean Norris <sean.norris@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us> Cc: Janet Rowland <janet.rowland@mesacounty.us>, cody.davis@mesacounty.us, bcarlson@townofpalisade.org, Jason and Rhiannon Lawson <jasonandrhi@hotmail.com>, eturner@townofpalisade.org, Jeff Berino <jeff.berino@gmail.com>

Thank you Wendy. Your comments are received. We appreciate your input. Best, Bobbie Daniel Mesa County Commissioner

On Feb 22, 2024, at 7:46 AM, wendy <coloradawendy@gmail.com> wrote:

Dear City Council Members and Others,

Please review the following studies and articles in regards to large scale solar power and the smart ways to do it.

Because industrial solar is beating down our doors, it is your responsibility to make them do it properly, safely, and with our fire danger and high temps at the forefront of any consideration.

It's crucial we do it right from the get-go, because it's clear that the national government will eventually require we do it this way:

https://www.pbs.org/newshour/economy/solar-panels-built-over-water-canals-seem-like-a-no-brainer-so-why-arent-they-widespread

https://www.pbs.org/newshour/economy/solar-panels-built-over-water-canals-seem-like-a-no-brainer-so-why-arent-they-widespread

To be clear, the Colorado Energy Agency has already highly recommended this idea. More expensive, yes, but more costly to the Solar industry, (as it should be) and not on our citizenry.

Please add this comment and the studies above to the public record. Thanks, Wendy Videlock

Upcoming Events wendyvidelock.com Writer, Artist, Teacher, Newspaper Columnist Poetry Foundation @wendyvidelock.inklings on Instagram



Amendment to Section 6.02 Use Specific Standards

2 messages

Louis Villaire <lvillaire@gmail.com> To: Sean Norris <sean.norris@mesacounty.us>

Hi Sean,

I had to run out Wednesday evening before all of the fun finished.

There were a couple of other questions/comments I wanted to make that were specific to #3 'Approval Criteria.'

First, I believe that you noted during our meeting Wednesday evening that the 'Approval Criteria' applies to the 'solar array only?'

Subsection b. of #3 states that 'The facility will not unreasonably impact the physical, economic, or social environment, except as permitted in Chapter 6 Use Regulations as applicable.'

And Subsection c. of #3 states 'When an adverse impact is expected to occur, reasonable modifications and programs and other reasonable mitigating actions will be implemented and maintained to minimize the degree of adversity of the impact;'

Sean, apologies if there have already been some modifications here, but my concern is that 'unreasonable impact' seems ill-defined, too broad, and possibly subject the solar project to discretionary and/or arbitrary arguments against its development.

Would it be possible to provide more guidance on the intent of #3 'Approval Criteria?'

Thank you.

Lou Villaire Atlasta Solar Center 970-314-4413

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Sean Norris <sean.norris@mesacounty.us> To: Louis Villaire <lvillaire@gmail.com>

Thank you Lou. I am working on several clarifications and these are valid.

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



Fri, Feb 23, 2024 at 11:54 AM

Fri, Feb 23, 2024 at 2:22 PM

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Animals trapped in solar farm

3 messages

Frank Nemanich <westiecolorado@bresnan.net> To: Sean Norris <sean.norris@mesacounty.us> Cc: molly.west@state.co.us Thu, Feb 8, 2024 at 9:16 AM

Sean: I would like to comment on the dismissal of the importance of possible trapped animals in a fenced solar farm. It has been my experience that wild animals and domestic critters cannot always get out of a enclosed area that they somehow entered. I have had deer stuck in my fenced back yard. Because of this I have constructed a breakable top to the fence that they can bust through. Once in Utah on a fishing trip, several deer were found in a fenced sub-station. Fortunately my cousin was able to break open a locked gate. I have seen elk jump very high fencing to get to hay stacks.

I think it would be a good ideal to contact Molly West, Land Use Specialist with Colo Parks & Wildlife for more input on this. I know they have many years experience with this. I meet her at the previous solar meeting.

Frank

□ westiecolorado.vcf

West - DNR, Molly <molly.west@state.co.us> To: Frank Nemanich <westiecolorado@bresnan.net> Cc: Sean Norris <sean.norris@mesacounty.us> Thu, Feb 8, 2024 at 10:39 AM

Sean,

I would be happy to discuss this topic with you as it develops. We do have quite a bit of experience with this and can provide you with industry-standard practices as applicable.

In the meantime, I apologize for arriving late at the solar open house last week. Would you be able to send me the presentation so that I can review it on my own or meet to go over it? I am very interested in supporting you and Mesa County in a positive way, setting you up for success, and working together for wildlife.

Sincerely,

Molly West Land Use Specialist Northwest Region



P 970.255.6100 | C 970.250.3818 711 Independent Ave, Grand Junction CO 81505 molly.west@state.co.us | cpw.state.co.us



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Sean Norris <sean.norris@mesacounty.us> To: "West - DNR, Molly" <molly.west@state.co.us> Cc: Frank Nemanich <westiecolorado@bresnan.net>

We will be doing more Molly. Here is the original presentation. OPur next meeting will be a Code Focus Group on February 21st and 4:45. 544 Rood in Room A on the 3rd floor. Wed, Feb 14, 2024 at 2:55 PM

Sean T. Norris Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



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<u>Summary Position Points by Ben Murphy and Tom McCloskey</u> representing Citizens' Climate Lobby Grand Valley and Western Colorado Alliance

Preferred Resolution:

Changes to the Mesa County Land Development Code (LDC), including the addition of solar energy production projects to Sections 6 and 12. Utility scale solar (PV) installations <u>should be</u> <u>prioritized</u> in the near term and new or less than optimal technologies for our County (wind, geothermal, nuclear, gravity-based energy storage systems) should follow soon after in the process of updating the LDC.

No extension of the existing moratorium, enabling local residents and businesses to capture the benefits of solar energy in the near term and respecting land owners private property rights to use their land as it best fits their needs.

There is currently momentum behind advancing solar projects throughout the United States. This includes counties in Colorado where these projects have already improved the energy portfolio of their citizens. This momentum is driven by consumer demand for renewable electricity, federal incentives, and local initiatives, among others.

Localities which adopt favorable but reasonable policies will capture a larger market share of projects and the associated benefits (including significant economic impacts and regional tax revenues), while late or non-adopters may be entirely passed over as projects are sited elsewhere.

Local Benefits:

County residents and businesses stand to benefit the local economy by reducing electricity costs. Per the DOE, new solar projects have achieved electricity costs at less than \$0.06/kWh and dropping.

In particular, projects supporting underserved communities, local schools, and municipal buildings help empower these communities and improve equitability. This allows citizens with limited financial and/or housing resources to reap the benefits of the technology.

<u>Note:</u> Not all solar projects are developed to support local communities; some are developed through Power Purchase Agreements (PPAs) in which third parties receive the cost savings and environmental attributes. These projects still provide second order benefits to the local community including environmental and economic.

Solar power production projects further benefit the local economy by creating jobs.

<u>Note:</u> The operation of solar power production facilities require limited upkeep, so the job creation is largely temporary. However, if Mesa County becomes an early adopter, ongoing projects could sustain a sizable workforce.

Including solar power development in the LDC respects the rights of residents by giving landowners the ability to develop or sell their land as they see fit (within the bounds of the LDC)

Solar power developments are much lower in visual, community noise, and environmental impact than many other uses currently allowed in the Land Development Code. Recognizing the potential for a protectionist approach to maintaining the status quo is needed and should be avoided.

Tenet to Consider:

All conversions related to solar project moratoriums and changes to the Land Development Code should be fact based. New technologies should be incorporated based on benefits to citizens and balanced against the tendency to resist changes in energy economy. While cost are the main driver of economic decisions, environmental and quality-of-life effects of new technologies need to be considered. Proponents of Colorado's fossil fuel industry have represented existing regulations of methane emissions and fluid spills as onerous, but now portray these regs as a positive. Solar PV installations have much lower environmental impacts (metal leaching, wildlife displacement, etc.) and can be mitigated by the LDC.

There is considerable misinformation around solar projects, leading to some hesitation from a small but vocal minority of county residents. Subject matter experts (neutral, unbiased) should be consulted to validate statements and allay concerns. This should be a priority due to the recent experiences of solar "garden" projects in Palisade and larger projects in nearby counties.

Additionally, the provisions required in the Use Specific Standards and Section 12 to ensure reasonable guidelines are included for development will require subject matter experts, potentially including input from project developers.

ADDITIONAL INFORMATION

Title: Connecting Renewable Energy in Colorado

Section 1. Legislative declaration

- The general assembly recognizes there is a compelling state interest in the need for new renewable and clean energy projects to continue making progress on the state's greenhouse gas emissions reduction goals while also protecting public health, safety, welfare, and the environment, including wildlife resources.
- The general assembly declares that permitting and siting commercial wind and solar facilities is a matter of mixed local and statewide concern.
- The general assembly recognizes that protecting wildlife resources provides resilient lands and waters that can be utilized as nature-based solutions to mitigate some impact of climate change.
- The general assembly recognizes that the state will likely need to triple wind energy capacity and quintuple solar capacity by 2040 to make progress towards the greenhouse gas reduction goals in CRS 25-7-102.
- The general assembly further recognizes the development of clean energy resources will generate cost-savings for electricity consumers, and will provide more stable energy prices by reducing dependence on commodities with variable prices, reduce harmful air pollution and improve public health and will bring economic benefits to landowners and local communities. A fair and consistent approach to the siting and permitting of solar, wind, and transmission projects will encourage needed energy and economic development across the entire state.
- The general assembly further recognizes that a fair and consistent approach to siting and permitting is also necessary to reduce pollution and achieve the state's climate goals, provide for economic prosperity for landowners and local communities through infrastructure development, achieve energy affordability by unlocking lower cost and more cost predictable clean energy, ensure the security of the state's energy supply, and enable job creation.

Section 2. - Definitions

- (1) (a) "Commercial solar energy facility" means any device or assembly of devices that:
 - (i) is ground installed;
 - (ii) equal or greater than 5 megawatts in total nameplate generating capacity; and
 - (ii) uses solar energy from the sun for generating electricity for the primary purpose of wholesale or retail sale and not primarily for consumption on the property on which the device or devices reside.
- (2) "Commercial wind energy facility" means a wind energy conversion facility of equal or greater than 500 kilowatts in total nameplate generating capacity.

- (3) "Compensatory Mitigation Plan" means a plan to offset the direct and unavoidable adverse indirect impacts to wildlife resources.
 - (a) Direct impacts to wildlife are unavoidable and occur from direct mortality or displacement during construction activities and habitat conversion to industrial facilities.
 - (b) Indirect impacts to wildlife occur over time from the cumulative functional habitat loss from fragmentation and modified habitat use as development density increases.
- (4) "Facility owner" means:
 - (a) a person with a direct ownership interest in a commercial wind energy facility, a commercial solar energy facility, regardless of whether the person is involved in acquiring the necessary rights, permits, and approvals or otherwise planning for the construction and operation of the facility; and
 - (b) at the time the facility is being developed, a person who is acting as a developer of the facility by acquiring the necessary rights, permits, and approvals or by planning for the construction and operation of the facility, regardless of whether the person will own or operate the facility after commercial operation.
- (5) "High Priority Habitat" means habitat areas identified by Colorado Parks and Wildlife where measures to avoid, minimize, and mitigate adverse impacts to wildlife have been identified to protect breeding, nesting, foraging, migrating, or other uses by wildlife.
- (6) "Nonparticipating property" means any landowner except those on whose property all or a portion of a solar or wind energy facility is located pursuant to an agreement with the Facility Owner or Operator.
- (7) "Nonparticipating residence" means a residence that is located on nonparticipating property and that is existing and occupied on the date that an application for a permit to develop the commercial wind energy facility or the commercial solar energy facility is filed with the county.
- (8) "Occupied community building" means any one or more of the following buildings that is existing and occupied on the date that the application for a permit to develop the commercial wind energy facility or the commercial solar energy facility is filed with the county:
 - (a) a school;
 - (b) a place of worship;
 - (c) a day care facility;
 - (d) a public library; or
 - (e) a community center.
- (9) "Participating property" means real property that is the subject of a written agreement between a facility owner and the owner of the real property that provides the facility owner an easement, option, lease, or license to use the real property for the purpose of constructing a commercial wind energy facility, a commercial solar energy facility, or supporting facilities and includes real property that is owned by a facility owner for the

purpose of constructing a commercial wind energy facility, a commercial solar energy facility, or supporting facilities.

- (10) "Participating residence" means a residence that is located on participating property and that is existing and occupied on the date that an application for a permit to develop the commercial wind energy facility or the commercial solar energy facility is filed with the county.
- (11) "Protected lands" means real property that is
 - (a) Subject to a permanent conservation easement;
 - (i) for the purposes of the following Sections, applicable conservation easements are limited to those that specifically identify the purpose of the protection of a relatively natural habitat of fish, wildlife, or plants, or similar ecosystem
 - (b) Colorado Parks and Wildlife State Park or State Wildlife Area¹;
 - c) Colorado Natural Areas pursuant to CRS 33-33-101
 - (d) Government-owned County and city dedicated open spaces
 - (e) USFWS Wildlife Refuges
- (12) "Supporting facilities" means the transmission lines, generation interconnect lines, substations, access roads, meteorological towers, storage containers, and equipment associated with the construction and generation of electricity by the commercial wind energy facility or commercial solar energy facility
- (13) "Wildlife Mitigation Plan" means a document for solar or wind energy facilities that describes the implementation of avoidance, minimization measures, and any mitigation requirements pursuant to consultation with CPW.
- (14) "Wildlife Resources" means fish, wildlife, and their aquatic and terrestrial habitats used for all life stages, including reproduction, rearing of young and foraging, and the migration corridors and seasonal ranges necessary to sustain robust wildlife populations.
- (15) "Wind tower" means the wind turbine tower, nacelle, and blades.
- (16) "Adverse Impacts" includes
 - (a) avoiding adverse impacts means differentially selecting alternative locations, practices, or methods for commercial solar or wind energy facilities based on site-specific circumstances, so that those operations will not cause direct, adverse impacts to the potentially affected resource(s).
 - (b) minimizing adverse impacts means providing necessary and reasonable protections to reduce the extent, severity, significance, or duration of unavoidable direct adverse Impacts to public health, safety, welfare, the environment, or wildlife resources from commercial solar or wind energy facilities and supporting facilities.
 - (c) mitigating adverse impacts means, with respect to wildlife resources, measures that compensate for unavoidable direct, adverse Impacts and loss of such resources from commercial solar or wind energy facilities, including, as appropriate, habitat replacement, on- or off-site habitat enhancement, habitat

¹ Ref 33-1-101-, 33-2.101-Nongame, Endangered, or Threatened Species Conservation Act

banking, or financial payment in lieu of habitat replacement or enhancement to compensate for the loss of habitat and ensure that wildlife populations are protected.

(d) unavoidable adverse impacts means direct, adverse impacts to public health, safety, welfare, the environment, or wildlife resources that are not entirely eliminated through the application of alternative location selection or other methods designed to minimize adverse impacts from commercial solar or wind energy facilities.

Section 3. Standards for Commercial Wind Energy Facilities and Commercial Solar Energy Facilities

(1) (a) Notwithstanding any other provision of law or whether the county has formed a zoning commission and adopted formal zoning under the Local Government Regulation of Land Use Act, a county shall establish standards for commercial wind energy facilities, commercial solar energy facilities, or both.

(b) The standards described in Subsection (1)(a) may include all of the requirements specified in Section 2 but may not include requirements for commercial wind energy facilities or commercial solar energy facilities that are more restrictive to the county approval of a renewable energy facility than specified in this Section.

(c) A county with an existing zoning ordinance in conflict with this Section shall amend that zoning ordinance to be in compliance with this Section within 120 days after the effective date of this Section.

(2) (a) After a county establishes standards under Subsection (1), before the county grants siting approval or a special use permit for a commercial wind energy facility or a commercial solar energy facility (as applicable), or modification of an approved siting or special use permit, the county board of the county in which the facility is to be sited or the zoning board of appeals for the county shall hold at least one public hearing.

(b) A county may conduct the public hearing described in Subsection (2)(a) not more than 60 days after the filing of the application for the facility.

(c) The county shall also allow public comment at the public hearing..

(d) At the public hearing described in Subsection (2)(a), the county shall consider whether the proposed solar or wind energy facility meets the standards established by the county under Subsection (1)(a). The county shall also balance its own interests with the statewide interest in advancing greenhouse gas emissions reduction goals while also protecting public health, safety, welfare, and the environment, including wildlife resources, and the interest of the public in reliable, clean, and cost-effective energy.

- (3) The county shall issue a decision on any siting or permitting application described in this Section not more than 30 days after the conclusion of the public hearing.
- (4) A county shall publish notice of the hearing in a newspaper of general circulation under Section 44-3-311 Public notice posting and publication.

- (5) A local unit of government may implement a temporary moratorium on the development of energy facilities for no longer than 6 months while the local unity of government develops a renewable energy ordinance compatible with Section 3. A local unit of government shall not extend the moratorium period beyond the initial 6 months. If the moratorium period extends beyond the initial 6-month period, the local unit of government will be considered in non-compliance with XXX." Compatible renewable energy ordinance" means an ordinance that provides for the development of energy facilities within the local unit of government, the requirements of which are no more restrictive than the provisions included in section 226(8). A local unit of government is considered not to have a compatible renewable energy ordinance if it has a moratorium on the development of energy facilities in effect within its jurisdiction.
- (6) [TK Language] on RE as an allowed or conditional use in Agriculture, Industrial/Brownfields, and Open Space zones
- (7) [TK language] on adopting reasonable fees for processing and issuing permits
- (8) [TK language] on adopting timelines for processing applications (mentioned ability for state resources to help)
- (9) [TK language] on requiring that Interconnection agreements, power purchase agreements, or proprietary project finance details can not be required as permit application materials.

Section 4. Siting – Setbacks

- (1) The requirements set forth in this Section shall be waived subject to the written consent of the owner of each affected nonparticipating property.
- (2) The maximum setbacks that a county may require a wind tower of a commercial wind energy facility to implement (setback distances, measured from the center of the base of the wind tower) are:

(a) from occupied community buildings:	2.1 times the maximum blade tip height of the wind tower to the nearest point on the outside wall of the structure;
(b) from participating residences:	1.1 times the maximum blade tip height of the wind tower to the nearest point on the outside wall of the structure
(c) from nonparticipating residences:	2.1 times the maximum blade tip height of the wind tower to the nearest point on the outside wall of the structure

(d) from boundary lines of participating property:	none
(e) from boundary lines of nonparticipating property,	1.1 times the maximum blade tip height of the wind tower to the nearest point on the property line of the nonparticipating property
(f) from public road rights-of-way,	1.1 times the maximum blade tip height of the wind tower to the center point of the public road right-of-way
(g) from overhead communication and electric transmission and distribution facilities, not including overhead utility service lines to individual houses or outbuildings:	1.1 times the maximum blade tip height of the wind tower to the nearest edge of the property line, easement, or right of way containing the overhead line
(h) from overhead utility service lines to individual houses or outbuildings:	none
(i) setback from Protected Lands if applicable, to avoid and/or minimize adverse impacts to wildlife resources:	to be determined in consultation with CPW as part of the consultation process described in Section 6.

- (3) Notwithstanding subsection (2), facility owners or operators must comply with all applicable electric facility clearances approved or required by the National Electrical Code, The National Electrical Safety Code, the Colorado Public Utilities Commission, or the Federal Energy Regulatory Commission, and their designees or successors.
- (4) The maximum setbacks a county may require a commercial solar energy facility (setback distances measured from the nearest edge of any component of the facility), are:

(a) from occupied community buildings and dwellings on nonparticipating properties:	150 feet from the nearest point on the outside wall of the structure
(b) from boundary lines of participating property:	none
(c) from public road rights of way:	50 feet from the nearest edge

(d) from boundary lines of nonparticipating property:	50 feet to the nearest point on the property line of the nonparticipating property
(e) setback from Protected Lands if	to be determined in consultation with
applicable, to avoid and/or minimize	CPW as part of the consultation process
adverse impacts to wildlife resources:	described in Section 6(1).

- (5) A county may require a commercial solar energy facility:
 - (a) to enclose the facility's perimeter with fencing that is no more than 25 feet in height, incorporates measures to accommodate wildlife habitat, to the extent practicable and in accordance with fencing requirements in National Electrical Code (NFPA 70) or the National Electric Safety Code (NESC); and
 - (b) so that no component of a solar panel has a height of more than 20 feet above ground when the solar energy facility's arrays are at full tilt.
- (6) A county shall not require earthen berms or similar structures surrounding a commercial wind energy facility or commercial solar energy facility.
- (7) A county may not set blade tip height limits for wind towers in a commercial wind energy facility that are lower than what the Federal Aviation Administration determines is safe pursuant to Determinations of No Hazard to Air Navigation under 14 CFR Part 77 for towers in that facility.
- (8) A county may not condition approval of a commercial wind energy facility or commercial solar energy facility on a property value guarantee and may not require a facility owner to pay into a neighboring property devaluation escrow account.
- (9) A county shall require a facility owner/applicant to demonstrate avoidance of protected lands defined in Section 1.
- (10) A county may allow a facility owner to site a test wind tower or test solar energy system without formal approval by the county board.

Section 5. Road Use Agreement

- (1) A facility owner may enter into a road use agreement with the Colorado Department of Transportation or local government entity.
- (2) (a) If a facility owner enters into a road use agreement described in this Section 5, the road use agreement shall require a facility owner to incur the reasonable cost of repairing and improving roads used by the facility owner to construct a commercial wind energy facility or commercial solar energy facility such that the roads are returned to a condition that is safe for the driving public after the completion of the facility's construction.

(b) A road use agreement described in this Section shall not require the facility owner to pay costs, fees, or charges for road work that is not specifically and uniquely attributable to the construction of the commercial wind energy facility or the commercial solar energy facility.

(c) Any road use agreement described in this Section that provides road-related fees, permit fees, or other charges shall require those fees or charges to be reasonably related to the cost of administration of the road use agreement by the [Colorado Department of Transportation or local government entity].

Section 6. ECMC and CPW consultation

- (1) For projects proposed within High Priority Habitat, areas of known or expected habitat or occurrence for state and/or federal threatened, endangered, or species of greatest conservation need that have been included in maps adopted by the Energy and Carbon Management Commission (ECMC), and areas within 1000 feet adjacent to Protected Lands defined in Section 2(11) the county shall require the Facility Owner/Applicant to engage in a pre-application consultation with the Energy and Carbon Management Commission (ECMC) prior to filing an application with the county for a commercial solar or wind energy facility.
- (2) For projects located outside of these areas, the facility Owner/Applicant may request a pre-application consultation with ECMC. Based on this pre-application consultation, the ECMC Director, in consultation with other state agencies at the discretion of ECMC such as the Colorado Energy Office and the Public Utilities Commission (PUC), shall provide an opinion as to whether the application appropriately advances the statewide interest in advancing greenhouse gas emissions reduction goals while also protecting public health, safety, welfare, and the environment, including wildlife resources, and the interest of the public in reliable, clean, and cost-effective energy. The opinion is not binding but may be a factor that is considered by the county in the approval or disapproval of a project. The ECMC Director's opinion shall be provided to the PUC for any projects that fall within the PUC's jurisdiction.
- (3) (a) The ECMC consultation described in Section 6(1) shall include a pre-application consultation with Colorado Parks and Wildlife (CPW) by the Facility Owner/Applicant prior to filing an application with the county for a commercial solar or wind energy facility in High Priority Habitats, areas of known or expected habitat or occurrence for state and/or federal threatened, endangered, or species of greatest conservation need that have been included in maps adopted by the ECMC, and areas within 1000 feet Protected Lands defined in Section 2(11).

(b) Based on this pre-application consultation, ECMC, in consultation with other state agencies at the discretion of ECMC such as the Colorado Energy Office and the PUC, shall provide an opinion as to whether the application appropriately advances the statewide interest in advancing greenhouse gas emissions reduction goals while also protecting public health, safety, welfare, and the environment, including wildlife resources, and the interest of the public in reliable, clean, and cost-effective energy.

(c) Included in the ECMC opinion described in Section 3(b), CPW shall provide recommendations to the Facility/Owner Applicant on measures to avoid, minimize, and

mitigate adverse impacts to wildlife. The Facility/Owner Applicant shall include in their application an explanation of the recommendations provided by CPW, those the Applicant has adopted, and those the Applicant has not adopted and why.

(d)These recommendations are not binding, but shall be factors that are considered by the county in the approval or disapproval of a project.

(e) A county shall not require a wildlife mitigation plan or compensatory mitigation more extensive than that recommended by CPW.

(4) (a) The ECMC consultation described in Section 6(1) shall include the development of a Wildlife Mitigation Plan for projects in Controlled Surface Use Habitats; areas of known or expected habitat or occurrence for state and/or federal threatened, endangered, or species of greatest conservation need, as determined by CPW on an annual basis.

(b) Based on this pre-application consultation, ECMC, in consultation with other state agencies at the discretion of ECMC such as the Colorado Energy Office and the PUC, shall provide an opinion as to whether the application appropriately advances the statewide interest in advancing greenhouse gas emissions reduction goals while also protecting public health, safety, welfare, and the environment, including wildlife resources, and the interest of the public in reliable, clean, and cost-effective energy.

(c) For projects in Controlled Surface Use Habitats the county may require the Facility Owner/Applicant to incorporate and include CPW recommendations to avoid and minimize adverse impacts within the facility siting, planning, design, construction, and operation.

(d) The county may require a facility owner/applicant to provide compensatory mitigation to offset impacts from projects in Controlled Surface Use Habitats where the extent and severity of the impacts identified in the Wildlife Mitigation Plan cannot be avoided. A facility/owner applicant may fulfill the obligation to provide compensatory mitigation by:

(i) Completing or causing to be completed a project approved by the county and CPW; or

(ii) Paying to CPW a habitat mitigation fee calculated to reimburse all reasonable and necessary direct and indirect costs that will be incurred by CPW in completing compensatory mitigation sufficient to offset the direct and unavoidable adverse indirect impacts to wildlife resources caused by the project.

(e) A county shall not require a wildlife mitigation plan or compensatory mitigation more extensive than recommended by CPW.

(5) (a) The ECMC consultation described in Section 6(1) shall include the development of a Wildlife Mitigation Plan for projects in No Surface Occupancy Habitats, areas of known or expected habitat or occurrence for state and/or federal threatened, endangered, or species of greatest conservation need, as determined by CPW in maps adopted by ECMC on an annual basis.

(b) Based on this pre-application consultation, ECMC, in consultation with other state agencies at the discretion of ECMC such as the Colorado Energy Office and the PUC,

shall provide an opinion as to whether the application appropriately advances the statewide interest in advancing greenhouse gas emissions reduction goals while also protecting public health, safety, welfare, and the environment, including wildlife resources, and the interest of the public in reliable, clean, and cost-effective energy.

(c) For projects in No Surface Occupancy Habitats the county shall require the Facility Owner/Applicant to incorporate and include CPW recommendations to avoid and minimize adverse impacts within the facility siting, planning, design, construction, and operation.

(d) The county shall require a facility owner/applicant to provide compensatory mitigation recommended by CPW to offset impacts from projects in No Surface Occupancy Habitats where the extent and severity of the impacts identified in the Wildlife Mitigation Plan cannot be avoided. A facility/owner applicant may fulfill the obligation to provide compensatory mitigation by:

(i) Completing or causing to be completed a project approved by the county and CPW; or

(ii) Paying to CPW a habitat mitigation fee calculated to reimburse all reasonable and necessary direct and indirect costs that will be incurred by CPW in completing compensatory mitigation sufficient to offset the direct and unavoidable adverse indirect impacts to wildlife resources caused by the project.

(e) A county shall not require a wildlife mitigation plan or compensatory mitigation more extensive than recommended by CPW.

- (6) The requirements in this section would not supersede consultations required by PUC Rules on Environmental Impacts nor does this alter any existing recommended consultation under federal guidelines or established industry standards on communication with state agencies.
- (7) Upon request by a local government, ECMC shall provide technical support to the participating local government concerning the implementation of the standards established in this Act. ECMC may collaborate with other state agencies when providing such support.

Section 7. Decommissioning Plan

- (1) A commercial solar or wind energy facility owner may not construct a commercial solar or wind energy facility or supporting facility unless the facility owner submits a decommissioning plan to a relevant county authority.
- (2) A decommissioning plan shall:
 (a) provide that a commercial solar or wind energy facility owner is responsible for, at the facility owner's expense, the decommissioning of the facility after the operational life of the commercial solar or wind energy facility
 - (b) state the conditions:

(i) that constitute the operational life of the commercial solar or wind energy facility; and

(ii) the conditions under which a facility owner is required to decommission the commercial solar or wind energy facility.; and

(iii) include a requirement to provide financial assurance in accordance with Section 11.

(c) State a decommissioning strategy that provides for the facility owner to either:

(i) restore the commercial solar or wind energy facility to operational life, including by repowering the energy facility's equipment; or

(ii) remove the commercial solar or wind energy facility and supporting facilities from participating or nonparticipating property and restore the property to a useful condition that is similar to the property's condition before construction of the commercial solar or wind energy facility.

(3) A decommissioning strategy to remove a commercial solar or wind energy facility and restore participating or nonparticipating property under Subsection 9(2)(c)(ii) shall require the facility owner to:

(a) remove above-surface components of the commercial solar or wind energy facility and any supporting facilities that have no ongoing operational purpose; and

(b) unless provided otherwise by the permitting county or under agreement with a participating or nonparticipating landowner, remove underground components of the commercial solar or wind energy facility and any supporting facilities that have no ongoing operational purpose to a depth of 3 feet below the surface; and

(c) if agreed to by the owner of participating or nonparticipating property in advance, restore buildings, roads, or any other facilities.

(4) (a) A commercial solar or wind energy facility owner may petition a permitting county to amend a decommissioning plan described in Subsection (1).

(b) A county shall permit a facility owner to amend a decommissioning plan if necessary to account for:

(i) advancements in available technology;

(ii) advancements in decommissioning, salvaging, or repowering processes or procedures; or

(iii) where otherwise in the best interest of the county and the facility owner.

Section 8. Financial Assurance.

- (1) A decommissioning plan for a commercial solar or wind energy facility described in Section X shall include a requirement for the commercial solar or wind energy facility owner to provide the county with evidence of financial assurance that secures the facility owner's obligation to remove the commercial solar or wind energy facility in accordance with the decommissioning plan.
- (2) A facility owner may provide the financial assurance described in Subsection (1) in the form of one or more of:
 - (a) a surety bond;
 - (b) a letter of credit;
 - (c) a self-guarantee;
 - (d) a parent guarantee;
 - (e) an escrow account; or
 - (f) any other form of financial assurance reasonably acceptable to the developer.
- (3) (a) The required amount of financial assurance described in Subsection (1) is the estimated cost of decommissioning the commercial solar or wind energy system, net of estimated salvage value and resale value.

(b) The evidence of financial assurance described in Subsection (1) shall include an estimate of the total cost of decommissioning the commercial solar or wind energy system, net of salvage value and resale value.

(c) A individual is qualified to conduct the estimate described in this Subsection (3) if the individual:

(i) is a registered professional engineer who is independent from the facility owner and the county; or

(ii) if agreed to by the facility owner and county, has other experience in the decommissioning commercial solar or wind energy systems of the type in question suitable to the facility owner and county.

(4) The facility owner shall post the financial assurance required under Subsection (1) in accordance with the following schedule:

(a) An initial posting on or before the day ten years after the commercial operation date of the commercial solar or wind energy system no greater than 25% of the entire decommissioning cost calculated under Subsection (3);

(b) Intermediary postings occurring no less frequently than one posting every five years after the date of the initial posting; and

(c) a final posting on or before the day twenty five years after the commercial operation date of the commercial solar or wind energy system, such that the total amount posted is equal to the entire decommissioning cost calculated under Subsection (3).

(5) The commercial solar or wind energy facility owner and county shall determine by agreement the amount of each posting described in Subsection (4)(a) and 4(b).

(6) In the event of a transfer of ownership of a commercial solar or wind energy facility, the transferor facility owner shall maintain the financial assurance required by this Section (11) until the transferee facility owner posts financial assurance that complies with this Section (11).

Section 9. Decommissioning Timing

- (1) A commercial solar or wind energy facility owner, to the extent practicable, and where required by this Section and the decommissioning plan described in Section 10, shall complete decommissioning no later than 12 months after the end of the operational life of the commercial solar or wind energy facility.
- (2) For the purposes of this section, unless otherwise defined in a lease agreement between a facility owner and a landowner, the operational life of a commercial solar or wind energy facility ends no later than the day following a period of 24 consecutive months during which the commercial solar or wind energy facility fails to generate or store electricity.

Section 10. Updating transmission planning

- Focus would be updating transmission planning at the PUC and working to ensure that the planning is focused on aligned with state policy goals
- Additional requirements for regional cooperation (including State Land Board)
- Require the PUC and CETA to consider multiple benefits when making decisions, including the economic, reliability, operational, public policy, environmental, and climate benefits that transmission projects pose. Also requires PUC and CETA to facilitate stronger interregional collaboration and consider the multiple benefits consistently across regions.
- Require the PUC to allow utilities to allocate the costs associated with non-wires solutions for the purposes of cost recovery through transmission rates.
- Requires the PUC to direct utilities to study deploying grid-enhancing technologies (GETs) to reduce costs.
- Require the PUC to direct utilities to engage in regional dialogues with county representatives, tribal leadership, and designated environmental justice representatives.
- Require the PUC to direct utilities to consult with Colorado Parks and Wildlife to identify measures to avoid, minimize, and mitigate impacts of new transmission development on wildlife resources.
- Require CDOT to designate energy infrastructure corridors in certain state-owned areas of highways as available for installing electric transmission lines. It would require CDOT to negotiate with a developer payment for the use of state land within an energy infrastructure corridor. Any projects within the designated corridors must comply with the state's energy facility siting approval process.
- 40-42-104(1)(m) should be modified *Identify* and establish corridors for the transmission of electricity within the state, subject to siting and land use approval by the local government with siting and land use authority pursuant to article 65.1 of title 24;
 - Once a designated corridor is identified by CETA, local authorities must review and approve designation within 45 days.

- For transmission corridors that impact more than one county, a joint session of all interested local government parties shall be convened.
- If a majority of local governments approve the siting of the corridor, CETA may exercise the power of eminent domain for acquiring any property or rights-of-way.

Applicability

[TK language] regarding where applicability in the bill does not apply to:

an application for siting approval or for a special use permit for a commercial wind energy facility or commercial solar energy facility if the application was submitted to a unit of local government before the effective date of this Section; or

a commercial wind energy facility or a commercial solar energy facility if the facility owner has submitted a wildlife impact mitigation agreement to the Colorado Parks and Wildlife before the effective date of this Section. **OPINION**

Driving the Solar Train Wisely

We can do a better job of managing the solar-land dilemma

BY ANNA CLARE MONLEZUN



A ccording to the United States Department of Energy's Solar Futures Study of 2021, by 2050 up to 10.3 million acres of land will be required for solar energy production if we are to meet established clean energy goals. Global reliance on fossil fuels will continue to diminish as solar energy production will become more efficient and less expensive, reports Ember's Global Electricity Review 2023.

The point is that the solar energy train has left the station and there is no turning back. While DOE has identified enough "marginal," "disturbed" or "contaminated" lands to fulfill our solar power needs, in reality we are seeing arable farmland and even pristine native rangelands being converted to solar stations by developers who are not thinking ecologically or holistically. This is going to continue to happen.

The question becomes, do we re-

main on the station's platform and lament solar energy's downsides and pitfalls while continuing our reliance on fossil fuels, or do we jump on, hang on to our hats, and ensure this train goes somewhere better?

In 2018, one of the country's most progressive communities in terms of "greenness," Boulder County, Colorado, conducted an internal assessment that concluded that even if all the rooftops in the county were covered in solar panels, they still wouldn't provide enough energy to fuel the county's electrical usage. There are additional discouraging obstacles to large-scale rooftop and parking lot installations that make this idea prohibitive.

So, where will all the land for solar energy expansion come from? The current industry standard is to site solar power plants on sun-abundant landscapes near hubs of electricity systems and users — urban and residential areas. Unfortunately, these are the same criteria for good agricultural land. Both of these provisions for society — energy and food — need photons and proximity to people.

Solar development is a tough pill to swallow if you value farmland, natural landscapes and open spaces. Solar energy stations are typically not pretty. In contrast, in oil and gas production, most of the land disturbance is belowground, hidden from view. Last summer I was driving around Utah with my family on a trek to the state's national parks, and we passed what felt like miles of solar panels on top of once-intact native rangeland; it brought tears streaming down my face.

As an ecologist and landowner, the sight of such grand disregard for nature is appalling. I realized in that moment that the solar industry needs us. It has a lot to learn from the knowledge and expertise of scientists, land stewards, agrarians, ranchers and natural resource managers.

I live on a 100 percent off-grid working ranch in the Rocky Mountains. My animals and family rely on solar and wind power to stay alive. We raise cattle, sheep, hogs and poultry under this system, and I can vouch for how good it feels to produce food this way. It's the cleanest of the clean. I also happen to be a rangeland ecosystem scientist whose off-ranch work involves elevating ranching and agriculture into the new regenerative paradigm.

One of my current research projects is a large, integrated study on agrivoltaics - the integration of agriculture and solar energy generation. Funded by DOE, our team of top-notch scientists, engineers and ranchers are tasked with keenly observing and measuring the ecological dynamics of agrivoltaic grazing systems, specifically the integration of sheep and cattle. We are studying the soil, plant, animal, energy and economic dynamics of a utility-scale solar site that is managed in an agrivoltaic partnership. Our objective is to discover a holistic solution that is good for the land, good for the animal, and good for society.

There is momentum in the scientific community to produce new knowledge regarding the social-ecological dynamics and outcomes of agrivoltaics, both from the crop and livestock production sides. After having conducted a comprehensive review of the literature over this past year, I can safely say that the evidence is mounting in favor of agrivoltaics as a viable solution to reducing (I didn't say eliminating) the tradeoffs in land use between agriculture and renewable energy.

For comparison, approximately 40 million acres of U.S. land is currently used for corn ethanol production — another form of "renewable energy." As a society, are we okay with this monocultural land use system but not with a quarter of this amount of land being used for solar energy production? Solar energy production can much more easily co-exist in a biodiverse symphony with polyculture vegetable farming, livestock and pollinator habitat than can monocultural row crops.

But for wise use of solar to be broadly adopted, we have to put in much more effort. The agriculture and solar energy sectors have to remove themselves from their silos and jump on this train together. We need diverse hearts and minds at the same table — engineers, ranchers, farmers, policymakers, community members, ecologists, agronomists and tech innovators. If we perpetuate the "us versus them" script, the real meaningful work will never get done.

What types of solutions do we need, then? Broadly speaking, they must be both sensical and ethical.

We have to move forward with good common sense, and when we can't trust some players to do so, we need regulatory buffers to protect our interests and the interests of nature and ecological processes. For example, landscapes of prime agricultural or ecological value should not even be considered for solar siting, in my opinion. There are plenty of marginal or fallowed lands, not in someone's "backyard," that would make more sense. And according to recent research, the presence of solar panels may even help retain soil moisture, reduce evapotranspiration and increase vegetative productivity, therefore contributing to the restoration of depleted and degraded lands. At the same time, we have to find ways to install and manage solar power plants without raising the cost of energy to the consumer.

We also have to think and act ethically. It goes back to the golden rule; we must keep excess pride and the greed of a booming solar industry in check. We can do this by keeping what is honest, just and moral at the forefront of the permitting conversation. For example, solar developers should be talking directly with farmers and ranchers and all their neighbors, listening to their concerns and questions, sharing anecdotes and collaborating on management plans. There needs to be advocacy and education on the part of the landowner so that risk and the chance of unintended consequences are reduced. Farmers and ranchers are not obligated to comply with a solar developers' first pitch. There are



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OPINION

experts out there to help negotiate contracts so that the landowner isn't left alone with the clean-up and land reclamation.

Speaking of clean-up - one of the biggest criticisms of the solar industry - innovators are taking incredible strides to launch recycling programs for retired panels and other materials. SolarCycle in Odessa, Texas, for example, claims 95 percent of panels - including glass, silicon, copper, aluminum and silver - can be returned to the supply chain. Recycling must be part of the solar developer's plan. They have a responsibility to protect soils, plants and animals, to close the loop on waste, and to manage solar sites as ecosystems, all while producing clean energy. Not an easy task, but there are good people out there doing monumental work under extreme pressure. Let's keep up the pressure. It is an effective catalyst.

The desire for a sustainable future is the common ground we can all value and stand upon. This is the origin story of both the solar industry and the regenerative agriculture movement. As long as we remember we are all just humans working toward the same goal in different ways, we can stop incriminating each other and see through the noise. There are groundbreaking models we can follow, such as the successful, mutually beneficial agrivoltaics partnership between Silicon Ranch (solar developer) and White Oak Pastures (regenerative ranch) in Bluffton, Georgia, and the pioneering creativity behind Jack's Community Solar Garden in Longmont, Colorado.

Regenerative farmers and ranchers must do their part to ensure the solar energy train is driven wisely. ACRES.

Anna Clare Monlezun is a Colorado rancher and is the CEO of Rangeland Living Laboratory (*rangelandlivinglaboratory.org*). She has a Ph.D. in ecosystem science and sustainability.



Colorado's Community Solar Gardens statute

2 messages

Durkay - CEO She Her, Jocelyn <jocelyn.durkay@state.co.us> To: sean.norris@mesacounty.us

Fri, Feb 23, 2024 at 4:48 PM

Cc: jasonandrhi@hotmail.com

Good afternoon Mr. Norris,

I spoke with Ms. Lawson regarding Mesa County's code and understanding Colorado's statutory language on Community Solar Gardens (CSGs). I cannot provide a legal interpretation of statute or on behalf of the Colorado Energy Office. However, I wanted to note that certain statutes may help answer questions you had around CSGs.

First, CSGs are defined under Colo. Rev. Stat. 40-2-127(2)(b)(I)(A)-(D) as follows.

"(A) "Community solar garden" means a solar electric generation facility with a nameplate rating within the range specified under subsection (2)(b)(I)(D) of this section that is located in or near a community served by a qualifying retail utility where the beneficial use of the electricity generated by the facility belongs to the subscribers to the community solar garden. There shall be at least ten subscribers. The owner of the community solar garden may be the qualifying retail utility or any other forprofit or nonprofit entity or organization, including a subscriber organization organized under this section, that contracts to sell the output from the community solar garden to the qualifying retail utility. A community solar garden shall be deemed to be "located on the site of customer facilities".

(B) A community solar garden shall constitute "retail distributed generation" within the meaning of section 40-2-124, as amended by House Bill 10-1001, enacted in 2010.

(C) Notwithstanding any provision of this section or section 40-2-124 to the contrary, a community solar garden constitutes retail distributed generation for purposes of a cooperative electric association's compliance with the applicable renewable energy standard under section 40-2-124.

(D) A community solar garden must have a nameplate rating of five megawatts or less; except that the commission may, in rules adopted pursuant to subsection (3)(b) of this section, approve the formation of a community solar garden with a nameplate rating of up to ten megawatts on or after July 1, 2023."

While subsection (A) directly contains a definition, subsection (B) notes that CSGs are defined as retail distributed generation and subsection (D) sets size limitations.

Second, under Colorado Rev. Stat. 40-2-124(1)(a)(VIII) retail distributed generation is defined as "Except as provided in subsection (1)(c)(II)(D) of this section with respect to cooperative electric associations, "retail distributed generation" means a renewable energy resource or renewable energy storage that is located on any property owned or leased by the customer within the service territory of the qualifying retail utility and is interconnected on the customer's side of the utility meter. In addition, retail distributed generation shall provide electric energy primarily to serve the customer's loads and shall be sized to supply no more than two hundred percent of the reasonably expected average annual total consumption of electricity at all properties owned or leased by the customer within the utility's service territory."

Please let me know if I can provide further assistance and thank you for reaching out to our office. Best regards, Jocelyn

Jocelyn Durkay Associate Director of Regulatory Policy



C 720.762.3437 1600 Broadway, Suite 1960, Denver, CO 80202 jocelyn.durkay@state.co.us | energyoffice.colorado.gov

Sean Norris <sean.norris@mesacounty.us> To: Greg Moberg <greg.moberg@mesacounty.us> Mon, Feb 26, 2024 at 9:02 AM

Should we consider adding these definitions, or is the reference to the statues sufficient?

Sean T. Norris

Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]

SECTION 6.01 | USE REGULATIONS

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Institutional & Civic (Section 12.04)															I													
																	А	А			А	А			С	А	С	
Parks and Open	Golf Course	А	А	А	А	А	А	А	А	А	А	А	А		А	А	А	А				С		А	А	С	С	
Space	Golf Driving Ranges	А	С	С	С	С	С	С	С	С	С	С	С			А	А	А	А	А	А	А		С	С	С	С	
Space Gol 12.04 E. Par All a Religious Institutions	Parks/Lakes/Reservoirs	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	
	All Other	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	С	А	С	
Religious Institutions <u>12.04 F.</u>	All	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	А	А	А	A	A	
Public Safety Facilities	Jails, Honor Camps, Reformatories, Rehabilitation Centers															С		С	С	С		С						
<u>12.04 G.</u>	Police Station & Sub- Station/Fire Station/Ambulance	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	А	А	A	A	
	Boarding School	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	А	А			А	А	А	А	А	С	С	
3Chools 12.04 H.	Elementary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А				А	А	А	А	А	А	С	
	Secondary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А			А	А	А	А	А	А	С	
	1	1	1	1		<u>U</u>	tiliti	es	(Se	ctio	on '	12.)	<u>()</u>	1	1	1	1	1	1	1	1	1	1		1	-	•	
	Utility Service Facilities (underground)	A	А	А	A	А	А	А	A	А	А	А	А	А	А	A	А	A	А	A	А	A	А	А	А	Α	Α	
Utility, Basic <u>12.04 I.</u>	Utility Treatment, Production or Service Facility	С																	С	С		С	С	С	С			
	Minor Basic Utilities	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	Α	Α	
	Basic Utilities	С	С	С	С	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	С	С	С	С	А	С	С	
	Transmission lines (above ground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	<u>6.02 F.</u>
Utility Corridors <u>12.04 J.</u>	Transmission lines (underground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	А	А	А	С	С	А	А	А	С	С	
	Minor Utility Facility	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	
	All Others	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	
	Community Solar Garden	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	<u>A</u>	A	A	A	A	A	A	A	<u>6.02</u>
	Private Energy System	<u>A</u>	A	<u>A</u>	▲	<u>A</u>	<u>A</u>	A	<u>A</u>	<u>A</u>	A	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	A	<u>A</u>	A	<u>A</u>	<u>A</u>	A	A	<u>A</u>	A	A	A	A	<u>6.02</u>
<u>Utility, Production</u>	Energy Generation/Production Facility	<u>c</u>															A	A	A	CA								<u>6.02</u>
	Agrivoltaics	<u>A</u>																										

SECTION 6.02 | USE SPECIFIC STANDARDS

CC. Utility, Production

1. Applicability

- a. The following standards shall apply to all new energy production facilities to regulate the development and surface impacts that these facilities may have on the public health, safety, and welfare for any of the following:
 - (1) Private energy facilities:
 - (2) Community solar garden as defined by CRS 40-2-127;

(3) Energy generation/production facility-; and

(3)(4) Agrivoltaics

- b. Any facility that exceeds the definition of a private energy facility or community solar garden shall be processed as an energy generation/production facility.
- 2. Submittal Requirements for Energy Generation/Production Facilities
 - a. Narrative

The applicant will provide a narrative describing the proposed facility including but not limited to; general description of the proposal, the height and location of equipment and ancillary structures, health and safety, decommissioning, traffic analysis, construction schedule, type and location of interconnection, rated capacity,

b. Site plan

The site plan map shall be provided in a legible format and shall include but not be limited to the location and arrangement of screening, fencing, existing and proposed structures, equipment, roadways and access points, wildlife corridors, floodplain, easements, existing utilities, and connection to the electrical grid.

- c. Setbacks
 - (1) One quarter (1/4) mile from a designated Scenic By-way.
 - (2) A minimum of one hundred fifty (150) feet from the nearest outside wall of residential occupied structure on adjacent properties.
- d. Fire Prevention and Safety Procedures
 - (1) The relevant Fire Protection District's adopted standards, based on current fire code, shall apply.
 - (2) A fire break or other facility perimeter design acceptable to the fire district shall be required to reduce or eliminate the interface risk from wildfire.
 - (3) If fenced, egress gates should be installed approximately every 300 feet along any perimeter fencing.
 - (4) A vegetation management plan shall describe the operator's methods to maintain vegetation inside the facility to address wildfire which may include treatment, mowing, agrivoltaics or other methods of fuel reduction.
- e. Visual Mitigation

Reasonable efforts to mitigate visual impacts of an energy generation/production facility will be detailed in the project narrative. Visual impact mitigation may include opaque fencing, screening, berming, use of existing or planted vegetation of landscaping either on-site, or off-site.

- (1) Solar System equipment shall be no higher than fifteen (15) feet at the solar panel mounting point. The height of the interconnection equipment may exceed 15 feet. Solar System Facilities within 50 feet of a property line of a residential zoned property should be designed with some form of visual mitigation, to include but not be limited to, opaque fencing, or landscaping.
- (2) Agrivoltaics are exempt from height restrictions.
- f. Wildlife, Wetlands, Riparian Areas and Stream Channel Measures
 - (1) The Operator shall address the recommendations of Colorado Parks & Wildlife (CPW) that address any site-specific site conditions. The Applicant shall avoid constructing in CPW-mapped High Priority Habitats (HPH) to the maximum extent possible.
 - (2) Operator shall inspect the interior of the facility at least once weekly, to potentially free any trapped animals.
 - (3) When fencing is necessary, the use of wildlife friendly fencing is encouraged.
- g. Decommissioning Plan

At the time of application, Operator shall include a decommissioning plan for the facility which will include detailed plans for management and removal of equipment, mounting systems, above and underground utilities, equipment and facilities as follows:

- (1) A cost estimate for the decommissioning of the facility and restoration of the site prepared by a Professional Engineer or contractor who has expertise in removal of such facilities.
- (1)(2) Within twelve (12) months of ceasing operations, the operator shall complete decommissioning of the facility which may include removal of all aboveground and belowground equipment and structures and removal of any access roads and fire breaks unless previous agreements have been made with the property owner.
- (2)(3) Any equipment that cannot be recycled shall be properly disposed in accordance with all State and Federal regulations.
- (3)(4) The site shall be revegetated in compliance with the property owner's specifications or to a minimum of 70% of predevelopment vegetative cover whichever is less.
- h. Securities
 - (1) Reclamation and Bonding

Prior to construction, the developer is required to submit an irrevocable standby letter of credit, bond, or alternative form of Security in an amount sufficient to fund the estimated decommissioning/reclamation costs with the County as beneficiary. Decommissioning/reclamation cost estimates, which shall be updated and delivered to the Planning and Development Director or designee every five (5) years from the establishment and submittal of the Security, shall include costs associated with the dismantlement, recycling, and safe disposal of facility components and site reclamation activities, and afford credit for "scrap value". The developer's irrevocable standby letter of credit, bond, or alternative form of Security shall be updated to match any changes in the cost estimates every five (5) years.

i. Utility Interconnection

The applicant shall provide available information or certification of intent to enter into an interconnection agreement with final details submitted prior to construction of the facility.

h.j._Insurance

The owner/operator shall provide proof of general liability insurance with commercially reasonable amounts of coverage for the permitted facility. Facility owners/operators shall
maintain such insurance in place through all times the facility is in operation.

3. Approval Criteria

In evaluating the proposal, the request shall consider conditions of approval and all applicable requirements of this LDC, including, but not limited to:

- a. The health, safety and welfare of the citizens of this jurisdiction will be protected and served;
- b. The facility will not unreasonably impact the physical, economic, or social environment, except as permitted in Chapter 6 Use Regulations as applicable.
- c. When an impact is expected to occur, reasonable modifications and programs and other reasonable mitigating actions will be implemented and maintained to minimize the degree of adversity of the impact;
- d. There exists a need, or a reasonably foreseeable need, for the facility as proposed.

SECTION 12.01 | GENERAL

Energy Generation/Production Facility. A facility designed to generate electricity by the conversion of natural resources such as light, natural gas<u>fossil fuels</u>, nuclear or water which is directly connected to the utility grid supplying <u>for profit</u> electricity serving a wide customer base without being connected to specific end-users.

Private Energy Facility. A residential or business-scale energy conversion facility designed to generate electricity by the conversion of natural resources such as light, natural gas, nuclear, biomass or water which produces electricity for on-site uses or to nearby off site facilities under the same ownership, for which the private facility is intended to provide electrical power and is a behind-the-meter installation.

Community Solar Garden: A solar power generating facility designed to produce electricity as defined in C.R.S 40-2-127. A community solar garden may include battery storage equipment as accessory equipment.

Agrivoltaics: Agrivoltaics, agrophotovoltaics, agrisolar, or dual-use solar is the simultaneous use of areas of land for both solar panels and agriculture. agricultural production, such as crop or livestock production or pollinator habitats, underneath or adjacent to solar panels.

Behind-the-meter: Means an energy resource that is interconnected on the property owner's side of the utility meter providing electric energy primarily to serve the property owner's loads-and shall be sized to supply no more than two hundred (200%) percent of the reasonably expected average annual total consumption of electricity at all properties owned or leased by the property owner.

Fire Protection District: A Fire Protection District within Mesa County is defined as one which has been recognized by resolution as per C.R.S 32-1-102 (2022) by the BoCC.

Residential Occupied Structure: See Building, Principle see also Dwelling Unit.

SECTION 12.04 | GENERAL

K. Utilities, Production

1. Characteristics

A facility designed and operated for the generation, and distribution of electricity which use fossil fuels, solar energy, hydroelectric energy, geothermal energy, nuclear, biomass energy or wind energy as a resource for the primary purpose of selling electricity generated to the electric power grid.

2. Accessory Uses

Accessory uses may include parking and control, monitoring, data or transmission or battery storage equipment and agrivoltaics.

- 3. Exceptions
 - a. Does not apply to on-site generation equipment when such use is an accessory use as described in Section 6.02 CC of this LCD.
 - b. Transmission lines, substations, and pipelines.
 - c. Utility production facilities with no occupied structures or full-time on-site employees are exempt from the requirements for potable water required in Section 8.09.

SECTION 6.01 | USE REGULATIONS

TABLE 6-1: USE TABLE																												
Principal Uses Allowed																												
Use Category (Section)	Specific Use Type	Rural		Urban Residential Nonresidential $Virban Residential Nonresidential Virban Residential V$									Gate Ove Dis	eway erlay trict	Site Specific Standards													
		AFT/AF35	RSFR	URR	RSFE	RSF-1	RSF-2	RSF-4	RMF-5	RMF-8	RMF-12	RMF-16	RMF-24	R-O	B-1	B-2	C-1	C-2	-	I-2	TIER #1	TIER #2	MU-OTC	MUR	MUC	Area A	Area B	
Institutional & Civic (<u>Section 12.04</u>)																												
	Cemetery	А								С	С	С					А	А			А	А			С	А	С	
Parks and Open	Golf Course	А	А	А	А	А	А	А	А	А	А	А	А		А	А	А	А				С		А	А	С	С	
Space	Golf Driving Ranges	А	С	С	С	С	С	С	С	С	С	С	С			А	А	А	А	А	А	А		С	С	С	С	
<u>12.04 E.</u>	Parks/Lakes/Reservoirs	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	
	All Other	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	С	А	С	
Religious Institutions <u>12.04 F.</u>	All	A	A	А	A	A	A	A	А	A	A	A	А	A	А	A	А	A	А	A	A	A	А	А	А	A	A	
Public Safety Facilities 12.04 G.	Jails, Honor Camps, Reformatories, Rehabilitation Centers															С		С	С	С		С						
	Police Station & Sub- Station/Fire Station/Ambulance	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	Α	A	А	А	A	
Schools <u>12.04 H.</u>	Boarding School	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	А	А			А	А	А	А	А	С	С	
	Elementary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А				А	А	А	А	А	Α	С	
	Secondary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А			А	А	А	А	А	Α	С	
Utilities (Section 12.04)																												
Utility, Basic <u>12.04 I.</u>	Utility Service Facilities (underground)	A	А	А	Α	А	А	А	Α	A	А	А	А	A	A	A	А	Α	А	Α	Α	A	Α	А	А	A	A	
	Utility Treatment, Production or Service Facility	С																	С	С		С	С	С	С			
	Minor Basic Utilities	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	Α	А	
	Basic Utilities	С	С	С	С	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	С	С	С	С	А	С	С	
Utility Corridors <u>12.04 J.</u>	Transmission lines (above ground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	<u>6.02 F.</u>
	Transmission lines (underground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	A	А	А	С	С	А	А	А	С	С	
	Minor Utility Facility	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	
	All Others	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	
<u>Utility, Production</u>	Community Solar Garden	A	A	A	A	A	A	A	A	A	A	<u>A</u>	A	<u>A</u>	A	A	A	A	A	<u>A</u>	A	A	A	A	<u>A</u>	A	Α	<u>6.02 CC.</u>
	Private Energy System	A	A	<u>A</u>	A	A	A	A	A	A	A	A	A	<u>A</u>	A	A	A	A	A	A	A	A	Δ	A	A	A	A	<u>6.02 CC.</u>
	Energy Generation/Production Facility	<u>c</u>															A	A	A	A								<u>6.02 CC.</u>
	Agrivoltaics	Α	1		1						1		1		1		1		1		1							

SECTION 6.02 | USE SPECIFIC STANDARDS

CC. Utility, Production

- 1. Applicability
 - a. The following standards shall apply to all new energy production facilities to regulate the development and surface impacts that these facilities may have on the public health, safety, and welfare for any of the following:
 - (1) Private energy facilities
 - (2) Community solar garden as defined by CRS 40-2-127
 - (3) Energy generation/production facility
 - (4) Agrivoltaics
- 2. Submittal Requirements for Energy Generation/Production Facilities
 - a. Narrative

The applicant will provide a narrative describing the proposed facility including but not limited to; general description of the proposal, the height and location of equipment and ancillary structures, health and safety, decommissioning, traffic analysis, construction schedule, type and location of interconnection, rated capacity,

b. Site plan

The site plan map shall be provided in a legible format and shall include but not be limited to the location and arrangement of screening, fencing, existing and proposed structures, equipment, roadways and access points, wildlife corridors, floodplain, easements, existing utilities, and connection to the electrical grid.

- c. Setbacks
 - (1) One quarter (1/4) mile from a designated Scenic By-way.
 - (2) A minimum of one hundred fifty (150) feet from the nearest outside wall of residential occupied structure on adjacent properties.
- d. Fire Prevention and Safety Procedures
 - (1) The relevant Fire Protection District's adopted standards, based on current fire code, shall apply.
 - (2) A fire break or other facility perimeter design acceptable to the fire district shall be required to reduce or eliminate the interface risk from wildfire.
 - (3) If fenced, egress gates should be installed approximately every 300 feet along any perimeter fencing.
 - (4) A vegetation management plan shall describe the operator's methods to maintain vegetation inside the facility to address wildfire which may include treatment, mowing, agrivoltaics or other methods of fuel reduction.
- e. Visual Mitigation

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with some form of visual mitigation, to include but not be limited to, opaque fencing, or landscaping.

- (2) Agrivoltaics are exempt from height restrictions.
- f. Wildlife, Wetlands, Riparian Areas and Stream Channel Measures
 - (1) The Operator shall address the recommendations of Colorado Parks & Wildlife (CPW) that address any site-specific site conditions. The Applicant shall avoid constructing in CPW-mapped High Priority Habitats (HPH) to the maximum extent possible.
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 - (3) When fencing is necessary, the use of wildlife friendly fencing is encouraged.
- g. Decommissioning Plan

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- (1) A cost estimate for the decommissioning of the facility and restoration of the site prepared by a Professional Engineer or contractor who has expertise in removal of such facilities.
- (2) Within twelve (12) months of ceasing operations, the operator shall complete decommissioning of the facility which may include removal of all aboveground and belowground equipment and structures and removal of any access roads and fire breaks unless previous agreements have been made with the property owner.
- (3) Any equipment that cannot be recycled shall be properly disposed in accordance with all State and Federal regulations.
- (4) The site shall be revegetated in compliance with the property owner's specifications or to a minimum of 70% of predevelopment vegetative cover whichever is less.
- h. Utility Interconnection

The applicant shall provide available information or certification of intent to enter into an interconnection agreement with final details submitted prior to construction of the facility.

i. Insurance

The owner/operator shall provide proof of general liability insurance with commercially reasonable amounts of coverage for the permitted facility. Facility owners/operators shall maintain such insurance in place through all times the facility is in operation.

3. Approval Criteria

In evaluating the proposal, the request shall consider conditions of approval and all applicable requirements of this LDC, including, but not limited to:

- a. The health, safety and welfare of the citizens of this jurisdiction will be protected and served;
- b. The facility will not unreasonably impact the physical, economic, or social environment, except as permitted in Chapter 6 Use Regulations as applicable.
- c. When an impact is expected to occur, reasonable modifications and programs and other reasonable mitigating actions will be implemented and maintained to minimize the degree of adversity of the impact;
- d. There exists a need, or a reasonably foreseeable need, for the facility as proposed.

SECTION 12.01 | GENERAL

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Private Energy Facility. A residential or business-scale energy conversion facility designed to generate electricity by the conversion of natural resources such as light, natural gas, nuclear, biomass or water which produces electricity for on-site uses or to nearby off-site facilities under the same ownership, for which the private facility is intended to provide electrical power and is a behind-the-meter installation.

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Agrivoltaics: Agrivoltaics, agrophotovoltaics, agrisolar, or dual-use solar is the simultaneous use of land for both solar panels and agriculture agricultural production, such as crop or livestock production or pollinator habitats, underneath or adjacent to solar panels.

Behind-the-meter: Means an energy resource that is interconnected on the property owner's side of the utility meter providing electric energy primarily to serve the property owner's loads.

Fire Protection District: A Fire Protection District within Mesa County is defined as one which has been recognized by resolution as per C.R.S 32-1-102 (2022) by the BoCC.

Residential Occupied Structure: See Building, Principle see also Dwelling Unit.

SECTION 12.04 | GENERAL

K. Utilities, Production

1. Characteristics

A facility designed and operated for the generation, and distribution of electricity which use fossil fuels, solar energy, hydroelectric energy, geothermal energy, nuclear, biomass energy or wind energy as a resource for the primary purpose of selling electricity generated to the electric power grid.

2. Accessory Uses

Accessory uses may include parking and control, monitoring, data or transmission or battery storage equipment and agrivoltaics.

- 3. Exceptions
 - a. Does not apply to on-site generation equipment when such use is an accessory use as described in Section 6.02 CC of this LCD.
 - b. Transmission lines, substations, and pipelines.
 - c. Utility production facilities with no occupied structures or full-time on-site employees are exempt from the requirements for potable water required in Section 8.09.



Re: Solar items due dates timeline

3 messages

Todd Hollenbeck <todd.hollenbeck@mesacounty.us> To: Bobbie Daniel

 Bobbie.daniel@mesacounty.us>

Cc: Janet Rowland </anet.rowland@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Greg Moberg </areg.moberg@mesacounty.us>, Sean Norris <Sean.norris@mesacounty.us>

I've included Sean in this thread as he may have access to the stakeholder emails list from yesterday's email.

On Mar 30, 2024, at 2:43 PM, Greg Moberg <greg.moberg@mesacounty.us> wrote:

Bobbie,

I'll see what we can do on Monday. I'm not sure how we store comments in MainStar. I don't think the comments are stored by sender, I think they are stored as just a comment.

Greg

On Sat, Mar 30, 2024, 2:19 PM Bobbie Daniel

bobbie.daniel@mesacounty.us> wrote:

Greg can I get just all the emails from the stakeholder's list that Sean emailed out yesterday. Just the email list. Thanks

On Mar 30, 2024, at 12:01 PM, Greg Moberg <greg.moberg@mesacounty.us> wrote:

Bobbie,

Attached is a copy of the Planning Commission binder that has all of the comments received prior to the Planning Commission meeting. On Monday, I will have Sean send you the comments we have received after the meeting.

03-21-24 MCPC Hearing Binder.pdf

Greg Moberg Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

On Fri, Mar 29, 2024 at 9:53 PM Bobbie Daniel <bobbie.daniel@mesacounty.us> wrote: Thanks, Greg Can you send me all the emails of all the stakeholders?

On Mar 29, 2024, at 6:57 PM, Greg Moberg <greg.moberg@mesacounty.us> wrote:

Bobbie,

The notice date for the April 23rd public hearing is April 5th. Here are the public hearing dates followed by the notice date:

Public Hearing Date	Notice Date
April 23rd	April 5th
May 28th	May 10th

Sat, Mar 30, 2024 at 3:55 PM

June 25th	June 7th
July 9th	June 21st

Even though the proposed language cannot be changed or modified once the notice has been sent, comments from the public can be submitted up to the day of the hearing. If comments are received before the day of the meeting, staff will email the comments to the Board for your review. If comments are submitted the day of the meeting, we will make copies and hand them out at the public hearing.

Once the public hearing is completed, the Board may consider the following actions:

- The Board could make a decision by approving or denying the proposed language; or
- The Board could ask for language to be changed or modified as a condition of approval; or
- The Board could table or continue the meeting and remand the proposal back to staff to rewrite the proposed amendment.

Please let me know if you have any other questions.

Greg Moberg

Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

On Fri, Mar 29, 2024 at 4:03 PM Bobbie Daniel bobbie.daniel@mesacounty.us wrote: So April 23rd would next public notice what day?

On Mar 29, 2024, at 3:44 PM, Greg Moberg <greg.moberg@mesacounty.us> wrote:

Bobbie,

Here are how the timelines would work:

Public Hearing - May 28th; Binder/Notice May 10th Public Hearing - June 25th; Binder/Notice June 7th Public Hearing - July 9th; Binder/Notice June 21st

Greg Moberg Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

On Fri, Mar 29, 2024 at 1:42 PM Bobbie Daniel

bobbie.daniel@mesacounty.us> wrote:

Greg,

Would you put together a timeline of "what is due when" items leading up to an April 23 Public Hearing date and a timeline leading up to an end of May date.

Please note the July deadline date as well.

Please give me a call with any questions or clarification needed on this request.

Sincerely,

Bobbie Daniel Mesa County Commissioner (970) 244-1604



Sean Norris <sean.norris@mesacounty.us>

To: Todd Hollenbeck <todd.hollenbeck@mesacounty.us>

Cc: Bobbie Daniel <bobbie.daniel@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>

Good afternoon.

All comments are stored in MaintStar my the senders last name, the date and the title of their email.

The following is the BCC list of the 40 + people who have submitted comments or attended a meeting.

Nicholas Aranda • naranda@jgmsinc.com Chris Weaver • s.chris.weaver@gmail.com sealings@acsol.net chasmop@bresnan.net sballerton@gmail.com TMACK McCloskey • thosmccloskey@gmail.com Charlee.brady@gmail.com Brent Goff • brent.goff@mesacounty.us Mary Elaine Johnson • elaine.johnson.craig@gmail.com plevon@aol.com Louis Villaire • Ivillaire@gmail.com Frank Nemanich • westiecolorado@bresnan.net Sharon Bouse-Ferry • kanga424@msn.com E Satie • evsatie@gmail.com Luke.rome@swca.com Greg Motz • greg@sun-king.com Cully and Krista • cullyandkrista@gmail.com Rondo Buecheler • rondoworld@gmail.com jdelany58@gmail.com scottb@gjcity.org Janet Rowland • Janet.rowland@mesacounty.us Bobbie Daniel • bobbie.daniel@mesacounty.us Cody Davis • cody.davis@mesacounty.us bcmurphy21@gmail.com chloerittenhouse@gmail.com Caspari,Horst • Horst.Caspari@colostate.edu Susan Hess • susan.bassoon.hess@gmail.com Tanva Travis • ttravis1405@gmail.com Greg Brophy • senatorbrophy@gmail.com Nina Hutchins • hutchinsninas@yahoo.com Jason and Rhiannon Lawson • jasonandrhi@hotmail.com ksundman@pivotenergy.net Mike Kruger • mkruger@cossa.co Jeremiah Garrick • jgarrick@cossa.co jfitzpatrick@pivotenergy.net Kathryn Bedell • kathy@roancreekranch.com Kim Kerk • kimk355@outlook.com Charlie Talbott • charlie@talbottfarms.com Ron Abeloe • ron@cwihomes.com KRAIG ANDREWS • andrews1201@msn.com Don Pettygrove • dgpengineeringllc@gmail.com Jim Pedersen • jim@timberlinebank.com Todd Hollenbeck • todd.hollenbeck@mesacounty.us

Have a nice evening

Sean T. Norris

Sat, Mar 30, 2024 at 3:59 PM

970-254-4183

[Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us>

Sat, Mar 30, 2024 at 4:07 PM

To: Todd Hollenbeck <todd.hollenbeck@mesacounty.us> Cc: Bobbie Daniel <bobbie.daniel@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>

As far as Commissioner access to the MaintStarfiles, I thought we had this fixed so that each of the Commissioners can access the MaintStar file and thus read the comments electronically. At this point there are several hundred pages and as I recall, Commissioner Daniel wanted electronic access rather than printed copies a few weeks ago. Janika Harris spent a great deal of time setting up access for each Commissioner and I thought she has sent everyone instructions. I will work with her on Monday to resolve this issue. If in the meantime, anyone wants me too go in and email all the comments to you, please let me know.

[Quoted text hidden] [Quoted text hidden]



Requirements for Photovoltaic Modules Tested under Fire Conditions According to IEC 61730-2

TÜV Rheinland Energie und Umwelt GmbH Business Field Regenerative Energies

February 2011



Requirements for photovoltaic modules tested under fire conditions according to IEC 61730-2

IEC 61730 describes both the requirements for materials and components, such as e.g. foils, frame materials, junction boxes, etc., and for complete PV modules.

The fire resistance requirements of IEC 61730-2 for PV modules are based on the American fire tests for roof coverings according to ANSI/UL 790. Furthermore additional country-specific requirements can result from the respective construction regulations.

The

- Spread of Flame Test and the
- Burning Brand Test

are to be performed for the fire resistance qualification of PV modules in the roof area. For this purpose both roof-integrated PV modules and also modules for roof parallel installation are subjected to flame treatment from the upper surface.

The PV modules are rated in Classes A, B or C, whereby Class C comprises the minimum requirements. The requirements of roof-integrated PV modules can go beyond these requirements and are orientated at the fire resistance requirements of the roof in which the PV modules are installed.

The fire resistance qualification of PV modules within the framework of the IEC-certification at TÜV Rheinland requires at least four PV modules of each class for testing. Depending on the fire behaviour and the dimensions of the PV modules this number may also be higher.

TÜV Rheinland Energie und Umwelt GmbH subcontract performance of the fire tests to their cooperation partner, the fire technology division of CURRENTA GmbH & Co. OHG in Leverkusen.



Spread of Flame Test

The aim of the *Spread of Flame Test* is to evaluate the flame spread on the upper surface and, as applicable, between the roof covering and the PV modules assembled on the roof. For this purpose a gas flame is directed over the surface of the PV elements and exposed to wind. Flame exposure period and burner rating are graduated according to the requirements:

- Class C Burner rating approx. 325 kW Flame exposure period 4 min
- Class A or B
 Burner rating ca. 378 kW
 Flame exposure period 10 min

A total of three modules are required for the *Spread of Flame* test. The modules are tested both individually and also parallel as pairs. In this way also a potential gap between two module or frame components and gaskets can be evaluated under fire test conditions. The test modules are mounted on the test rig in accordance to the installation manual of the manufacturer with the required mounting and attachment parts.



Picture 1: Spread of Flame Test



Burning Brand Test

The *Burning Brand Test* evaluates whether an external fire can cause the test specimen to also burn or to even burn through. For this purpose, depending on the class to be tested, wooden brands with a mass of 10 g to 2.000 g are deployed as the incendiary composition. These brands are inflamed and placed on a PV module assembled on the test rig where they are secured against slipping off. Testing is also performed under wind exposure.

The class rating in A, B und C is based on the different masses of the wooden brands and the number of individual tests.



Picture 2: Wooden brands according to UL 790, Class A, B, C

Requirements from IEC 61730-2 and ANSI/UL 1703:

All criteria for evaluation of the test results in accordance with IEC 61730-2 apply to both the *Spread of Flame Test* and to the *Burning Brand Test*.

The principal requirements in accordance with IEC 61730-2 are that:

- No glowing or burning part of the PV modules may fall from the test rig.
- The flame spread may not exceed the following:
 - Class A 1.82 m
 - Class B 2.40 m
 - Class C 3.90 m
- The lateral flame spread is limited.



In the North American standard ANSI/UL 1703 additional requirements for PV modules are imposed which are derived from UL 790, according to which the following are not permitted:

- that burn-through results with the formation of holes in the PV modules.
- that the PV modules also burn continuously during the Burning Brand Test.



Fwd: 4-2 meeting with commissioners

1 message

Greg Moberg <greg.moberg@mesacounty.us> To: Sean Norris <sean.norris@mesacounty.us>

FYI

Greg Moberg

Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

------ Forwarded message -------From: Bobbie Daniel <bobbie.daniel@mesacounty.us> Date: Fri, Mar 29, 2024 at 12:51 PM Subject: Re: 4-2 meeting with commissioners To: Janet Rowland <a hete: rowland@mesacounty.us> To: Janet Rowland <a hete: rowland@mesacounty.us> Co: Jason and Rhiannon Lawson <a hete: hete: hete: rowland@mesacounty.us>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us>, Greg Moberg <a hete: hete:

Thank you Rhiannon we appreciate this and will prepare. Looking forward to our conversation. Bobbie

On Mar 29, 2024, at 12:01 PM, Janet Rowland <janet.rowland@mesacounty.us> wrote:

Thank you, Rhiannon.

See you Tuesday!

Janet

From: Jason and Rhiannon Lawson <jasonandrhi@hotmail.com> Sent: Friday, March 29, 2024 11:53 AM To: Janet Rowland <janet.rowland@mesacounty.us>; cody.davis@mesacounty.us; bobbie.daniel@mesacounty.us Subject: Fw: 4-2 meeting with commissioners

Dear Commissioners,

I am forwarding this email to you as Ms. Frasier is out of the office until Monday and I want to be sure that you receive this summary agenda for our upcoming meeting 🙂

Fri, Mar 29, 2024 at 1:11 PM

From: Jason and Rhiannon Lawson <jasonandrhi@hotmail.com> Sent: Friday, March 29, 2024 11:50 AM To: linda.frasier@mesacounty.us <linda.frasier@mesacounty.us> Subject: 4-2 meeting with commissioners

Re: April 2, 2024 Meeting with Commissioners

Dear Ms. Frasier,

It was requested that I send an agenda of sorts re: the specifics I would like to discuss on Tuesday during my meeting with Commissioners Davis, Rowland and possibly Daniel. This is a brief bullet-point agenda of what I would like to discuss. Please pass on to the commissioners that I am very thankful for their being willing to meet with me in such a timely manner. It is very much appreciated and I am looking forward to understanding the decision-making process of our BoCC.

Sincerely,

Rhiannon Lawson

Recent changes made to Section 6.02 and 12.01 in the new Utility, Production code re: solar developments.

In particular:

- Fire protection and oversight for electric utility developments outside of an incorporated fire district (not addressed yet)
- Bond requirements (added and then removed)
- Large-scale electrical production facilities now "Use by Right" in C-1, C-2, I-1, I-2.
- Definition of Agrivoltaics changed to no longer mirror the Federal definition in S.1778: Agrivoltaics Research and Demonstration Act of 2023.
- The granting of "in front of the meter" for-profit electricity production as a "Use by Right" to any agricultural land, without requirement of continued agricultural production.



Fwd: 4-2 meeting with commissioners

1 message

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FYI

Greg Moberg

Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

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- The granting of "in front of the meter" for-profit electricity production as a "Use by Right" to any agricultural land, without requirement of continued agricultural production.

Fwd: Solar items due dates timeline

4 messages

Greg Moberg <greg.moberg@mesacounty.us> To: Collin Rode <collin.rode@mesacounty.us>, Sean Norris <sean.norris@mesacounty.us>

Could I get some assistance with these timeline questions?

Greg Moberg

Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

------ Forwarded message -------From: Bobbie Daniel <bobbie.daniel@mesacounty.us> Date: Fri, Mar 29, 2024 at 1:42 PM Subject: Solar items due dates timeline To: Greg Moberg <greg.moberg@mesacounty.us> To: Greg Moberg <greg.moberg@mesacounty.us> Cc: Janet Rowland <janet.rowland@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us>

Greg,

Would you put together a timeline of "what is due when" items leading up to an April 23 Public Hearing date and a timeline leading up to an end of May date.

Please note the July deadline date as well.

Please give me a call with any questions or clarification needed on this request.

Sincerely,

Bobbie Daniel Mesa County Commissioner (970) 244-1604





Sean Norris <sean.norris@mesacounty.us> To: Greg Moberg <greg.moberg@mesacounty.us> Cc: Collin Rode <collin.rode@mesacounty.us>

Greg

Fri, Mar 29, 2024 at 1:46 PM

Fri, Mar 29, 2024 at 3:04 PM

The timeline that we are working on is based on a schedule that Commissioner Rowland created for this code amendment. To get to the April 23rd BoCC hearing date, the LDC requires 15 days public notice of a land use hearing. In an effort to allow staff the required time to create the package for the required public notice, we have an inhouse policy that the binder be prepared and created 17 days in advance, which is 2 days longer than the required Public Notice period to the April 15 day period would require the notice to have gone out on April 7th. As the 7th is a Sunday, we need to create and publish this notice on the first work day ahead of that, which in this case is Friday April 5, 2024.



Sean Norris <sean.norris@mesacounty.us>

The following is the published timeline mandated by the BoCC for this process back in January.



Everything we have done for the last 3 months has been scheduled and conducted with the April 23rd date for a BoCC hearing in mind.

Is there something more we need to be looking at?

Sean T. Norris Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



[Quoted text hidden]

Greg Moberg <greg.moberg@mesacounty.us> To: Sean Norris <sean.norris@mesacounty.us> Cc: Collin Rode <collin.rode@mesacounty.us>

What she is asking for is a timeline for a meeting in May and June. Does this look right?

Public Hearing - May 21st; Binder May 3rd Public Hearing - June 18th; Binder May 31st

Greg Moberg Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

[Quoted text hidden]

To: Greg Moberg <greg.moberg@mesacounty.us> Cc: Collin Rode <collin.rode@mesacounty.us>

Yes. That is the same timing required and those dates look correct.

Sean T. Norris Manager Planning Department 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



Planning Department

[Quoted text hidden]



Utility, Production (solar) LDC Amendment schedule with respect to the Moratorium

8 messages

Sean Norris <sean.norris@mesacounty.us>

Thu, Jan 25, 2024 at 3:13 PM To: Bobbie Daniel <Bobbie_Daniel@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, Peter Baier cpeter.baier@mesacounty.us>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us>, David Schwenke <david.schwenke@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us> Cc: Rose Tafoya <rose.tafoya@mesacounty.us>, Collin Rode <collin.rode@mesacounty.us>

Commissioners,

In response to the Mesa County Resolution No. MCM 2024-3, imposing a temporary moratorium on accepting or processing applications for commercial solar farms, I have prepared the following timeline for milestones related to the development of LDC amendments. The process forward will involve our regular project processing of a code amendment through MaintStar, with the additional outreach opportunity of a public open house, a review by the Code Focus Group and a Planning Commission workshop and hearing followed by a BoCC hearing. At the conclusion of each of these milestones, you can expect a briefing of any information we have gained from the most recent events and how we intend to move forward from that point.

We will begin with the initiation of the code amendment project in MaintStar. That action should be completed by the end of day Friday the 26th.

We are scheduled for a public open house on Tuesday 1/30 from 1:00 p.m. to 7:00 p.m. in the Main conference room at MCCS, 200 S. Spruce.

I will convene the CFG on Wednesday 2/7 at 4:15 in the West conference room at MCCS.

The Planning Commission will have a workshop on 2/8 at 5:45. The location is in conflict with elections so we are working on that issue.

The Planning Commission Hearing for the Code amendment will be 3/21 at 6:00 p.m. in the 544 Hearing room.

The item will then come before the BoCC on 4/23. At that time, I anticipate that an item to rescind the Moratorium will appear on your agenda immediately following the adoption of the code amendment.

The Code amendment can and likely will be modified throughout the process as necessary up until and including the BoCC hearing on 4/23. I will send a draft of the current amendment to you as soon as I have it in MaintStar.

Short summary of the schedule is as follows:

MaintStar project filed 1/26 Open House 1/30 Code Focus Group 2/7 PC Workshop 2/8 Planning Commission 3/21 BoCC 4/23

Please feel free to reach out as we go through this with any questions.

Thank you.

Sean T. Norris

Manager Planning Department 970-254-4183

Planning Department (970) 244-1636 www.mesacounty.us/planning **CONFIDENTIALITY NOTICE**: The contents of this email message and any attachments are intended solely for the addressee(s) and may contain confidential and/or privileged information and may be legally protected from disclosure. If you are not the intended recipient of this message or their agent, or if this message has been addressed to you in error, please immediately alert the sender by reply email and then delete this message and any attachments. If you are not the intended recipient, you are hereby notified that any use, dissemination, copying, or storage of this message or its attachments is strictly prohibited.

Would you like to contact other Offices within Community Development?

Email mccomdev@mesacounty.us/services/community-development/. & www.mesacounty.us/services/community-development/. & www.mesacounty.us/

Bobbie Daniel <bobbie.daniel@mesacounty.us>

To: Sean Norris <sean.norris@mesacounty.us>

Cc: Cody Davis <cody.davis@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, Peter Baier <peter.baier@mesacounty.us>, Todd Hollenbeck@mesacounty.us>, David Schwenke <david.schwenke@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us>, Rose Tafoya <rose.tafoya@mesacounty.us>, Collin Rode <collin.rode@mesacounty.us>

Thank you, Sean. Appreciate everyone's hard work on this.

On Jan 25, 2024, at 3:14 PM, Sean Norris <sean.norris@mesacounty.us> wrote:

[Quoted text hidden]

Rose Tafoya <rose.tafoya@mesacounty.us>

To: Sean Norris <sean.norris@mesacounty.us> Cc: Bobbie Daniel <Bobbie.Daniel@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, Peter Baier <peter.baier@mesacounty.us>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us>, David Schwenke <david.schwenke@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us>, Collin Rode <collin.rode@mesacounty.us>

Hi all.

We have confirmation that Feb. 8th is scheduled in the Main Conference Room (formerly known as Room 40) at 200 S. Spruce St. (West Entrance). This is how it is noticed to the public.

Thank you, Rose Tafoya Mesa County Community Development P.O. Box 20,000-5022 Grand Junction, CO 81502 Phone: (970) 244-1761 Fax: 970-244-1769 rose.tafoya@mesacounty.us

[Quoted text hidden]

Janet Rowland <janet.rowland@mesacounty.us>

To: Rose Tafoya <rose.tafoya@mesacounty.us>, Sean Norris <sean.norris@mesacounty.us>

Cc: Bobbie Daniel <bobbie.daniel@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, Peter Baier <peter.baier@mesacounty.us>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us>, David Schwenke <david.schwenke@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us>, Collin Rode <collin.rode@mesacounty.us>

Thanks, Rose.

[Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us>

To: Janet Rowland <janet.rowland@mesacounty.us> Cc: Rose Tafoya <rose.tafoya@mesacounty.us>, Bobbie Daniel <bobbie.daniel@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, Peter Baier <peter.baier@mesacounty.us>, Todd Hollenbeck

<todd.hollenbeck@mesacounty.us>, David Schwenke <david.schwenke@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us>, Collin Rode <collin.rode@mesacounty.us>

Please find attached the red line draft of the Utility, Production LDC amendment. I have just initiated a project in MaintStar on this project.

This is all new code, so view it with respect to the sections that it applies to, and at this point, no other areas of the code outside these sections have been amended.

Thank you and have a nice weekend.

Fri, Jan 26, 2024 at 2:23 PM

Thu, Jan 25, 2024 at 3:21 PM nesacounty.us>, David

Fri, Jan 26, 2024 at 9:53 AM

Fri, Jan 26, 2024 at 2:31 PM

Manager Planning Department 970-254-4183



[Quoted text hidden]

Utility Production LDC Amendment.docx 53K

Cody Davis <cody.davis@mesacounty.us>

To: Sean Norris <sean.norris@mesacounty.us>

Mon, Jan 29, 2024 at 2:17 PM

Cc: Janet Rowland <janet.rowland@mesacounty.us>, Rose Tafoya <rose.tafoya@mesacounty.us>, Bobbie Daniel <bobbie daniel@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, Peter Baier <peter.baier@mesacounty.us>, Todd Hollenbeck

<todd.hollenbeck@mesacounty.us>, David Schwenke <david.schwenke@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us>, Collin Rode <collin.rode@mesacounty.us>

When defining characteristics Utilities, in Section 12.04-CC-4, should we include nuclear as an option? We list every other type of energy. Or maybe that's a conversation to have later? **Cody Davis** | **Mesa County Commissioner**



Office: 970-244-1605 Cell: 970-640-4330 Email: cody.davis@mesacounty.us 544 Rood Ave | Grand Junction | CO 81501

[Quoted text hidden]

Sean Norris <sean.norris@mesacounty.us>

To: Cody Davis <cody.davis@mesacounty.us>

Cc: Janet Rowland <janet.rowland@mesacounty.us>, Rose Tafoya <rose.tafoya@mesacounty.us>, Bobbie Daniel <bobbie daniel@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, Peter Baier <peter.baier@mesacounty.us>, Todd Hollenbeck

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I have no problem with that. [Quoted text hidden]

[Quoted text hidden]

Bobbie Daniel <bobbie.daniel@mesacounty.us>

To: Sean Norris <sean.norris@mesacounty.us>

Mon, Jan 29, 2024 at 2:35 PM

Mon, Jan 29, 2024 at 2:22 PM

Cc: Cody Davis <cody.davis@mesacounty.us>, Janet Rowland <janet.rowland@mesacounty.us>, Rose Tafoya <rose.tafoya@mesacounty.us>, Todd Starr <todd.starr@mesacounty.us>, Peter Baier <peter.baier@mesacounty.us>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us>, David Schwenke <david.schwenke@mesacounty.us>, Greg Moberg <greg.moberg@mesacounty.us>, MCAdmin <mcadmin@mesacounty.us>, Collin Rode <collin.rode@mesacounty.us>

I like that addition

On Jan 29, 2024, at 2:23 PM, Sean Norris <sean.norris@mesacounty.us> wrote:

[Quoted text hidden]



Energy Production Amendment

3 messages

Greg Moberg <greg.moberg@mesacounty.us> To: Sean Norris <sean.norris@mesacounty.us>

Sean,

Take a look.

Greg Moberg Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

Utility Production.docx 49K

Sean Norris <sean.norris@mesacounty.us> To: Greg Moberg <greg.moberg@mesacounty.us>

Greg,

Attached is the Utility Production Final Draft 3-26-2024 of the PRO2024-0022 TXT

Below, I am summarizing the recommendations from the MCPC on 3/21/2024, and the direction we received from the BoCC at a public briefing 3/25/2024, I have tracked the changes to develop a clear guide to the attached Final Draft which is expected to be presented to the BoCC for adoption in August.

Table 6-1

Corrected Label for Utilities (Section 12.04)

Removed C from Energy Production in I2 and Added "A" allowed by right to C1, C2, I1 and I2 zone districts.

Added Agrivoltaics to Utility Production as "A" allowed by right.

CC. Utility, Production

Added 1.a. (4) Agrivoltaics.

Removed 1.b. b. Any facility that exceeds the definition of a private energy facility or community solar garden shall be processed as an energy generation/production facility.

CC. 2.g.(1) Added

A cost estimate for the decommissioning of the facility and restoration of the site prepared by a Professional Engineer or contractor who has expertise in removal of such facilities.

CC. 2.h.(1) Removed

Securities

(1) Reclamation and Bonding

Mon, Mar 25, 2024 at 3:49 PM

Tue, Mar 26, 2024 at 11:02 AM

Prior to construction, the developer is required to submit an irrevocable standby letter of credit, bond, or alternative form of Security in an amount sufficient to fund the estimated decommissioning/reclamation costs with the County as beneficiary. Decommissioning/reclamation cost estimates, which shall be updated and delivered to the Planning and Development Director or designee every five (5) years from the establishment and submittal of the Security, shall include costs associated with the dismantlement, recycling, and safe disposal of facility components and site reclamation activities, and afford credit for "scrap value". The developer's irrevocable standby letter of credit, bond, or alternative form of Security shall be updated to match any changes in the cost estimates every five (5) years.

Section 12.01

Definition of Agrivoltaics remains basically unchanged.

Please circulate this to the BoCC and Leadership to see if there are any items we missed. I will need to prepare the Binder on Thursday of next week, April 4th, for the BoCC April 23rd hearing for publication and notice. Any comments will need to be back to me before then to make it into the Final version of the amendment.

Sean T. Norris Manager Planning Department

Planning Departmen 970-254-4183

If you have any questions or comments, please contact Sean Norris, Planning Manager, via email at sean.norris@mesacounty.us or by telephone at 970-254-4183



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Utility Production Final Draft 3-26-2024.docx

Greg Moberg <greg.moberg@mesacounty.us> To: Sean Norris <sean.norris@mesacounty.us>

Sean,

Attached is the 3/22/24 draft that we used for yesterday's meeting.

Greg Moberg Community Development Director



0: 970.244.1650 C: 970.318.8866 200 S. Spruce St, Grand Junction, CO 81501 greg.moberg@mesacounty.us

[Quoted text hidden]

Energy Production Amendments - Draft 3-22-24.docx 51K

Tue, Mar 26, 2024 at 11:50 AM



General email notification of the Utility Production Final Draft 3-26-2024

1 message

Sean Norris <sean.norris@mesacounty.us>

Fri, Mar 29, 2024 at 4:41 PM

To: Sean Norris <sean.norris@mesacounty.us>

Bcc: Nicholas Aranda <naranda@jgmsinc.com>, Chris Weaver <s.chris.weaver@gmail.com>, sealings@acsol.net, chasmop@bresnan.net, sballerton@gmail.com, TMACK McCloskey <thosmccloskey@gmail.com>, Charlee.brady@gmail.com>, Brent Goff <brent.goff@mesacounty.us>, Mary Elaine Johnson <elaine.johnson.craig@gmail.com>, plevon@aol.com, Louis Villaire <lvillaire@gmail.com>, Frank Nemanich <westiecolorado@bresnan.net>, Sharon Bouse-Ferry <kanga424@msn.com>, E Satie <evsatie@gmail.com>, Luke.rome@swca.com, Greg Motz <greg@sun-king.com>, Cully and Krista <cullyandkrista@gmail.com>, Rondo Buecheler <rondoworld@gmail.com>, jdelany58@gmail.com, scottb@gjcity.org, Janet Rowland <Janet.rowland@mesacounty.us>, Bobbie Daniel <bobbie.daniel@mesacounty.us>, Cody Davis <cody.davis@mesacounty.us>, bcmurphy21@gmail.com, chloerittenhouse@gmail.com, "Caspari,Horst" <Horst.Caspari@colostate.edu>, Susan Hess <susan.bassoon.hess@gmail.com>, Tanya Travis <ttravis1405@gmail.com>, Greg Brophy <senatorbrophy@gmail.com>, Nina Hutchins <hutchinsninas@yahoo.com>, Jason and Rhiannon Lawson <jasonandhi@hotmail.com>, ksundman@pivotenergy.net, Mike Kruger <mkruger@cossa.co>, Jeremiah Garrick <jgarrick@cossa.co>, jfitzpatrick@pivotenergy.net, Kathryn Bedell <kathy@roancreekranch.com>, Kim Kerk <kimk355@outlook.com>, Charlie Talbott <charlie@talbottfarms.com>, Ron Abeloe <ron@cwihomes.com>, KRAIG ANDREWS <andrews1201@msn.com>, Don Pettygrove <dgpengineeringllc@gmail.com>, Jim Pedersen <jim@timberlinebank.com>, Todd Hollenbeck <todd.hollenbeck@mesacounty.us>

All.

If you have not already accessed the Utility Production Final Draft 3-36-2024 on MaintStar, here is a copy for your information.

You may recall that in January, 2024, Mesa County posted a timeline for the adoption of a Land Development Code amendment on Utility Production (Solar) which was as follows.

SOLA	RTI	MELINE
JAN. 30, 2024 (Public Open House) 1 - 7 p.m. 👬 200 S. Spruce	Presentations 1:30, 3:30, 5:30 p.m. St., Main Conference Room
FEB. 7, 2024 Code Focus Group Rev	iew	
FEB. 8, 2024 Planning Commission Workshop	🕔 5:45 p.m.	200 S. Spruce St., Main Conference Room
MARCH 21, 2024 Planning Commission Hearing	🕓 6 p.m. 🏼	544 Rood Ave., Public Hearing Room
APRIL 23, 2024 County Commissioner Public Hearing	🕚 9 a.m. 🛛	544 Rood Ave., Public Hearing Room

In an effort to meet the schedule, we are preparing to create the Binder for the April 23, 2024 BoCC Land use Hearing, which requires Public Noticing of the hearing, 15 days prior to that hearing. As that date is on Sunday the 7th, we will be creating the BoCC Binder and publishing the Public Notice on Friday April 5th, 2024.

As with all Public Hearings, and Binders, public comments received before the creation of the Binder will be included in the Binder. Comments received after that publication date are still included in the public record, and are emailed to the BoCC for their review, as well as printed to be available at the public hearing. In fairness to the BoCC and to allow them time to consider all comments before the hearing, Mesa County would ask that all efforts be made to deliver those comments to Sean Norris at sean.norris@mesacounty.us, as many days before the hearing as possible, so that I can get them in front of the Commissioners for their review.

As always, Thank you for your interest and involvement in the development of this code amendment.

Sean T. Norris Manager Planning Department 970-254-4183

Planning Department (970) 244-1636 www.mesacounty.us/planning **CONFIDENTIALITY NOTICE**: The contents of this email message and any attachments are intended solely for the addressee(s) and may contain confidential and/or privileged information and may be legally protected from disclosure. If you are not the intended recipient of this message or their agent, or if this message has been addressed to you in error, please immediately alert the sender by reply email and then delete this message and any attachments. If you are not the intended recipient, you are hereby notified that any use, dissemination, copying, or storage of this message or its attachments is strictly prohibited.

Would you like to contact other Offices within Community Development?

Email mccomdev@mesacounty.us/services/community-development/. & www.mesacounty.us/services/community-development/. & www.mesacounty.us/

Utility Production Final Draft 3-26-2024.docx

USFWS Comments to Mesa County LDC Amendment, PRO2024-0022 February, 2024

The push for renewable energy development is stronger than ever. Within the United States, solar energy consumption has increased from 1,016 trillion BTU in 2019 to 1,519 trillion BTU in 2021 (a 49.51% increase) (USEIA 2022). Additionally, studies project solar to provide up to 40% of the nation's energy by 2035 (EERE 2022). The Great Plains states are likely to see the bulk of this growth (Shaffer, et al. 2022). Renewable energy helps reduce greenhouse gas emissions over coal or natural gas; however, placement of solar panels, especially at the utility-scale scope in formerly undeveloped land, can negatively impact species, their habitat, and ecosystems. This can result from habitat fragmentation and loss of functionality or destruction (Shaffer, et al. 2022).

The U.S. Fish and Wildlife Service (Service), Colorado Team appreciates the efforts to advance our state's renewable energy. Wildlife professionals and land use managers are asking developers of utility-scale solar projects to consider measures that ameliorate negative impacts on trust resources (CPW 2021). The siting of these large projects is multifaceted involving various processes before obtaining the required permits and construction initiation.

The Service of Western Colorado has many conservation considerations for photo voltaic (PV) utility and community-scale solar projects. Should the current LDC be amended to include utility, specifically solar, we ask that solar developers consider measures that ameliorate impacts on threatened and endangered species and their habitat.

This is not a complete list, and each project will be somewhat unique in scope. The Service hopes these considerations may assist with early planning for solar project siting decisions through the stages of development. Further, it may assist projects to move more quickly through the permitting process by avoiding Endangered Species Act-listed species and their habitats. The Service is always available to provide input early in project development and technical assistance at any point:

GENERAL LAND/BEST USE PRACTICES: PLANNING PHASE

Review Service Information for Planning and Consultation (<u>IPaC: Home (fws.gov)</u> site for federally listed threatened, endangered, and candidate species and critical habitats at the county and local level, coordinating with the Service local office. This would allow early planners to avoid Critical Habitat and streamline the permitting processes. Request the project proponent to arrange pre-application (Conditional Use Permit) meetings with wildlife managers to help with assessment for potential adverse effects (CPW 2021). Including key referral wildlife agencies like the Service and Colorado Parks and Wildlife (CPW) during the planning phase could allow for agency accelerated reviews at the permitting stage due to familiarity (COSSA 2022). Proposed siting locations could also be included in this meeting.

- Encourage or require the maintenance of vegetated buffers between projects and streams or wetlands;
 - Consider Low-Impact Development on wildlife habitat (SAS 2021):
 - Consider siting new solar fields on contaminated lands, brownfields, and previously tilled agricultural lands used in the past (been mowed/leveled), which generally lack high-quality wildlife habitat.
 - Avoid Environmentally sensitive areas (wetlands, Federal Endangered Species or State Species of Concern habitat)
- Examine possible mitigation of acquiring land to offset project impacts and contribute to its perpetual conservation and management. If this is considered, it should be at this phase of the project plan and considered reclaimed lands in the Decommissioning Phase.

SITE EVALUATION PHASE

- As stated earlier, siting has more to do with project success or failure than any other factor (COSSA 2022).
- Also stated earlier, wildlife managers could provide input at this phase to avoid unanticipated issues at the permitting stage. Avoiding Critical Habitats will support the conservation of atrisk species and reduce Service involvement in permitting processes see <u>USFWS Critical</u> <u>Habitat Map</u>. The Service is willing to work with County Planners to incorporate these habitats into their Master planning and development documents for reference.
- Development of larger facility (USSE) projects occur on private lands. This can result in fragmented landscapes for wildlife movement, which varies from site to site. The Nature Conservancy has a <u>Resilient and Connected Network (RCN)</u> mapping tool that can assist in siting locations *outside* areas that are designed to sustain biodiversity and ecological function into the future (TNC 2023). Please note, the RCN does NOT take into consideration USFWS Critical Habitat.
- Further Considerations:
 - Discourage or prohibit projects on sites with high levels of biodiversity, ecological connectivity, or endangered species. This is the single most important way to minimize and avoid impacts on sensitive fish, wildlife, and plants.
 - Check the accuracy of information by doing site visits, and including relevant external stakeholders.
 - Avoid siting criteria that fragment land uses especially existing or potential wildlife habitat. Consideration of the surrounding habitats and landscape context is important as well (BLM 2013).
- Good siting locations for consideration include previously disturbed lands such as sites that do not require extensive grading or vegetation removal (especially large trees). Pile driving through existing vegetation avoids a host of downstream impacts on soils, water quality, weeds, and visual appearance (COSSA 2022).

DESIGN PHASE

Co-Use Options:

- Agriculture-Pollinator inclusion: if 10-15% of facilities include co-use with pollinator habitat, they would produce \$1.9-\$5.7 billion in pollination benefits annually (COSSA 2022).
- Use locally sourced, native seeds in seed mixes to allow vegetation to grow beneath solar panels creating new habitats and food sources for various wildlife species and/or pollinators and helping with dust control. (Sinha, et al. 2018).
 - Agrivoltaic and or pollinator habitat inclusion can help with carbon sequestration and reduce fertilizer, herbicide, and pesticide applications to better soil and water health.
- Use low height native grasses and/or pollinator ground cover so as not to interfere with panels (USFWS 2022) (Seed a Legacy <u>info@beeandbutteflyfund.org</u>).
 - Co-use with certain irrigated crops and/or rotational grazing with sheep (sheep do not introduce or enhance invasive species and can reduce the need for herbicides) (DOE website 2022).
- Avoid unnecessary lighting that may attract migratory birds or other species and cause light pollution (BLM 2013). Low lighting and downward pointing lighting can also benefit Dark Sky counties.
- Use Conservation Corridors that enable certain species' free pass between various project blocks (array fields).
- Pre-development surveys for impacts on wildlife and their habitats (CFR 3668) (CPW 2021).
- Wildlife-friendly fencing allows some species protection from primary/top predators and enables challenged species to thrive. Also using fence reflectors and other devices to mitigate adverse avian contact and collision (CPW 2021). There are different types of options depending on the site. Most recent information on successful wildlife-friendly fencing includes (TNCNC 2023)(FPL 2024):
 - Using wood posts allowing certain species to climb for entrance, exit
 - Perimeter fencing that allows small to medium animals (turtles, raccoons, foxes, some ground foraging birds) to pass through (e.g. 4' to 6' tall; 12.5 gauge Fixed Knot Deer Busters; 17/75/6 deer mesh galvanized fence with three strands of 12.5 gauge 4 point barbed wire, Fortress Fencing), turned upside down such that bottom section of fence has a vertical wire space at least 7" apart. Another idea is to provide wildlife passage pipes (8" diameter HDPE) roughly 500' apart around the site, OR raise the fence 6".
 - This type of fencing is compatible with much of rural landscapes.
 - Adding fence and interim cameras along with trans-line cameras can be used for monitoring the site.



Photo credits: left FPL (2024); right TNC (2023)

CONSTRUCTION/DEVELOPMENT PHASE

- No gravel (if used, it requires herbicide use the life of the Solar farm).
- Bare soil under panels keeps the ground hot and makes panels less efficient. Native, non-invasive vegetation is recommended.
- Have a construction staging area to avoid excess traffic and associated dust (BLM 2013); Consolidate the road facilities to the extent possible to minimize the amount of land disturbance and habitat fragmentation.
- Dust Suppression for certain plants, weed management, surveys before work, use of strategic construction timing windows, and work area/staging considerations.

Transmission Line Development

• The Service recommends utilizing existing transmission lines or infrastructure corridors whenever possible to minimize additional impacts on wildlife, critical habitat, and habitat fragmentation; of high concern regarding electrical transmission lines is the potential for collisions and raptor electrocution (aplic.org) from lines. Proximity to rivers, reservoirs, and migratory stop-over habitats for bald eagle wintering roosts is also a factor in overall risk to birds (CPW). Finally, lines and some infrastructure can provide perching for certain omnivorous species that could increase ground-dwelling species mortality rates; recommend the use of collision and perching avoidance features, fence reflectors, and other devices to mitigate adverse avian contact and collision.

OPERATIONS PHASE

Co-Use Options:

- On-site vegetation maintenance by periodic pulse/rotational grazing by sheep. This applied with periodic herbicide application provides ongoing invasive weed control.
- Regular monitoring of fence integrity and any unexpected animal intrusions from unplanned openings;

DECOMMISSIONING PHASE

- Require decommissioning bond to account for reclamation cost near the project's end of life rather than at the beginning (COSSA 2022).
- Recommend reclamation of the site to the condition before the project, or plan possible incorporation of the site as an "open space" with newly created habitat (pollinators, ecosystems, etc.) upon panel and infrastructure removal and disposal.
Resources:

Avian Power Line Interaction Committee (APLIC) website: <u>https://www.aplic.org</u> (2022)

Bureau of Land Management (BLM) Best Management Practices for Reducing Visual Impacts of Renewable Energy Facilities on BLM Administered Lands, first ed. (2013)

Colorado Park and Wildlife (CPW) Best Management Practices for Solar Energy Development (May 27, 2021)

Colorado Solar and Storage Association (COSSA) Becoming Utility-Scale Solar Ready, Principles and Best Practices for Colorado's Local Governments (January 2022)

Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (OEERE), Solar and Agricultural co-location, website: <u>Solar and Agriculture Co-Location | Department of</u> <u>Energy</u> accessed 11/2/2022

Florida Power and Lighting (FPL) Solar Stewardship fact sheet. Available online: <u>FPL | Energy</u> <u>My Way | Solar</u>, accessed 2024, January 23

Shaffer, J.A., Loesch, C.R., Buhl, D.A. (2022) Understanding the Avian-Impact Offset Method-A Tutorial: U.S. Geological Survey Open-File Report

Sinha, P., B. Hoffman, J. Sakers, L. Althouse. (2018). Best Practices in Responsible Land Use for Improving Biodiversity at a Utility-Scale Solar Facility. Case Studies in the Environment State of Colorado Code of Regulations Section 723-3-3668-Section 4 Environmental Impacts (May 15, 2016)

Solar@Scale (SAS) A Local Government Guidebook for Improving Large-Scale Solar Development Outcomes (September 2021)

The Nature Conservancy (TNC) Principles of Low-Impact Solar Siting and Design – North Carolina (2023)

United States Office of Energy Efficiency and Renewable Energy, a Department of the U.S. Office of Energy (2022). Retrieved from website: <u>Solar Futures Study | Department of Energy</u>United States Energy Information Administration, Independent Statistics and Analysis (2022) Retrieved from website: <u>Homepage - U.S. Energy Information Administration (EIA)</u> United States Fish and Wildlife Service (USFWS) and Solar Pollinator Co-Use Fact Sheet (January 2022) *IMPORTANT LINKS*

Agrisolar Clearinghouse. A nationwide hub connecting business, landowners, and researchers with trusted resources to support the growth of co-located solar and sustainable agriculture <u>AgriSolar Clearinghouse</u>

Clean Energy Economy for the Region. Non-profit that brings together local government leaders and institution and help them with the steps necessary to achieve results <u>https://cleanenergyeconomy.net</u>

Colorado Brightfields. Free and publicly available mapping application that provides access to information about thousands of marginalized sites suitable for solar energy and wind power. https://coloradolab.org/wp-content/uploads/2021/05/Colorado-Brightfields-Report_Final.pdf

Colorado's GHG/pollution Reduction Road Map (goal 2030) https://energyoffice.colorado.gov/climate-energy/ghg-pollution-reduction-roadmap

Colorado Solar and Storage Association (COSSA) Guide for local governments to become large/utility-scale solar ready <u>https://cossa.co/wp-content/uploads/2022/03/Utility-Scale-Best-Practices-for-Colorado-Govts-220301.pdf</u>

Department of Energy, Office of Energy Efficiency and Renewable Energy (OEERE), Solar and Agricultural co-location:

Solar and Agriculture Co-Location | Department of Energy

Low Impact solar development, including agriculture, weed control, noise, and dust, continues to advance and is updated regularly.

https://www.energy.gov/eere/solar/articles/new-reports-highlight-AND best-practices-combining-solar-energy-and-agriculture AND https://openei.org/wiki/InSPIRE (Agrisolar)

National Renewable Energy Laboratories (NREL) 7 steps to successful large-scale solar development

https://www.nrel.gov/state-local-tribal/blog/posts/nrels-seven-steps-to-successful-large-scale-solar-development.html

Nature Conservancy Resilient and Connected Network Resilient Land Mapping Tool. A proposed conservation network of representative climate-resilient sites designed to sustain biodiversity and ecological functions into the future under a changing climate. The network was identified and mapped over a 10-year period by Nature Conservancy scientists using public data available at the state and national scale, and an inclusive process that involved 289 scientists from agencies, academia, and NGOs across the US: Resilient Land Mapping Tool (tnc.org)

NREL's State and Local planning for Energy (SLOPE) maps and datasets. (web-map platform that helps jurisdictions explore energy data potential and projections to better understand opportunities and options in energy planning. SLOPE incorporates population and building area data)

https://maps.nrel.gov/slope

Solar@scale (SAS), A Local Government Guidebook for Improving Large-Scale Solar Development Outcomes. A must-read for any local government looking to maximize a project's benefits in 8 modules.

https://planning-org-uploaded-media.s3.amazonaws.com/publication/download_pdf/Solar-at-Scale-Guidebook.pdf

Sustainable SITES – a sustainability-focused framework that guides permitting, engineering, construction, and operations teams toward practices that enhance the mosaic of benefits that solar continuously provide our communities and ecosystems https://sustainablesites.org

Western Colorado Clean Energy Network. a collaboration of regional partners working together to accelerate progress toward these goals in ways that maximize community resilience, economic development, and environmental benefits. https://wccleanenergy.org

United States Fish and Wildlife Service (USFWS), Critical Habitat Map: <u>Critical Habitat for Threatened & Endangered Species [USFWS] (arcgis.com)</u>

SECTION 6.01 | USE REGULATIONS

						T/	٩BL	E 6	-1:	US	5E 1	AB	BLE															
						Pr	inc	ipa	l Us	es	All	ow	ed															
Use Category (Section)	Specific Use Type	Rural			ι	lrbo	an I	les	ide	ntic	al				No	onre	esid	len	tial		Mack Overlay	Districts	Mix Di	ed stric	Use cts	Gate Ove Dis	eway erlay trict	Site Specific Standards
		AFT/AF35	RSFR	URR	RSFE	RSF-1	RSF-2	RSF-4	RMF-5	RMF-8	RMF-12	RMF-16	RMF-24	R-O	B-1	B-2	C-1	C-2		I-2	TIER #1	TIER #2	MU-OTC	MUR	MUC	Area A	Area B	
	•			In	stit	utic	ona	&	Civ	ic ((<u>Se</u>	ctic	on 1	2.0) <u>4</u>)												<u>.</u>	
	Cemetery	А								С	С	С					А	А			А	А			С	А	С	
Parks and Open	Golf Course	А	А	А	А	А	А	А	А	А	А	А	А		А	А	А	А				С		А	А	С	С	
Space	Golf Driving Ranges	А	С	С	С	С	С	С	С	С	С	С	С			А	А	А	А	А	А	А		С	С	С	С	
<u>12.04 E.</u>	Parks/Lakes/Reservoirs	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	
	All Other	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	С	А	С	
Religious Institutions 12.04 F.	All	A	А	A	A	A	А	A	A	A	A	A	A	A	A	A	A	A	А	A	А	A	А	А	А	A	Α	
Public Safety Facilities	Jails, Honor Camps, Reformatories, Rehabilitation Centers															С		С	С	С		С						
<u>12.04 G.</u>	Police Station & Sub- Station/Fire Station/Ambulance	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	А	A	A	A	А	А	А	A	А	
Sahaala	Boarding School	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	А	А			А	А	А	А	А	С	С	
12.04 H.	Elementary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А				А	А	А	А	А	А	С	
	Secondary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А			А	А	А	А	А	А	С	
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	Utility Service Facilities (underground)	А	А	Α	А	А	А	А	А	А	А	А	А	А	А	A	А	А	А	Α	А	А	А	А	А	А	A	
Utility, Basic <u>12.04 I.</u>	Utility Treatment, Production or Service Facility	С																	С	С		С	С	С	С			
	Minor Basic Utilities	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	
	Basic Utilities	С	С	С	С	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	С	С	С	С	А	С	С	
	Transmission lines (above ground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	<u>6.02 F.</u>
Utility Corridors <u>12.04 J.</u>	Transmission lines (underground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	А	А	А	С	С	А	А	А	С	С	
	Minor Utility Facility	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	
	All Others	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	
	Community Solar Garden	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	A	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	Α	Α	Δ	A	A	<u>6.02 CC.</u>						
	Private Energy System	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	Δ	A	A	<u>6.02 CC.</u>
<u>Utility, Production</u>	Energy Generation/Production Facility	<u>c</u>															A	A	A	A								<u>6.02 CC.</u>
	Aarivoltaics	Α			1				1				1		1		1											

SECTION 6.02 | USE SPECIFIC STANDARDS

CC. Utility, Production

- 1. Applicability
 - a. The following standards shall apply to all new energy production facilities to regulate the development and surface impacts that these facilities may have on the public health, safety, and welfare for any of the following:
 - (1) Private energy facilities
 - (2) Community solar garden as defined by CRS 40-2-127
 - (3) Energy generation/production facility
 - (4) Agrivoltaics
- 2. Submittal Requirements for Energy Generation/Production Facilities
 - a. Narrative

The applicant will provide a narrative describing the proposed facility including but not limited to; general description of the proposal, the height and location of equipment and ancillary structures, health and safety, decommissioning, traffic analysis, construction schedule, type and location of interconnection, rated capacity,

b. Site plan

The site plan map shall be provided in a legible format and shall include but not be limited to the location and arrangement of screening, fencing, existing and proposed structures, equipment, roadways and access points, wildlife corridors, floodplain, easements, existing utilities, and connection to the electrical grid.

- c. Setbacks
 - (1) One quarter (1/4) mile from a designated Scenic By-way.
 - (2) A minimum of one hundred fifty (150) feet from the nearest outside wall of residential occupied structure on adjacent properties.
- d. Fire Prevention and Safety Procedures
 - (1) The relevant Fire Protection District's adopted standards, based on current fire code, shall apply.
 - (2) A fire break or other facility perimeter design acceptable to the fire district shall be required to reduce or eliminate the interface risk from wildfire.
 - (3) If fenced, egress gates should be installed approximately every 300 feet along any perimeter fencing.
 - (4) A vegetation management plan shall describe the operator's methods to maintain vegetation inside the facility to address wildfire which may include treatment, mowing, agrivoltaics or other methods of fuel reduction.
- e. Visual Mitigation

Reasonable efforts to mitigate visual impacts of an energy generation/production facility will be detailed in the project narrative. Visual impact mitigation may include opaque fencing, screening, berming, use of existing or planted vegetation of landscaping either on-site, or off-site.

(1) Solar System equipment shall be no higher than fifteen (15) feet at the solar panel mounting point. The height of the interconnection equipment may exceed 15 feet. Solar System Facilities within 50 feet of a property line of a residential zoned property should be designed

with some form of visual mitigation, to include but not be limited to, opaque fencing, or landscaping.

- (2) Agrivoltaics are exempt from height restrictions.
- f. Wildlife, Wetlands, Riparian Areas and Stream Channel Measures
 - (1) The Operator shall address the recommendations of Colorado Parks & Wildlife (CPW) that address any site-specific site conditions. The Applicant shall avoid constructing in CPW-mapped High Priority Habitats (HPH) to the maximum extent possible.
 - (2) Operator shall inspect the interior of the facility at least once weekly, to potentially free any trapped animals.
 - (3) When fencing is necessary, the use of wildlife friendly fencing is encouraged.
- g. Decommissioning Plan

At the time of application, Operator shall include a decommissioning plan for the facility which will include detailed plans for management and removal of equipment, mounting systems, above and underground utilities, equipment and facilities as follows:

- (1) A cost estimate for the decommissioning of the facility and restoration of the site prepared by a Professional Engineer or contractor who has expertise in removal of such facilities.
- (2) Within twelve (12) months of ceasing operations, the operator shall complete decommissioning of the facility which may include removal of all aboveground and belowground equipment and structures and removal of any access roads and fire breaks unless previous agreements have been made with the property owner.
- (3) Any equipment that cannot be recycled shall be properly disposed in accordance with all State and Federal regulations.
- (4) The site shall be revegetated in compliance with the property owner's specifications or to a minimum of 70% of predevelopment vegetative cover whichever is less.
- h. Utility Interconnection

The applicant shall provide available information or certification of intent to enter into an interconnection agreement with final details submitted prior to construction of the facility.

i. Insurance

The owner/operator shall provide proof of general liability insurance with commercially reasonable amounts of coverage for the permitted facility. Facility owners/operators shall maintain such insurance in place through all times the facility is in operation.

3. Approval Criteria

In evaluating the proposal, the request shall consider conditions of approval and all applicable requirements of this LDC, including, but not limited to:

- a. The health, safety and welfare of the citizens of this jurisdiction will be protected and served;
- b. The facility will not unreasonably impact the physical, economic, or social environment, except as permitted in Chapter 6 Use Regulations as applicable.
- c. When an impact is expected to occur, reasonable modifications and programs and other reasonable mitigating actions will be implemented and maintained to minimize the degree of adversity of the impact;
- d. There exists a need, or a reasonably foreseeable need, for the facility as proposed.

SECTION 12.01 | GENERAL

Energy Generation/Production Facility. A facility designed to generate electricity by the conversion of natural resources such as light, fossil fuels, nuclear or water which is directly connected to the utility grid supplying electricity serving a wide customer base without being connected to specific end-users.

Private Energy Facility. A residential or business-scale energy conversion facility designed to generate electricity by the conversion of natural resources such as light, natural gas, nuclear, biomass or water which produces electricity for on-site uses or to nearby off site facilities under the same ownership, for which the private facility is intended to provide electrical power and is a behind-the-meter installation.

Community Solar Garden: A solar power generating facility designed to produce electricity as defined in C.R.S 40-2-127. A community solar garden may include battery storage equipment as accessory equipment.

Agrivoltaics: Agrivoltaics, agrophotovoltaics, agrisolar, or dual-use solar is the simultaneous use of areas of land for both solar panels and agriculture.

Behind-the-meter: Means an energy resource that is interconnected on the property owner's side of the utility meter providing electric energy primarily to serve the property owner's loads.

Fire Protection District: A Fire Protection District within Mesa County is defined as one which has been recognized by resolution as per C.R.S 32-1-102 (2022) by the BoCC.

Residential Occupied Structure: See Building, Principle see also Dwelling Unit.

SECTION 12.04 | GENERAL

K. Utilities, Production

1. Characteristics

A facility designed and operated for the generation, and distribution of electricity which use fossil fuels, solar energy, hydroelectric energy, geothermal energy, nuclear, biomass energy or wind energy as a resource for the primary purpose of selling electricity generated to the electric power grid.

2. Accessory Uses

Accessory uses may include parking and control, monitoring, data or transmission or battery storage equipment and agrivoltaics.

- 3. Exceptions
 - a. Does not apply to on-site generation equipment when such use is an accessory use as described in Section 6.02 CC of this LCD.
 - b. Transmission lines, substations, and pipelines.
 - c. Utility production facilities with no occupied structures or full-time on-site employees are exempt from the requirements for potable water required in Section 8.09.



200 S. Spruce Street • PO Box 20,000-5022 • Grand Junction, Colorado • 81502 Telephone: 970.244.1636 • www.mesacounty.us/planning

PROJECT REVIEW

March 5, 2024

2024-0022 TXT LAND DEVELOPMENT CODE AMENDMENT

Representative: Mesa County Community Development Department

Planner: Sean Norris, 970-254-4183, sean.norris@mesacounty.us

Request: The Mesa County Planning Division is proposing amendments to the following Sections and Tables of the Mesa County 2020 Land Development Code (as amended): Section 6.01 Use Table, 6.02 Use Specific Standards Section 12.01 General and Section 12.04 Institutional and Civic Use Categories

Proposed amendments to the Land Development Code (LDC): LDC amendments to create a new category for Utility Production and establish specific use requirements and definitions to manage electrical energy production within the Mesa County for utility scale, private scale and community solar garden energy production facilities.

I. PROJECT DESCRIPTION:

Amendments to the Mesa County Land Development Code to codify specific use requirements for Utility Generation/Production Facilities, Private Energy Facilities, and Community Solar Gardens. Prior to the creation of this new text, Utility Production was not well defined within the LDC. In response to the concerns of citizens within the County, on January 9, 2024, the Board of County Commissioners placed a temporary moratorium on applications for energy generation projects, more specifically solar facilities, in order to give the Community Development Department, and the Planning Division, time to prepare new code language to be included in the LDC. The recommended amendments to the LDC include the following tables, sections and definitions:

SECTION 6.01 | USE REGULATIONS

						TA	ABL	E 6	-1:	US	SE T	AB	BLE															
						Pr	inci	ipa	l Us	es	All	ow	ed															
Use Category (Section)	Specific Use Type	Rural			ι	Irbo	an F	(esi	ide	ntic	al				Nc	onre	esid	leni	ial		Mack Overlay	Districts	Mix Di	ed stric	Use ts	Gate Ove Dis	eway erlay trict	Site Specific Standards
		AFT/AF35	RSFR	URR	RSFE	RSF-1	RSF-2	RSF-4	RMF-5	RMF-8	RMF-12	RMF-16	RMF-24	R-O	B-1	B-2	C-1	C-2	1-1	I-2	TIER #1	TIER #2	MU-OTC	MUR	MUC	Area A	Area B	
				In	stit	utic	na	&	Civ	ic (Se	ctic	on 1	2.0	<mark>)4</mark>)													
	Cemetery	А								С	С	С	1		Γ	1	А	А			А	А			С	А	С	
Parks and Open	Golf Course	А	А	А	А	А	А	А	А	А	А	А	Α		А	А	А	А				С		А	А	С	С	
Space	Golf Driving Ranges	А	С	С	С	С	С	С	С	С	С	С	С			А	А	А	А	А	А	А		С	С	С	С	
<u>12.04 E.</u>	Parks/Lakes/Reservoirs	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	
	All Other	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	С	А	С	
Religious Institutions 12.04 F.	All	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	А	A	А	A	A	
Public Safety Facilities	Jails, Honor Camps, Reformatories, Rehabilitation Centers															С		С	С	С		С						
<u>12.04 G.</u>	Police Station & Sub- Station/Fire Station/Ambulance	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	А	A	А	A	A	
Cabaala	Boarding School	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	А	А			А	А	А	А	А	С	С	
12.04 H.	Elementary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А				А	А	А	А	А	А	С	
	Secondary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А			А	А	А	А	А	А	С	
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	Utility Service Facilities (underground)	А	А	А	A	A	A	А	А	А	А	А	А	А	А	А	А	А	A	А	A	A	А	А	А	A	Α	
Utility, Basic <u>12.04 I.</u>	Utility Treatment, Production or Service Facility	С																	С	С		С	С	С	С			
	Minor Basic Utilities	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	
	Basic Utilities	С	С	С	С	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	С	С	С	С	А	С	С	
	Transmission lines (above ground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	<u>6.02 F.</u>
Utility Corridors <u>12.04 J.</u>	Transmission lines (underground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	А	А	А	С	С	А	А	А	С	С	
	Minor Utility Facility	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	
	All Others	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	
	Community Solar Garden	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	<u>A</u>	A	A	A	A	<u>A</u>	A	A	Δ	<u>6.02</u>
Ittility Production	Private Energy System	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	<u>A</u>	A	A	A	A	<u>A</u>	A	A	Δ	<u>6.02</u>
	Energy Generation/Production Facility	<u>c</u>																		<u>c</u>								<u>6.02</u>

SECTION 6.02 | USE SPECIFIC STANDARDS

CC. Utility, Production

- 1. Applicability
 - a. The following standards shall apply to all new energy production facilities to regulate the development and surface impacts that these facilities may have on the public health, safety, and welfare for any of the following:
 - (1) Private energy facilities
 - (2) Community solar garden as defined by CRS 40-2-127;
 - (3) Energy generation/production facility.
 - b. Any facility that exceeds the definition of a private energy facility or community solar garden shall be processed as an energy generation/production facility.
- 2. Submittal Requirements for Energy Generation/Production Facilities
 - a. Narrative

The applicant will provide a narrative describing the proposed facility including but not limited to; general description of the proposal, the height and location of equipment and ancillary structures, health and safety, decommissioning, traffic analysis, construction schedule, type and location of interconnection, rated capacity,

b. Site plan

The site plan map shall be provided in a legible format and shall include but not be limited to the location and arrangement of screening, fencing, existing and proposed structures, equipment, roadways and access points, wildlife corridors, floodplain, easements, existing utilities, and connection to the electrical grid.

- c. Setbacks
 - (1) One quarter (1/4) mile from a designated Scenic By-way.
 - (2) A minimum of one hundred fifty (150) feet from the nearest outside wall of residential occupied structure on adjacent properties.
- d. Fire Prevention and Safety Procedures
 - (1) The relevant Fire Protection District's adopted standards, based on current fire code, shall apply.
 - (2) A fire break or other facility perimeter design acceptable to the fire district shall be required to reduce or eliminate the interface risk from wildfire.
 - (3) If fenced, egress gates should be installed approximately every 300 feet along any perimeter fencing.
 - (4) A vegetation management plan shall describe the operator's methods to maintain vegetation inside the facility to address wildfire which may include treatment, mowing, agrivoltaics or other methods of fuel reduction.
- e. Visual Mitigation

Reasonable efforts to mitigate visual impacts of an energy generation/production facility will be detailed in the project narrative. Visual impact mitigation may include opaque fencing, screening, berming, use of existing or planted vegetation of landscaping either on-site, or off-site.

(1) Solar System equipment shall be no higher than fifteen (15) feet at the solar panel mounting point. The height of the interconnection equipment may exceed 15 feet. Solar System Facilities within 50 feet of a property line of a residential zoned property should be designed

with some form of visual mitigation, to include but not be limited to, opaque fencing, or landscaping.

- (2) Agrivoltaics are exempt from height restrictions.
- f. Wildlife, Wetlands, Riparian Areas and Stream Channel Measures
 - (1) The Operator shall address the recommendations of Colorado Parks & Wildlife (CPW) that address any site-specific site conditions. The Applicant shall avoid constructing in CPW-mapped High Priority Habitats (HPH) to the maximum extent possible.
 - (2) Operator shall inspect the interior of the facility at least once weekly, to potentially free any trapped animals.
 - (3) When fencing is necessary, the use of wildlife friendly fencing is encouraged.
- g. Decommissioning Plan

At the time of application, Operator shall include a decommissioning plan for the facility which will include detailed plans for management and removal of equipment, mounting systems, above and underground utilities, equipment and facilities as follows:

- (1) Within twelve (12) months of ceasing operations, the operator shall complete decommissioning of the facility which may include removal of all aboveground and belowground equipment and structures and removal of any access roads and fire breaks unless previous agreements have been made with the property owner.
- (2) Any equipment that cannot be recycled shall be properly disposed in accordance with all State and Federal regulations.
- (3) The site shall be revegetated in compliance with the property owner's specifications or to a minimum of 70% of predevelopment vegetative cover whichever is less.
- h. Insurance

The owner/operator shall provide proof of general liability insurance with commercially reasonable amounts of coverage for the permitted facility. Facility owners/operators shall maintain such insurance in place through all times the facility is in operation.

3. Approval Criteria

In evaluating the proposal, the request shall consider conditions of approval and all applicable requirements of this LDC, including, but not limited to:

- a. The health, safety and welfare of the citizens of this jurisdiction will be protected and served;
- b. The facility will not unreasonably impact the physical, economic, or social environment, except as permitted in Chapter 6 Use Regulations as applicable.
- c. When an impact is expected to occur, reasonable modifications and programs and other reasonable mitigating actions will be implemented and maintained to minimize the degree of adversity of the impact;
- d. There exists a need, or a reasonably foreseeable need, for the facility as proposed.

SECTION 12.01 | GENERAL

Energy Generation/Production Facility. A facility designed to generate electricity by the conversion of natural resources such as light, natural gas, nuclear or water which is directly connected to the utility grid supplying electricity serving a wide customer base without being connected to specific end-users.

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Community Solar Garden: A solar power generating facility designed to produce electricity as defined in C.R.S 40-2-127. A community solar garden may include battery storage equipment as accessory equipment.

Agrivoltaics: Agrivoltaics, agrophotovoltaics, agrisolar, or dual-use solar is the simultaneous use of areas of land for both solar panels and agriculture.

Behind-the-meter: Means an energy resource that is interconnected on the property owner's side of the utility meter providing electric energy primarily to serve the property owner's loads and shall be sized to supply no more than two hundred (200%) percent of the reasonably expected average annual total consumption of electricity at all properties owned or leased by the property owner.

Fire Protection District: A Fire Protection District within Mesa County is defined as one which has been recognized by resolution as per C.R.S 32-1-102 (2022) by the BoCC.

Residential Occupied Structure: See Building, Principle see also Dwelling Unit.

SECTION 12.04 | GENERAL

K. Utilities, Production

1. Characteristics

A facility designed and operated for the generation, and distribution of electricity which use fossil fuels, solar energy, hydroelectric energy, geothermal energy, nuclear, biomass energy or wind energy as a resource for the primary purpose of selling electricity generated to the electric power grid.

2. Accessory Uses

Accessory uses may include parking and control, monitoring, data or transmission or battery storage equipment and agrivoltaics.

- 3. Exceptions
 - a. Does not apply to on-site generation equipment when such use is an accessory use as described in Section 6.02 CC of this LCD.
 - b. Transmission lines, substations, and pipelines.
 - c. Utility production facilities with no occupied structures or full-time on-site employees are exempt from the requirements for potable water required in Section 8.09.

II. TEXT AMENDMENT APPROVAL CRITERIA:

Section 1.05 Purpose:

This Land Development Code is adopted for the purpose of preserving and improving the public health, safety, and general welfare of the citizens and businesses of Mesa County. More specifically, it is the purpose of this Land Development Code to:

A. Implement the purposes, goals, and policies of the Mesa County Master Plan;

The Master Plan is implemented in part through the development review process. The proposed text amendments do not conflict and are consistent with the purposes, goals and policies of the Master Plan.

Criterion has been met

B. Promote predictability, consistency, and efficiency in the land development process for residents, neighborhoods, businesses, and agricultural and development interests;

The amendments promote predictability, consistency, and efficiency in the land development process.

Criterion has been met

C. Provide appropriate opportunities for participation and involvement in the development process by all affected parties;

The proposed amendments do not affect the opportunities for participation and involvement in the development process.

Criterion has been met

D. Promote development that is consistent and compatible with that of the municipalities within Mesa County within the joint municipal planning areas;

The proposed amendments were provided to all municipalities for review.

Criterion has been met; and:

E. Be fair to all by giving due consideration to protecting private property rights, the rights of individuals, and the rights of the community as a whole. In instances where an application to develop does not meet all applicable criteria of this Code, and unique or special circumstances exist which would warrant the approval of the application to develop, and provided the proposed development: (a) poses no threat to health or safety; (b) provides for the mitigation of impacts to the maximum extent reasonable; and (c) is generally consistent and compatible with the allowed uses in the applicable Zoning District, the application to develop may be approved.

Protection of private property rights, the rights of individuals and the interests of the community as a whole were considered during the drafting of the proposed text amendments and it is staff's opinion that the proposed amendments do not diminish these rights.

Criterion has been met

III. REVIEW AGENCY COMMENTS

No opposition from review agencies were received. A report of agenciy review comments is attached to the file.

I. PUBLIC COMMENTS:

Over the course of the project review, many public comments were collected during meetings, open houses andvia email. Every effort to filter through the abundant comments was made to add what was codifiable and to respond to that which is of concern to residents but not codifiable. Copies of all public comments are attached to the project file.

II. STAFF RECOMMENDATION

Recommend approval of the proposed text amendments.

Basis: The amendments meets the purpose statements in Section 1.05 of the Mesa County 2020 Land Development Code (as amended) and do not conflict with other sections in the Land Development Code. The proposed text amendments meet the basic goals of the Mesa County Master Plan and do not conflict with State Statutes regulating County Planning.

Summary

Purpose

1.05.A (implement Master Plan purposes, goals, and policies)	is met
1.05.B (promote predictability, consistency and efficiency)	is met
1.05.C (provide opportunities for participation and involvement)	is met
1.05.D (development compatible with the municipalities)	is met
1.05.E (give due consideration to protecting rights)	is met

V. MCPC RECOMMENDATION: March 21, 2024

VI. BoCC ACTION: April 23, 2024

SECTION 6.01 | USE REGULATIONS

						T/	BL	E 6	-1:	US	SE T	AB	BLE															
						Pr	inc	ipa	l Us	es	All	ow	ed													-		
Use Category (Section)	Specific Use Type	Rural			U	Irbo	an f	les	ide	ntic	al				Nc	onre	esid	len	tial		Mack Overlay	Districts	Mix Di	ed stric	Use :ts	Gate Ove Dis	eway erlay trict	Site Specific Standards
		AFT/AF35	RSFR	URR	RSFE	RSF-1	RSF-2	RSF-4	RMF-5	RMF-8	RMF-12	RMF-16	RMF-24	R-O	B-1	B-2	C-1	C-2	-1	I-2	TIER #1	TIER #2	MU-OTC	MUR	MUC	Area A	Area B	
				In	stit	utic	ona	&	Civ	ic (Se	ctic	<mark>on</mark> 1	2.0	<mark>)4</mark>)													
	Cemetery	А								С	С	С					А	А			А	А			С	А	С	
Parks and Open	Golf Course	А	А	А	А	А	А	А	А	А	А	А	А		А	А	А	А				С		А	А	С	С	
Space	Golf Driving Ranges	А	С	С	С	С	С	С	С	С	С	С	С			А	А	А	А	А	А	А		С	С	С	С	
<u>12.04 E.</u>	Parks/Lakes/Reservoirs	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	
	All Other	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	С	А	С	
Religious Institutions <u>12.04 F.</u>	All	A	А	A	A	A	A	A	A	A	A	A	A	A	A	A	А	A	А	A	A	A	А	A	A	A	А	
Public Safety Facilities	Jails, Honor Camps, Reformatories, Rehabilitation Centers															С		С	С	С		С						
<u>12.04 G.</u>	Police Station & Sub- Station/Fire Station/Ambulance	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Sahaala	Boarding School	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	А	А			А	А	А	А	А	С	С	
12.04 H.	Elementary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А				А	А	А	А	А	А	С	
	Secondary School	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А			А	А	А	А	А	А	С	
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	Utility Service Facilities (underground)	Α	A	A	А	А	А	A	А	А	А	A	А	А	А	А	А	A	А	А	А	А	А	А	А	А	А	
Utility, Basic <u>12.04 I.</u>	Utility Treatment, Production or Service Facility	С																	С	С		С	С	С	С			
	Minor Basic Utilities	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	
	Basic Utilities	С	С	С	С	С	С	С	С	С	С	С	С	С	А	А	А	А	А	А	С	С	С	С	А	С	С	
	Transmission lines (above ground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	<u>6.02 F.</u>
Utility Corridors <u>12.04 J.</u>	Transmission lines (underground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	А	А	А	С	С	А	А	А	С	С	
	Minor Utility Facility	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	
	All Others	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	
	Community Solar Garden	A	A	<u>A</u>	A	A	A	A	A	<u>A</u>	A	<u>A</u>	A	A	A	A	A	A	A	<u>A</u>	A	A	<u>A</u>	<u>A</u>	<u>A</u>	A	Α	<u>6.02 CC.</u>
	Private Energy System	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	Α	Α	Α	A	A	<u>6.02 CC.</u>
<u>Utility, Production</u>	Energy Generation/Production Facility	<u>c</u>															A	A	A	A								<u>6.02 CC.</u>
	Aarivoltaics	Α			1						1				1		1		1		1							

SECTION 6.02 | USE SPECIFIC STANDARDS

CC. Utility, Production

- 1. Applicability
 - a. The following standards shall apply to all new energy production facilities to regulate the development and surface impacts that these facilities may have on the public health, safety, and welfare for any of the following:
 - (1) Private energy facilities
 - (2) Community solar garden as defined by CRS 40-2-127
 - (3) Energy generation/production facility
 - (4) Agrivoltaics
- 2. Submittal Requirements for Energy Generation/Production Facilities
 - a. Narrative

The applicant will provide a narrative describing the proposed facility including but not limited to; general description of the proposal, the height and location of equipment and ancillary structures, health and safety, decommissioning, traffic analysis, construction schedule, type and location of interconnection, rated capacity,

b. Site plan

The site plan map shall be provided in a legible format and shall include but not be limited to the location and arrangement of screening, fencing, existing and proposed structures, equipment, roadways and access points, wildlife corridors, floodplain, easements, existing utilities, and connection to the electrical grid.

- c. Setbacks
 - (1) One quarter (1/4) mile from a designated Scenic By-way.
 - (2) A minimum of one hundred fifty (150) feet from the nearest outside wall of residential occupied structure on adjacent properties.
- d. Fire Prevention and Safety Procedures
 - (1) The relevant Fire Protection District's adopted standards, based on current fire code, shall apply.
 - (2) A fire break or other facility perimeter design acceptable to the fire district shall be required to reduce or eliminate the interface risk from wildfire.
 - (3) If fenced, egress gates should be installed approximately every 300 feet along any perimeter fencing.
 - (4) A vegetation management plan shall describe the operator's methods to maintain vegetation inside the facility to address wildfire which may include treatment, mowing, agrivoltaics or other methods of fuel reduction.
- e. Visual Mitigation

Reasonable efforts to mitigate visual impacts of an energy generation/production facility will be detailed in the project narrative. Visual impact mitigation may include opaque fencing, screening, berming, use of existing or planted vegetation of landscaping either on-site, or off-site.

(1) Solar System equipment shall be no higher than fifteen (15) feet at the solar panel mounting point. The height of the interconnection equipment may exceed 15 feet. Solar System Facilities within 50 feet of a property line of a residential zoned property should be designed

with some form of visual mitigation, to include but not be limited to, opaque fencing, or landscaping.

- (2) Agrivoltaics are exempt from height restrictions.
- f. Wildlife, Wetlands, Riparian Areas and Stream Channel Measures
 - (1) The Operator shall address the recommendations of Colorado Parks & Wildlife (CPW) that address any site-specific site conditions. The Applicant shall avoid constructing in CPW-mapped High Priority Habitats (HPH) to the maximum extent possible.
 - (2) Operator shall inspect the interior of the facility at least once weekly, to potentially free any trapped animals.
 - (3) When fencing is necessary, the use of wildlife friendly fencing is encouraged.
- g. Decommissioning Plan

At the time of application, Operator shall include a decommissioning plan for the facility which will include detailed plans for management and removal of equipment, mounting systems, above and underground utilities, equipment and facilities as follows:

- (1) A cost estimate for the decommissioning of the facility and restoration of the site prepared by a Professional Engineer or contractor who has expertise in removal of such facilities.
- (2) Within twelve (12) months of ceasing operations, the operator shall complete decommissioning of the facility which may include removal of all aboveground and belowground equipment and structures and removal of any access roads and fire breaks unless previous agreements have been made with the property owner.
- (3) Any equipment that cannot be recycled shall be properly disposed in accordance with all State and Federal regulations.
- (4) The site shall be revegetated in compliance with the property owner's specifications or to a minimum of 70% of predevelopment vegetative cover whichever is less.
- h. Utility Interconnection

The applicant shall provide available information or certification of intent to enter into an interconnection agreement with final details submitted prior to construction of the facility.

i. Insurance

The owner/operator shall provide proof of general liability insurance with commercially reasonable amounts of coverage for the permitted facility. Facility owners/operators shall maintain such insurance in place through all times the facility is in operation.

3. Approval Criteria

In evaluating the proposal, the request shall consider conditions of approval and all applicable requirements of this LDC, including, but not limited to:

- a. The health, safety and welfare of the citizens of this jurisdiction will be protected and served;
- b. The facility will not unreasonably impact the physical, economic, or social environment, except as permitted in Chapter 6 Use Regulations as applicable.
- c. When an impact is expected to occur, reasonable modifications and programs and other reasonable mitigating actions will be implemented and maintained to minimize the degree of adversity of the impact;
- d. There exists a need, or a reasonably foreseeable need, for the facility as proposed.

SECTION 12.01 | GENERAL

Energy Generation/Production Facility. A facility designed to generate electricity by the conversion of natural resources such as light, fossil fuels, nuclear or water which is directly connected to the utility grid supplying electricity serving a wide customer base without being connected to specific end-users.

Private Energy Facility. A residential or business-scale energy conversion facility designed to generate electricity by the conversion of natural resources such as light, natural gas, nuclear, biomass or water which produces electricity for on-site uses or to nearby off-site facilities under the same ownership, for which the private facility is intended to provide electrical power and is a behind-the-meter installation.

Community Solar Garden: A solar power generating facility designed to produce electricity as defined in C.R.S 40-2-127. A community solar garden may include battery storage equipment as accessory equipment.

Agrivoltaics: Agrivoltaics, agrophotovoltaics, agrisolar, or dual-use solar is the simultaneous use of land for both solar panels and agriculture.

Behind-the-meter: Means an energy resource that is interconnected on the property owner's side of the utility meter providing electric energy primarily to serve the property owner's loads.

Fire Protection District: A Fire Protection District within Mesa County is defined as one which has been recognized by resolution as per C.R.S 32-1-102 (2022) by the BoCC.

Residential Occupied Structure: See Building, Principle see also Dwelling Unit.

SECTION 12.04 | GENERAL

K. Utilities, Production

1. Characteristics

A facility designed and operated for the generation, and distribution of electricity which use fossil fuels, solar energy, hydroelectric energy, geothermal energy, nuclear, biomass energy or wind energy as a resource for the primary purpose of selling electricity generated to the electric power grid.

2. Accessory Uses

Accessory uses may include parking and control, monitoring, data or transmission or battery storage equipment and agrivoltaics.

- 3. Exceptions
 - a. Does not apply to on-site generation equipment when such use is an accessory use as described in Section 6.02 CC of this LCD.
 - b. Transmission lines, substations, and pipelines.
 - c. Utility production facilities with no occupied structures or full-time on-site employees are exempt from the requirements for potable water required in Section 8.09.

Amendment to Section 6.02 Use Specific Standards

CC. Utility, Production

- 1. Applicability
 - a. The following standards shall apply to all new energy production facilities to regulate the development and surface impacts that these facilities may have on the public health, safety, and welfare for any of the following:
 - (1) Private energy facilities, with the following exception;
 - (a) Roof mounted systems;
 - (b) Facilities with a rated capacity of less than 100 kW, occupying no more than one half (.5) acre of land that will be used to produce electricity to on-site uses.
 - (2) Community solar garden as defined by CRS 40-2-127;
 - (2)(3) Agrivoltaics for related private on-site or related off site and facilities or distributed generation, and
 - (3)(4) Energy generation/production facility for distributed generation.
 - b. Any facility that exceeds the definition of a private energy facility or community solar garden shall be processed as an energy generation/production facility.
- 2. Submittal Requirements
 - a. Narrative

The applicant will provide a narrative describing the proposed facility including but not limited to; general description of the proposal, the height and location of equipment and ancillary structures, health and safety, decommissioning, traffic analysis, construction schedule, type and location of interconnection, rated capacity,

b. Site plan

The site plan map shall be provided in a legible format and shall include but not be limited to the location and arrangement of screening, fencing, existing and proposed structures, equipment, roadways and access points, wildlife corridors, floodplain, easements, existing utilities, and connection to the electrical grid.

- c. Setbacks
 - (1) All structures must meet minimum street, side, and rear setback requirements for the zone district in which the proposed facility is to be located.
 - (2) One quarter (1/4) mile from a designated Scenic By-way.
 - (3) A minimum of two-one hundred fifty (200150) feet from any-the nearest outside wall of residential occupied structure.

Grading plan

Elevations

Traffic Study

- d. Fire Prevention and Safety Procedures
 - (1) The relevant Fire Protection District's adopted standards, based on current fire code, shall apply<u>. unless</u>.
 - (2) A fire break or other facility perimeter design acceptable to the fire district shall be required to reduce or eliminate the interface risk from wildfire.

- (3) <u>If fenced, H</u>ocked gates shall be installed <u>approximately</u> every 300 feet on the inside of along the <u>any</u> perimeter fencing.
- (4) A vegetation management plan shall describe the operator's methods to maintain vegetation inside the facility to <u>address wildfire a minimum level</u>, which may include treatment, mowing, agrivoltaics or other methods of fuel reduction.
- e. Visual Mitigation

Reasonable efforts to mitigate visual impacts of an energy generation/production facility will be detailed in the project narrative. Visual impact mitigation may include opaque fencing, screening, berming, use of existing or planted vegetation of landscaping.

(1) Solar System equipment shall be no higher than fifteen (15) fifteen (15) feet at the solar panel mounting point. The height of the interconnection equipment may exceed 15 feet. Solar System Facilities within 50 feet of a property line of a residential zoned property containing a residential occupied structure shall should be designed with some form of visual mitigation, to include but not be limited to, opaque fencing, berming, or landscaping.

(a) Agrivoltaics are exempt from height restrictions.

- f. Wildlife, Wetlands, Riparian Areas and Stream Channel Measures
 - The Operator shall address the recommendations of Colorado Parks & Wildlife (CPW) that address any site-specific site conditions. The Applicant shall avoid constructing in CPWmapped High Priority Habitats (HPH) to the maximum extent possible.
 - (2) Operator shall inspect the interior of the facility at least once weekly, to potentially free any trapped animals.

(2)(3) When fencing is necessary, the use of wildlife friendly fencing is encouraged.

g. Decommissioning Plan

At the time of application, Operator shall include a decommissioning plan for the facility which will include detailed plans for management and removal of equipment, mounting systems, above and underground utilities, equipment and facilities as follows:

- (1) Within six-twelve (612) months of ceasing operations, the operator shall complete decommissioning of the facility which will include removal of all aboveground and belowground equipment to a depth of 16 inches, and structures and removal of any access roads and fire breaks.
- (2) Any equipment that cannot be recycled shall be properly disposed in accordance with all State and Federal regulations.
- (3) The site shall be revegetated in compliance with the property owner's specifications or to a minimum of 70% of predevelopment vegetative cover whichever is less.

h. Insurance

The owner/operator shall provide proof of general liability insurance with commercially reasonable amounts of coverage for the permitted facility. Facility owners/operators shall maintain such insurance in place through all times the facility is in operation.

i. Referral

Once a complete application has been submitted, County staff will refer the application for review to appropriate review agencies which may include; law enforcement, state and federal agencies, local municipalities, fire districts utility providers and others as may be deemed appropriate.

3. Approval Criteria

In evaluating the proposal, the request shall comply with any conditions of approval and all applicable requirements of this LDC, including, but not limited to:

- a. The health, safety and welfare of the citizens of this jurisdiction will be protected and served;
- b. The facility will not adversely <u>unreasonably</u> impact the physical, economic, or social environment, except as permitted in Chapter 6 Use Regulations as applicable. 6.
- c. When an adverse impact is expected to occur, reasonable modifications and programs and other reasonable mitigating actions will be implemented and maintained to minimize the degree of adversity of the impact;
- d. There exists a need, or a reasonably foreseeable need, for the facility as proposed;
- e. Adequate resources (e.g., schools, utilities, roads) exist, or will exist, for the construction and efficient operation of the facility;

Energy Generation/Production Facility. A facility designed to generate electricity by the conversion of natural resources such as light, natural gas, <u>nuclear</u> or water with a rated capacity of more than two (2) Megawatts and/or occupying more than five (5) acres of land. An Energy Generation/Production Facility may include battery storage equipment as accessory equipment. See also Distributed generation as defined in CRS 40-2-124.

Private Energy Facility. A residential or business-scale energy conversion facility designed to generate electricity by the conversion of natural resources such as light, natural gas, <u>nuclear</u>, biomass or water with a rated capacity of <u>less than 130% of the normal electrical power demand of the property or facility</u> <u>upon which it is sited two (2) Megawatts or less, occupying no more than five (5) acres of land, that produces electricity to for on-site uses or to nearby off site facilities under the same ownership, for which the private facility is intended to provide electrical power.</u>

Community Solar Garden: A solar power generating facility designed to produce electricity <u>as defined in</u> with a maximum rated capacity of five (5) Megawatts or less and meets the definition contained within C.R.S 40-2-127. A community solar garden may include battery storage equipment <u>as accessory</u> equipment.

Agrivoltaics: Agrivoltaics, agrophotovoltaics, agrisolar, or dual-use solar is the simultaneous use of areas of land for both solar panels and agriculture. I.E. Agricultural production, such as crop or livestock production or pollinator habitats, underneath solar panels or adjacent to solar panels for the production of electricity while still producing revenue via continued agricultural operations.

<u>Fire Protection District</u>: A Fire Protection District within Mesa County is defined as one which has been recognized by resolution as per C.R.S 32-1-102 (2022) by the BoCC.

<u>Residential Occupied Structure</u>: See Building, Principle see also Dwelling Unit.

Utility Solar Energy Facility: Any energy production facility which is designed to produce electrical energy in excess of 130% of the normal electrical power demand of the property or facility upon which it is sited.

Amendment to Section 12.04 Institutional And Civic Use Categories

K. Utilities, Production

1. Characteristics

A facility designed and operated for the generation, and distribution of electricity which use fossil fuels, solar energy, hydroelectric energy, geothermal energy, <u>nuclear</u>, biomass energy or wind energy as a resource for the primary purpose of selling electricity generated to the electric power grid.

2. Accessory Uses

Accessory uses may include parking and control, monitoring, data or transmission or battery storage equipment and agrivoltaics.

- 3. Exceptions
 - a. Does not apply to on-site generation equipment when such use is an accessory use as described in Section 6.02 <u>CC</u> A-of this LCD.
 - b. Transmission lines, power plants, substations, and pipelines.

c. Utility production facilities with no occupied structures or full-time on-site employees are exempt from the requirements for potable water required in Section 8.09.

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<u>12.04 A.</u>	All Other Educational Institutions									С	С	С	С	А	A	А	А	А	А	А	А	А	С		С	С	С	
Community	All Community Services	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А			А	А	С	С	С	А	С	
Service <u>12.04 B.</u>	Museums/Art Galleries/Opera House	А	А											А	А	А	А	А	А	А	А	А	А	А	А	А	С	
Day Caro	Home-Based Day Care	А	А	А	А	А	А	А	А	А	А	А	А	А	А						А	А	С	С	С	А	С	
<u>12.04 C.</u>	Limited Day Care	С	С	С	А	А	А	А	А	А	А	А	А	А	А	А					А	А	С	С	С	Α	С	
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	All Other						-						-	-	-	С	С	С			С	С	С		С	С	С	
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Parks and Open	Golf Course	А	А	А	А	А	А	А	А	А	А	А	А		А	А	А	А				С		А	А	С	С	
Space	Golf Driving Ranges	А	С	С	С	С	С	С	С	С	С	С	С			А	А	А	А	А	А	А		С	С	С	С	
<u>12.04 E.</u>	Parks/Lakes/Reservoirs	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	
	All Other	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	А	С	С	С	Α	С	
Religious Institutions 12.04 F.	All	А	А	А	А	А	А	A	А	А	А	A	А	A	А	A	А	A	А	А	А	А	А	А	А	А	A	
Public Safety	Jails, Honor Camps, Reformatories, Rehabilitation Centers															С		с	с	С		С						
<u>12.04 G.</u>	Police Station & Sub- Station/Fire Station/Ambulance	A	A	A	A	A	A	A	A	A	A	A	А	A	А	A	A	A	A	A	A	A	А	А	А	А	А	
Schools	Boarding School	С	С	С	С	С	С	С	С	С	А	А	Α	А	А	А	А	А			А	А	А	А	А	С	С	
<u>12.04 H.</u>	Elementary School	Α	А	A	A	A	Α	А	А	А	Α	А	A	A	А	Α	А				А	Α	Α	Α	А	A	С	
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Utility, Basic <u>12.04 I.</u>	Utility Treatment, Production or Service Facility	С																	С	С		С	С	С	С			
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	Basic Utilities	С	С	С	С	С	С	С	С	С	С	С	С	С	Α	А	А	А	A	Α	С	С	С	С	Α	С	С	
Utility Corridors	Transmission lines (above ground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	<u>6.02 F.</u>
<u>12.04 J.</u>	Transmission lines (underground)	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	А	А	А	С	С	А	А	А	С	С	
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	All Others	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	
	Community Solar Garden	<u>A</u>																										<u>6.02</u>
<u>Utility,</u>	Private Energy System	<u>A</u>	A	A	A	A	A	<u>A</u>	A	A	A	A	A	<u>A</u>	A	A	A	A	A	<u>A</u>	A	<u>A</u>	A	A	A	A	A	<u>6.02</u>
Production	Energy Generation/Production Facility	<u>c</u>																		<u>c</u>								<u>6.02</u>

BECOMING UTILITY-SCALE SOLAR READY

PRINCIPLES AND BEST PRACTICES FOR COLORADO'S LOCAL GOVERNMENTS

Cover Photo by De



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BECOMING UTILITY-SCALE SOLAR READY: PRINCIPLES AND BEST PRACTICES FOR COLORADO'S LOCAL GOVERNMENTS

As one of the least expensive forms of new energy generation, utility-scale solar is growing in pace and scale across Colorado. With political support at the state level and technical support from the National Renewable Energy Laboratory (NREL) at the federal level, Colorado is a pioneer in deploying solar energy development at every scale. Colorado's **Greenhouse Gas Pollution Reduction Roadmap** anticipates the need for 9 gigawatts (GW) of renewable energy by 2030 to meet the 80 percent statewide greenhouse gas reduction requirement. These statewide plans and market demand translate to tens of thousands of acres of new solar projects in Colorado over the next 10 years.

Yet despite these global, national, and state support, the final siting and permitting authority rests with local governments on private or local governmental land. Few local government plans, zoning codes, and staff capacity or training are designed and ready to permit utility-scale solar projects. These local governments are finding it difficult to approve policies and permitting procedures to address an increasing number of complex development proposals.

Roof-mounted solar panels for residences, commercial buildings, and shaded parking structures are becoming widely embraced with automated permitting systems like the **SolarAPP+**, which is free to local governments to ensure that all systems are code-compliant and safe, based on the system's specifications. In many communities small-scale solar, typically defined as less than 40 acres in size, is also becoming a "use by right" in all zoning districts. These smaller systems connect directly to electric distribution lines and rarely encounter community resistance due to their smaller size. However, there is less certainty in how local governments should best address much larger utilityscale photovoltaic solar projects that connect to the high-voltage transmission network. Some projects exceed 2,000 acres, or three square miles in size.

WHY BECOME READY FOR UTILITY-SCALE SOLAR?

In Colorado, the lead land use permitting agency will likely be a local government for two reasons: 1) through "1041 powers" (named after House Bill 74-1041 and now found in **C.R.S. 24-65.1-101**) the State of Colorado enabled local governments to regulate "Activities of State Interest" such as public facilities of a major utility, and 2) developers are prone to avoid slower and more costly federal permitting processes.

With global trends, national and state targets, and the solar industry moving far faster than local governments, how can local governments ready themselves to:

- Benefit from utility-scale solar projects?:
- Reduce the environmental and visual impacts from large-scale solar projects?
- Implement a simpler, smoother permitting process for the public, local governments, and the solar industry?

The purpose of this memo¹ is to:

- Institutionalize and share lessons learned from other Solar Ready initiatives
- Proactively address utility-scale solar and transmission projects in land use plans and codes
- Increase community readiness
- Bridge local government permitting and solar industry needs

While standards may vary by community, there are five principles that when followed result in more productive neighbor and community relations, smoother public hearings, and projects delivered on schedule and budget.



 Best practices have been developed by the <u>Colorado Solar and Storage Association</u> and <u>Logan Simpson</u> through four workshops with the American Planning Association and Western Planners Association throughout 2021. The authors gratefully acknowledge NREL's Megan Day, who has written extensively on this challenge, see for example "<u>Are You Solar</u> <u>Ready? Seven steps to successfully manage large-scale solar development.</u>" #1

CULTIVATE AWARENESS AHEAD OF PROPOSED DEVELOPMENT

Community planners can employ strategies that will not only help them be prepared when large-scale solar developers come to call, but also make government officials aware of where solar development is likely to occur. These discussions can also communicate the benefits that solar can bring to a community, setting the stage for a partnership approach in lieu of a potentially adversarial relationship.

Siting has more to do with a solar project's ultimate success or failure than any other single factor. The natural environment at a proposed site will define the potential impacts project sponsors will need to mitigate. The proposed site and location of a project will also likely determine the individuals and groups who rally for and against the development. Three simple steps can help community planners identify lands that have the potential to be attractive to renewable energy developers, including solar.

1. *Visit <u>SLOPE</u>: State and Local Planning for Energy.* This is a web-map platform that helps jurisdictions explore energy data potential and projections to better understand opportunities and options in energy planning. SLOPE incorporates population and building area data, existing federal tax credits, state net metering policies, and renewable portfolio standards to enable quantifiable goal setting. SLOPE helps planners answer, "What will my jurisdiction's future energy needs look like?" or, "What are our options for meeting future energy needs with clean energy resources?"

2. Contact the high voltage transmission system operators in your jurisdiction and ask about their local power generation plans. Each electric utility provider has specific substation or transmission interconnections in mind with the capacity to accommodate new solar projects.

3. Compare the interconnection points to your adopted plans and zoning to identify land use compatibilities and opportunities. The solar industry is drawn to the lowest risk, lowest cost sites. These greenfield locations are typically rural and adjacent to a high voltage transmission network. Because these areas are rural, they often lack infrastructure such as major roads, drainage, or water and sewer connections. Fortunately, these services are rarely necessary to support solar.



NREL's SLOPE illustrates opportunities and scenarios for achieving goals and understanding the impacts of energy actions in multiple formats, including maps, time series charts, and scenario model visualizations that can be easily conveyed to decision makers.

BECOMING UTILITY-SCALE SOLAR READY



COLORADO BRIGHTFIELDS

Combines over 100 datasets into one easy to use web-mapping application to identify marginalized properties for renewable energy development across ten Colorado counties **for free.**

motivate developers to select lands that align with their land use plans by offering a streamlined permitting process or other incentives such as infrastructure cost sharing, tax abatement, or <u>enterprise zones</u>.

Solar developers typically prefer so called "marginal lands" that lack official designation as open space, though sometimes these rural lands are valued for open space qualities such as wildlife habitat, scenery, and respite from urbanization. By proposing to develop rural sites, solar proposals can ignite tensions, which elevate the risk of denial of land use applications.

Currently, future land use plans rarely anticipate where solar is the "highest and best use," much less establish goals for renewable energy. "Highest and best use" is the delta between the current use and a future use. The more degraded or unprofitable the existing use on a potential site, the higher the delta. Brownfields, capped landfills, abandoned or reclaiming mines, dried up properties (where water rights have been sold), dryland agriculture, or lands that are adjacent to existing industrial uses can be obvious choices. The online map <u>Colorado Brightfields</u> can help: it has already highlighted thousands of suitable brownfields that can accommodate solar.

While local governments may hope developers are willing to consider brownfields and existing industrial uses, doing so requires reassurance that the solar developers will avoid the added risk and cost associated with these sites. Also, most brownfields are too small to meet market demand for larger projects. Rather than restricting solar development to specific zones or areas, local governments can Solar developers can avoid oppo-

sition and delays by consulting early with planning departments and referral agencies to understand their prioritites and concerns prior to preparing a development proposal. Proposals that demonstrate how questions and concerns have been addressed as part of the initial application submittal gain an advantage over those that rely on a local government to discover concerns. Local governments that invite key referral agencies such as Colorado Parks and Wildlife (CPW) to a pre-application meeting also find that the agencies' reviews are often accelerated because they are already familiar with the project.

Cultivating Awareness Ahead of Proposed Development

- Define project sizes by acres, not megawatts.
- Understand the market potential for utilityscale solar - it is not equally distributed across all jurisdictions.
- Establish a shared vision and goals ahead of development proposals, such as through Pace Land Use Law Center's <u>Model Solar Energy</u> <u>Resolution.</u>
- Review and update land use plans around expected transmission interconnections and BrightFields.

#2 CREATE A COLLABORATIVE, PROBLEM SOLVING PARTNERSHIP WITH CONTINUOUS IMPROVEMENT AND LEARNING

Most local governments lack the technical knowledge and staff capacity to review development applications for utility-scale solar projects. Many may have never dealt with a large-scale utility project before or may draw inaccurate parallels like an industrial use (solar does not produce the noise, smells, or traffic of industry). Because most local governments' development review services rely on cost-recovery models (with applicants funding staff positions), a modest increase in solar application fees can support an additional staff position or much needed training to enable local staff readiness.

The fast pace at which large-scale solar installations are being constructed in Colorado emphasizes the need for rapid learning and responsiveness by all to ensure continuous improvement and success. The exponential rise of battery storage co-locating with industry, military, and other resilient applications is but one example. Power grid operators, fire districts, and permitting agencies are quickly adjusting to this exciting trend.

WHAT CAN LOCAL GOVERNMENTS DO TO ACCELERATE LEARNING?

All municipalities and counties can join existing partnerships with research institutions like <u>SolSmart</u> and <u>NREL</u> to improve local capacity at no cost. <u>SolSmart's Toolkit for Local Governments</u> presents a roadmap to help local governments and community stakeholders accommodate emerging technologies like battery storage, and is updated with new sections regularly. **COSSA** hosts regular educational events for local leaders. Local governments that do not seek advice from or offer a seat at the table to these experts will find themselves at a disadvantage.

<u>Clean Energy Economy for the Region</u> (CLEER) is an example of a regional initiative led by a non-profit

NO COST SOFT COSTS

"Nearly 30 Colorado communities are now designated 'SolSmart' and have benefited from teams of national experts whose technical assistance comes at no cost to reduce local governments' soft costs of updating regulations. SolSmart is helping Colorado municipalities streamline permitting processes, unlock local finance options, and implement other best practices to make solar more sustainable, affordable and accessible."

- Mike Kruger, President & CEO of Colorado Solar and Storage Association

organization to bring together local government leaders and institutions, inspire them to take action, challenge them to set ambitious goals, advise them on the steps necessary to achieve real results, and then strengthen the political will to stick to the program. CLEER has helped nine local governments in Garfield County successfully apply for federal stimulus funding, complete a county-wide analysis of energy usage, map suitable solar sites, and work with elected officials to update plans that encourage development in their preferred locations.



*Estimated annual savings in 2018. **Cumulative since 2008, attributable to projects in which CLEER has been involved.

BECOMING UTILITY-SCALE SOLAR READY

Approaching solar proposals as a problem solving partnership—where planners act as strategists rather than compliance checkers, and developers are transparent and methodical with their agency counterparts on schedule and decision-points—arrives at better answers and successful projects. Establishing agreement early in the process to define, "What does success look like?" shapes criteria that all parties strive toward. Creating learning opportunities together, such as joint tours of agrivoltiacs or low impact construction methods, helps local governments calibrate and inform developers of their expectations and vice-versa.

PROFESSIONALISM IS PARAMOUNT

"A process managed by experienced civil servants will more closely adhere to statutory timelines, conscientiously involve other affected agencies, and follow through on agreed upon commitments. The more professional the lead agency staff, the more likely the permit process will be what it is intended to be: a rigorous and thoughtful weighing of a proposed project's merits against its impacts."

 Robert D. Kahn in Siting Struggles: The Unique Challenge of Permitting Renewable Energy Power Plants

Creating a Collaborative Problem-Solving Partnership with Continuous Improvement and Learning

- Share information through multiple platforms, such as:
 - Online data share through webinars and virtual conferences or the US Department of Energy's Open Energy Data Initiative.
 - Local sponsorship of in-person conferences/educational events such as Weld County's 2021 Energy and Environment Leadership Symposium.
 - Offer tours of existing utility-scale solar facilities and new technologies to elected and appointed officials.
- Create strategic partnerships to accelerate up-to-date research, analysis, and increased capacity.
 - Apply for Solsmart technical assistance.
 - Join the Western Colorado Clean Energy Network or similar.
 - Jointly fund a renewable energy liaison staff position to better utilize resources for data collection and communication.
- Problemsolve siting, design, and public processes in partnership with developers together.
 - · Invite elected officials to meet with experts from NREL, COSSA, and universities.
 - Incentivize local problem solving with students and community organizations through a contest. See the **World Solar Challenge** for inspiration.
- Keep records of the outcomes of on-going projects.
 - Highlight accomplishments. For example, post installation evaluations allow for collaborative learning in the solar community.
 - Invite community colleges and universities to participate in data collection and analysis.
 - Publishing metrics accessible to schools so that locals can see how their community benefits.
 - Monitor the holistic performance of utility-scale projects to learn from how they are achieving the desired outcomes long-term (water quality, revegetation, output, etc.)
- Acknowledge and support local programs that are overcoming market barriers and enabling private sector solar development, such as non-profits and vocational training programs.



MAXIMIZE COMMUNITY BENEFITS AND DESIRED OUTCOMES

The State of Colorado actively promotes solar because the technology brings many benefits that are not offered by other energy sources. These include:

Lowest cost. Utility-scale solar is the least expensive new power source available today, keeping utility rates low for customers.



Free sunshine. In addition to no fuel costs, solar avoids externalizing the environmental costs of mining, extraction and reclamation of fossil fuel sites and transportation.



Social and work force capacity building. The solar industry funds workforce skill development and training programs. Local governments can help target those programs to traditionally disadvantaged, underemployed populations, or workers transitioning from other industries.



Local economic development. Solar developers invest hundreds of millions of dollars into large projects, a good portion of which occurs as direct and indirect school and fire district payments, landowner payments, salaries to a local construction and operations workforce, and local construction purchases of supplies and services, ranging from lodging and food to equipment.



Local employment. Many construction industries and laborers, like heavy machine operators, are employed during a project's lifecycle. Jurisdictions can encourage developers to hire locals as a percentage of the workforce or contract value.

and planned solar facilities were used for

would produce \$1.9 to

Technology.

Resilient energy supplies. Local solar strengthens the energy portfolio and buffers localities from national energy disruptions.

Fewer long-distance transmission lines. A more efficient distributed system with energy production built near the consumer means that there is less line-loss and greater efficiency in the system and fewer new transmission lines that wind, coal, nuclear, and hydropower depend upon.



Cleaner air and water. Regional air quality improves with energy produced from the sun, rather than fossil fuels. Solar also does not generate hazardous waste.

Increased ecological diversity. Lands that have solar facilities can offer more diversity and can support more pollinators than agricultural lands because they are not monocultures and provide shaded environments for plants to grow. Wetter areas where runoff concentrates can support a broader variety of plants and animals.



Grazing and agrivoltaics. In some areas farm animals can be used to control weeds and vegetation height, and agricultural crops can be grown for local food production.



\$5.7 billion in pollination benefit annually¹. 1. Leroy J. Walston, et. al. Examining the Potential for Agricultural Benefits from Pollinator Habitat at Solar Facilities in the United States. Environmental Science &

How can Colorado leverage these BENEFITS IN THE PERMITTING PROCESS?

Performance-based standards are a good place to start. Performance-based standards focus on the desired outcomes and benefits of a solar project and allow creative paths to achieve them.

Unfortunately, most local governments rely on reducing impacts through the use of prescriptive, or minimallyacceptable land use codes and development standards. Setting a bar at the lowest tolerable height prompts industries to only rise to the lowest expectation. Prescriptive standards discourage creative problem solving and miss opportunities to magnify the benefits of solar. Requirements that cover the potential incompetencies of developers are commonly built into prescriptive standards, but they are not always necessary and can waste resources that could otherwise be re-allocated in more efficient ways.

PRESCRIPTIVE METHODS VERS	US PERFORMANCE OUTCOMES
Manages risks with one-size-fits-all, simplistic standards that prevent innovation.	Resolves risks through creativity and context-sensitive solutions.
Explicit government control of design, construction, and operation.	Allows the developer and local government to assess trade- offs between goals and options. If certain elements perform especially well, more leniency is allowed to other elements.
Audits and inspections.	Insights and innovation.
Focuses almost exclusively on design and construction methods, sometimes to the detriment of operations.	Focuses on life cycle performance.
PRESCRIPTIVE EXAMPLES VERS	SUS PERFORMANCE STANDARDS
Panel coverage maximums, such as no more than 65% coverage.	Maximize solar panel performance and efficiency, which naturally limits how close panels can be to one another ¹ .
Explicit setback and landscape standards.	A finding that "The applicant has demonstrated that neighbor concerns have been addressed through respectful siting and project design".

1. NREL's 2013 Land Use Requirements for power plants describes panel coverage percentages from 13% to 92% in their study of 152 utility-scale installations due to many "packing factors" considered in panel spacing.

Solar@Scale, a partnership between the American Planning Association and International City/County Management Association, evaluated 81 online resources and identified consistent gaps in planning, zoning, inspections, technical assistance, performance management, and spatial and economic analyses. Solar@ Scale's *A Local Government Guidebook for Improving Large-Scale Solar Development Outcomes* is a must read for any local government looking to maximize a project's benefits.


BECOMING UTILITY-SCALE SOLAR READY

FLEXIBILITY = INNOVATION

When placed on man-made reservoirs with low ecological value such as water-treatment plants, cooling ponds, and water supply reservoirs, floating solar reduces water temperatures and water loss to evaporation, does not compete for scarce land, and controls algal blooms which protects water quality while improving solar panel performance because the water cools the solar equipment.



Utility-scale solar is constantly progressing with improvements in technology and research. This means prescriptive standards quickly become outdated or inapplicable as technology evolves. For example, ground-mounted solar standards (lot coverage, grading and drainage, erosion control, etc.) do not apply to solar arrays that float on a water body. When overly simplistic prescriptive codes are applied to rapidly evolving technologies or systems, they get in the way of innovation and problem solving and result in requests for variances, which create extra work for everyone involved.

There are many types of tools to guide design processes with the goal of making them fit more sustainably within their site context and the community. A major program is the Green Building Construction Institute's <u>Sustainable SITES</u>[®], which offers a sustainabilityfocused framework that guides permitting, engineering, construction, and operations teams toward practices that enhance the mosaic of benefits that solar continuously provides our communities and ecosystems. SITES[®] brings benefits far beyond typical land use regulations – including climate regulation, sustainable material selection, and energy supply resiliency. This tool could be used by solar developers and required by local governments to demonstrate creative ways to improve a project's performance.

Measurable performance-based sustainability standards are a potentially powerful tool to improve the life-cycle performance of utility-scale solar, but require a change in paradigm and dedication to monitoring and reporting the results over time. Incentivizing one performance metric more than others may have unintended consequences. A balanced series of metrics should be applied so that the goals of compatibility, site efficiency, and life-cycle performance take priority over a simple checklist.

Utility providers who issue requests for proposals from solar developers can also help improve the industry by shifting away from the traditional "lowest bidder" practice towards a "best-value" approach that maximizes community benefits.

Maximizing Community Benefits and Desired Outcomes

- Comprehensive Plans and Sustainability Plans, as well as the Resource Plans of utility providers should list the community benefits that investments in solar can accomplish. Codify those outcomes in performance-based development standards.
- The Findings section of a land use code is an ideal place to articulate desired outcomes. An example of performance-based wording could be, "The proposal utilizes construction methods in a manner that ensures return to original productivity and character upon cessation of such use."
- Implement a benchmarking system that has proven to be successful over time and nationally recognized.
- Provide an annual report on how your community has been affected by utility-scale solar.

REDUCE IMPACTS

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According to NREL's <u>Solar Futures Study</u>, reaching stated goals for a 100% clean energy economy with net-zero emissions could require 1 terawatt of installed solar capacity nationally by 2035, which would require about **5.7 million acres** of land. Minimizing impacts and maximizing the benefits of solar will be critical to meeting these climate goals in partnership with each community.

LOWERING IMPACTS AT LARGER SCALES

If all parties focus on maximizing community benefits, overall negative effects diminish. However, both negative and positive impacts must be identified and acknowledged with the goal of reducing the negative impacts as much as possible and ending up with a net positive result.

For example, developers can expect grudging acceptance of a change in land use from residents who are accustomed to and fond of the current land use. Most residential complaints are visual in nature and are a function of proximity, and yet tens of thousands of residents install solar on their own properties without complaint. The difference, it seems, is when undeveloped public or private land is valued as a public viewscape that must be protected. Hence, thoughtful land acquisition and siting are imperative.

For example, screening a solar array from key viewpoints may be impossible, or the solution may end up worse than the change in visual character of landscape. Installing trees in a desert or grasslands landscape requires long term irrigation, which uses precious water, is extremely expensive, and may have a high mortality rate over time because trees don't naturally occur in that environment. A large and extensive earthen berm would also be out of character for that landscape type, is very difficult to vegetate without irrigation, and may not effectively screen the development depending upon the topography. The question is whether changes to the visual character are acceptable given the avoidance of excess water use and other benefits of the project. The end decision may be that the visual impact cannot be completely mitigated. The BLM's Best Practices for Reducing the Visual Impacts of Renewable Energy Facilities offers a range of creative, site-specific techniques.

Complexities also exist regarding mitigation of wildlife impacts. <u>Colorado Parks & Wildlife</u> provides best practices to avoid, minimize, and mitigate impacts to big game and other priority species. Here again, the most beneficial discussions and mutually beneficial solutions are gained in the land acquisition and siting stage.

Similar best practices for agriculture, weed control, noise, dust, continue to advance and are updated regularly in <u>Innovative Solar Practices Integrated with</u> <u>Rural Economies and Ecosystems (InSPIRE)</u>.



Platte River Power Authority and developers setback the solar facility footprint and fences from this natural drainage to enable wildlife passage and protect water quality, as well as avoid extra development costs and permits.

Typical Impacts	Local Governments	Residents	Construction (6 mos 2 years)	Operations (20 - 30 years)	Decommissioning (6 mos 2 years)
Pace of Change and Land Conversion	•	•	•		
Wildlife	•	0	•	0	0
Agriculture	•	0	•	•	
Weeds	•	0	•	0	•
Noise	•	•	•		•
Traffic and Roads	•	•	•		•
Visual	•	•	•	•	0
Dust	•	0	•		•
Ideological Support	•	•			
Local Partnerships	•	0	0	0	
Permitting Pathways	•	0			
Table Key: ● Primary Issue					

BECOMING UTILITY-SCALE SOLAR READY

Selecting sites that do not require extensive grading and pile driving through existing vegetation avoids a host of downstream impacts to soils, water quality, weeds, visual appearance – and costs.



Reducing Impacts

- Convene affected agencies and stakeholders to identify local impacts that can be avoided through proper siting and design at the pre-application meeting if not earlier.
- Consult with CPW and other affected agencies prior to applying for a land use approval.
- Utilize and participate in open-source data platforms of best practices, such as InSPIRE's <u>Low-Impact Solar Develop-</u> <u>ment Strategies Guidebook</u>.

BECOMING UTILITY-SCALE SOLAR READY

Potential impacts are shown on the table above, which occur at different stages of the project's lifecycle. Local governments must pay attention to all of them, and some may have varying importance to residents.

ALIGN AGENCIES, PLANS, AND REGULATIONS

It is not always clear where utility-scale solar fits into existing planning and land use regulations. Conflicting policies can cause multiple governing agencies (or agency departments) within a jurisdiction to work against one another. One common example is when a community has adopted a sustainability plan to encourage solar, but has a land use code and development review process that places onerous or unclear requirements on developers. When agencies and their policies and regulations are not aligned:

- Utility-scale solar projects may be improperly categorized as an industrial or commercial land use.
- Development may be unnecessarily subject to existing building regulations, such as minimum lot coverages and impervious surface calculations.
- A developer is exposed to regulatory double jeopardy by needing to obtain essentially the same approval for the same proposal from multiple different agencies (i.e., federal NEPA and local 1041 processes).

POLICY PLANS

Identify and define solar resources and desired patterns

Prioritize solar development co-benefits

Identify transmission and solar land use opportunities and conflicts, including opportunities to generate revenue from marginal lands

Set solar development and battery targets or goals

Ensure "fit" within the urban, rural, or remote context, rather than onesize-fits-all aesthetic and landscaping requirements

Align with Sustainability Plans and Utility Plans

Best Practices for Aligning Planning Tools

- Describe solar resources and establish clean energy goals in Comprehensive Plans, recognizing that utility-scale solar may not fit precisely into an existing land use category.
- Explicitly address solar development in its varied forms in **Development Regulations**.
- Create permitting processes that are predictable, transparent, and documented.
- Align local government direction with regional, state, and federal investment already being made in the community's solar resources
- Unify permitting systems by reducing duplicative requirements between agencies, such as using Memorandums of Agreement with other agencies to consolidate development proposal reviews (i.e., joint 1041s or NEPA reviews).

By aligning planning tools, solar projects face less unnecessary friction in the permitting process and the future zoning problems are more likely to be eliminated.

PERMITTING PROCESSES

Invite COSSA, NREL, or SolSmart for technical assistance

Engage the whole community -- with involvement from utility, landowner, solar developer, environmental stakeholders

Calculate application fees to support staff responsiveness and training

Calibrate Conditional/Special Use Permits to medium and large scale solar based on impact and area -- not capacity (kW) as efficiencies and technologies change over time

Utilize 1041 / Activities of State Interest applications for transmission, solar, and battery projects that exceed a significant threshold of community impact

Colidate all proposed components (transmission, solar arrays, battery, substation, switchyard) into a single application

DEVELOPMENT REGULATIONS

Use by Right: Allow small rooftop and ground-mounted PV in all major zoning districts as a Use by Right

Lot Coverage: Exempt ground-mounted solar from lot coverage restrictions that apply to buildings

Setbacks: Avoid applying building setbacks

Glare: Glare studies are not needed unless solar is adjacent to airport, in which case it may be regulated by FAA, not the local jurisdiction

Impervious surface calculations: Exempt as long as the ground beneath the system is vegetated and pervious

Avoid siting criteria that fragment land uses, such as "one mile from community boundaries or other solar projects"

Require a decommissioning bond accounting for salvage value near the project's end of life rather than at the beginning