

# Columbia County

## A Solar Experience

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Land Resources Director

# Topics To Be Discussed

- ▶ 1) Why Solar Developers Are Drawn To Columbia County
- ▶ 2) How the County Only Has Authority Given To It By Statues
- ▶ 3) Mixed Bag Of Solar Developers
- ▶ 4) Why the County Chose to Update The Ordinance With Goals/Approach
- ▶ 5) Overview of Ordinance Language
- ▶ 6) Challenges & Opportunities

# Why Columbia County?

- ▶ Columbia Energy Coal Plant Closing
- ▶ Substantial Transmission Line Infrastructure/Access Points
- ▶ Lots of Undeveloped Agricultural Lands/Open Landscape/Flat
- ▶ Landowner **Interest** In Agreements (40%-60%) leased Ag Land
- ▶ Nothing Unique Regarding Regulations/Same Rules Apply Across The State

# Columbia Energy Center Closing 2029

3/1/24, 3:30 PM

Alliant Energy says it will close coal-fired plant near Portage by 2024

**milwaukee journal sentinel**

**MONEY**

## Alliant says it will close its last Wisconsin coal-fired power plant by 2024; Columbia Energy Center has operated for nearly 50 years

**Guy Boulton and Joe Taschler** Milwaukee Journal Sentinel  
Published 9:08 a.m. CT Feb. 2, 2021 | Updated 5:53 p.m. CT Feb. 2, 2021

Alliant Energy said Tuesday that it plans to close its Columbia Energy Center — the last of its coal-fired power plants in Wisconsin — by 2024.

The power plant, near Portage in Columbia County, has generated electricity for nearly half a



WPR

<https://www.wpr.org> > energy > alliant-energy-will-shut-...

## Alliant Energy Will Shut Down Its Last Coal Plant In ... - WPR

Feb 2, 2021 — Madison-based Alliant Energy announced Tuesday it's shuttering its roughly 1,100-megawatt **coal plant** in **Columbia** County by the end of 2024.



Wisconsin State Journal

<https://madison.com> > news > local > environment > colu...

## Columbia power plant to close by 2025, ending coal-fired ...

Feb 3, 2021 — Wisconsin's second-largest **coal plant** and source of carbon dioxide will **shut down** by 2025 as utilities continue the shift away from fossil ...



Energy News Network

<https://energynews.us> > 2023/11/14 > wisconsin-coal-pla...

## Wisc. coal plants are closing, but ratepayers are still on the ...

Nov 14, 2023 — Columbia Energy Center — the state's largest coal plant, co-owned by WEC and Alliant — will close by 2026. ... Power Cooperative — will close by ...

# High Level Of Public Engagement 2023

- ▶ High Levels of Engagement From Public Around Solar Development Areas. Most Concerns Came From Primarily PSC Size Projects
- ▶ Elected Officials Trying To React To Concerns. Obvious Struggle Over What The County Can Legally Do.
- ▶ 2 Resolutions Passed
  - ▶ Providing Direct Input on High Noon Solar EA/EIS
  - ▶ Request To Revise State Law
- ▶ Motion To Seek Implementation Of Solar Moratorium
  - ▶ 17 Page Memo Responding To Issue And Other General Solar Concerns
- ▶ July 2023 Recall Election Successful For CB Member
- ▶ Marathon CB Meetings/PZ Meetings/Joint AELWCC/PZ Meetings

# Points Of Confusion

- ▶ Is Comp Plan a Law Or a Just a Plan?
- ▶ Is this Farmland Preservation?
- ▶ Staff Are On The Side Of Developers?
- ▶ Not Fully Understanding The Power Or Lack Of Power Of State Law
- ▶ Litigation Risks
- ▶ Role of Corporation Counsel
- ▶ Jurisdiction Of County Zoning In County
- ▶ How To Provide Input To PSC

# Finally, A Shift In Focus

- ▶ Focus on How

- ▶ Not If

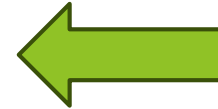
# County Authority Provided In Statutes

## April 13, 2023 Corporation Counsel Memo



Second, preemption applies to this subject matter. Preemption is a legal concept, that when looking at the hierarchy of laws, the higher law supplants, or preempts, the lower regulation. For example, unless by exception, Federal law preempts state law; and state law preempts local law.

Turning next to the subject of solar energy, note, the Wisconsin legislature adopted a policy, and goal, for newly installed capacity for electricity be from renewable forms, including solar, years ago. *See Wis. Stat. § 1.12(3)(b)*. In doing so, the Legislature enacted law limiting local authority over solar energy. Instead, Wisconsin solar energy law vests most regulatory authority with the State. Aside from that allowed by *Wis. Stat. § 66.0401(1m)(a-c)*, local restrictions on solar energy are preempted by State law.





# Case Law Ecker Brothers v. Calumet County

## This means CUP For Less Than 100 MW.

Wisconsin Courts have considered Wis. Stat. § 66.0401(1m) and reinforced its limits on local control. Local authorities are bound to these statutory restrictions when considering an application for a permit. *State ex rel. Numrich v. City of Mequon*, 626 N.W.2d 366, 2001 WI App 88. When reviewing that permit, a “case-by-case approach” to solar energy is required and not widespread or broad tactic. *Ecker Brothers v. Calumet County*, 772 N.W.2d 240, 321 Wis.2d 51 (Ct. App. 2009).





State of Wisconsin  
Governor Tony Evers

**Department of Agriculture, Trade and Consumer Protection**  
Secretary Randy Romanski

## Renewable Energy Frequently Asked Questions

### Is commercial energy production an agricultural use?

No. Energy production is not an agricultural use, regardless of whether it is commercial or accessory to a farm for the purposes of the farmland preservation law. Agricultural use is defined in s. 91.01(2), Wis. Stats. to include any of the following activities for the purpose of producing an income or livelihood: crop or forage production, keeping livestock, beekeeping, nursery, sod or Christmas tree production, floriculture, aquaculture, fur farming, forest management, or enrolling land in a federal agricultural commodity payment program or a federal or state agricultural land conservation payment program.

### What is dual-use?

Dual-use for commercial energy production is sometimes referred to as agrivoltaics. This refers to a land use where the farmland is used for agriculture and solar photovoltaic energy generation.

### Can you site renewable energy facilities on lands covered by an effective farmland preservation agreement?

Commercial energy production is not an allowable use on land subject to an effective farmland preservation agreement. Lands covered by post-2009 farmland preservation agreements are restricted to agricultural uses, accessory uses, undeveloped natural resource and open space uses, and pre-existing uses defined in the terms of an agreement. If a landowner chooses to sign a lease to allow for the siting of a renewable energy facility on property covered by an effective farmland preservation agreement, they will be required to release those lands, prior to any change in land use that would violate the terms of their farmland preservation agreement.

### Can you site renewable energy facilities (i.e. solar panels, wind turbines) on lands zoned in a farmland preservation zoning district?

Commercial renewable energy production may be an allowable use in a farmland preservation zoning district. Whether the use is permitted or conditionally permitted depends on the context and the local ordinance. Project scale may affect whether the local zoning authority may regulate the use.

- **Accessory** (Wis. Stat. § 91.44(1)(b) or Wis. Stat. § 91.46(1)(b)) - may be permitted or conditionally permitted depending on how the local zoning ordinance has been written.
- **Commercial** renewable energy generation (Wis. Stat. § 91.44(1)(f) or Wis. Stat. § 91.46(1)(f)) may be authorized uses in farmland preservation zoning districts.

### How does renewable energy facility siting affect the farmland preservation tax credits?

Under s. 71.613(1)(h), Wis. Stats., "Qualifying acres" means the number of acres of a farm that correlate to a claimant's percentage of ownership interest in a farm in a certified zoning district, covered by an effective farmland preservation agreement or both.



# Understanding Regulations (Authority)

Wis. Stat. § 66.0401(1m) further defines how solar and wind energy systems are to be regulated in Wisconsin.

## 66.0401 Regulation relating to solar and wind energy systems.

(1e) DEFINITIONS. In this section:

- (a) "Application for approval" means an application for approval of a wind energy system under rules promulgated by the commission under s. 196.378 (4g) (c) 1.
- (b) "Commission" means the public service commission.
- (c) "Political subdivision" means a city, village, town, or county.
- (d) "Wind energy system" has the meaning given in s. 66.0403 (1) (m).

→ (1m) AUTHORITY TO RESTRICT SYSTEMS LIMITED. No political subdivision may place any restriction, either directly or in effect, on the installation or use of a wind energy system that is more restrictive than the rules promulgated by the commission under s. 196.378 (4g) (b). No political subdivision may place any restriction, either directly or in effect, on the installation or use of a solar energy system, as defined in s. 13.48 (2) (h) 1. g., or a wind energy system, unless the restriction satisfies one of the following conditions:

- (a) Serves to preserve or protect the public health or safety.
- (b) Does not significantly increase the cost of the system or significantly decrease its efficiency.
- (c) Allows for an alternative system of comparable cost and efficiency.

Welfare?

# Understanding Regulations (Authority)- Continued

Wis. Stat. § 59.69 further defines the standards for review and approval of conditional use permits.

## 59.69(2)(bs)

(bs) As part of its approval process for granting a conditional use permit under this section, a county may not impose on a permit applicant a requirement that is expressly preempted by federal or state law.



## (5e) CONDITIONAL USE PERMITS.

(a) In this subsection:

1. "Conditional use" means a use allowed under a conditional use permit, special exception, or other special zoning permission issued by a county, but does not include a variance.
2. "Substantial evidence" means facts and information, other than merely personal preferences or speculation, directly pertaining to the requirements and conditions an applicant must meet to obtain a conditional use permit and that reasonable persons would accept in support of a conclusion.

(b)

1. If an applicant for a conditional use permit meets or agrees to meet all of the requirements and conditions specified in the county ordinance or those imposed by the county zoning board, the county shall grant the conditional use permit. Any condition imposed must be related to the purpose of the ordinance and be based on substantial evidence.
2. The requirements and conditions described under subd. 1. must be reasonable and, to the extent practicable, measurable and may include conditions such as the permit's duration, transfer, or renewal. The applicant must demonstrate that the application and all requirements and conditions established by the county relating to the conditional use are or shall be satisfied, both of which must be supported by substantial evidence. The county's decision to approve or deny the permit must be supported by substantial evidence.

(c) Upon receipt of a conditional use permit application, and following publication in the county of a class 2 notice under ch. 985, the county shall hold a public hearing on the application.

(d) Once granted, a conditional use permit shall remain in effect as long as the conditions upon which the permit was issued are followed, but the county may impose conditions such as the permit's duration, transfer, or renewal, in addition to any other conditions specified in the zoning ordinance or by the county zoning board.

(e) If a county denies a person's conditional use permit application, the person may appeal the decision to the circuit court under the procedures contained in s. 59.694 (10).



# Summary Of Regulations

- ▶ Small Solar Energy Generating Facility <100 MW
  - ▶ CUP Under Zoning (If applicable)
- ▶ Large Solar Energy Generating Facility >100 MW
  - ▶ Certificate of Public Convenience and Necessity From PSC
  - ▶ Typically, There is a Joint Development Agreement To Bring In Local Concerns
  - ▶ Chapter 196
  - ▶ Administrative Permits (Zoning etc.)For Structures

# Mixed Bag Of Solar Projects Approved To Date

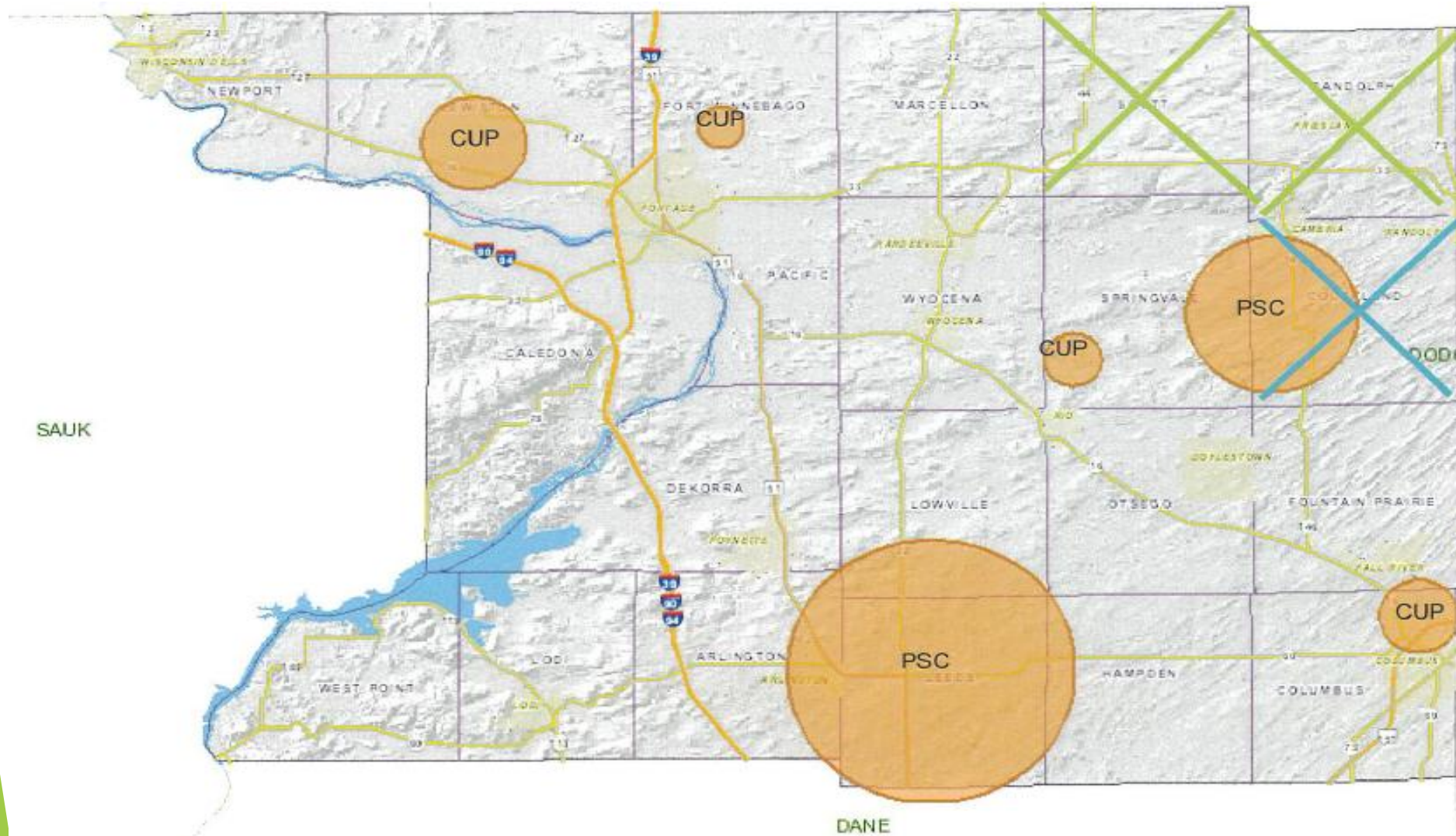
## 6 Projects In Columbia County

- ▶ Enbridge Energy (CUP) - March 31, 2022
    - ▶ 12 MW 115 Acres
    - ▶ Behind Grid
  - ▶ High Noon Solar (PSC) - July 10, 2022
    - ▶ (PSC) 300 MW 3000 Acres With Battery Storage
    - ▶ Shared Revenue \$700,000/year
  - ▶ P & Q Dodge County LLC/Alliant (CUP) - May 2, 2023
    - ▶ 4.5 MW 23 Acres
- Shared Revenue calcs have increased per MW.

# Solar Projects - Continued


- ▶ Langdon Mills (PSC) - November 8, 2023
  - ▶ 200 MW 2000 Acres With Battery Storage
  - ▶ Shared Revenue \$500,000
- ▶ Gristmill Solar (CUP) - November 7, 2023
  - ▶ 67 MW 458 Acres
  - ▶ Shared Revenue \$160,000
- ▶ Good Oak Solar (CUP) - November 7, 2023
  - ▶ 98 MW 620 Acres
  - ▶ Shared Revenue \$235,000

# Locations of Approved Solar Projects - Columbia County






# Why County Ordinance Chose To Include Goals-In Our Approach

- ▶ The Conditional Use Permit Process Is An Opportunity For Public Engagement On a Proposal. By Solidify Application Requirements and Clearly Stating Our Concerns/Goals We Can Achieve Desired Outcomes Without the Direct Authority Under State Law To Require Them.
- ▶ Experience To This Point Has Shown Us that Developers Want to Know Concerns And Will Actively Engage On Those Concerns.
- ▶ Ordinance Developed To Try And Engage Discussion On List Of Concerns. 
- ▶ Must Understand What a Goal Is and What Is Not.

# Trying To Find...Compromise!

- ▶ Address Things That You **CAN** Address
- ▶ Solid Definitions
- ▶ Clear Application Requirements For Small Scale CUP
  - ▶ Spell Out Exactly What Makes A Complete Application
- ▶ Clear Review Criteria (**ASK** Them Verses Tell Them) 
  - ▶ Set Back Goal of 50 feet Property Line/500 Feet From A Residence
  - ▶ Screening
  - ▶ Property Value Protection
  - ▶ Operator Ownership Change
  - ▶ Decommissioning & Financial Assurance
  - ▶ Battery Storage Best Management Practices
  - ▶ Sound Mitigation Measures



# Discussion on Concerns Regarding Solar Regulations

January 3, 2023 Planning & Zoning Committee Meeting

1. Water/runoff + during construction
2. Cleanup/decommission
3. Require bonds
4. Emergency management
5. Hazardous/containment for materials
6. Storm damage/cleanup for panels
7. Aesthetics
8. Wildlife/corridors
9. Snowmobile routes
10. A-4 Overlay
11. Groundwater testing
12. Loss of species/endangered plants and animals
13. Dust
14. Road maintenance
15. Setback for participating and nonparticipating
16. Economic impact on farmland
17. Loss for farm related businesses
18. Public safety
19. Farm animal safety
20. Notice earlier
21. Pollinators
22. Stray voltage
23. Heat island
24. Contract transparency
25. Land productivity at decommission
26. Alternate batteries
27. Education – PSC/legislatures

# Ordinance Implementation June 2024 Adoption

- ▶ The CUP Sized Projects That Were Approved Prior To The Ordinance Did Follow The Basic Process Outlined In Ordinance We have Codified Now
- ▶ Several Points of Contact With New Developers, They Appreciate The Expectations Outlined In the Application and The Clarity In the Review Criteria And Zoning Permit Requirements
- ▶ Discussions With PSC-Size Projects Regarding Zoning Permit Application Requirements
- ▶ Future Implementation Will Be Better Defined For All Involved And Result In Better outcome
- ▶ Focuses On “How” Not “If”

FEATURED

# Columbia County board drafts new ordinances for new energy

Jonathan Stefonek | [lpedit@hngnews.com](mailto:lpedit@hngnews.com) Sep 1, 2023

Approved June of 2024  
Part of County Zoning Ordinance

1 of 2



**LET'S PLAY,  
WISCONSIN!**  
Daily games for true Wisconsinites

## SEC. 12.125.31 SMALL SOLAR ENERGY GENERATING FACILITY

- (1) **Purpose and Scope.** The purpose of this section is to adopt and incorporate the requirements of Wis. Stat. § 66.0401 as a local ordinance and to establish local regulations on the installation and use of Small Solar Energy Generating Facilities that are authorized by and compliant with Wisconsin statutes and that serve to preserve or protect the public health or safety, do not significantly increase the cost of the system or significantly decrease its efficiency, or allow for an alternative system of comparable cost or efficiency. The provisions listed under this section are not intended to be a duplication of any federal or state requirement or to exceed that authority granted to Wisconsin counties.
- (2) **Statutes, Regulations and Rules**
- (a) This section is subject to the provisions of Wisconsin law.
- (b) Wis. Stat. § 66.0401 is adopted and incorporated by reference.
- (3) **Definitions**
- (a) “Conditional Use Permit” means a discretionary permit for a listed conditional use, granted by the Columbia County Planning and Zoning Committee, under the notice and hearing procedures of Section 12.150.07 of the chapter, upon application by an owner, and to which various conditions of use may be attached and adhered to by the applicant.
- (b) “County” means Columbia County.
- (c) “Department” means the Columbia County Planning and Zoning Department.
- (d) “Department Director” or “Director” means the Director of the Columbia County Planning and Zoning Department or the Department Director’s designee.
- (e) “Kilowatt” means a unit of power equal to one thousand watts.
- (f) “Megawatt” means a unit of power equal to one million watts, especially as a measure of the output of a power station.
- (g) “Permit” means a Zoning Permit issued by the Columbia County Planning and Zoning Department pursuant to this code.
- (h) “Shared Revenue Utility Payment” means payments made to counties and municipalities to off-set tax exempt utility property. Payments are based on state calculations.
- (i) “Small Solar Energy Generating Facility” means but is not limited to: connected arrays of photovoltaic panels, their supporting structures and/or mounting systems, the network of necessary electrical wires and conduit (above and below ground), power poles, inverters, transformers, and supporting substations. These facilities are designed for nominal operation at a nameplate capacity of less than 100 megawatts and do not meet the definition of an “accessory solar energy generating system.” This includes facilities which directly convert and transfer or store solar energy into thermal or electrical energy.

- (j) “Zoning Permit” means written approval by the Planning and Zoning Department staff that is required before commencing any development as defined in this chapter or before establishing, extending, or changing any use on any parcel.
- (k) “Cultural Resource” – see 12.160: Definitions.
- (l) “Environmental Analysis” means a detailed localized review of relevant environmental conditions (e.g., wetland delineations, threatened and endangered species reviews, floodplain studies, navigability determination, or areas identified as environmental corridors within the County Comprehensive Plan).
- (4) **Conditional Use Permit Requirements**
- (a) **Permit Requirement.** Small Solar Energy Generating Facilities are subject to Conditional Use Permit approval in all zoning districts.
- (b) **Application Process.** The application for a Conditional Use Permit shall be processed in accordance with the procedures set forth in Section 12.150.07.
- (c) **Application Requirements.** The application for a Conditional Use Permit shall include the following items as applicable to the project area:
1. A narrative of the proposed project, including a description of the subject property by metes and bounds, address(es), parcel numbers, and any unique circumstances within the project area;
  2. A site plan, which shall include a scalable drawing showing the location of all drives, entrances, easement labels and locations, trails, and signs; panels, inverters, storage systems, and any other planned infrastructure; vision clearance triangles; floodplain(s); wetland(s); and shoreland zone boundaries;
  3. A plan showing an overhead view of all existing and proposed landscaping on the site, including the location, species, size at time of planting, and mature size for all new plantings;
  4. A grading and drainage plan, showing existing and proposed surface elevations, and proposed erosion control and stormwater management provisions;
  5. A decommissioning plan and financial assurance;
  6. Shared Revenue Utility Payment tax projections and estimated property tax reductions to the County, town(s), and school/special district(s);
  7. Agreements, leases or other documentation with affected landowners and/or communities outlining any site-specific terms or conditions of development and assuring maintenance of land to be owned or used for common purposes, including, but not limited to joint development agreements and road maintenance agreements;
  8. Supporting documentation addressing the review criteria in Section 12.125.31(4)(d);
  9. Copies of all state, federal, and other permits;
  10. Any other documentation as identified by the Director or the Planning and Zoning

Committee to demonstrate compliance with state and federal law.

11. Documentation evidencing cultural, archeological, and environmental analyses done by third parties, and associated permit authorizations as required by law]
12. A complete list of neighboring parcels that have been notified of the project. Within two miles of project boundary is preferred;
13. Anticipated water and soil quality impacts from construction materials and project, and a baseline testing and monitoring protocol to be implemented to address such impacts;
14. A planned maintenance log description. An owner/operator, at the owner/operator's sole expense, shall maintain and provide the Department at least annually with a maintenance log for the solar energy generating facility. The log must contain the following information regarding any maintenance performed: 1) date and time maintenance was performed; 2) nature of the maintenance performed; and 3) reason(s) for the maintenance. The Department may retain such consultants or experts as it deems necessary to assess and determine whether the solar energy system facilities are compliant and/or to assess whether the solar energy system facilities are being maintained in good repair and operating condition. An owner/operator shall pay for all costs incurred by the County in connection with monitoring compliance during construction and assessing whether solar energy facilities are maintained in good repair and operational condition.
15. The equipment must have the capability to withstand extreme weather events, with a preference that components be listed by the Underwriters Laboratory.
16. Documentation of planned stray voltage mitigation and response.
17. Planned noise nuisance abatement measures.

(d) **Review Criteria.** In addition to the criteria set forth in Section 12.150.07(4), the review for a Conditional Use Permit shall address and consider the following:

1. Setbacks from participating and non-participating property lines, residential structures, unique adjacent land uses, and roadways, assessed on a case-by-case basis for each parcel affected.
  - a. Documentation of working with neighbors toward a Committee-identified minimum goal of 50 feet from non-participating property lines and minimum 500 feet from residential structures.
2. Documentation of working with neighbors to address stray voltage concerns.
3. Beneficial vegetative screenings and maintenance requirements of said vegetative screening.
4. To the extent feasible and practical, plans to use the land for both agriculture and electricity generation among solar panels, possibly including but not limited to:
  - a. Planting and maintaining pollinator-friendly native plant species and reduced herbicide applications.

- b. Grazing of livestock such as cattle, sheep, goats, and/or chickens; or
- c. Planting of shade tolerant crops.
5. Mitigation of impacts to local environmentally sensitive species and habitats by following:
  - a. Best construction practices, such as wildlife permeable fencing to allow smaller wildlife access through facility fences; and
  - b. Best construction practices to allow larger wildlife access natural movement around facility fences.
6. Best Management Practices (BMPs) and considerations as noted in Section 12.125.31(10) associated with projects using battery storage.
7. Dust mitigation measures.
8. Cultural and environmental resources.
9. Stormwater runoff and erosion control mitigation measures, with a focus on assuring implementation of mitigation measures, including a preference for minimal soil grading.
10. Reasonable construction standards, including:
  - a. Phasing to limit area of disturbance;
  - b. Hours of construction to limit disruption to residents; and
  - c. Light pollution mitigation.
11. Equipment-related sound mitigation measures that keep operational noise generation at property line(s) at a threshold of no greater than the industry standards outlined by the Public Service Commission, possibly including but not limited to:
  - a. Equipment relocation further from receptors;
  - b. Noise cancellation using quieter equipment;
  - c. Sound shielding technology;
  - d. Sound filtering technology; and,
  - e. Noise suppression and blocking with building enclosures or barrier walls.
12. Operational lighting standards in concurrence with 12.140.07.
13. Maintenance and repair of damage to local roads due to project construction, possibly in the form of a Road Maintenance Agreement.
14. Mitigation plans for any damaged soil drainage infrastructure.

15. Mitigation plans for any damage to surface water conveyance infrastructure, such as grassed waterways.
16. Fire hazard mitigation plans, including:
  - a. Battery-related fire suppression design and chemical release containment design;
  - b. Clean-up and monitoring of any fire-related chemical releases; and
  - c. Additional funding to affected fire districts directly impacted by the project area, including but not limited to equipment supplies and drills for local firefighting and emergency response departments at owner/operator expense.
17. Replacement of lost property tax revenue, including school and special districts.
18. Financial assurance during the construction phase in the form of a surety bond, letter of credit, escrow account, reserve fund, parent guarantee or other suitable financial mechanism.
19. Decommissioning plan and financial assurance for project decommissioning costs. A posted form of financial security such as a surety bond, letter of credit, escrow account, reserve fund, parent guarantee or other suitable financial mechanism, prior to the commencement of construction to include the total cost of decommissioning of the solar generation portion and the battery energy storage portion of the solar project at the end of its useful life.
20. Compliance with state and federal laws, as may be applicable.
21. Other community benefits as may be relevant.
22. Potential property value impacts associated with the project, and potential to offset said impacts with landowner compensation agreements.



(5) **Zoning Permit Requirements.**

- (a) **Permit Requirement.** The owner must apply for and receive a Zoning Permit from the Department before installing, constructing, or expanding any Small Solar Energy Generating Facility.
- (b) **Application Process.** The application for a Zoning Permit shall be processed in accordance with the procedures set forth in Section 12.150.08.
- (c) **Permit Fee.** The owner shall pay an application fee at the time the application for a Small Solar Energy Generating Facility is filed with the Department. Fees shall be based on cost of construction.
- (d) **Permit Expiration.** A Zoning Permit issued by the Department expires if construction of the Small Solar Energy Generating Facility is not commenced within 24 months from the date of the permit, or if the Small Solar Energy Generating Facility is not

**\$510 - \$300K \$2.00/\$1000**



installed and fully functioning within 12 months from the date construction begins. A 24-month extension may be granted under Section 12.150.08(6).

(e) **Application Requirement.** The application for a zoning permit shall include the following items as applicable to the project area:

1. A narrative of the proposed project, including a description of the subject property by metes and bounds, address(es), parcel numbers, and any unique circumstances within the project area.
2. A site plan, which shall include a scalable drawing showing the location of all drives, entrances, easement labels and locations, trails, and signs; panels, inverters, energy storage systems, and any other planned infrastructure; vision clearance triangles; floodplain(s); wetland(s); and shoreland zone boundaries.
3. Supporting documentation addressing the review criteria in Section 12.125.31(4)(c) & (d) and any other relevant update, if not already submitted.

(6) **Additional Permitting Requirements.** Additional permits and processes may be required under the Columbia County Code of Ordinances.

(7) **Operator Ownership Change.** Notice shall be provided to the County for any change in ownership of the Small Solar Energy Generating Facility on or before the effective date of the change.

(8) **Other Approvals.** A copy of all necessary state and federal permits and approvals shall be submitted to the Department within 90 days of receiving said authorizations.

(9) **Postconstruction Filing Requirement.** Within 90 days of the date a Small Solar Energy Generating Facility commences operation, the owner shall file with the Department an as-built description of the facility, an accurate map of the facility showing the location of all infrastructure, geographic information system information showing the location of said infrastructure, and current information identifying the owner(s) and operator(s), including designated contact(s), of the Small Solar Energy Generating Facility.



(10) **Battery Energy Storage System.** If battery energy storage systems are included in solar or other projects, the following considerations shall be made by the owner/operator:

- a. Setbacks from residential, business, municipal, school, or town structures, and public and private drinking water systems. A committee-identified minimum goal of 1,500 feet from residential, business, municipal, school, or town structures and minimum 1,000 feet from a drinking water system is desired.
- b. Separate containment enclosures that include the following goals:
  1. Enclosure size capacity containment of 150% of the battery energy storage system.





2. Sufficient fireproofing for connecting electronic wires, protecting from one structure to the next and from the battery energy storage system to the substation.
- c. Battery management protocols including:
1. Labeling of battery energy storage system container with a date of first usage via a stamped metal nameplate with serial number.
  2. Upon the end of its serviceable life or no more than seven consecutive years, whichever comes first, the battery energy storage system container shall be removed from the site and recycled at owner/operator's expense.
  3. The owner/operator shall give an annual report to the Department documenting which batteries are near the end of their lifecycle, including current physical location of the battery and its serial number.

**SEC. 12.125.32 LARGE SOLAR ENERGY GENERATING FACILITY**

- (1) **Purpose and Scope.** The purpose of this section is to adopt and incorporate the requirements of Wis. Stat. § 66.0401 as a local ordinance and to establish local regulations on the installation and use of Large Solar Energy Generating Facilities that are authorized by and compliant with Wisconsin Statutes and that serve to preserve or protect the public health or safety, do not significantly increase the cost of the system or significantly decrease its efficiency, or allow for an alternative system of comparable cost or efficiency. The provisions listed under this section are not intended to be a duplication of any federal or state requirement or to exceed that authority granted to Wisconsin counties.
- (2) **Statutes, Regulations and Rules**
  - (a) This section is subject to the provisions of Wisconsin law.
  - (b) Wis. Stat. § 66.0401 is adopted and incorporated by reference.
- (3) **Definitions**
  - (a) "Conditional Use Permit" means a discretionary permit for a listed conditional use, granted by the Columbia County Planning and Zoning Committee, under the notice and hearing procedures of Section 12.150.07 of the chapter, upon application by an owner, and to which various conditions of use shall be attached and adhered to by the applicant.
  - (b) "County" means Columbia County.
  - (c) "Department" means the Columbia County Planning and Zoning Department.
  - (d) "Department Director" or "Director" means the Director of the Columbia County Planning and Zoning Department or the Department Director's designee.
  - (e) "Kilowatt" means a unit of power equal to one thousand watts.
  - (f) "Megawatt" means a unit of power equal to one million watts, especially as a measure of the output of a power station.
  - (g) "Permit" means a zoning permit issued by the Columbia County Planning and Zoning Department pursuant to this code.
  - (h) "Shared Revenue Utility Payment" means payments made to counties and municipalities to off-set tax exempt utility property; payments are based on state calculations.
  - (i) "Large Solar Energy Generating Facility" means, but is not limited to, connected arrays of photovoltaic panels, their supporting structures and/or mounting systems, the network of necessary electrical wires and conduit (above and below ground), power poles, inverters, transformers, and supporting substations, or a concentrated mirror thermal energy generating facility and its respective components. These facilities are designed for nominal operation at a nameplate capacity of 100 megawatts or more. A Certificate of Public Convenience and Necessity issued by the Wisconsin Public Service Commission (PSC) is typically associated with these facilities. This includes facilities which directly convert and transfer or store solar energy into thermal or electrical energy.



- (j) "Zoning Permit" means written approval by the Planning and Zoning Department staff that is required before commencing any development as defined in this chapter or before establishing, extending, or changing any use on any parcel.
- (k) "Cultural Resource" see 12.160: Definitions.
- (l) "Environmental Analysis" means a detailed localized review of relevant environmental conditions (e.g., wetland delineations, threatened and endangered species reviews, floodplain studies, navigability determination, or areas identified as environmental corridors within the County Comprehensive Plan).
- (4) **Zoning Permit Requirements**
  - (a) **Permit Requirement.** The owner must apply for and receive a Zoning Permit from the Department before installing, constructing, or expanding any Large Solar Energy Generating Facility.
  - (b) **Application Process.** The application for a Zoning Permit shall be processed in accordance with the procedures set forth in Section 12.150.08.
  - (c) **Permit Fee.** The owner shall pay an application fee at the time the application for a Large Solar Energy Generating Facility is filed with the Department. Fees shall be based on cost of construction.
  - (d) **Permit Expiration.** A zoning permit issued by the Department expires if construction of the Large Solar Energy Generating Facility is not commenced within 24 months from the date of the permit, or if the Large Solar Energy Generating Facility is not installed and fully functioning within 12 months from the date construction begins. A 24-month extension may be granted under 12.150.08(6).
  - (e) **Standards for Review.** The standards for review of a permit application for a Large Solar Energy Generating Facility are consistent with Wis. Stat. 66.0401 as well as Wis. Stat. 59.69 and are not more restrictive than the PSC-approved site plan as part of the Certificate of Public Convenience and Necessity.
  - (f) **Application Requirement.** The application for a Zoning Permit shall include the following items, as may be applicable:
    1. A copy of the PSC authorization, in the form of a Certificate of Public Convenience and Necessity, and a copy of the final application packet and documentation submitted to the PSC for approval;
    2. A narrative of the proposed project, including a description of the subject property by metes and bounds, address(es), parcel numbers, and any unique circumstances within the project area, as may have been identified during the PSC review;
    3. A site plan, which shall include a scalable drawing showing the location of all drives, entrances, easement labels and locations, trails, and signs; panels, inverters, energy storage systems, and any other planned infrastructure; vision clearance triangles; floodplain(s); wetland(s); and shoreland zone boundaries;
    4. Documentation evidencing cultural, archeological, and environmental analyses done by third parties and associated permit authorizations as required by law;



5. A complete list of neighboring parcels that have been notified of the project. Within two miles of project boundary is preferred;
  6. Shared Revenue Utility Payment tax projections; and estimated property tax reductions to the County, town(s), and school/special district(s);
  7. Any updates submitted to the PSC as applicable to these requirements. The equipment should have capability to withstand extreme weather events, with a preference that components be listed by the Underwriters Laboratory.
- (5) **Additional Permitting Requirements.** Additional permits and processes may be required under Chapter 12 or otherwise under the Columbia County Code of Ordinances.
- (6) **Operator Ownership Change.** Notice shall be provided to the County for any change in ownership of the Large Solar Energy Generating Facility 30 days prior to the effective date of the change and contact information of the new owner shall be included with the notice.
- (7) **Other Approvals.** A copy of all necessary state and federal permits and approvals shall be submitted to the Department within 90 days of receiving said authorizations.
- (8) **Postconstruction Filing Requirement.** Within 90 days of the date a Large Solar Energy Generating Facility commences operation, the owner shall file with the Department an as-built description of the facility, an accurate map of the facility showing the location of all infrastructure, geographic information system information showing the location of said infrastructure, and current information identifying the owner(s) and operator(s), including designated contact(s), of the Large Solar Energy Generating Facility.



### Agricultural and Open Space Zoning Districts

↓ LAND USES ↓ See Subsection 12.155 for detailed land use descriptions	Agriculture (A-1)	Agriculture and Open Space (AO-1)	General Agriculture (A-2)	Agriculture Business (A-3)	Agricultural Overlay (A-4)	Recreation (RC-1)	Subject to Use and Building Specific Standards in Specified Section(s)
Small Wind Energy System	P	P	P	P	P	P	<a href="#">12.125.29</a>
Large Wind Energy System	P	P	P	P	P	P	<a href="#">12.125.30</a>
Small Solar Energy Generating Facility	C	C	C	C	C	C	<a href="#">12.125.31</a>
Large Solar Energy Generating Facility	P	P	P	P	P	P	<a href="#">12.125.32</a>

### Residential Zoning Districts

↓ LAND USES ↓	Rural Residence (RR-1)	Single-Family Residence (R-1)	Multiple-Family Residence (R-2)	Manufactured/ Mobile Home Park (R-3)	Subject to Use and Building Specific Standards in <a href="#">Subsection 12.125</a>
<b>Utility, Communication, and Transportation Use Group</b>					
Public utility or service	C	C	C	C	
Mobile Service Tower and Facilities	P		P	P	<a href="#">12.125.22</a>
Radio Broadcast Service Facility	C		C	C	<a href="#">12.125.22</a>
Small Wind Energy System	C	C	C	C	<a href="#">12.125.29</a>
Large Wind Energy Systems	C		C	C	<a href="#">12.215.30</a>
Small Solar Energy Generating Facility	C	C	C	C	<a href="#">12.125.31</a>
Large Solar Energy Generating Facility	P	P	P	P	<a href="#">12.125.32</a>

### Commercial and Industrial Zoning Districts

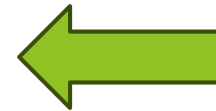
↓ LAND USES ↓	Light Commercial (C-1)	General Commercial (C-2)	Highway Interchange (C-3)	Light Industrial (I-1)	General Industrial (I-2)	Subject to Use and Building Specific Standards in <a href="#">Subsection 12.125</a>
<b>Utility, Communication, and Transportation</b>						
Airport or landing strip			C		P	<a href="#">12.125.19</a>
Composting, recycling or waste transfer operation			C	C	P	<a href="#">12.125.21</a>
Public utility or service	P	P	C	P	P	
Waste disposal operation					C	<a href="#">12.125.20</a>
Mobile Service Tower and Facilities	P	P	P	P	P	<a href="#">12.125.20</a>
Radio Broadcast Service Facilities	C	C	C	C	C	<a href="#">12.125.22</a>
Small Wind Energy System	P	P	P	P	P	<a href="#">12.125.29</a>
Large Wind Energy System	P	P	P	P	P	<a href="#">12.125.30</a>
Small Solar Energy Generating Facility	C	C	C	C	C	<a href="#">12.125.31</a>
Large Solar Energy Generating Facility	P	P	P	P	P	<a href="#">12.125.32</a>

Stand Alone Battery Storage  
CUP In Ag/Res/Hwy Interchange  
Permitted Use In Commercial/Industrial

**SUBSECTION 12.155: USE CLASSIFICATIONS**

**SEC. 12.155.07 UTILITY, COMMUNICATION AND TRANSPORTATION USE  
GROUP**

- (3) **Public utility or service.** Includes all county, town, state, and federal facilities; emergency service facilities; and public utilities such as, but not limited to wastewater treatment plants; utility substations; dams; water towers; transmission lines; fire towers; wind energy systems, solar energy generating facilities, battery energy storage systems, and similar land uses. Utilities with a certification of public convenience and necessity issued by the Public Service Commission are not subject to this chapter.



Lack of Industry Technical Standard For Battery Storage Use  
12.125.31(10 )

# Final Thoughts and Questions

- ▶ Lack of Industry Standards related to Battery Storage
- ▶ Lack of Solar Specific Guidance From State Law (PSC 128 Wind)
- ▶ Lack of Standardized Decommissioning Standards & Financial Assurance
- ▶ Lack of Property Value Impact Guidance

