

Solar Regulation Guidance

for Wisconsin Counties, Cities,
Villages, and Towns

February 10, 2026



Extension

UNIVERSITY OF WISCONSIN-MADISON

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RESET and UW-Madison Division of Extension Local Government Education Program

I. Introduction to Solar Development

Wisconsin counties, cities, villages and towns are seeking guidance about the extent to which local governments may regulate solar development projects within their borders. This memorandum is intended to provide legal education and training, but nothing in this memorandum should be construed as providing specific legal guidance. Rather, counties, cities, villages and towns should consult with competent legal counsel before enacting any solar regulatory ordinance or before taking regulatory action on a proposed or existing solar development.

Section II of this memorandum summarizes the state of Wisconsin’s policy favoring the development of solar energy as a renewable energy resource. This is important context when examining the boundaries by which local units of government may, or may not, regulate solar development.

Section III of this memorandum summarizes how state statutes and case law constrain local permitting authority over renewable energy development. Section IV summarizes how local governments may seek to negotiate with energy developers to reach agreements addressing local concerns with provisions that go beyond the regulatory authorities granted to local units of government. Finally, Section V addresses how counties may use comprehensive plans to influence siting and design of renewable energy development.

II. State Policy Promoting Solar Development

Wisconsin law demonstrates a clear policy favoring renewable energy and treats energy regulation as a matter of statewide concern. This is evident from statutory provisions and judicial interpretations prioritizing renewable energy and limiting local interference with state energy policies.

Wisconsin's Energy Priorities Law, codified in Wisconsin Statute § 1.12, establishes the state’s energy policy and provides a hierarchy of energy source options to be considered in decision-making. Above all, Wisconsin prioritizes energy conservation and efficiency, followed by renewable energy sources like wind and solar energy. The Energy Priorities Law also directs state agencies and local governmental units to rely, to the greatest extent feasible, on energy efficiency improvements and renewable energy sources, when these resources are cost effective, technically feasible, and do not have unacceptable environmental impacts.

Similarly, [Wisconsin Statute § 196.025: “Duties of the commission.”](#) mandates the Public Service Commission implement these energy priorities in all energy-related decisions and orders.

Other statutes like [§ 196.374: “Energy efficiency and renewable resource programs.”](#) and [§ 196.378: “Renewable resources.”](#) establish additional requirements for electric providers and utilities promoting renewable energy development. This statutory framework underscores the state's commitment to renewable energy as a preferred energy source. In addition to favoring renewable energy, other statutes limit how local governments may restrict wind and solar energy development.

III. Local Government Zoning Authority and Introduction to State Imposed Regulatory Limits

State law authorizes counties, cities, villages and towns to enact zoning ordinances regulating land use. Below are references to the relevant general zoning sections of the state statutes:

- County zoning authority is provided by [Wisconsin Statute § 59.69, “Planning and zoning authority.”](#)
- City zoning authority is provided by [Wisconsin Statute § 62.23\(7\)\(am\), “City planning.”](#)
- Village zoning is provided by [Wisconsin Statute § 61.35, “Village planning.”](#) which provides villages with similar zoning authority as provided to cities.
- Town zoning is authorized by [Wis. Stat. § 60.61, “General zoning authority.”](#)
 - Wisconsin towns, under certain circumstances, can choose to either have zoning within the town regulated by county zoning ordinances or by town zoning ordinances. In addition, those towns choosing to exercise zoning authority may choose to adopt village zoning powers. See [Wisconsin Statute § 60.62, “Zoning authority if exercising village powers.”](#)

A. Introduction to State Imposed Regulatory Limits

Wisconsin courts have consistently held that local ordinances must complement, rather than conflict with, state laws and matters of statewide concern.¹ This principle has been confirmed in numerous cases governing renewable energy regulation.

When it comes to local regulation of energy development and siting, local governments should consider the Public Service Commission of Wisconsin’s (PSC) near absolute authority over energy projects of nominal capacity of 100 megawatts (MW) or larger. Wisconsin Courts have held that the PSC’s CPCN process (discussed below) is so comprehensive that it leaves no room for local regulation of the same matters.

For solar and wind energy projects under 100 MW, local governments retain some authority to restrict siting and development. Wisconsin law allows limited local control over wind and solar energy systems generating less than 100 MW, but state law delegates no legislative authority to local governments. Rather, local regulations must be consistent with Wisconsin’s goal of promoting solar and wind energy. Said differently, local governments may not place general restrictions on solar energy development but must instead demonstrate that their restrictions meet three narrow statutory conditions. To this end, local governments must assess solar and wind development projects on an individual, case-by-case basis. The subsections below analyze the

¹ See *DeRosso Landfill Co. v. City of Oak Creek*, 200 Wis. 2d 642

existing state of the law related to regulation of solar developments.

B. State Regulation of Renewable Energy Systems of 100 MW or Larger

For solar developments of 100 MW or larger, regulation is conducted by the three-member Public Service Commission of Wisconsin (PSC) under its Certificate of Public Convenience and Necessity (CPCN) process. The PSC reviews the applicant's detailed project application to determine if the project is in the public interest. As a part of this determination, the PSC must determine if the project will "unreasonably interfere with the orderly land use and development plans" for the area. As noted in Section V below, the PSC's determination could be influenced by a local government's comprehensive plan to the extent it addresses solar development. However, once a CPCN is approved, a local government may not inhibit or restrict a project from commencing (*See* Wisconsin Statute § 196.491(3)(i)). The Wisconsin Supreme Court in *Rural v PSC*² held that "local ordinances, such as zoning ordinances, cannot impede what has been determined to be of a public convenience and necessity." Moreover, in *American Transmission v. Dane County*, the Court of Appeals held that Wisconsin Statute § 196.491(3)(i) "abrogates" or preempts any local regulations governing the same subject matter the PSC is required by statute to consider, when granting a CPCN.³

C. Local Government Regulation of Renewable Energy Systems Under 100 MW

For solar energy developments under 100 MWs, local governments retain permitting authority. However, [Wisconsin Statute § 66.0401, "Regulation relating to solar and wind energy systems,"](#) significantly limits local government's regulatory authority when the applicant is installing a solar or wind energy system.

Wisconsin Statute § 66.0401 expresses clear legislative support for renewable energy development, including wind or solar. Subsection [§ 66.0401\(1m\), "Authority to restrict systems limited,"](#) then substantially limits local government renewable energy development regulations by prohibiting local solar and wind energy regulations not meeting at least one of the following three standards:

- 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; or
- c) Allows for an alternative system of comparable cost and efficiency.

Local government determinations based on at least one of these three standards must be made on a case-by-case basis where the local government first hears the specifics of the particular system then decides whether a restriction is warranted.

Additional limitations come from an important renewable energy development decision by the Wisconsin Court of Appeals, as described below.

² Responsible Use of Rural & Agric. Land v. PSC, 2000 WI 129, 239 Wis. 2d 660, 702, 619 N.W.2d 888, 911

³ Am. Transmission Co., LLC v. Dane Cty., 2009 WI App 126, ¶15, 321 Wis. 2d 138, 772 N.W.2d 731

D. Wisconsin Caselaw Limiting Local Government Regulation

The Wisconsin Court of Appeals in *Ecker Bros. v. Calumet County*, 2009 WI APP 112, and State ex rel. *Numrich v. City of Mequon Bd. of Zoning Appeals*, 20001 WI APP 88, interpreted the Wisconsin statutes as favoring renewable energy systems and disfavoring wholesale local control circumventing this statewide policy.

In *Ecker Bros. v. Calumet County*, the Wisconsin Court of Appeals considered a 2009 legal challenge by farmers seeking to construct wind turbines on their farm against a Calumet County moratorium on wind turbines, and then a regulatory ordinance limiting wind turbines. The county ordinance regulated wind turbines uniformly, whether large or small. The farmers challenged the county's ordinance as violating Wisconsin Statute § 66.0401 and the Court of Appeals ruled in the farmers' favor. The Court held counties could restrict "a wind energy system," but not "wind energy systems," and that local government regulation must "rely on the facts of an individual situation to make case-by-case restrictions." The Court further held that local governmental regulation of wind energy systems must satisfy one of the three conditions stated in [Wisconsin Statute § 66.0401\(1m\)](#) and that counties could not impose a "cart before the horse" regulation. The Court then determined a conditional use permit process was the acceptable local government regulatory process.

Following this 2009 decision, the Wisconsin Legislature enacted Wisconsin Act 40. Act 40 put in place statutory revisions to wind energy system regulation and granted the Public Service Commission authority to engage in rulemaking related to wind energy. The PSC responded by promulgating what is now known as PSC 128 wind energy siting standards.

Legal experts consulted by the University of Wisconsin-Madison Division of Extension interpret this decision to apply to all local units of government and not just counties. Moreover, legal experts interpret this decision to equally apply to solar energy development projects.

In *Numrich*, the Wisconsin Court of Appeals held that the Waukesha County Circuit Court mistakenly upheld the City of Mequon Zoning Board of Appeal's decision to deny a conditional use permit to construct a wind energy system within the city. The Court held that the state law at the time, since replaced by Wisconsin Statute § 66.0401, encouraged renewable energy sources such as wind and solar and that the Wisconsin Legislature, by adopting the law, intended to "remove legal impediments to such systems."

The *Ecker Bros.* and *Numrich* decisions make clear the Wisconsin courts interpret Wisconsin law to favor renewable energy development such as wind and solar and to disfavor general local regulation and control of such systems. These are important sideboards to consider when local governments seek to regulate wind and solar energy systems under 100 MWs.

Conditional Use Permit Regulatory Review Process

Given the *Ecker Brothers* decision explained above, local governments likely may not generally apply zoning ordinance regulations to wind or solar energy developments but may consider applying conditions to a specific solar development project under 100 MW. Local units of

government may seek to apply conditions to a solar development project where a use is conditional within the zoning ordinance, where proposed land uses may create potential neighborhood or environmental impacts, and/or where a proposed land use may benefit from timing, screening or other controls to meet ordinance goals.

Conditional use permit (CUP) conditions may include, but are not limited to the following: (1) compliance with documentation requirements contained within a permitting ordinance, (2) road repair, (3) access restrictions, (4) site fencing and security, (5) insurance and liability indemnification, (6) decommissioning, and (7) cooperation with law enforcement and emergency response on developing a municipal emergency response plan, including site fencing and security. The conditions must be based on “substantial evidence” and cannot be based merely on opinion or public sentiment. *See* Section D below. An example of a conditional use permitting process for solar developments may be found in the [Columbia County Zoning Ordinance, Subsection 12.125.31, “Small solar energy generating facility.”](#) Additionally, if the local government imposed conditions, in aggregate, substantially increases the cost of the solar energy development or substantially decreases its efficiency, the local government will need to demonstrate there is substantial evidence the required conditions are necessary to protect public health and safety. Conditional use permit conditions relating to protecting prime farmland, shared revenue, decommissioning, and emergency response may risk legal challenge if the conditions are not reasonably based.

Local Solar Energy Regulatory Ordinance Recommendations

The bottom line is that local units of government may enact regulatory ordinances for solar energy developments of under 100 MW provided the ordinances meet the legal requirements of Wisconsin Statute § 66.0401 and the likely limitation created by the [Ecker Brothers](#) Court of Appeals decision. The ordinance should explicitly state which of the three standards listed in Wisconsin Statute § 66.0401(1m) it is based upon.

Solar energy development ordinances creating a permitting process, along with a reasonable application fee related to project size, are likely valid provided the ordinance complies with the permitting provisions of [Wisconsin Statute § 66.0403, “Solar and wind access permits,”](#) including timeliness of the permit review process.

Once again, the local ordinance may identify potential areas of CUP restrictions/requirements such as:

- compliance with permit application requirements,
- site fencing and security,
- access restrictions,
- road maintenance and repair,
- indemnification and insurance,
- emergency response plan cooperation, and
- decommissioning.

The local ordinance should not limit solar energy developments to specific zoning districts since this type of provision is likely to be overturned by the Wisconsin courts. The local ordinance

should also not create substantive zoning standards applicable to all solar energy developments since this would also likely be struck down by the Wisconsin courts. For example, an ordinance provision requiring all renewable energy developments to be sited at least 1,500 feet away from a home would face the likely risk of being overturned by a court because it could be interpreted as creating a general zoning standard not allowed by the *Ecker Brothers* Wisconsin Court of Appeals decision.

Local governments should remember Wisconsin Statute § 66.0401(1m)(b) prohibits local ordinance provisions “significantly” increasing system cost. Once again, this prohibition also likely applies to CUP requirements.

Additionally, [Wisconsin Act 67 \(2017\)](#) provides a municipal CUP requirement or restriction must be based on “substantial evidence.” “Substantial evidence” is defined as follows:

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.

For counties, the “substantial evidence” requirement is contained in Wis. Stat. § 59.69(5e). For cities and villages, this requirement is contained in Wis. Stat. § 62.23(7)(de). For towns, this requirement is contained in Wis. Stat. § 60.61(4e).

As a final note, Wisconsin Act 67 also took away local units of governments’ broad discretion to deny CUPs based on local opposition by providing that if the solar energy development applicant satisfies all ordinance requirements, the CUP must be granted.

Solar regulatory ordinance examples

Multiple Wisconsin counties already include solar regulatory provisions within their land use/zoning ordinances. The counties include:

- Calumet (Section 82-77(b));
- Columbia (Sections 12.125.31 and 12.124.32);
- Clark (Sections 22-1530-22-1541);
- Kenosha (Chapter 12, Division III, Sections 12.27.050 and 12.27.060);
- Marathon (Section 17.408);
- Outagamie (Chapter 54, Division 4)
- Pierce (Section 240-41D(3));
- Sauk (Chapter 7, Section 7.078);
- St. Croix (Section 15.385); and
- Walworth (Chapter 65, Article III).

A common feature of many of these county ordinances is a conditional use permit process for solar developments under 100 MW.

IV. Negotiating Developer Agreements

Local units of government are encouraged to consider negotiating a development agreement with a solar developer because such an agreement may create restrictions and benefits not otherwise available under Wisconsin law. For example, the development agreement could include monetary payments beyond those required by state law to help offset the local tax levy. The agreement could also include provisions such as additional property line setbacks benefitting adjacent neighbors that are otherwise not supported as a valid health and safety measure because the setback does not meet the “substantial evidence” requirement. Solar developers report they are generally agreeable to discussing solar development agreements with local units of government because this creates a stronger foundation for governmental cooperation and overall project success. Local units of government may initiate the negotiation process by contacting the solar developer with a request to engage in developer agreement negotiations.

As noted, developer agreements are relatively common between local governments and solar developers for PSC-approved projects of 100 MW or more. However, to date, developer agreements are uncommon for smaller solar development projects. Yet, once again, solar developers express interest in working with local governments to ensure a greater level of cooperation between the developer and local government. The development agreements are negotiated between the parties and are governed by contract law rather than by Wisconsin Statute § 66.0401.

For example, the development agreement could include higher payments to local governments than required by Wisconsin law, particularly for 100 MW or more solar development projects.¹ For example, the local government could negotiate additional payments to offset road maintenance costs, make good potential property tax losses to the school district, or to build community amenities.

Developer agreements may include provisions relating to:

- construction coordination,
- road routes, repair, and protection,
- shared revenues protections,
- local government cooperation, project setbacks, height, vegetation and fencing,
- indemnification and insurance, and
- decommissioning.

V. Updating Comprehensive Plans

Local governments should consider amending current comprehensive plans to indicate what parts of the municipality are most suitable for solar development. For example, the comprehensive plan could indicate sensitive lands not suitable for solar development.

Comprehensive plans incorporating solar development help provide the PSC with guidance on whether the proposed development, as noted above, will “unreasonably interfere with the orderly land use and development plans for the municipality.” Creating or amending a comprehensive plan to incorporate solar energy development will help ensure the local government’s viewpoint is considered despite the state statute providing regulatory oversight exclusively to the PSC . However, counties, cities, villages, and towns should be aware that during a CPCN review, the

PSC is unlikely to give weight to comprehensive plan provisions that declare solar energy development unsuitable throughout the entire municipality due to the limitations imposed by Wisconsin Statute § 66.0401.

Potential language could be as follows:

Comprehensive Plan Amendment Language: Solar Energy Development

Solar Energy Development

The [county/city/village/town] recognizes the importance of transitioning to renewable energy sources to meet future energy needs. To that end, the comprehensive plan shall promote the responsible development of solar energy systems, including utility-scale solar projects, distributed solar installations, and community solar projects.

Goal

Encourage the siting of solar energy systems in areas compatible with existing land uses and environmental conditions.

Support solar development that minimizes impacts on prime agricultural land, historic sites, and ecologically sensitive areas.

Promote solar installations on rooftops, brownfields, and other underutilized lands.

Policies:

- (1) The [local government] shall work with developers to ensure solar projects are consistent with local land use goals and provide community benefits.*
- (2) Solar energy systems shall be reviewed under conditional use or site plan review processes, with decisions based on **substantial evidence** as required by Wis. Stat. §§ 59.69(5e), 60.61(4e), and 62.23(7)(de).*
- (3) The [local government] may require decommissioning plans and financial assurances for solar facilities to ensure proper site restoration.*
- (4) The plan supports voluntary agreements between solar developers and landowners that include setbacks, visual screening, and other mitigation measures*

Implementation Actions:

- (5) Update zoning ordinances to define solar energy systems and establish clear standards for their approval.*
- (6) Coordinate with the Public Service Commission (PSC) and Department of Natural Resources (DNR) to ensure compliance with applicable state regulations.*
- (7) Engage the public in planning and siting decisions through hearings and comment periods.*
- (8) Create an overlay map indicating which areas within the municipality may be environmentally or culturally sensitive or designated for residential development and are, therefore, considered unsuitable for solar energy development.*

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