

GUIDE TO LOCAL REGULATION

How to Regulate Wind and Solar Systems Under 100 Megawatts



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Our Advice: Proactively planning for utility-scale wind and solar systems before your office is approached by developers can prepare you to advocate for community priorities when a project comes through. This brief provides guidance on how to prepare zoning ordinances, permitting procedures, comprehensive plans, and joint development agreements for renewable energy projects in compliance with state law.

State regulations on wind and solar energy have created some confusion about what options towns and counties have to influence development. Here's a review of what relevant state statutes mean for local jurisdictions, and how localities can regulate these projects in compliance with state law.

The big picture: Towns and counties have some limited powers to regulate the development and operations of wind and solar projects under 100 megawatts (MW). While local jurisdictions are still the principal regulatory authority, state law authorized the Public Service Commission (PSC) to set limits on local regulation in order to create consistent siting standards across the state. Courts affirmed that the primary responsibility of local regulation is to implement state policy, however towns and counties still have leeway to implement community priorities. Local officials maintain the power to enact ordinances in compliance with state law, set local permitting requirements, and negotiate with developers.

The most important statutes:

Wisconsin Statute 66.0401 states that subdivisions cannot set regulations on wind or solar projects that are stricter than the state, except in limited circumstances. It also dictates the local procedure for project application, review, approval, and appeal.

PSC 128 is the chapter of rules guiding local regulation of wind projects under 100 MW, set by the Public Service Commission. PSC guidelines, when adopted by a local ordinance, ensure community and environmental welfare by regulating project construction and operation via setbacks, noise limits, and other zoning restrictions.

Wisconsin Land+Water is here to help, but this primer is not a legal document. Please consult legal counsel as you draft ordinances and evaluate projects.

WHY PROACTIVELY PLAN FOR RENEWABLE ENERGY?

Communities may want to invest the time and energy to plan for renewable energy development projects because local ordinances and permitting procedures offer:

Customization for Local Needs: Local ordinances and permitting procedures allow communities to tailor requirements to meet particular safety and environmental needs in their community.

Alignment on Siting and Land Use Goals: Comprehensive planning enables communities to decide where and how renewable projects are sited, aligning with local land use plans and preserving areas like agricultural, residential, or scenic spaces. This helps integrate renewable energy in a way that supports local identity and priorities.

Enhanced Public Engagement: Planning efforts can create formal channels for community input, giving residents more structured opportunities to participate in the process. This fosters community buy-in and builds trust with developers.

Local Economic Benefits: Through conditional use permitting negotiations and development agreements, communities can encourage developers to contribute to the local economy via payments to neighbors, schools, or public initiatives, which aren't mandated by state law.

Reduced Risk of Conflict and Legal Issues: Clear, enforceable standards in local ordinances reduce potential conflicts, project delays, and legal disputes that can arise when projects rely solely on state-level standards.

Safe project requirements: Setbacks, noise limits, and other wind energy regulations by the Public Service Commission only apply to projects when they are adopted in a local ordinance.





WIND ENERGY ORDINANCES

How to develop an ordinance in compliance with PSC 128 rules for wind projects under 100 MW

How often does PSC 128 get updated? PSC 128 was developed by the Public Service Commission with input from the Wind Siting Council, and has been in effect since March 2012. It is subject to formal rulemaking procedures, which can be lengthy and would require public input. The PSC occasionally publishes protocols to assist with compliance, like noise measurement protocol and application filing requirements. These resources may be updated as industry standards evolve.

What types/size of projects does this apply to? PSC 128 applies to wind and solar projects under 100 MW. Small wind energy systems under 300kW are exempt from some provisions. Solar and wind projects greater than 100 MW are regulated at the state level: development approval is granted by the PSC via certificates of public convenience and necessity, preempting local ordinances.

Quick tip: A local ordinance that establishes PSC 128 regulations should cite the relevant statutes and PSC rules that it is operating in compliance with, along with any other applicable local regulations.

1. Some mandatory requirements in PSC 128 apply to wind projects without a local ordinance.

If a subdivision does not enact an ordinance regulating wind energy systems, developers are still responsible for following the mandatory requirements listed in PSC 128, including:

- Wind system owners must follow certain **notice and application requirements**
- Owners of wind systems 1 or more MW must follow stated **decommissioning rules**

2. Subdivisions *must* enact a local ordinance in order for PSC 128 regulations for wind energy systems to apply.

Aside from mandatory requirements, project regulations in PSC 128 only apply when a local unit enacts an ordinance. The chapter sets limits and requires planning, compliance, notice, waivers, and/or mitigation standards on the following subjects:

- Mandatory notice and decommissioning requirements
- Easement recording requirements and waiver provisions
- Reasonable accommodation of existing neighboring property uses
- Siting criteria, including setback distances
- Noise criteria, including decibel limits and measurement
- Shadow flicker mitigation
- Signal interference mitigation for radio, telephone, or television signals
- Stray voltage testing and rectification
- Construction and operation requirements for visual appearance and lighting, electrical safety, soil and vegetation restoration, and emergency procedures

3. Subdivisions have the authority to enact additional reasonable requirements in compliance with PSC 128 provisions, but may not make regulations for wind systems that are stricter than the law.

There are several opportunities for political subdivisions to set regulations within PSC 128 parameters. Look out for language that signals local authority, such as “A political subdivision may establish reasonable requirements” or “A political subdivision may require.” Here are two examples:

	Soil and Drainage System Protection	Emergency Procedures
Chapter PSC 128: Wind Energy Systems	<p>“An owner shall minimize soil compaction, topsoil mixing and damage to drainage systems on agricultural land during the construction or decommissioning of the wind energy system.</p> <p>A political subdivision may establish reasonable requirements designed to minimize soil compaction, topsoil mixing and damage to drainage systems on agricultural land.”</p> <p><i>128.18(1)(am)</i></p>	<p>“A political subdivision may require the owner to provide annual training for fire, police and other appropriate first responders regarding responding to a wind energy system emergency until the wind energy system has been decommissioned.”</p> <p><i>128.18(4)(e)</i></p>
Columbia County Zoning Ordinance: Large Wind Energy Systems	<p>“An owner shall utilize all applicable best practices in the placement, construction, operation, and maintenance of its wind energy facilities in order to minimize soil compaction, protect the topsoil, prevent topsoil mixing, and avoid and repair any damage to drainage systems on agricultural land.</p> <p>An owner shall describe the applicable best practices that it intends to use in the placement, construction, operation, and maintenance of its wind energy facilities in its application.”</p> <p><i>Sec. 12.125.30(19)</i></p>	<p>“An owner shall provide annual training for the county’s emergency management department, sheriff’s department, and any other fire, police, or other first responder identified in the owner’s emergency plans. An owner shall provide at least 8 hours of training during each calendar year and is responsible for all direct training costs.”</p> <p><i>Sec. 12.125.30(9)(c)</i></p>
Key Differences	<p>Columbia County adopts PSC 128 requirements to minimize project impacts on soil health. The County then guides implementation of this state standard by requiring that project applications describe best practices.</p>	<p>Columbia County adopts PSC 128 requirements to provide annual training to first responders to wind energy system emergencies. The County then clarifies the number of annual training hours required and the project’s cost responsibility.</p>

4. Subdivisions may set regulations that are less restrictive than PSC 128.

Political subdivisions may also set rules that are less restrictive than PSC 128. All ordinances must uphold the mandatory requirements for notice and decommissioning.

5. Subdivisions may regulate other aspects of the project outside of PSC 128 guidelines.

Political subdivisions have some limited leeway to regulate topics that are outside the purview of PSC 128. These may include access restrictions and permitting, requirements for road repair, insurance indemnification, or other topics. Consult a lawyer to ensure compliance with Statute 66.0401.



CONDITIONAL USE PERMITTING

How to develop conditional use procedures for renewable energy in compliance with Statute 66.0401

1. Subdivisions may set regulations on particular wind and solar systems that are stricter than state law on a case-by-case basis when they satisfy one or more of the following conditions:

What does case-by-case basis mean? Localities cannot use these conditions to set “one size fits all” policies regulating all projects, but must evaluate the specifics of a particular system to decide if a restriction is justified. This most commonly occurs via a Conditional Use Permitting process.

Statute Conditions	Examples
“Serves to preserve or protect the public health or safety.”	Raise a setback to ensure safe sight lines for particular intersections
“Does not significantly increase the cost of the system or significantly decrease its efficiency.”	Request additional or specific vegetative screening to address particular visual concerns
“Allows for an alternative system of comparable cost and efficiency.”	Request alternative mechanical technology for solar panel rotation to address particular noise concerns

66.0401(1m)

2. Subdivisions may communicate local priorities via application requirements and review criteria.

While localities cannot set general regulations for solar systems at all, or for wind systems that are stricter than PSC 128, subdivisions may communicate local priorities to developers by requesting information from particular projects in conditional use applications and other permitting processes to review on a case-by-case basis. See permissible language in the following example:

Columbia County Zoning Ordinance: Small Solar Energy Generating Facility	
Subject	"Review Criteria. In addition to the criteria set forth in Section ... the review for a Conditional Use Permit shall address and consider the following: "
Case-by-Case Setbacks	<p>"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.</p> <p>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."</p>
Agricultural Co-Use	<p>"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:</p> <p>a. Planting and maintaining pollinator-friendly native plant species and reduced herbicide applications.</p> <p>b. Grazing of livestock such as cattle, sheep, goats, and/or chickens; or</p> <p>c. Planting of shade tolerant crops."</p>
Wildlife Impacts Mitigation	<p>"Mitigation of impacts to local environmentally sensitive species and habitats by following:</p> <p>a. Best construction practices, such as wildlife permeable fencing to allow smaller wildlife access through facility fences; and</p> <p>b. Best construction practices to allow larger wildlife access natural movement around facility fences."</p>

Sec. 12.125.31(4)(d)



JOINT DEVELOPMENT AGREEMENTS

How to negotiate Joint Development Agreements (JDAs) to enforce regulations beyond state limits

Local officials may negotiate directly with a wind or solar project to approve a JDA, in which a developer agrees to exceed state restrictions voluntarily. Other terms for these contracts include: memorandum of understanding, roads and revenue agreement, or local operating contract. JDAs may cover a wide range of topics otherwise regulated by local and state regulations including setbacks, noise restrictions, and decommissioning procedures. Often JDAs also secure conservation and environmental commitments, as well as financial and property tax assurances, from the owner. Here's a snippet of the JDA between Vista Sands Solar, Portage County, and 4 towns and villages:

June 2024 Vista Sands Solar JDA: Assurances in Support of Decommissioning

"At least 90 days prior to starting construction on the Project, the Developer shall provide the County, with copies of said financial assurance to the Towns and Village, with cash, a bond, or a letter of credit to cover 10% of the estimated costs of the decommissioning plan filed with PSCW, net of any salvage value if not otherwise accounted for in the decommissioning plan costs.

...

On or before the fifteenth anniversary of the Project's Commercial Operation Date, the Developer shall provide the County, with copies of said financial assurance to the Towns and Village, with cash, a bond, or a letter of credit to cover 100% of the estimated costs of the decommissioning plan filed with PSCW, net of any salvage value if not otherwise accounted for in the decommissioning plan costs."



COMPREHENSIVE PLANNING

How to plan ahead to guide wind and solar development to align with land use goals

Comprehensive plans are useful tools that demonstrate planning goals to developers and courts. They can act as a signal for where the community is open to wind and solar projects, and where it is prioritizing other public needs. Political subdivisions cannot prevent wind energy developments 1 MW or larger via a comprehensive plan, regardless of an ordinance or lack thereof, except when the area is primarily designated via map for future housing or commercial development in a comprehensive plan developed per Statute 66.1001 procedures prior to the application of a project. Even so, such plans can offer better justification for negotiations and additional legal support in the case of disputes.



TOPICS OF INTEREST

There are a couple options outside of typical zoning and permitting regulations that offer an opportunity for local units to ensure co-benefits between renewable energy projects and community priorities.

How are farmland preservation districts impacted? Energy generation, while it may be permitted in farmland preservation zoning districts, does not typically qualify as primarily agricultural use. As such, acres that previously qualified for farmland preservation tax credits may no longer be eligible to receive state credits when they are converted to wind or solar projects.

Shared Revenue, Good Neighbor Contracts, and Property Taxes

Localities can work with project developers to ensure local economic benefits, typically via joint development agreements. Renewable energy systems with capacity of 1 MW or more are responsible for utility aid payments totaling \$5,000 per megawatt annually in lieu of traditional property taxes. These payments significantly increase tax revenue for county, town, city, and/or village budgets; however school districts and other local units do not benefit. Local agreements can ensure that owners:

- **Continue utility aid payments if state laws change:** If state property tax laws change in the lifetime of the project, project owners can commit to “true-up” payments, or payments that make up the difference between property taxes and the expected utility shared revenue payments.
- **Reimburse local units for lost property tax revenue:** Developers can agree to reimburse local units, like schools and technical colleges, for any tax revenue lost by the property’s exemption from local millages.
- **Compensate nonparticipating residences:** Owners can pay annual monetary compensation to neighboring or nearby properties of the project, up to the discretion of the ordinance or JDA.

Conservation and Environmental Protection

PSC 128, if adopted locally, offers some protections for wildlife management and soil restoration, as well as opportunities for local units to set additional requirements. These and other conservation concerns can be addressed via ordinance, permitting, planning, and JDAs, provided they are not cost or efficiency prohibitive to developers. Issues conservation departments can advise on include:

- **Cover crop planting:** Groundcover plants can ensure the soil is healthy for when the land is returned to agriculture after the project decommissions. Planners may also consider pollinator habitats to rebuild the soil and support local ecosystems.
- **Wildlife friendly-fencing:** Developers can adopt fencing plans that minimize disruption to small and large wildlife, including avoiding barbed wire and creating wildlife corridors.





APPLICATION REVIEW TIMELINE

Required procedure for reviewing and approving project applications

This section summarizes the key time-bound requirements for local procedures listed in Statute 66.0401 that political subdivisions must follow to determine, review, and approve wind and solar project applications. Be sure to consult detailed requirements in PSC 128 and Statute 196.378.

For wind systems: If a subdivision does not enact an ordinance per PSC 128 and 66.0401 before or within 3 months of receiving a wind energy system application, the application is automatically approved. Owners of wind energy systems that filed an application, received local approval, or began construction or operation prior to March 1, 2011 are not required to obtain local approval.

DETERMINING COMPLETE APPLICATION

Developer files application for approval and notifies subdivision that all materials have been filed.

AS SOON AS POSSIBLE

Subdivision must publish Class 1 notice stating application has been filed.

NO LATER THAN 45 DAYS AFTER FILING

Subdivision must determine and notify applicant whether or not application is complete.

- **For wind systems:** Completeness must be determined based on PSC 128.30 application requirements.
- If application is determined incomplete, notice shall state reason.
- Applicant may refile as many times as needed and must respond to all items in subdivision's notice of incomplete application.
- Refiling constitutes a new application, restarting the 45 day review period. Minor modifications are not considered new applications and do not restart the review period.
- **Extension option:** Subdivisions without an active ordinance gain an extra 3 months to determine if application is complete (deadline is 45 days from 1st day of 4th month).
- **If subdivision fails to determine and notify if application is complete within 45 days, application shall be considered complete.**

DECISION MAKING PROCEDURE AND APPROVALS

For wind systems: After application is determined complete, subdivisions may request additional information. Owners shall respond to all reasonable inquiries in timely, complete, and accurate manner.

Subdivision must base decision on written findings supported by evidence presented in public hearings and associated documents, and any application documents..

- **For wind systems:** Subdivisions may not unreasonably deny or impose conditions on an application. Subdivisions may establish any PSC 128.33 provisions as conditions for approval. Decision making and record processes must conform to PSC 128 Subchapter 3.

NO LATER THAN 90 DAYS AFTER NOTICE OF COMPLETE APPLICATION

Subdivision shall approve or deny application, or authorize extension for additional review.

- **For wind systems:** Subdivisions shall issue written decision to owner and PSC that includes finding supported by evidence in record and if applicable, reason for denial.
- **Extension options:** Subdivision may grant multiple extensions, but any combination of extensions **may not exceed 90 days total**.
 - Up to 45 days if subdivision needs additional information to make determination
 - Up to 90 days if applicant makes material modification to application
 - Up to 90 days for other good cause specified in writing
- **If subdivision fails to approve or deny application within 90 days (or extension period), application is considered approved.**

To learn more, visit wisconsinlandwater.org/renewableenergy

