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Publication Date

2024-06-13

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Laws in Order:

An Inventory of State Renewable Energy Siting Policies

Shawn Enterline and Andrew Valainis, Regulatory Assistance Project



This material is based upon work supported by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) under the Wind Energy Technologies Office Award Number DE-EE0008728.

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June 2024

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Disclaimer

The information that was compiled for this report was gathered primarily using general internet searches supplemented by information from two proprietary databases (Power Suite and EnerKnol). The data inventory was compiled between June and September of 2023 by a team of researchers who were neither attorneys nor specialists in renewable energy siting and permitting. Because the legislative and regulatory landscape in many jurisdictions is changing, the research team continued to update the data inventory throughout the drafting of this report. Every effort has been made to capture the latest information up to and including February 2024. Errors and omissions are, however, inevitable in such a large and varied body of work. In addition, definitive sources and information for some jurisdictions were extremely difficult to identify. In these instances, the information in the state profiles may be limited, missing or inaccurate.

The Office of Energy Efficiency and Renewable Energy at the U.S. Department of Energy is most interested in keeping this research current and accurate. As a result, we encourage readers to send clarifying comments with sources and citations to renewablesiting@ee.doe.gov.

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Acknowledgments

This publication benefited from a strong group of collaborators who contributed to the work throughout its development.

Chief among them were Kendra Kostek and Raphael Tisch from the U.S. Department of Energy, Ben Hoen of Lawrence Berkeley National Laboratory, and Nelson Falkenburg and Alex Breckel of Clean Air Task Force. Without their thought leadership and vision, the project would not have been possible. Their further contributions are described below.

Contributors

The following individuals and organizations acted as fellow researchers, advisors and co-developers.

- Nelson Falkenburg of Clean Air Task Force, who contributed to every aspect of the project, and whose project management was invaluable. Also, Annabel Williams of Clean Air Task Force, who refined the initial research.
- Angela Ferguson, Patrick Field and Patrick Collins from the Consensus Building Institute and Dara Torre from the Regulatory Assistance Project. Their research formed the bulk of the initial data inventory.
- · Ruth Hare of the Regulatory Assistance Project, who provided editorial review and expertise.

Reviewers

The following people reviewed various drafts of this publication, and their comments and edits were invaluable.

- · Matthew Eisenson from the Sabin Center for Climate Change Law at Columbia University, who provided a detailed review of the statutory citations and many insightful suggestions about the authority categories.
- Kendra Kostek, Angela Guiliani, Raphael Tisch, Juan Botero and Patrick Gilman from the U.S. Department of Energy.
- Ben Hoen from Lawrence Berkeley National Laboratory.
- Ava Gallo from the National Caucus of Environmental Legislators.
- Hilary Clark from the American Clean Power Association.

Introduction

aining approval from public authorities to build a large-scale wind or solar facility is often a complex process involving many actors. A single project commonly requires multiple permits. Authority for different aspects of the siting and permitting process is sometimes spread among federal, tribal, state and local authorities. Each of these entities may be concerned with different impacts that the project may have on the community (such as aesthetic, economic and land use impacts) and on the environment (such as water quality and wildlife).

Knowledge of the decision-making processes and the entities that conduct them is necessary to participate. Knowledge also enables the policymaking community to support the deployment of renewable energy projects. In this context, the purpose of this research was twofold.

First, it aimed to document the principal entity or entities that have jurisdiction over siting and permitting decisions. It also sought to identify the presence of any guidebooks about the process and any requirements to involve the public. This information can give interested stakeholders an entry point into the process and show them how to participate.

The purpose of this research was twofold:

- To document the principal entity or entities with jurisdiction over siting and permitting decisions.
- To better understand the regulatory landscape for large-scale, land-based solar and wind projects in each state.

The second purpose was to better understand the regulatory landscape for large-scale, land-based solar and wind energy projects in each state (plus Puerto Rico¹). Understanding how the regulatory landscape is structured in other states can help the policymaking community create siting and permitting processes for use by their own state and local governments.

Because the number of local governments is so large,² this research primarily focuses on characterizing the nature of state-level authority. For resources that characterize federal and tribal siting and permitting processes, please see the list at the end of this report.

Puerto Rico was treated as a state for the purposes of this study. Other territories were not included.

² There are approximately 90,000 state and local governments including approximately 3,000 counties, 35,000 cities and towns, 13,000 independent school districts and 39,000

Using the research team's inventory of data about each state, the first section of this report offers observations and summary statistics in maps addressing five topics:

- 1. Primary siting and permitting authority.
- 2. Presence of siting and permitting timelines.
- 3. Public involvement requirements.
- 4. Availability of permitting guides and model ordinances.
- 5. Siting standard-setting authority.

The state profiles section includes a synopsis of the siting and permitting authority and process in each state and Puerto Rico, as well as citations that enable a deeper dive.

Finally, the appendix describes the research methodology.

Basics of siting and permitting

The U.S. Department of Energy describes renewable energy siting as a series of decision-making processes and actions that determine the location and design of new wind, solar or other clean energy generating facilities.³ The entities that are involved in these decisions typically issue permits listing the terms and conditions that developers must adhere to for specific projects. As a result, the term "siting and permitting" is commonly used to describe both the decisionmaking processes themselves (siting) and their outcome (a permit or permits).

At the state level, the decision-making body is typically called the public utilities commission or public service commission, although some states use other names. These are quasi-governmental bodies that provide oversight and/or regulation of public utilities in their jurisdiction.

In many states, the commission issues what's known as a certificate of public convenience and necessity or a certificate of public convenience. Private companies wishing to provide essential public services in one of these states must be granted a certificate before constructing facilities and offering services

In addition, renewable energy developments may be subject to ordinances, which are laws enacted by local governments, typically municipalities. Zoning ordinances allow and restrict various types of projects and may use rules and regulations known as siting standards to manage land use and regulate development and construction of solar and wind projects. Permitting is the process of acquiring permits for a specific project within the scope of those zoning rules and standards.4

³ Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy. (n.d.). Siting of large-scale renewable energy projects. https://www.energy.gov/eere/siting-large-scale-renewable-energyprojects

⁴ Adapted from National Association of State Energy Officials. (n.d.). Zoning and siting. https://www.naseo.org/issues/solar/zoning; and Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy. (2024, March). Small wind guidebook. https://windexchange.energy.gov/small-wind-guidebook#practical

Observations

sing the inventory of data the research team compiled, we categorized, counted and compared it to gain insights into the siting and permitting landscape across the United States. A series of observations emerged from this analysis and are presented in the following six subsections.

1. Principal authority is frequently contingent on project size.

Based on a literature review and the results of the data analysis, we identified four broad categories describing where the principal level of authority rests (see Table 1).

Importantly, these categories should not be interpreted to mean that a principal authority, when identified, has exclusive or preemptive authority. Although some states do grant exclusive or preemptive authority, these categories are intended to show what level of government leads the siting and permitting process.

Figure 1 on the next page shows the authority category by state. Twenty-seven states (53%) have contingent authority, 5 meaning the principal authority depends on the size of the project — with the exception of Washington, where the authority is contingent on the developer's choice. In most states with contingent authority, the size of the project is measured in megawatts (MW), and

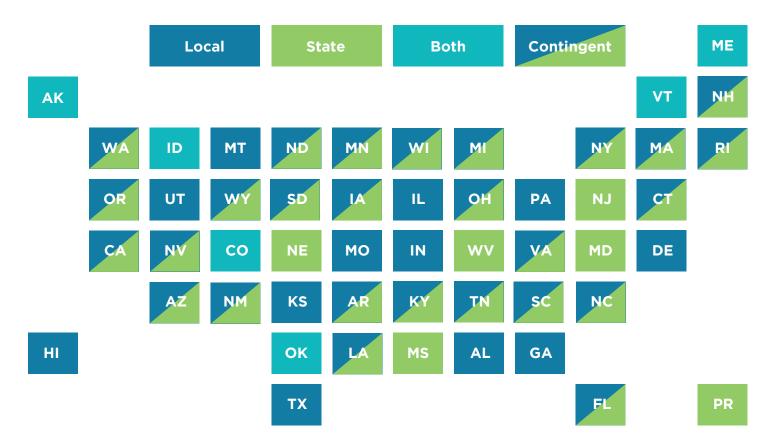
Table 1. Principal authority categories

Category	Description	
Local (12 states)	Local governments have principal jurisdiction.	
State (6 states)	State or territorial government has principal jurisdiction.	
Both (6 states)	"Both/and" scenarios in which both the state and the local government have some authority.	
Contingent (27 states)	"Either/or" scenarios in which either the state or local government has principal authority, nearly always depending upon the size of the project.	

Note: These categories add up to 51 because Puerto Rico was treated and counted as a state throughout the research.

⁵ Four states (AZ, FL, NC, TN) that were categorized as contingent are actually more nuanced. In these states, certain types of projects are subject to contingent authority based at least in part on a MW size threshold, while other types are subject to local authority regardless of their size.

Figure 1. Principal authority categories by state

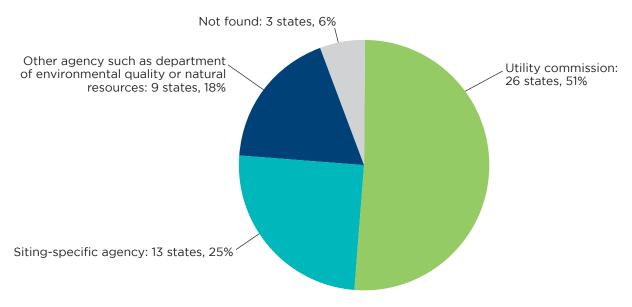


the principal authority is typically placed with the state for projects that are larger than the MW threshold(s). Subsection 1.2 below explores variations in size thresholds in more detail.

The next most common category is local authority. Twelve states (24%) empower local authorities (typically counties or municipalities) with principal jurisdiction.

The remaining 12 states are categorized as either state authority or both. Six of these states (12%) place principal authority with a state entity. The other six states (12%) have authority that is spread between state and local entities operating their own siting processes.

Figure 2. State entity involved



1.1 STATE ENTITIES ARE INVOLVED IN SITING AND PERMITTING IN AT LEAST 94% OF STATES.

While principal jurisdiction is varied across the states, our research identified a state-level entity in the vast majority (94%) of states that is either involved in or has some authority over the siting and permitting process. Figure 2 shows the state entities by category.

1.2 STATES WITH CONTINGENT **AUTHORITY USE A WIDE RANGE OF** SIZE THRESHOLDS.

Many states use project size to delineate siting and permitting authority. When the project is smaller than a defined threshold, authority is vested locally, and when the project is larger than the defined threshold, authority is vested at the state level.

Among the 27 states with contingent authority, Louisiana is alone in not using MW when determining project size, opting for acreage

instead.⁶ In states that do use MW, the thresholds range from less than 1 MW up to 300 MW. Figure 3 on the next page depicts the spectrum. The 12 states categorized as mixed do not apply the same threshold to solar and wind projects, including four states that use other metrics in addition to MW.

- Oregon uses MW for wind and solar thermal projects and acreage for solar photovoltaics.
- Tennessee uses both MW and the height of wind turbines.
- Virginia uses MW and acreage to define solar project sizes.
- Wyoming uses MW and acreage to define solar project sizes and the number of turbines to define the size of a wind project.

Table 2 on the next page details the size thresholds in the 12 states where they are mixed. Where the metric used for solar and wind is solely MW (highlighted in bold in the table), the solar threshold is larger in three of four instances.

Figure 3. Thresholds in states with contingent authority

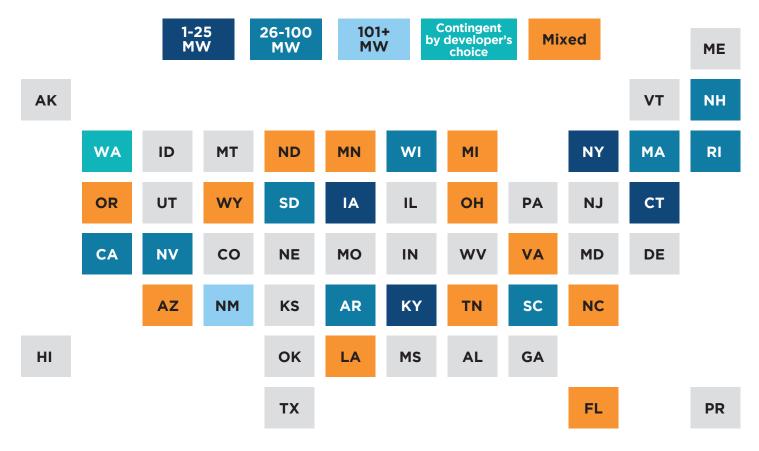


Table 2. Thresholds in states where they are mixed

State	Solar	Wind
AZ	Thermal: 100 MW; photovoltaic: N/A	N/A
FL	75 MW	N/A
LA	10 acres	N/A
MI	50 MW	100 MW
MN	50 MW	5 MW
NC	N/A	1 MW
ND	50 MW	0.5 MW
ОН	50 MW	5 MW
OR	Thermal: 25 MW Photovoltaic: 160/1,280/1,920 acres	50 MW
TN	N/A	1 MW and 200 feet in height
VA	5 MW/10 acres and 150 MW	5 MW and 150 MW
WY	30 MW or 100 acres	20 turbines

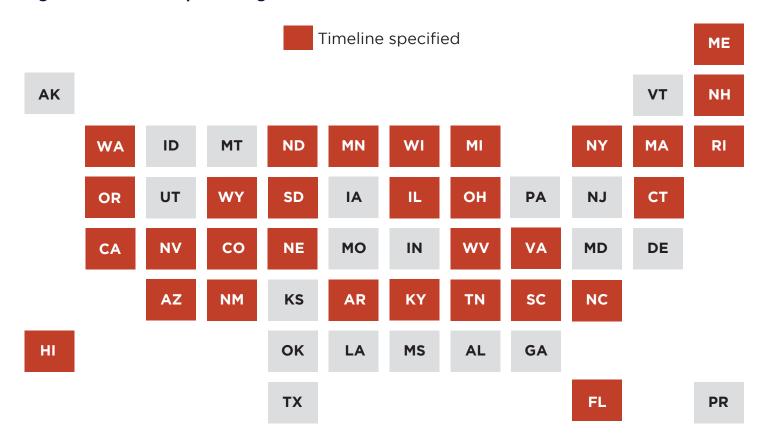
Bold text denotes thresholds measured solely in MW.

2. Timelines for permitting vary widely.

According to our research, 31 states (61%) have timelines that govern the permit issuance process (see Figure 4). Many of the timelines are associated with a specific initiation point (e.g., application date) and run through some form of decision

to approve or reject the permit. There are other circumstances, however. In some states the timeline requires a "completeness determination" before the permitting process begins, and in some the timeline requires a form of public involvement to happen. For those states with specific timelines noted in statute or regulations, the duration ranged from as little as 30 days to as much as one year.

Figure 4. States with permitting timelines

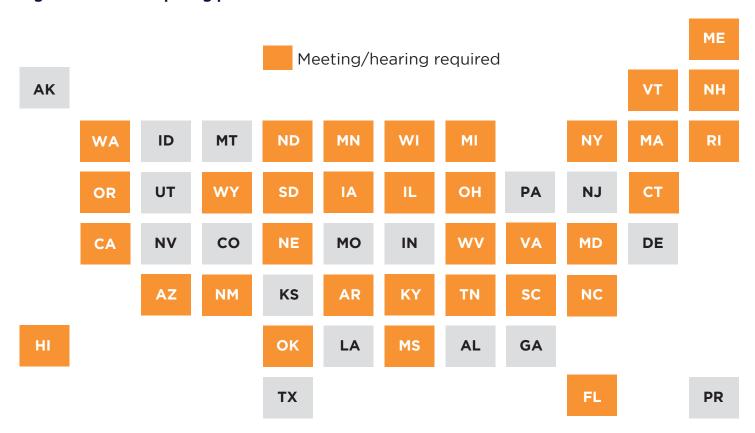


3. Most states have public involvement requirements.

Our research identified 34 states (67%) that have a statutory or regulatory requirement to conduct some form of public meeting or hearing during

permitting (see Figure 5). These requirements were most commonly found where the state has either principal or contingent authority in the process. States typically, although not always, leave it to local governments to set rules for public involvement in their own processes.

Figure 5. States requiring public involvement



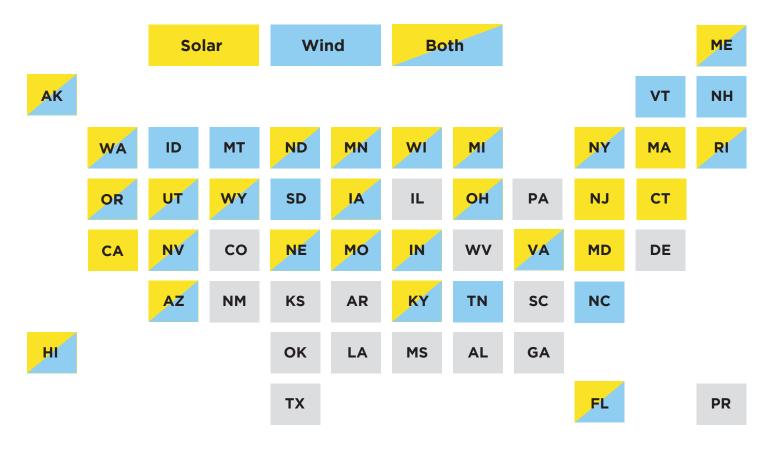
4. Published guidance is available in many states.

In many states, published siting and permitting guides are available for developers, local governments or consumers. These guides typically summarize how the siting and permitting process works in the state, identify the entities involved and give an overview of relevant policies. Many of these guides are published by a state agency, but

some are published by working groups or nonprofit groups in the state or region.⁷

As shown in Figure 6, our research identified published solar siting and permitting guides in 28 states (55%). Thirty states (59%) were found to have wind permitting guides available. These two lists have considerable overlap. The research found 23 states (45%) where guides are available for both solar and wind.

Figure 6. Permitting guides available



⁷ Please refer to the state profiles in this report for full citations to the various guides that are available.

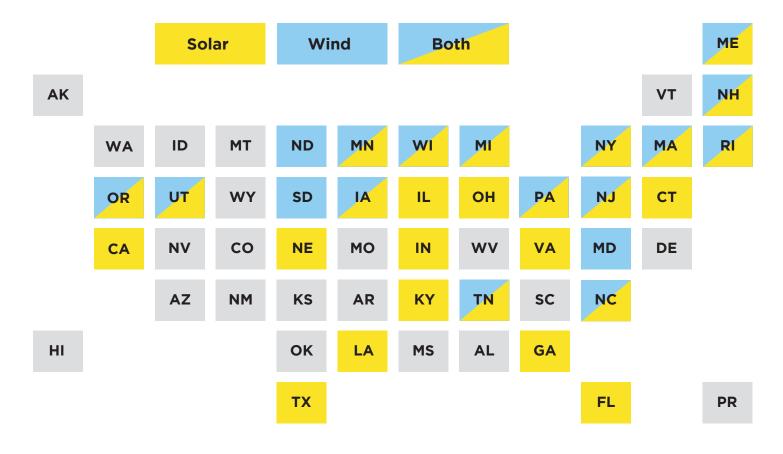
5. Model ordinances are available in many states.

Ordinances are laws enacted by local governments (typically municipalities), and they are frequently enacted to set zoning rules or siting standards for solar and wind projects. Local governments have a role in setting rules or standards in most states, not just those where they are the principal permitting authority. As a result, model ordinances have been developed for local jurisdictions to use as guides for their zoning rules and siting standards for renewable energy projects.

Model ordinances are available for the majority of states for either solar or wind, as shown in Figure 7. Our research identified solar model ordinances for 27 states (53%) and wind model ordinances for 18 (35%). These lists overlap in 15 states (29%) where both are available.

Model ordinances are sometimes promulgated by a state agency, but they often originate from other sources.⁸ Regardless of their source, these ordinances are simply models, and local authorities have no obligation to adopt them.

Figure 7. State-specific model ordinances available



6. Local authorities typically control siting standards.

Siting standards are rules and regulations that state and local governments use to manage land use and regulate development and construction of solar and wind facilities.9 Projects must meet these standards to receive a permit. Standards may include requirements such as setbacks, tip heights, decibel levels, viewshed impacts or acreage limits. Generally speaking, standards are included in a state law or local zoning ordinance.

Our research found that 37 states (73%) give jurisdiction to set siting standards — either exclusively or conditionally — to local authorities. Among these, 14 states provide state requirements as maximum or minimum standards. These are categorized as "Local with state requirements" in Figure 8. Finally, 10 states (20%) set siting standards at the state level. Our research found no siting standards in four states (8%).

Figure 8. Standard-setting authority in states with siting standards



Adapted from National Association of State Energy Officials, n.d.; and Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy, 2024.

State Profiles

Legend for the state profiles	
INDEX OF STATES	Montana
Alabama	Nebraska49
Alaska	Nevada 50
Arizona19	New Hampshire
Arkansas	New Jersey53
California	New Mexico54
Colorado	New York55
Connecticut	North Carolina
Delaware	North Dakota
Florida	Ohio
Georgia28	Oklahoma
Hawaii29	Oregon61
Idaho30	Pennsylvania62
Illinois	Puerto Rico63
Indiana32	Rhode Island64
lowa	South Carolina
Kansas	South Dakota
Kentucky35	Tennessee67
Louisiana36	Texas68
Maine	Utah
Maryland	Vermont70
Massachusetts	Virginia71
Michigan	Washington72
Minnesota	West Virginia
Mississippi46	Wisconsin
Missouri	Wyoming76

Legend for the state profiles

Principal authority category

[Level of government that leads the process]

Relevant timelines

FWhether anv statutory timelines]

Public involvement

[Type of public involvement required]

Published resources

Solar: [Whether any guide or model ordinance] Wind: [Whether any guide or model

ordinance1

The top section of each profile provides a snapshot of information about the state.

The first box puts the state into one of four categories:

- Local
- State
- Both where state and local governments both have some authority
- Contingent where either state or local government has principal authority, nearly always based on project

For contingent states, the box also identifies the threshold at which authority shifts to the state.

The bottom section of each profile consists of short narratives that describe the snapshot items in more detail. It also provides citations to statute, regulations or other resources where more information can be found.

Authority summary

[Siting and permitting processes and provisions at the state and local levels, as appropriate]

Relevant timelines: Details

[Statutory or regulatory timelines, if any, applicable to siting and permitting in the state]

Public involvement: Details

[Public involvement requirements, if any, applicable to siting and permitting in the state]

Published resources: Details

Siting and permitting guides

[Any state-specific guidebooks or other guiding materials available to solar and/or wind stakeholders]

Model ordinances

[Any state-specific model ordinances on solar and/or wind projects available to government bodies]

Alabama



Principal authority category

Local

Relevant timelines

Not found

Public involvement

Not found

Published resources

Solar: Not found Wind: Not found

Authority summary

Principal authority rests with local jurisdictions, and four counties are given explicit statutory authority over siting wind projects.

Local authority details: The state grants four counties explicit authority over siting wind projects of any size: Baldwin, Cherokee, DeKalb and Etowah. Our research did not uncover the reason for legislating authority for these four counties but not others. In three of these counties, Cherokee, DeKalb and Etowah, a county

permit is explicitly required for any wind project. Baldwin County is authorized to require a permit, but the decision about whether to require one is left to the county. Our research found no mention of solar in state statutes, but in practice it appears that siting decisions also fall under local government. (Ala. Code § 45-2-262 (Baldwin); § 45-10-260.02 (Cherokee); § 45-25-260.02 (Dekalb); § 45-28-260.02 (Etowah)).

State authority details: Not found.



12019/Pixabay

Alaska Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Not found Solar: Yes Both Not found Wind: Yes

Authority summary

Municipal governments have jurisdiction over land use regulations. Utility-scale projects require additional certification from the Regulatory Commission of Alaska.

Local authority details: By state law, municipalities are allowed to adopt their own rules regarding land use, including by developing "land use permit requirements designed to encourage or discourage specified uses and construction of specified structures, or to minimize unfavorable effects of uses and the construction of structures" (Alaska Stat. § 29.40.040).

State authority details: A certificate from the Regulatory Commission of Alaska is required for any utility-scale project. Under Alaska law, to operate as a public utility, a company must first obtain a certificate of public convenience and necessity from the Regulatory Commission of Alaska (Alaska Stat. § 42.05.221 describing requirement for public utilities to obtain a certificate). A "public utility" is defined as any corporation that "owns, operates, manages, or controls any plant, pipeline, or system for ... furnishing, by generation, transmission, or distribution, electrical service to the public for compensation." This definition would seem to include those who own or operate utility-scale wind or solar plants (Alaska Stat. § 42.05.990(6) defining "public utility").

See: Essa, E., Curtiss, K., & Dodinval, C. (2021, February). Solar siting authority across the United States. https://closup.umich.edu/research/workingpapers/solar-siting-authority-across-united-states

Published resources: Details

Siting and permitting guides

Solar: Alaska Energy Authority. (n.d.). *Solar* power best practices guide. https://www. akenergyauthority.org/Portals/0/Renewable%20 Energy%20Fund/2022.09.28%20REF%20 Best%20Practices%20Guide%20for%20Solar. pdf?ver=2022-10-04-133808-163

Wind: Alaska Energy Authority. (n.d.). Wind power best practices guide. https://www. akenergyauthority.org/Portals/0/Renewable%20 Energy%20Fund/2022.09.28%20REF%20 Best%20Practices%20Guide%20for%20Wind. pdf?ver=XuYZBzo1XT4QXRIEBS2BDg%3d%3d

Arizona Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Yes Contingent Public hearing(s) Wind: Yes Solar thermal: State ≥ 100 MW

Authority summary

The state does not appear to claim authority over wind or solar PV. By extension, all wind and solar PV projects are subject to local approval. Solar thermal projects of at least 100 MW appear to need a certificate of environmental compatibility (CEC) from the state Power Plant and Transmission Line Siting Committee.

Local authority details: Local siting authority is in effect for all wind and solar PV projects, as well as solar thermal projects smaller than 100 MW. Thermal electric facilities of at least 100 MW must comply with local regulations unless deemed unreasonably restrictive by the Power Plant and Transmission Line Siting Committee (Ariz. Rev. Stat. Ann. § 40-360.06 requiring certificates to be conditioned on compliance with local law unless "unreasonably restrictive"). For large facilities reviewed by the state committee, any county and municipal government interested in the proposed

site can file intent to be a party in the certificate proceedings (Ariz. Rev. Stat. Ann. §§ 40-360, 40-360.05 allowing local governments to intervene in state certification proceedings).

State authority details: The state does not appear to claim authority over wind or solar PV. Relevant statute is silent on renewables, but the definition of a major project (at least 100 MW) includes "thermal electric." Projects of this size must obtain a CEC from the Power Plant and Transmission Line Siting Committee by filing an application with the Arizona Corporation Commission (Ariz. Rev. Stat. Ann. § 40-360 defining "plant" as "each separate thermal electric, nuclear or hydroelectric generating unit with a nameplate rating of one hundred megawatts or more"; § 360.03 requiring a certificate of environmental compatibility for any "plant").

Relevant timelines: Details

The Power Plant and Transmission Line Siting Committee shall issue a ruling on the CEC within 180 days of when the application was filed or referred to the committee (Ariz. Rev. Stat. Ann. § 40-360.04 hearings; procedures).

Public involvement: Details

One or more public hearings are required as part of the process for issuing a CEC (Ariz. Rev. Stat. Ann. § 40-360.04).

Published resources: Details

Siting and permitting guides

Solar and wind: Perkins Coie Environment, Energy & Resources Group, & SWCA Environmental Consultants. (2020). Siting energy and transmission line projects in Arizona: An irreverent primer. https://www.perkinscoie.com/images/ content/2/3/v3/238366/Siting-Energy-and-Transmission-Line-Projects-in-Arizona.pdf

Arkansas Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Not found Contingent **Public hearing** Wind: Not found State ≥ 50 MW

Authority summary

Large, utility-owned solar and wind projects of at least 50 MW must obtain a certificate of environmental compatibility and public need (CECPN) and/or a certificate of public convenience and necessity (CPCN) from the Arkansas Public Service Commission. For smaller projects, the siting and operation of the facilities fall under the authority of local governments.

Local authority details: Small or municipal solar and wind projects are under the jurisdiction of the local governments whose area the facility is located (see

generally A.C.A. § 14-17-205 specifying that county planning boards shall have power over zoning).

State authority details: Large, utility-owned solar and wind projects (at least 50 MW) must obtain a CECPN and/or a CPCN from the Arkansas Public Service Commission (A.C.A. § 23-18-503(6) defining "major utility facility"; § 23-18-510 requiring CECPN for a major utility facility). Facilities whose majority owner is an exempt wholesale generator are exempt from needing a CECPN (A.C.A. § 23-18-504).

Relevant timelines: Details

When reviewing an application for a CECPN, the Arkansas Public Service Commission must hold a hearing at least 40 and not more than 180 days after receiving the application.

Public involvement: Details

A public hearing is required on an application for a CECPN.

California Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Yes Contingent Public meeting(s) Wind: Not found State ≥ 50 MW

Authority summary

Siting authority is based on project size. Generally, authority to approve projects rests with counties. However, project developers may opt in to the California Energy Commission (CEC) siting process for projects of at least 50 MW. Opting in gives principal and preemptive authority to the CEC.

Local authority details: The County Board of Supervisors oversees local siting of renewable energy projects unless the developer of a large project opts in to review by the state. State planning law requires each city and county to adopt a long-term plan that includes a section on land use setting forth objectives, principles, standards, policies, maps that include data and analysis and mitigation measures (Cal. Government Code § 65000 et seg.).

State authority details: The CEC oversees state siting for renewable projects. The CEC has opt-in siting authority over solar and wind projects of at least 50 MW. The CEC's approval of an opt-in application enables the construction and operation of the project and explicitly supersedes local permitting requirements and local ordinances. The CEC is the lead agency for the California Environmental Quality Act (CEQA) (Cal. Public Resources Code § 25545 defining the facilities subject to CEC review; § 25545.1 explaining that issuance of a certificate by the CEC supersedes any local requirements; § 25545.7 explaining that the CEC is the lead agency for CEQA review).

Relevant timelines: Details

Under the CEC opt-in process, the CEC has 270 days to approve a project application permit, along with interim timelines for application completeness, public engagement and interagency consultations. Any legal appeals must be resolved within 270 days of filing (Cal. Public Resources Code § 25545.4; § 25545.13).

Public involvement: Details

Projects less than 50 MW are subject to county code for public involvement. (Our research didn't determine if they are subject to state law, as well.) Projects of at least 50 MW may opt in to the CEC process, which requires multiple public meetings of differing scope and scale (Cal. Public Resources Code § 25545.7.2 requiring public meetings on application; § 25545.7.6 requiring public meetings on environmental review).

Published resources: Details

Siting and permitting guides

Solar: Solar Permitting Task Force, Governor's Office of Planning and Research. (2019). California solar permitting guidebook. https://opr.ca.gov/docs/20190226-Solar_ Permitting Guidebook 4th Edition.pdf

Model ordinances

Solar: California County Planning Directors Association. (2012). Model solar energy facility permit streamlining ordinance. https://www.ccpda. org/resources/docs/energy/4-model-solar-energyfacility-permit-streamlining-ordinance/file

Colorado

Choose another state

Principal authority category

Both

Relevant timelines

Yes

Public involvement

Not found

Published resources

Solar: Not found Wind: Not found

Authority summary

Local governments regulate siting. If a local government denies an application for a renewable energy project or applies unreasonable requirements, the applicant may appeal to the Colorado Public Utilities Commission (CPUC). A certificate of public convenience and necessity from the CPUC is required for public utility facilities.

Local authority details: A public utility shall not construct or install a facility unless the construction or installation complies with the local government's zoning rules, resolutions or ordinances (Colo. Rev. Stat. § 40-5-101(3) requiring facilities to conform to local rules).

State authority details: The CPUC has regulatory authority for public utility projects (Colo. Rev. Stat. 40-5-101). A project applicant may appeal a county's decision to deny a project application to the CPUC (Colo. Rev. Stat. § 29-20-108(5)(a)).

Relevant timelines: Details

The local government has 120 days to act on a preliminary application or 90 days on a final application (Colo. Rev. Stat. § 29-20-108(2)).



U.S. Department of Energy, public domain, via Wikimedia Commons

Connecticut Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Yes Contingent Public hearing(s) Wind: Not found State > 1 MW

Authority summary

Siting authority for projects larger than 1 MW rests with the Connecticut Siting Council. Certain local jurisdictions may issue orders regulating the proposed location, but those may be overriden by the council. There are secondary requirements for certain projects, including a certificate of registration for electric generating facilities and a certificate of environmental compatibility and public necessity (CECPN) for projects that may have adverse environmental impacts. Both certificates are issued by state entities.

Local authority details: Municipal zoning commissions have jurisdiction over renewable energy facilities no larger than 1 MW. For larger facilities, which fall under the jurisdiction of the Connecticut Siting Council, municipal zoning commissions or inland wetland agencies may issue orders that regulate the proposed location of an electric generation facility. These orders may, however, be revoked by the Connecticut Siting Council (Conn. Gen. Stat. Ann. § 16-50i(a) setting a 1 MW threshold in the definition of a facility; § 16-50x(d) allowing local zoning commissions and inland wetland agencies to regulate proposed location, subject to conditions).

See: Hansen, L. (2020). Siting law for renewable energy facilities. Connecticut Office of Legislative Research. https://www.cga.ct.gov/2020/rpt/pdf/2020-R-0265.pdf **State authority details:** The Connecticut Siting Council has jurisdiction over most projects larger than 1 MW. The council is directed to "give such consideration to ... municipal regulations as it shall deem appropriate" and is authorized to affirm or revoke municipal orders concerning siting. Certain electric generating facilities must obtain a certificate of registration from state utility regulators. Furthermore, projects that may have adverse environmental impacts, including all wind projects larger than 65 MW, must apply to the Siting Council for a CECPN. Other projects must file a petition for a declaratory ruling, a separate process. Those include customer-side distributed generation facilities and grid-side distributed resource facilities no larger than 65 MW that meet certain standards. Certain independent power producers, projects for self-consumption and certain PURPA (Public Utility Regulatory Policies Act of 1978) projects are exempt from the Siting Council's jurisdiction (Conn. Agencies Regs. § 16-258b-2 on certificate of registration; § 16-50j-92 requiring a CECPN for wind projects larger than 65 MW; § 16-50j-93 requiring a petition for a declaratory ruling for certain projects. Conn. Gen. Stat. Ann. § 16-50x allowing state to override local zoning orders and giving state discretion to consider municipal regulations; § 16-50k requiring a CECPN for projects that may have adverse impacts).

Relevant timelines: Details

For certification proceedings, the Connecticut Siting Council must render a decision on an application for a generating facility within 180 days of the filing of the application (Conn. Gen. Stat. Ann. § 16-50p(a) setting time limits for review). A local municipality must exercise

its power to site or regulate a facility within 65 days after an application for a facility has been filed with the Siting Council (Conn. Gen. Stat. Ann. §16-50x(d) setting time limits for local orders).

Connecticut continued

Public involvement: Details

The Connecticut Siting Council shall hold at least one public hearing no more than 150 days from when it receives the application (Conn. Gen. Stat. Ann. § 16-50m timing requirements for public hearings).

Published resources: Details

Siting and permitting guides

Solar: Connecticut Department of Energy & Environmental Protection. (2024, March). Permit information for solar projects [Factsheet]. https://portal.ct.gov/-/media/DEEP/Permits_and_ Licenses/Factsheets_General/Solar-Permitting-Factsheet.pdf

Model ordinances

Solar: Energize Connecticut. (2014). *Solar PV* model zoning ordinance Connecticut jurisdictions. http://my.solarroadmap.com/userfiles/Model-PV-Zoning-Ordinance.pdf

Delaware

Choose another state

Principal authority category

Local

Relevant timelines

Not found

Public involvement

Not found

Published resources

Solar: Not found Wind: Not found

Authority summary

Delaware delegates siting authority to local governments, though the Delaware Energy Office is charged with providing general support for the responsible siting of renewable energy projects. Guidelines for standards for small wind are provided by the state but implemented at the local level.

Local authority details: Local governments have final decision-making authority over local land use. (Del. Code Ann. tit. 29 § 9206). Local governments are, however, prohibited from adopting regulations on residential wind turbines that exceed state limits (Del. Code Ann. tit. 29 § 8060).

State authority details: The Delaware Energy Office is responsible for the study, analysis and collaboration of the utility and stakeholders regarding responsible siting of renewable energy projects in the state but does not have final decision-making authority (Del. Code. Ann. tit. 29 § 8053; tit. 29 § 9206).



Harrison Keely, <u>CC BY 4.0</u>, via Wikimedia Commons

Florida Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Contingent Public hearing(s)/ Solar: Yes meetings Wind: Yes Solar: State ≥ 75 MW

Authority summary

Solar projects smaller than 75 MW are subject to local government authority, although developers may choose to apply for a state permit instead. Projects of at least 75 MW are subject to the authority of the state's siting board. No statutes concerning wind projects were found.

Local authority details: Local governments have authority for siting solar projects smaller than 75 MW, unless applicants choose to apply for the state-issued permit process in lieu of local approval (Fla. Stat. Ann. § 403.506). While counties have authority over zoning, there are some restrictions on that authority. Under state law, "[a] solar facility shall be a permitted use in all agricultural land use categories in a local government comprehensive plan and all agricultural zoning districts within an unincorporated area.' Counties also cannot establish buffer or landscaping requirements that "exceed the requirements for similar uses involving the construction of other facilities that

are permitted uses in agricultural land use categories and zoning districts" (Fla. Stat. Ann. § 163.3205(3)-(4)).

State authority details: The Florida Siting Board, in conjunction with the Siting Coordination Office, has principal authority to oversee steam or solar electric generating facilities with a capacity of 75 MW or more. These projects require a certificate from the state that replaces all local and state permits. If the state's siting board determines that a proposed site or associated facility "does not conform with existing land use plans and zoning ordinances" but that "it is in the public interest to authorize the use," it may authorize a variance, preempting local law. (Fla. Stat. Ann. § 403.503(14) defining "electrical power plant" and allowing developers of smaller facilities to elect to apply for certification; § 403.508(f) allowing the siting board to issue a variance; § 403.510 preempting regulations in conflict).

Relevant timelines: Details

Within 40 days after the filing of an application, the Florida Department of Environmental Protection must file a statement with regard to the completeness of the application (Fla. Stat. Ann. 403.5066(b)). A certification hearing must be held by the designated administrative law judge within 265 days after an application is filed

with the department (Fla. Stat. Ann. 403.508(2)(a)). After the certification hearing, the administrative law judge must make a recommended order within 45 days (Fla. Stat. Ann. § 403.508(5)). The siting board then must make a decision within 60 days (Fla. Stat. Ann. § 403.509(1)(b)).

continued on next page

Florida continued

Public involvement: Details

A local government where the facility is proposed may hold one informational public meeting in addition to the hearings authorized by state law (Fla. Stat. Ann. § 403.50663; § 403.508(2)(c)).

Published resources: Details

Siting and permitting guides

Solar and wind: Florida Department of Environmental Protection. (2022). Power Plant Siting Act. https:// floridadep.gov/water/siting-coordination-office/ content/power-plant-siting-act

Florida Department of Management Services. (n.d.). General overview of regulations for renewable energy facilities in Florida [Chart]. https://dms-media.ccplatform.net/content/ download/56812/239864/file/Renewable_Energy_ Regs.pdf

Model ordinances

Solar: Go Solar Florida. (2014, September). Planning and zoning best management practices. SunShot Initiative, Energy Efficiency and Renewable Energy Program, U.S. Department of Energy. https://www.broward.org/GoGreen/GoSOLAR/ GoSOLARFlorida/Documents/Best_Practices_ Solar Friendly Planning Zoning 2014.pdf

Georgia Choose another state **Public Principal authority** Relevant **Published** category timelines involvement resources Not found Not found Solar: Yes Local Wind: Not found

Authority summary

Municipalities oversee permitting and siting processes. Compliance with state and federal environmental regulations are part of those processes, though the ultimate approval rests with municipalities.

Local authority details: Local authorities have jurisdiction for facilities of any size (O.C.G.A. § 36-66-1 et seq. describing local zoning authority).

See: Kahn, J., & Shields, L. (2020, September 2). State approaches to wind facility siting. National Conference of State Legislatures. https://www.ncsl.org/energy/ state-approaches-to-wind-facility-siting

State authority details: The state does not ultimately approve projects. Projects must, however, comply with existing state and federal environmental regulations and avoid building on sites that stakeholders label "avoidance areas." State environmental regulations can be found in Georgia's Erosion and Sedimentation Control Act and the Metropolitan River Protection Act (O.C.G.A. § 12-7-1).

Published resources: Details

Model ordinances

Solar: Strategic Energy Institute, Georgia Institute of Technology. (2018, July). The Georgia model solar zoning ordinance. https://lpdd.org/wp-content/ uploads/2021/05/2018-07-30_mso_guide_final.pdf

Hawaii Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Yes Local Public hearing(s) Wind: Yes

Authority summary

In Hawaii, local zoning laws govern the siting of wind and solar facilities. A special use permit is required for any solar facility project on class B or C agricultural soils that will occupy more than 20 acres or 10% of the parcel. Construction of wind and solar facilities may trigger environmental review under the state's environmental law.

Local authority details: Local governments and their planning departments have principal authority over siting of solar and wind facilities.

State authority details: Solar energy facilities are not permitted in agricultural districts on soils with the productivity rating A. On class B and C soils, solar

facilities may not occupy more than 10% of the parcel or 20 acres, whichever is less, without a special use permit from the county planning commission and, for land greater than 15 acres, approval by the Land Use Commission (HRS § 205-2(d)(6) describing restrictions on solar facilities in agricultural districts). Wind energy facilities are allowed in agricultural districts without such restrictions. Additionally, renewable energy projects proposed on public land can apply for leases that are reviewed and issued by the Board of Land and Natural Resources. Certain types of projects require state environmental assessments (HRS § 343-5 describing when environmental assessments are required; HRS § 171-95.3 describing requirements for leasing public land for renewable energy facilities).

Relevant timelines: Details

For projects requiring a special use permit approved by the Hawaii Land Use Commission, the county must send a copy of its decision and the complete record of the proceeding to the Land Use Commission within 60 days after reaching the decision. The commission then has 45 days in which to approve, approve with modification or deny the petition (HRS § 205-6(e)).

Public involvement: Details

Planning commissions must establish their own rule or regulation for the timing of a hearing on a special use permit (HRS § 205-6(b)). For projects requiring a lease of public land, at least two public hearings must be held (HRS § 171-95.3(c)).

Published resources: Details

Siting and permitting guides

Solar and wind: Department of Business, Economic Development & Tourism, Hawaii State Energy Office. (2015, April). Guide to renewable energy facility permits in the state of Hawaii. https://energy.hawaii.gov/wp-content/ uploads/2022/05/DBEDT-Permit-Guide V3 04-30-15R.pdf

Idaho Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Not found Solar: Not found Both Not found Wind: Yes

Authority summary

Any electrical corporation constructing an electric plant must obtain a certificate of public convenience and necessity (CPCN) from the Idaho Public Utilities Commission (IPUC). Siting authority rests with local city or county governing boards. The state may also oversee environmental reviews.

Local authority details: The state delegates land use authority to city councils and boards of county commissioners, who are authorized to create planning and zoning commissions (Idaho Code § 67-6504 et seq.).

State authority details: Idaho statute requires any electrical corporation constructing an electric plant to obtain a CPCN from the IPUC. Public utilities may also voluntarily request a CPCN from the IPUC as part of a

preapproval process. Furthermore, the IPUC also has a backstopping role related to permitting and siting. If an order from the IPUC to a public utility is in conflict with an order from a local government agency (e.g., a local zoning commission), the local government's order can be nullified (Idaho Code § 61-118 defining "electric plant"; § 61-119 defining "electrical corporation"; § 61-526 requiring a CPCN for public utilities; § 67-6528 requiring state agencies to comply with local zoning and planning except when IPUC has issued order in conflict).

See: Idaho Governor's Office of Energy and Mineral Resources. (n.d.). State agency involvement: Idaho Public Utilities Commission. https://oemr.idaho.gov/ energy-infrastructure/agencies/

Published resources: Details

Siting and permitting guides

Wind: Energy Division, Idaho Department of Water Resources. (2005, November). Permitting of small and medium sized wind turbine projects in Idaho. https://oemr.idaho.gov/wp-content/ uploads/2016/06/idwindpermitguide.pdf

Illinois Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Yes Local Public hearing(s) Wind: Not found

Authority summary

The local county government is the permitting and siting authority for all wind and solar energy projects in the state. The state has established siting standards for renewable projects — including setback requirements and tip heights — in law.

Local authority details: A county board or county zoning board of appeals may establish standards for commercial wind and solar energy facilities, but those standards cannot be more restrictive than the standards outlined in Public Act 102-1123 of 2023 (55 ILCS § 5/5-12020(b)). Counties also cannot prohibit wind or solar facilities from being sited in agricultural or industrial districts, either permanently or temporarily (55 ILCS § 5/5-12020(h)). The county is responsible for granting siting approval and special use permits to wind and solar energy facilities (55 ILCS § 5/5-12020(c)).

State authority details: The state Legislature established standards for siting commercial wind and solar facilities in Public Act 102-1123 of 2023. Counties are prohibited from establishing standards more restrictive than state standards. The state does not, however, have permitting authority over renewable energy projects. The Illinois Commerce Commission oversees public utilities and electric co-ops in the state.

Relevant timelines: Details

The county must hold a public hearing within 60 days of the filing of a project application. The county shall make its siting and permitting decisions within 30 days of the conclusion of the public hearing (55 ILCS § 5/5-12020(c)).

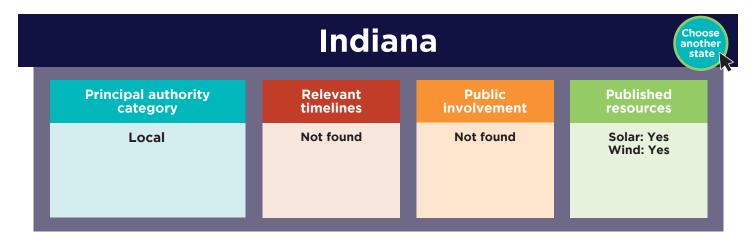
Public involvement: Details

Before a county grants siting approval or a special use permit for a wind or solar facility, the county board or zoning board must hold at least one public hearing (55 ILCS § 5/5-12020).

Published resources: Details

Model ordinances

Solar: Great Plains Institute. (2020, August). Illinois solar model ordinance. https://www. growsolar.org/wp-content/uploads/2020/09/IL-Solar-Ordinance-2020.pdf



Authority summary

Local governments have authority to site clean energy projects through broad zoning authority. Indiana has developed baseline standards and setbacks in statute that counties, municipalities or nonparticipating and adjacent property owners may waive.

Local authority details: Counties and municipalities control the siting of wind and solar projects. Local authorities may not adopt any standards that prohibit or unreasonably restrict solar projects, except to protect public health and safety. Counties or municipalities may adopt "reasonable restrictions" on solar projects as long as they either (a) do not significantly increase project costs or decrease efficiency, or (b) allow for an alternative system of comparable cost and efficiency (local solar standards in Ind. Code § 36-7-2-8). State law does not prohibit local authorities from banning wind projects. The state has created a voluntary program allowing

counties and municipalities to seek certification as "solar energy ready communities" and "wind energy ready communities" and has established default siting standards for those communities (I.C. § 8-1-41-4 default standards for wind energy ready communities; § 8-1-42-6 default standards for solar energy ready communities).

State authority details: There is no state-level permitting requirement for wind and solar projects. Further, wind and solar facilities — as "alternate energy production facilities" — are exempt from the requirement that the Indiana Utility Regulatory Commission must issue a certificate of public convenience and necessity before construction may begin (Ind. Admin. Code § 4-4.1-13 reporting requirements for alternate energy production facilities; I.C. 8-1-8.5-7, § 7(2) exemption from certification requirement for alternate energy production facilities).

Published resources: Details

Siting and permitting guides

Solar and wind: Greene, J., Ross, B., & Wyatt, J. (2020, December). Indiana renewable energy guide: A guide for local governments. Great Plains Institute. https://scholarworks.iu.edu/dspace/ items/b5be16a5-78bb-456c-9fbc-8e299a8ad750

Model ordinances

Solar: Great Plains Institute. (2020, December). Model solar ordinances for Indiana local governments. https://betterenergy.org/wp-content/ uploads/2021/02/IN-Solar-Ordinance-2020_ December.pdf

Choose lowa another state **Principal authority** Relevant **Public Published** category timelines involvement resources Not found Contingent Public hearing(s) Solar: Yes Wind: Yes State ≥ 25 MW

Authority summary

Project developers must obtain a certificate of public convenience, use and necessity from the Iowa Utilities Board to construct a facility of at least 25 MW. Facilities smaller than 25 MW are subject only to county or municipal authority.

Local authority details: Cities and counties are authorized to adopt local zoning regulations. These regulations must be made in accordance with a comprehensive plan and designed to meet a number of goals, including to "promote reasonable access to solar energy" (Iowa Code § 335 describing county zoning; § 414 describing city zoning).

State authority details: Project developers shall obtain a certificate from the Iowa Utilities Board to construct

a facility of at least 25 MW (Iowa Code § 476A.1(5) defining "facility"; § 476A.2 requiring a certificate). In practice, however, large wind facilities often do not need to obtain a state certificate because state courts have held that wind turbines that feed into different gathering lines are not part of the same "facility" within the meaning of state law; see, for example, Mathis v. Palo Alto Wind Energy, LLC, No. 18-1431 (Iowa Supreme Court, May 3, 2021). State law provides that "[t]he failure of a facility to meet [local] zoning ... shall not preclude the board from issuing the certificate" (lowa Code § 476A.5(3)). State law further provides that "[u] pon issuance of a certificate,... a regulatory agency, city or county shall not require any further approval, permit or license for the construction of the facility" (lowa Code § 476A.8).

Public involvement: Details

A public hearing is required on an application for a certificate (Iowa Code § 476A.4). The hearing process is subject to the Iowa Administrative Procedures Act (Iowa Code §17A et seq.; §§ 476A.4).

Published resources: Details

Siting and permitting guides

Solar and wind: Greene, J., Ross, B., & Wyatt, J. (2020, April). Siting utility-scale solar and wind in Iowa. Great Plains Institute. https://betterenergy. org/wp-content/uploads/2020/03/Solar_and_ Wind_in_lowa_Siting_Guide-1.pdf

Model ordinances

Solar: Center for Rural Affairs & Iowa Environmental Council. (n.d.). Iowa solar siting resource guide: A roadmap for counties. https://www.iaenvironment. org/webres/File/Solar%20Siting%20Guide%20 2 20 20.pdf

Wind: Iowa Environmental Council. (n.d.). Successful county wind siting practices in lowa. https://www. iaenvironment.org/webres/File/IEC WindSiting Best%20Practices_Oct_2019.pdf

Kansas

another state

Principal authority category

Local

Relevant timelines

Not found

Public involvement

Not found

Published resources

Solar: Not found Wind: Not found

Authority summary

The state has decided that legislation for and the practice of zoning and siting development will be reserved for municipal and county-level governments.

Local authority details: Kansas has granted the authority for siting and zoning practices throughout the state to municipal and county-level governments (see generally Kan. Stat. Ann. § 12-741).

State authority details: The developer of a renewable energy project has the choice of opting out of being classified as a public utility and thus opting out of the jurisdiction of the Kansas Corporation Commission (KCC). The KCC has a limited role in nonjurisdictional (i.e., nonregulated) renewable generation (Kan. Stat. Ann. § 66-104(e)).

See: Kansas Corporation Committee. (2022, October 27). Renewable generation and transmission: KCC's role and jurisdiction [Presentation]. https://www.kcc. ks.gov/images/PDFs/presentations-and-legislativetestimony/2022_Renewable%20Generation%20 and%20Transmission%20Presentation.pdf



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Kentucky

Choose another state

Principal authority category

> Contingent State ≥ 10 MW

Relevant timelines

Yes

Public involvement

Public meeting(s)/ potential hearing

Published resources

Solar: Yes Wind: Yes

Authority summary

The Kentucky State Board on Electric Generation and Transmission Siting reviews applications for a construction certificate for all energy generation facilities of at least 10 MW. Facilities or projects that fall under that threshold are overseen by local authorities, such as a local planning commission.

Local authority details: Facilities smaller than 10 MW in generation capacity will be overseen and regulated at the local level. All projects may be subject to local zoning ordinances (Ky. Rev. Stat. § 278.700 defining "merchant electric generating facilities").

State authority details: At the state level, the Kentucky State Board on Electric Generation and Transmission Siting reviews all applications for any kind of energygeneration facilities with a capacity of 10 MW or more (Ky. Rev. Stat. § 278.704 requiring state board certification). In evaluating an application, the board cannot, however, modify or waive local setback requirements and decommissioning requirements at the request of the developer (Ky. Rev. Stat. § 278.704(4)).

Relevant timelines: Details

For projects requiring a construction certificate, the state board must render a decision within 120 days (or 180 days if a hearing is requested) from the receipt of an administratively complete application (Ky. Rev. Stat. § 278.710).

Public involvement: Details

For projects subject to state jurisdiction, the applicant must indicate that it held a public meeting in the affected county or counties before filing (Ky. Rev. Stat. § 278.706.706(2)(f)). In addition, the state board may convene a local public hearing upon the request of three or more local residents and must convene a local hearing upon the request of certain local officials (Ky. Rev. Stat. § 278.712(1) allowing for local public hearing).

Published resources: Details

Siting and permitting guides

Solar and wind: Kentucky State Board on Electric Generation and Transmission Siting. (n.d.). Kentucky's electric generation and transmission siting process: A guide to public participation. https://psc.ky.gov/agencies/psc/siting_board/ guide.pdf

Kentucky Department of Energy Policy. (2020). Kentucky solar toolkit. https://kentucky-solartoolkit-kygis.hub.arcgis.com/

Model ordinances

Solar: Kentucky Resources Council. (2020, September). Kentucky model solar zoning ordinance 2.2. https://www.kyrc. org/assets/files/news_images/20-02A KentuckyModelSolarZoningOrdinance.pdf

Louisiana Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Not found Solar: Yes Contingent Not found Wind: Not found Solar: State ≥ 10 acres

Authority summary

Local authority governs zoning and permitting. However, the Louisiana Department of Energy and Natural Resources (DENR) is responsible for issuing permits for construction of solar facilities with a footprint of at least 10 acres.

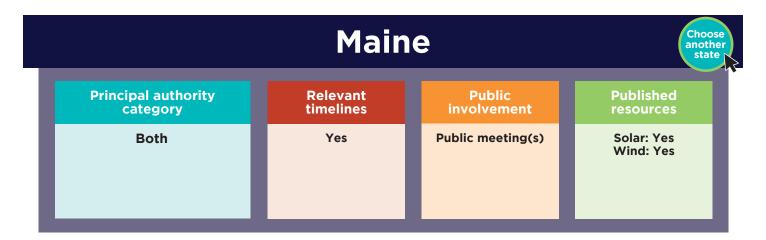
Local authority details: Parish planning commissions and municipal planning commissions are responsible for developing and adopting master plans, which hold authority over development covered within the scope of those plans; this includes utilities (La. R.S. § 33:106 regarding creation of master plans; § 33:109 regarding legal status of official plan).

State authority details: State law requires that any solar facility of at least 10 acres obtain a permit from the Louisiana DENR, with certain exceptions for utilityowned facilities (La. R.S. § 30.1154(D) requiring solar permits). Statute further directs the DENR to develop regulations related to permitting, but it is unclear if those regulations preempt local permitting and zoning authority (La. R.S. § 30.1154(A) regarding DENR developing permitting regulations).

Published resources: Details

Model ordinances

Solar: A model solar ordinance for Louisiana is in development by the Center for Planning Excellence. See: Center for Planning Excellence. (n.d.). Louisisana model solar toolkit. https://www.cpex.org/louisiana-model-solarordinance



Authority summary

Local governments have authority to adopt zoning requirements and to approve certain projects. Various state agencies have ultimate authority for approving impact- and environment-related permits, which are necessary for final project approval.

Local authority details: Municipalities may adopt ordinances and zoning requirements for renewable energy projects. Additionally, municipalities are required to review and comment on applications for renewable energy projects under the authority of the Maine Department of Environmental Protection (DEP). The governor or governor's designee may waive use restrictions in local ordinances if, after public notice and comment, it determines that one of five statutory bases for preemption apply (38 M.R.S.A. § 489-A allowing municipalities to review applications under certain circumstances; 30-A M.R.S.A. § 4352(6) describing bases for preemption).

State authority details:

The Maine DEP is the lead agency for siting solar and wind energy projects (38 M.R.S.A. § 341-D(2) describing circumstances under which state review is required). State authority is triggered when an area of more than 3 acres of impervious surface is created (38 M.R.S.A. § 482-6-B defining "structure").

Wind energy projects proposed for a location within an expedited siting area and non-grid-scale wind energy developments elsewhere are subject to the Maine Wind Energy Act (35-A M.R.S.A. § 3451 et seq., especially § 3451(8) and § 3456). If a grid-scale wind energy development is proposed outside an expedited permitting area, then the review standards of the Site Location of Development Act apply (38 M.R.S.A. § 488). Non-grid-scale wind farms must meet a series of state requirements under Maine's Natural Resources Protection Act (38 M.R.S.A. § 480-II).

For solar projects, the DEP is also the lead agency and requires stormwater permits for projects 20 acres or less, a permit under the Site Location of Development Act for projects larger than 20 acres and a Natural Resources Protection Act permit for projects near protected natural resources (35-A M.R.S.A. § 3471-§3474 describing policy of the state to promote solar development; 38 M.R.S.A. 480-B(8) defining "protected natural resource"; 38 M.R.S.A. §§ 481-490 on site location and development; 38 M.R.S.A. § 482(2) setting a 20-acre threshold for stormwater permitting).

Relevant timelines: Details

The DEP commissioner must issue a decision on an application for an expedited wind energy development within 185 days after the department accepts the application as complete or within 270 days of the acceptance of the application if the commissioner chooses to hold a hearing on it (38 M.R.S.A. § 344-B setting timetables for processing permits). The commissioner also publishes guaranteed processing

times for each type of new permit or license on the department's "Permits, Licenses, Certifications" webpage.

See: Maine Department of Environmenal Protection. (2023). Processing times for new applications. Effective: November 1, 2023 to October 31, 2024 (Schedule). https://www.maine.gov/dep/processingtimes.pdf

Maine continued

Public involvement: Details

Requirements include that a public informational meeting be held in accordance with DEP rules for a permit application for a small-scale (non-grid-scale) wind energy development (38 M.R.S.A. § 480-II). New applications for a license under the Site Location of Development Act require a public informational meeting, although the department may waive the requirement (06 C.M.R. ch. 2, § 096-2-13).

Published resources: Details

Siting and permitting guides

Solar: Maine Department of Inland Fisheries and Wildlife. (2020, March). Solar energy project general resource guidance and recommendations. https://www.maine.gov/dacf/ard/docs/ifw-solarproject-guidance-03052020.pdf

Maine Audubon. (2019, November). Best practices for low impact solar siting, design, and maintenance. https://www.maineaudubon.org/wpcontent/uploads/2020/03/Solar-Best-Practices. pdf

Wind: Maine Department of Environmental Protection. (n.d.). Wind energy developments. www.maine.gov/dep/land/sitelaw/wind/index.html

Wang, A., Zhange, A., & Schoeller, N. (2020). Shifting winds: Wind farm siting processes in New York, New Hampshire, and Maine, pp. 13-24. Nelson Rockefeller Center at Dartmouth College. https://rockefeller.dartmouth.edu/report/shiftingwinds

Maine Department of Environmental Protection. (n.d.). Wind energy developments. https://www. maine.gov/dep/land/sitelaw/wind/index.html

Model ordinances

Solar: Maine Audubon. (2020, February). Model site plan regulations and conditional use permits to support solar energy systems in Maine municipalities. https://www.maineaudubon. org/wp-content/uploads/2020/03/ ModelSolarOrdinance-Feb2020-FINAL.pdf

Wind: Maine State Planning Office. (2009, August). Model wind energy facility ordinance. https://www.maine.gov/dacf/municipalplanning/ docs/ModelWindEnergyFacilityOrdinance.pdf

Maryland Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Not found Solar: Yes State Public hearing(s) Wind: Yes

Authority summary

Siting authority is primarily under the jurisdiction of the Maryland Public Service Commission (MPSC). The MPSC must grant a certificate of public convenience and necessity (CPCN) before any construction can commence. Local government recommendations must be considered. Certain projects that are largely intended for on-site consumption may be given waivers from certain elements of MPSC approval.

Local authority details: Local governments regulate siting for electric generation facilities under 2 MW (Md. Code, Public Utilities § 7-207(c)). The MPSC is also required to consider recommendations of the local governing body on the proposed project for solar (Md. Code, Public Utilities §§ 7-207(e)). Local governments can petition to intervene to be a party in the MPSC solar-permitting process to help ensure community interests are heard (Md. Code, Public Utilities § 7-207; § 3-106 allowing intervention in PUC proceedings).

See: Maryland Department of Planning. (n.d.). Overview of Maryland's utility-scale solar review and approval process. https://planning.maryland.gov/Pages/ OurWork/envr-planning/solar-siting/solar-sitingoverview-review-approval-process.aspx

Maryland Public Service Commission. (2019, September). CPCN process: Sections 7-207 and 7-208, Public Utilities Article. https://www.psc.state.md.us/ electricity/wp-content/uploads/sites/2/CPCN-Processrevised-9-12-19.pdf

State authority details: The state holds principal authority over siting of generation and transmission projects through the MPSC, aside from certain projects smaller than 2 MW that are able to disconnect from the grid during outages (Md. Code, Public Utilities §§ 7-207-7-208; § 7-207.1). The MPUC may waive elements of approval process if the project is deemed to be in the public interest (Md. Code, Public Utilities § 7-207(e)).

Public involvement: Details

The MPSC must hold a public hearing on the application for the CPCN in each county and municipality where the generating station is proposed, although the hearings may be held virtually (Md. Code, Public Utilities § 7-207(d)(1); § 7-207.1(f)).

Published resources: Details

Siting and permitting guides

Solar: Maryland Department of Planning. (n.d.). Solar facility siting guidance. https://planning.maryland. gov/Pages/OurWork/envr-planning/solar-siting/ solar-siting-home.aspx

Model ordinances

Wind: Maryland Energy Administration. (2008, March). Maryland model wind ordinance for towns/ counties. https://energy.maryland.gov/documents/ DraftModelSmallWindOrdinanceforMD_000.pdf

Massachusetts Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Yes Contingent Public meeting(s) Wind: Yes State ≥ 100 MW

Authority summary

Siting authority for renewables in Massachusetts is based on facility size. For projects smaller than 100 MW, approval is local; for projects of at least 100 MW, approval is at the state level. The state has oversight of zoning restrictions and preemption authority for "unreasonably burdensome" zoning requirements.

Local authority details: City and town councils may adopt ordinances and zoning requirements for renewable energy projects. Changes to local government zoning are submitted to the Massachusetts attorney general's office for approval. Any zoning restrictions for solar must not be "unreasonably burdensome," which is not defined in the statute. The attorney general's office may reject an unreasonably burdensome requirement in a local government's zoning law.

See: Healey, M. (2020, November 4). Shutesbury Annual Town Meeting of June 27, 2020 — Case #9829 (Letter to Grace Bannasch, town clerk). The Commonwealth of Massachusetts Office of the Attorney General. https://www.shutesbury.org/sites/default/files/ago%20 letter%20re%20solar.pdf

Office of the Attorney General. (n.d.). About the Municipal Law Unit. https://www.mass.gov/info-details/ about-the-municipal-law-unit

In addition, state law provides that "[n]o zoning ordinance or by-law shall prohibit or unreasonably regulate the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety or welfare" (Mass. Gen. Laws ch. 40A § 3).

State authority details: The Energy Facilities Siting Board (EFSB) is the siting authority for large energy projects in the state, which includes a generating facility with a capacity of at least 100 MW (including renewables). The board also conducts environmental reviews and may override local restrictions when issuing a certificate of environmental impact and public interest (Mass. Gen. Laws ch. 164 §§ 69G providing definitions; §§ 69H on the powers and duties of board; §§ 69J1/4 (certificate for construction); §§ 69K1/2 (certificate of environmental compatibility and public need)).

Relevant timelines: Details

The EFSB process requires a board decision within one year on a petition to construct a project (Mass. Gen. Laws ch. 164 § 69J1/4).

Public involvement: Details

For projects under EFSB jurisdiction, public meetings and the opportunity for persons to intervene in the proceeding are required.

See: Massachusetts Energy Facilities Siting Board. (2019, January). The energy facilities siting handbook: An overview of the energy facilities siting board review process. https://www.mass.gov/doc/energyfacilities-siting-handbook-revised-january-2019/ download

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Massachusetts continued

Published resources: Details

Siting and permitting guides

Solar: Department of Energy Resources Massachusetts Executive Office of Energy and Environmental Affairs. (2014, March). Policy guidance for regulating solar energy systems. https://www.mass.gov/ doc/policy-guidance-for-regulating-solar-energysystems/download

Model ordinances

Solar: Department of Energy Resources. (2014, December). Model zoning for the regulation of solar energy systems. Massachusetts Executive Office of Energy and Environmental Affairs. https://drive.google.com/file/d/1l2nFL7BpNweZcAkhmhdibhTSGseRfMD/view

Wind: Massachusetts Department of Energy Resources. (2011, June). Model Amendment to a zoning ordinance or by-law: Allowing conditional use of wind energy facilities. Massachusetts Executive Office of Environmental Affairs. https://www.mass.gov/doc/ smart-growthsmart-energy-bylaws-wind-powerwind-by-special-permit/download

Michigan Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Yes Contingent Public meeting(s) Wind: Yes Solar: State ≥ 50 MW Wind: State ≥ 100 MW

Authority summary

A new state law effective November 29, 2024, gives the Michigan Public Service Commission (MPSC) principal authority for solar projects of at least 50 MW and wind projects of at least 100 MW unless the local government has an ordinance that is "compatible" with the requirements of the new law. Municipal exemption: A project located entirely within a city or village is exempt if the city or village is the owner of participating property, is a developer of the facility or owns an electric utility that will take service from the energy facility.

Local authority details: Local governments have authority to site solar projects smaller than 50 MW and wind projects smaller than 100 MW (Mich. PA 233 of 2023 § 222). They also have the option to retain control over the siting of facilities above these thresholds "if they adopt a renewable energy ordinance no stricter than the provisions in this new legislation. A local moratorium on the development of energy facilities within the local government's jurisdiction will be deemed incompatible. Should local government have a compatible renewable energy ordinance, the energy provider must file for approval with the local

government. However, there are off-ramps where the local government's failure to act will vest the MPSC with control over the certification process."

See: Miller Canfield. (2023, November 29). New legislation puts Michigan on the fast track to renewable, clean energy. JDSupra. https://www.jdsupra. com/legalnews/new-legislation-puts-michigan-onthe-9559170/

State authority details: Before beginning construction of an energy facility, an electric provider or independent power producer may obtain a certificate for that energy facility from the Michigan Public Service Commission. A local unit of government exercising zoning jurisdiction may request the commission to require an electric provider or independent power producer that proposes to construct an energy facility in that local unit to obtain a certificate for that energy facility from the commission. The issuance of a certificate preempts local restrictions (Mich. PA 233 § 222 (when certificate is required); § 232 (preemption)).

Relevant timelines: Details

The commission must determine whether an application is complete within 60 days of receiving it (Mich. PA 233 § 225 (2)). The commission shall grant the application and issue a certificate or deny the application not later than one year after a complete application is filed (Mich. PA 233 § 226(5)).

A local unit of government that has a "compatible" renewable energy ordinance shall approve or deny an application within 120 days after receiving the application. The applicant and local government may jointly agree to extend this deadline by up to 120 days (Mich. PA 233 § 223 (3) b).

Public involvement: Details

A public meeting in each affected local government unit is required for projects subject to the new law (Mich. PA 233 § 223). The developer must also attempt to negotiate a host community agreement with the local government; if unsuccessful, the developer must negotiate a community benefit agreement with a local community-based organization (Mich. PA 233 § 227).

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Michigan continued

Published resources: Details

Siting and permitting guides

Solar and wind: Mills, S., & Krol, M. (2024, January). What local governments should know about Michigan's new renewable energy siting policies. Center for EmPowering Communities, Graham Sustainability Institute, University of Michigan. https://milivcounty.gov/wp-content/uploads/FAQ-How-HB5120-Works.pdf

Model ordinances

Solar: Beyea, W., Fierke-Gmazel, H., Gould, M. C., Neumann, B., Reilly, M., & Mills, S. (n.d.). Planning & zoning for solar energy systems: A guide for Michigan local governments. Michigan State University Extension; Graham Sustainability Institute, University of Michigan. https://www.canr.msu.edu/planning/ uploads/files/SES-Sample-Ordinance-final-20211011single.pdf

Wind: Michigan State University. (2020, October). Sample zoning for wind energy systems. https://www.canr.msu.edu/outreach/uploads/files/ wind%20sample%20zoning%2010062020_FINAL.pdf

Minnesota Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Yes Contingent Public meeting/ hearings Wind: Yes Solar: State ≥ 50 MW Wind: State ≥ 5 MW

Authority summary

Siting authority for renewables is based on the size of the project. Wind projects smaller than 5 MW and all other generating projects smaller than 50 MW are permitted at the local level. The Minnesota Public Utilities Commission (MPUC) handles permitting for projects above those thresholds, although developers of some projects have the option of local review. Further, counties may assume permitting for wind projects above the 5 MW threshold (but smaller than 25 MW) by adopting an ordinance to that effect.

Local authority details: The board of county commissioners or board of zoning appeals has authority to regulate siting of small solar facilities (smaller than 50 MW with a single interconnection to the grid) and small wind farms (smaller than 5 MW) (Minn. Stat. § 216.F.02 exempting small wind energy conversion systems from MPUC jurisdiction; § 216F.01 Subd. 3 defining "small wind energy converstion system"). County boards may elect to assume jurisdiction over the permitting of wind projects smaller than 25 MW upon written notice to the MPUC (Minn. Stat. § 216F.08 allowing county boards to assume authority of wind projects up to 25 MW; § 394.301 allowing county boards to regulate zoning). Projects smaller than 80 MW may seek local approval, which supersedes the MPUC's authority. However, the local

government may still request the commission take jurisdiction (Minn. Stat. § 216E.05 regarding local review of applications).

See: Minnesota Department of Natural Resources. (2023, February). Commercial solar siting guidance. https://files.dnr.state.mn.us/publications/ewr/ commercial_solar_siting_guidance.pdf

State authority details: The MPUC is the principal state-level agency responsible for generation facilities of at least 50 MW (Minn. Stat. § 216E.02 siting authority for electric power facilities; § 216E.01 defining "large electric power generating plant" as 50 MW or larger; § 216E.021 describing how solar energy system size is determined, including by used of "shared interconnection"). The commission also handles permitting for wind projects of at least 5 MW (Minn. Stat. § 216F.01 defining "large wind energy system" as 5 MW or larger). A site permit from the state "shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances" promulgated by local governments (Minn. Stat. § 216E.10 explaining that site permit preempts local requirements; § 216F.02 explaining that wind energy is subject to different requirements; § 216F.07 explaining that state permits for large wind facilities preempt local requirements).

Relevant timelines: Details

For generating facilities, the MPUC shall make a determination within one year of a completed site application and within 60 days after receipt of a report from the administrative law judge. For wind systems, the commission shall make a determination within 180 days of accepting a complete application (Minn. Stat. § 216E.03 Subd. 9 timing requirements for large generating facilities not including wind; § 216F.04(c) timing requirements for large wind facilities).

Public involvement: Details

An applicant for state approval must meet with local government if requested, although the gathering may take the form of a single public meeting with notification to all affected local governments that requested to meet. The MPUC shall notice and host public hearings for all generation projects (Minn. Stat. § 216E.03 Subd. 3b and 6).

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Minnesota continued

Published resources: Details

Siting and permitting guides

Solar and wind: Great Plains Institute. (2020, February). Siting utility-scale solar and wind in *Minnesota.* https://betterenergy.org/wp-content/ uploads/2020/08/Solar_and_Wind_in_Minnesota_ Siting_Guide-1.pdf

Model ordinances

Solar: Great Plains Institute. (2020, August). Minnesota solar model ordinance. https://www.growsolar. org/wp-content/uploads/2020/08/MN-Solar-Ordinance-2020.pdf

Wind: Great Plains Institute. (2017, July). Minnesota local government wind toolkit. http://www.macpza. org/2017WindModelOrdinanceFinal.pdf

Mississippi Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Not found Solar: Not found **State Public hearing** Wind: Not found

Authority summary

The Mississippi Public Service Commission(MPSC) grants the certificate of public convenience and necessity (CPCN) that all energy projects must secure before beginning construction. Municipality and county governments may establish their own ordinances around land use and zoning.

Local authority details: Municipality and county governing bodies oversee land use and zoning decisions. For a project to receive a CPCN from the MPSC, it must first obtain prior franchise from the relevant municipality. The exception to this rule is that the MPSC may grant a certificate to a project for which a municipality has arbitrarily refused to grant a franchise for 90 days (Miss. Code Ann. § 17-1-3 (local zoning); § 77-3-19 (franchise)).

State authority details: Before constructing or acquiring an electricity generating project, developers must obtain from the MPSC a certificate attesting that the present and future public convenience and necessity require or will require the operation of said facility. As a condition for issuing this certificate, the MPSC must ascertain that all labor, materials, property or services to be rendered for the project will be supplied at reasonable prices (Miss. Code Ann. § 77-3-11; § 77-3-13).

Public involvement: Details

After receiving an application for a CPCN, the MPSC holds a hearing (Miss. Code Ann. § 77-3-13(3)).

Missouri

Choose another state

Principal authority category

Local

Relevant timelines

Not found

Public involvement

Not found

Published resources

Solar: Yes Wind: Yes

Authority summary

Siting and permitting are under the authority of local governments.

Local authority details: Local governments oversee the siting of solar and wind facilities (see generally Mo. Rev. Stat. § 89.010 et seq. describing powers of cities, towns and villages).

State authority details: Not found.

Published resources: Details

Siting and permitting guides

Solar and wind: Missouri Energy Infrastructure Conservation Siting Work Group. (2022). Guidelines for conservation siting of energy infrastructure in Missouri. https://online.flipbuilder. com/wordsmith/resc/



Chuck Morris, <u>CC BY-SA 3.0</u>, via Wikimedia Commons

Montana

Choose another state

Principal authority category

Local

Relevant timelines

Not found

Public involvement

Not found

Published resources

Solar: Not found Wind: Yes

Authority summary

Decisions on siting of wind and solar facilities are made at the local level.

Local authority details: Authority for siting is held at the local level primarily through county boards, but there is nothing in place for policies specifically for renewable energy (Mont. Code Ann. § 76-2-201 et seq.; § 76-2-301).

State authority details: No state-level siting authority was found for wind or solar electricity generating facilities. Wind facilities may need certain state environmental permits, depending on the locations of the roads, turbines and power lines.

Published resources: Details

Siting and permitting guides

Wind: Montana Department of Environmental Quality Permits and Approvals. (2019). DEQ permits for wind energy plants. https://deq.mt.gov/files/ Energy/Documents/Wind/DEQ_Permits_Wind_ Plants.pdf



U.S. Department of Energy, public domain, via Wikimedia Commons

Nebraska Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Yes State **Public hearing** Wind: Yes

Authority summary

The Nebraska Power Review Board holds authority over approving electric generation projects. There are certain exemptions from this approval, but the authority still rests at the state level.

Local authority details: Local governments maintain regulatory power over siting and zoning ordinances in their jurisdictions (Neb. Rev. Stat. § 66-913 allowing counties and municipalities to adopt regulations and ordinances to "encourage" solar and wind development).

State authority details: The state's Power Review Board approves the construction of new electric generation facilities, with exceptions (Neb. Rev. Stat. §§ 70-1012). The exceptions include privately developed renewable energy generation facilities that fulfill certain requirements (Neb. Rev. Stat. § 70-1014.02(2); § 70-1001.01(4) defining "private renewable energy facilities"). To be exempt from Power Review Board approval, private developers must submit a request to the board within 30 days prior to construction of renewable energy project (Neb. Rev. Stat. § 70-1014.02(2)).

Relevant timelines: Details

The Power Review Board shall hold a hearing within 60 days of the filing of an application, or at most 120 days if there is a delay for good cause. The board then has 60 days to give its decision (Neb. Rev. Stat. § 70-1013).

Public involvement: Details

The Power Review Board holds a public hearing on an application, although it can approve an application without a hearing if it finds that a hearing isn't needed (Neb. Rev. Stat. § 70-1013). Private renewable energy facilities compliying with §70-1014.02 are exempt from this requirment.

Published resources: Details

Siting and permitting guides

Solar: Mouw, L. (2023, June). Nebraska solar siting guide: A roadmap for counties. Center for Rural Affairs. https://www.cfra.org/sites/default/files/ publications/2nebraska-solar-siting-guide-aroadmap-for-counties-web.pdf

Wind: The Nebraska Wind and Wildlife Working Group. (2018). Guidelines for avoiding, minimizing, and mitigating impacts of wind energy on biodiversity in Nebraska. https://outdoornebraska. gov/wp-content/uploads/2023/03/Nebraska_ Wind Energy Guidelines August 2018.pdf

Model ordinances

Solar: Mouw, L. (2023, June). Nebraska solar siting guide: A roadmap for counties. Center for Rural Affairs. https://www.cfra.org/sites/default/files/ publications/2nebraska-solar-siting-guide-aroadmap-for-counties-web.pdf

Nevada Choose another state **Public Principal authority** Relevant **Published** category timelines involvement resources Yes Not found Solar: Yes Contingent Wind: Yes State > 70 MW

Authority summary

The Nevada Public Utilities Commission (NPUC) has jurisdiction for renewable energy projects larger than 70 MW.

Local authority details: There is no official defined role for local authorities in the renewable energy siting process. However, several statutes related to local zoning prohibit impeding solar and wind development (NRS 278.02077 prohibiting unreasonable wind restrictions; 278.0208 prohibiting unreasonable solar

restrictions; 278.250(c) allowing local governments to adopt zoning regulations that consider viewshed impacts; 278.250(n) allowing local governments to adopt zoning regulations that promote wind and solar).

State authority details: The NPUC approves permits for "utility facilities," the definition of which exempts renewable energy facilities with a capacity of "not more than 70 megawatts" (NRS 704.860 setting 70 MW threshold; 704.865 requiring permit for utility facilities).

Relevant timelines: Details

The NPUC must grant or deny an application within 150 days of the filing, unless a federal agency is required to conduct an environmental analysis of the proposed facility. If such an analysis is required, the NPUC must issue its decision within 120 days (NRS 704.8905).

Published resources: Details

Siting and permitting guides

Solar and wind: Nevada Public Utilities Commission. (2015, August 20). UEPA guide for applicants -Electric facilities. https://puc.nv.gov/uploadedFiles/ pucnvgov/Content/Utilities/UEPA Guide Electric. pdf

New Hampshire another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Public meetings/ Solar: Yes Contingent hearing(s) Wind: Yes State ≥ 30 MW

Authority summary

Siting authority for renewables is based on facility size. For projects smaller than 30 MW, authority is local. For projects of at least 30 MW, authority is at the state level. The state also has authority over certain projects between 5 MW and 30 MW.

Local authority details: Cities and towns may set their own standards for siting wind and solar projects smaller than 30 MW of capacity, over which the state-level New Hampshire Site Evaluation Committee only has discretionary jurisdictional authority.

State law mandates that local zoning ordinances shall be designed to encourage the installation and use of renewable energy systems. State law prohibits municipalities from adopting "unreasonable" limits on small wind projects (100 KW or smaller) that are used primarily for on-site consumption, such as ordinances prohibiting such projects altogether or requiring

setbacks from property boundaries that are more than 150% of the system height (N.H. RSA 674:17(I)(j) requiring that zoning ordinances encourage solar, wind and other renewable energy generation; 674:63 prohibiting unreasonable restrictions on small wind systems).

State authority details: The New Hampshire Site Evaluation Committee (SEC) has jurisdiction over proposed renewable energy facilities with a capacity of at least 30 MW. It also has jurisdiction over facilities with a capacity of 5 to 30 MW if the SEC determines the facility requires a certificate, either on its own motion or by petition of the developer or other community stakeholders. The SEC issues a certificate of site and facility authorizing construction of facilities or sizable changes/additions to existing facilities (N.H. RSA 162-H:2:VII; 162-H:2:XII).

Relevant timelines: Details

The SEC has 60 days to decide whether to accept an application for a certificate. After the SEC has accepted an application, relevant state agencies have 150 days to outline draft conditions for the SEC to issue the certificate. These state agencies have 240 days to provide the SEC with a final decision on parts of the application that relate to their authority.

Within 365 days of accepting an application, the SEC shall issue or deny a certificate for the energy facility. If deemed in the public interest, the SEC may temporarily suspend these timelines surrounding an application (N.H. RSA 162-H:7:VI).

Public involvement: Details

At least 30 days before applying for a certificate, a developer shall hold at least one public information session in each county where the proposed facility would be located.

Within 45 days of the SEC accepting the certificate application, a developer must hold at least one similar public information session in each county where the facility would be located. The SEC can order the developer to conduct more sessions.

Within 90 days of accepting an application, the SEC shall hold at least one public hearing in each county where the facility would be located; this shall be a joint hearing with representatives of relevant state agencies. At one or more of these hearings, the SEC shall provide an opportunity for comments from the governing body and residents of each affected municipality (N.H. RSA 162-H:10).

New Hampshire continued

Published resources: Details

Siting and permitting guides

Wind: Wind Energy Facility Siting Guidelines Working Group. (2007, May 29). Proposed wind power siting guidelines. https://www.nhsec.nh.gov/ projects/2013-01/documents/070529guidelines.pdf

Model ordinances

Solar: Farmland Information Center. (2018). New Hampshire model solar zoning ordinance. https://farmlandinfo.org/wp-content/uploads/ sites/2/2020/07/Model-Zoning-Ordinance-NH.pdf

Wind: HB 310 (2008) required the New Hamphsire Office of Energy and Planning to develop a technical bulletin on model municipal ordinances for the construction of small wind energy systems. The model ordinance does not appear to be hosted online anymore. HB 310 can be found here: https://www. gencourt.state.nh.us/legislation/2008/HB0310.html

New Jersey Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Not found Not found Solar: Yes State Wind: Yes

Authority summary

State statutes provide guidance on local ordinances related to wind and solar. Local permitting exists, but major permitting is coordinated by the Office of Permitting and Project Navigation at the Department of Environmental Protection. Projects may require permits from multiple state agencies.

Local authority details: Local governments have principal authority over setting regulations and standards for renewable energy projects, though restrictions may not be unreasonable (N.J. Stat. § 40:55D-66.12 prohibiting unreasonable restrictions on small wind systems). Administrative rules also reference permitting-by-rule and local authority in numerous different sections of code.

State authority details: All major projects go through permitting at the Office of Permitting and Project Navigation under the New Jersey Department of Environmental Protection (NJDEP). The specific

permits required depend on the location and nature of the project. The Office of Permitting and Project Navigation offers a permit readiness checklist to help developers understand and navigate the permitting requirementes and process

See: New Jersey Department of Environmental Protection. (2023). Permit readiness checklist. https://dep.nj.gov/oppn/permit-readiness-checklist/

Statute does not provide a clear definition of regulatory authority or permitting, though sections address specific circumstances of where solar and wind can and cannot be developed (for example: J.A.C. 7:50-5.36 imposing limits on solar in preservation areas: N.J. Stat. § 40:55D-66.16 providing that wind and solar are a permitted use at landfills and closed extraction operations; N.J. Stat. § 40:55D-66.11 providing that wind and solar are a permitted use in every industrial district of a municipality).

Published resources: Details

Siting and permitting guides

Solar: Laurent, C., Winn, A., Uppal, J., Birdsall, S., & Kooles, K. (n.d.). Solar guidebook for New Jersey municipalities. Sunshot, U.S. Department of Energy. https://static1.squarespace.com/ static/59eb5534b7411cf368c81ad3/t/5bad8a37c8 3025f8ad8a0492/1538099768941/USDoE-Solar_ Guidebook%2BNJ_Municipalities.pdf

Model ordinances

Solar: Delaware Valley Regional Planning Commission. (2015, February). Renewable energy ordinance framework: Solar PV. https://www.dvrpc.org/ energyclimate/modelordinance/solar/

Wind: Delaware Valley Regional Planning Commission. (n.d.). Renewable energy ordinance framework -Small wind. https://www.dvrpc.org/energyclimate/ modelordinance/wind/

New Jersey's Clean Energy Program. (2007, November 19). Toward the development of a model ordinance addressing small wind energy systems for New Jersey municipalities. https://njcleanenergy. com/files/file/SmallWindModelOrdinance111907.pdf

New Mexico Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Not found Contingent **Public hearing** Wind: Not found State ≥ 300 MW

Authority summary

Local authorities have jurisdiction for generation facilities smaller than 300 MW.

Local authority details: Local authorities have jurisdiction for generation facilities smaller than 300 MW (N.M. Stat. Ann. § 3-21-1 (local zoning authority in general); § 62-9-3(B) (300 MW threshold)). New Mexico amended the 1977 Solar Rights Act to limit local authorities from passing codes that would prohibit solar installations, with the exception of historical districts (N.M. Stat. Ann. § 3-18-32 limiting restrictions on solar by counties and municipalities).

State authority details: The New Mexico Public Regulation Commission has jurisdiction for generation facilities of at least 300 MW. Commission siting decisions can preempt local regulations deemed by the commission to be unreasonably restrictive or not in the public interest (N.M. Stat. Ann. § 62-9-3(G) allowing preemption of local laws that are unreasonably restrictive or not in the public interest).

Relevant timelines: Details

The Public Regulation Commission shall issue its order granting or denying the application within six months from the date the application is filed. If a utility also applies for approval of a transmission line at the same time, the commission has nine months to grant or deny the applications; the commission may take an additional six months with good cause (N.M. Stat. § 62-9-3(K)).

Public involvement: Details

State law calls for a public hearing prior to a decision by the Public Regulation Commission and gives the commission discretion to prescribe other notice (N.M. Stat. § 62-9-3(C)). The commission may, however, approve an application without a formal hearing if no protest is filed within 60 days of the notice of application (N.M. Stat. § 62-9-3(K)).

New York

Choose another state

Principal authority category

Contingent State ≥ 25 MW

Relevant timelines

Yes

Public involvement

Public meetings/ potential hearing

Published resources

Solar: Yes Wind: Yes

Authority summary

The state Office of Renewable Energy Siting (ORES) has exclusive siting authority for major solar and wind projects of at least 25 MW. Municipalities have authority over siting smaller energy facilities. Developers of renewable energy projects of 20 to 25 MW may opt into the ORES process.

Local authority details: Municipalities have authority over siting energy facilities smaller than 25 MW. Energy projects 20 to 25 MW may opt out of local siting and into ORES siting. Local governments may also adopt setbacks and other requirements for major energy facilities of at least 25 MW. However, for large projects subject to ORES review, the state may elect not to apply those requirements if they are deemed overly burdensome. Local governments are the lead agency for State Environmental Quality Review Act for projects under their jurisdiction (N.Y. Executive Law § 94-c(2)(h) defining "major renewable energy facility"; N.Y. Executive Law § 94-c(4)(g) allowing opt-in for projects 20 to 25 MW; N.Y. Executive Law § 94-c(5)(e) allowing preemption of unreasonably burdensome local restrictions; N.Y. Town Law §261 et seq. on zoning authority of towns; N.Y. Village Law §7-700 on zoning authority of villages).

State authority details: The ORES has siting authority for major solar and wind energy facilities of at least 25 MW. The ORES also has opt-in siting authority for projects 20 to 25 MW and for any projects previously under the authority of the state siting board pursuant to Article 10 of the New York Public Service Law. The ORES has adopted uniform permit standards and conditions for all projects under its siting process, including environmental review in consultation with environmental agencies and community engagement (N.Y. Executive Law § 94-c; 19 N.Y.C.R.R. § 900-1.1 to 900-15.2).

Relevant timelines: Details

The state must make a completeness determination within 60 days of application and must issue draft permit conditions within 60 days of the completeness determination. The final permit decision must be issued within one year of the completeness determination (or six months if on an underutilized site) (N.Y. Executive Law § 94-c(5)(b), (c), (f)).

Public involvement: Details

ORES regulations require developers to hold a meeting with local governments and a meeting with community members at least 60 days before filing an application. Local governments and community groups may apply for intervenor funding through the Local Agency Account to engage in the draft siting permit public comment period. Any substantive issues identified by the public could trigger an adjudicatory hearing (N.Y. Executive Law § 94-c(5) on public comment and adjudicatory hearing; 19 N.Y.C.R.R. § 900-1.3 describing preapplication procedures; 19 N.Y.C.R.R. § 900-5.1 on the local agency account).

New York continued

Published resources: Details

Siting and permitting guides

Solar: New York State Energy Research and Development Authority. (2023, May). New York solar guidebook for local governments. https://www. nyserda.ny.gov/All-Programs/Clean-Energy-Siting-Resources/Solar-Guidebook

Wind: New York State Energy Research and Development Authority. (2020, September). New York wind energy guidebook for local governments. https://www.nyserda.ny.gov/All-Programs/Clean-Energy-Siting-Resources/Wind-Guidebook

Model ordinances

Solar: New York State Energy Research and Development Authority (2023, May). New York solar guidebook for local governments. https://www. nyserda.ny.gov/All-Programs/Clean-Energy-Siting-Resources/Solar-Guidebook

Wind: James, J., Sugarman, D., & Sussman, M. (2012, January 12). Model municipal wind siting ordinance. Center for Climate Change Law, Columbia Law School. https://climate.law.columbia.edu/sites/ default/files/content/docs/others/Model_Municipal_ Wind Siting Ordinance.pdf

North Carolina

Choose another state

Principal authority category

Contingent Wind: State ≥ 1 MW

Relevant timelines

Yes

Public involvement

Public hearing(s)

Published resources

Solar: Yes Wind: Yes

Authority summary

Local governments have general authority to site renewable energy projects, while the state has additive permit requirements for wind energy facilities of at least 1 MW.

Local authority details: Local governments have general authority to establish local ordinances for siting, permitting and zoning (N.C. Stat. ch. 153A et seq. (counties); ch. 160A et seq. (cities and towns)). Chapters 153A and 160A are silent on specific laws related to large-scale generation, though they mention statutory limitations on prohibiting small-scale solar (N.C. Stat. § 153A-123(b1)(6); § 160A-175(b1)(5)). Wind statutes discussing state authority allude to local government authority for siting of wind energy facilities (N.C. Stat. Article 21C § 143-215.120(d) setting criteria for state approval of wind facilities).

State authority details: In addition to local zoning compliance, state law requires a certificate of site compatibility to build wind energy facilities. Department of Environmental Quality permit review and approval is required before construction or operation of a wind energy facility with a capacity of at least 1 MW (N.C. Stat. Article 21C § 143-215.115(2) setting 1 MW threshold; § 143-215.116 establishing permitting authority with the department). There are additional requirements and considerations for wind projects located near military facilities (N.C. Stat. Article 21C §143-215 et seq.).

Relevant timelines: Details

No less than 180 days prior to filing an application for a wind energy facility, a person shall request a preapplication site evaluation meeting with the Department of Environmental Quality. The preapplication site evaluation meeting shall be held no less than 120 days prior to applying. No less than 60 days prior to filing an application for a wind facility, the applicant shall request a scoping meeting with the department. The scoping meeting shall be held no less than 30 days prior to filing an application. Public hearings must take place within 75 days of receipt of a completed permit application (N.C. Stat. Article 21C § 143-215.117 through 143-215.119).

Public involvement: Details

The Department of Environmental Quality is required to hold a public hearing in each county impacted by a potential project within 75 days of receiving a permit application (N.C. Stat. Article 21C § 143-215.119(f)).

Published resources: Details

Siting and permitting guides

Wind: North Carolina Department of Environmental Quality. (n.d.). Onshore wind energy program. https://www.deg.nc.gov/onshorewindenergy

Model ordinances

Solar: NC Clean Energy Technology Center & NC Sustainable Energy Association. (2016). Template solar energy development ordinance for North Carolina. https://nccleantech.ncsu.edu/ wp-content/uploads/2018/06/NC-Template-Solar-Ordinance.pdf

Wind: North Carolina Wind Working Group. (2008, July). Model wind ordinance for wind energy facilities in North Carolina. https://energy. appstate.edu/sites/energy.appstate.edu/files/ NCModelWindOrd July2008.pdf

North Dakota

Choose another state

Principal authority category

Contingent

Solar: State > 50 MW Wind: State > 0.5 MW

Relevant timelines

Yes

Public involvement

Public hearing(s)

Published resources

Solar: Yes Wind: Yes

Authority summary

The state authorizes wind facility projects larger than 0.5 MW and other generating facilities larger than 50 MW.

Local authority details: Local authorities have jurisdiction over wind facilities no larger than 0.5 MW and other generating facilities no larger than 50 MW. Local zoning authorities may require greater setback distances than those required under state law (N.D. Cent. Code § 49-22-03(5) setting thresholds for state review).

State authority details: The North Dakota Public Service Commission authorizes wind facility projects larger than 0.5 MW and other generating facilities larger than 50 MW (N.D. Cent. Code § 49-22-03(5) defining "electric energy conversion facilities"; § 49-22-07 requiring a certificate for electric energy conversion facilities).

Relevant timelines: Details

The Public Service Commission has six months to approve a proposed facility after receiving a completed application (N.D. Cent. Code § 49-22-08(6)).

Public involvement: Details

A public hearing is required in each affected county (N.D. Cent. Code § 49-22-13).

Published resources: Details

Siting and permitting guides

Solar and wind: North Dakota Public Service Commission. (2022, April). Energy conversion and transmission facility siting. https://psc.nd.gov/ docs/ysk/PUD-1-Energy-Conversion-Transmission-Siting.pdf

Model ordinances

Wind: North Dakota Public Service Commission. (n.d.). Model environmental siting ordinances. https://psc.nd.gov/docs/consinfo/siting/clean%20 copy%20blank%20draft%20Model%20zoning%20 ordinances.pdf

Ohio Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Public meeting(s)/ Solar: Yes Contingent hearing Wind: Yes Solar: State ≥ 50 MW Wind: State ≥ 5 MW

Authority summary

The Ohio Power Siting Board (OPSB) has jurisdiction over solar projects of at least 50 MW and wind projects of at least 5 MW. However, counties can either (1) establish restricted areas where large wind and solar projects are prohibited or (2) veto individual projects.

Local authority details: The board of county commissioners or board of zoning appeals has authority to regulate siting of solar facilities smaller than 50 MW with a single interconnection to the grid and wind farms smaller than 5 MW, or smaller than 20 MW if the facility primarily powers a single customer at a single location (Ohio Rev. Code § 4906.01(B)(1) setting 50 MW threshold for state review; § 4906.13(A) setting 5 MW threshold for state review of wind; § 4906.13(B) depriving local governments of jursidiction over such projects; § 303.213 allowing counties jurisdiction over

smaller projects). Notwithstanding these limits, counties are authorized to adopt a resolution declaring all or part of the unincorporated territory as a restricted area where wind farms of at least 5 MW and solar farms of at least 50 MW are prohibited (Ohio Rev. Code § 303.58(A)). Counties are also authorized to veto individual projects (Ohio Rev. Code § 303.62(A)).

State authority details: Housed within the Public Utilities Commission of Ohio, the Power Siting Board is the siting authority for major energy projects and "economically significant" wind projects in the state, including solar projects of at least 50 MW and wind projects of at least 5 MW. Before construction can begin, the board must grant a certificate confirming the facility's "environmental compatibility and public need" (Ohio Rev. Code § 4906.10).

Relevant timelines: Details

No more than 90 days before applying to the Power Siting Board, the developer must hold at least one public informational meeting in the area where the project is proposed (Ohio Admin. Code § 4906-3-03(B)). Once an application is filed, the board makes a completeness

determination within 60 days (Ohio Admin. Code § 4906-3-06). The board then schedules a public hearing at least 60 days and no more than 90 days after receiving the complete application (Ohio Rev. Code § 4906.07).

Public involvement: Details

At least one public informational meeting and a public hearing are required on an application to the Power Siting Board.

In addition, when reviewing applications, the board must include two voting ad hoc members to represent the community where the project will be located: one county commissioner and one township trustee (Ohio Rev. Code § 4906.021).

Published resources: Details

Siting and permitting guides

Solar and wind: Ohio Power Siting Board. (2023, October 30). Understanding power siting: The standard application process. https://storymaps.arcgis.com/ stories/9bf2d0fc20214ffdaa3ae83a1fc9faa5

Model ordinances

Solar: Green County Ohio. (2021, July). Greene County model large-scale solar zoning text. https://www.greenecountyohio.gov/ DocumentCenter/View/28725/Model-Large-Scale-Solar-Zoning-TextPDF

Oklahoma

another state

Principal authority category

Both

Relevant timelines

Not found

Public involvement

Public meeting

Published resources

Solar: Not found Wind: Not found

Authority summary

The Oklahoma Corporation Commission (OCC) can write rules for siting wind projects, while local governments may set permit criteria for wind and solar facilities.

Local authority details: County and municipal governments may set permit criteria for wind and solar facilities (Okla. Stat. tit. 19 § 863.24 allowing local governments to set zoning regulations that trump other land use regulations).

State authority details: The OCC has authority to promulgate rules for wind facility siting under the Oklahoma Wind Energy Development Act of 2015 (Okla. Stat. tit. 17 § 160.22). The state has imposed minimum setbacks for wind facilities from certain types of buildings and infrastructures (Okla. Stat. tit. 17 § 160.20) and established decommissioning requirements (Okla. Stat. tit. 17 § 160.14).

Public involvement: Details

Developers of wind facilities are required to hold a public meeting (Okla. Stat. tit. 17 § 160.21).



Okiefromokla, public domain, via Wikimedia Commons

Oregon

Choose another state

Principal authority category

Contingent

Solar thermal: State ≥ 25 MW Solar PV: State > 160/1.280/1.920 acres Wind: State ≥ 50 MW

Relevant timelines

Yes

Public involvement

Public hearing(s)

Published resources

Solar: Yes Wind: Yes

Authority summary

The Oregon Energy Facility Siting Council holds authority over larger facilities, defined by capacity in the case of solar thermal and wind projects and by acreage for solar PV projects. Smaller facilities are governed by local governments and are subject to local zoning and permitting regulations. Developers may opt in to the state siting process.

Local authority details: Counties and municipalities hold regulatory authority over any wind facility smaller than 50 MW and any solar thermal facility smaller than 25 MW. For solar PV facilities, local governments can regulate projects that use no more than 160 acres on high-value farmland; 1,280 acres on land that is predominantly cultivated or classes I to IV; or

1,920 acres on other land (Or. Rev. Stat. § 469.300(11) setting thresholds for state authority; § 469.504 setting criteria for state and local approval).

State authority details: The Energy Facility Siting Council has jurisdiction over renewable generation siting decisions for larger energy facilities. Developers of these facilities must obtain a site certificate from the Energy Facility Siting Council prior to construction. Project developers may elect to use the state siting approval process for projects that are below the statelevel thresholds if desired (Or. Rev. Stat. § 469.320 requiring site certificates prior to construction and allowing developers of smaller projects to opt in to state review).

Relevant timelines: Details

For local projects, counties have 150 days from a fully completed application to render a decision (Or. Rev. Stat. 215.427(1)).

The Energy Facility Siting Council must approve or reject an application for a site certificate for a new renewable energy facility within 12 months after the filing of the application (Or. Rev. Stat. § 469.370(9)(d)).

Public involvement: Details

After the Oregon Department of Energy issues a draft proposed order on an application for a site certificate, the Energy Facility Siting Council shall hold one or more public hearings in the affected area and elsewhere (Or. Rev. Stat. § 469.370(2)). The council later holds a contested case hearing on issues raised in a public hearing (Or. Rev. Stat. § 469.370(5)).

Published resources: Details

Siting and permitting guides

Solar and wind: Oregon Department of Energy. (2023). A public guide to energy facility siting in Oregon. https://www.oregon.gov/energy/facilitiessafety/facilities/Documents/Fact-Sheets/EFSC-Public-Guide.pdf

Model ordinances

Solar and wind: Oregon Department of Energy. (2005). A model ordinance for energy projects: A guide for Oregon cities and counties on siting. https://icma.org/sites/default/files/302264_ OregonModelEnergy.pdf

Pennsylvania Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Not found Not found Solar: Yes Local Wind: Yes

Authority summary

Local authorities have jurisdiction over project approval, but the Pennsylvania Department of Environmental Protection has authority to issue environmental permits.

Local authority details: Counties and municipalities have autonomy in governing subdivision and land use development ordinances and zoning and permitting requirements. Construction of both solar and wind energy projects generally requires approval by the local government(s) in which they are located (see generally Pa. Consol. Stat. Title 53 concerning the powers of municipalities).

State authority details: The Department of Environmental Protection regulates the impacts of

wind energy facilities, typically impacts to water and wetlands mainly from road building and construction activities. For applicants considering siting a new project, including grid-scale solar, the department's Permit Application Consultation Tool is intended to help them determine which types of environmental permits, authorizations or notifications may be required.

See: Pennsylvania Department of Environmental Protection. (n.d.). Wind energy. https://www.dep. pa.gov/Business/Energy/Wind/Pages/default.aspx

Pennsylvania Department of Environmental Regulation. (n.d.). Solar developer resources. https://www.dep. pa.gov/Citizens/solar/Pages/Developers.aspx

Published resources: Details

Model ordinances

Solar: Delaware Valley Regional Planning Commission. (2015, February). Renewable energy ordinance framework: Solar PV. https://www.dvrpc.org/ energyclimate/modelordinance/solar/

Environmental Planning and Design. (2012). Western Pennsylvania rooftop solar challenge: Final solar zoning ordinance. PennFuture. https://library. weconservepa.org/library_items/1221-PennFuture-Model-Solar-Zoning-Ordinance

Wind: Pennsylvania Wind Working Group. (2006). Model ordinance for wind energy facilities in Pennsylvania. http://pawindenergynow.org/pa/ Model_Wind_Ordinance_Final_3_21_06.pdf

Puerto Rico

Choose another state

Principal authority category

State

Relevant timelines

Not found

Public involvement

Not found

Published resources

Solar: Not found Wind: Not found

Authority summary

Information on Puerto Rico's permitting process was challenging to identify. Research suggests the Permit Management Office and the Puerto Rico Electric Power Authority oversee most renewable energy project sitina.

Local authority details: Not found.

State authority details: The Puerto Rico Energy Public Policy Act of 2019 reformed numerous elements of Puerto Rico's energy sector and goals. Section 11 contemplates changes to clean energy development, which is largely driven by the renewable portfolio standards, as established in 12 L.P.R.A. § 8122 et seq. The Permit Management Office, Energy Bureau and Department of Economic Development and Commerce

all have roles in the siting and approval of renewable energy projects.

Permits, certifications and authorizations for new renewable energy projects are required to comply with the Environmental Public Policy Act (Act No. 416-2004) and are overseen by the Permit Management Office (Puerto Rico Energy Public Policy Act, Act. No. 17 of April 11, 2019, Section 11 (d), (e) and (f); 22 L.P.R.A. § 1052c(i) enumerating the duties and powers of the Department of Economic Development and Commerce in promulgating public policy on energy; 22 L.P.R.A. § 1054hh regarding construction and extension of electric power facilities; 23 L.P.R.A. § 9012d regarding the general authority of the Permit Management Office to grant and deny permits).



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Rhode Island Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Yes Contingent Public hearing(s) Wind: Yes State ≥ 40 MW

Authority summary

Town and city governments have the authority to site clean energy facilities smaller than 40 MW through broad zoning authority. State law authorizes communities to adopt zoning ordinances that control the use of land and how it is developed.

Local authority details: Local governments have broad zoning and planning authority to regulate and site renewable energy projects to implement the vision of their comprehensive plans (see generally R.I. Gen. Laws § 45-24-33 et seq.). Any facilities that produce less than 40 MW are regulated by local governments (R.I. Gen. Laws § 42-98-9 defining "major energy facility"). Since Rhode Island is a small state with little undeveloped or underdeveloped land, the vast majority of energy projects are smaller than 40 MW. For larger

projects under state jurisdiction, local governments are expected to render advisory opinions.

See: Kahn, J., & Shield, L. (2020, September 2). State approaches to wind facility siting. National Conference of State Legislatures. https://www.ncsl.org/energy/ state-approaches-to-wind-facility-siting

State authority details: The Energy Facility Siting Board (EFSB) is the licensing and permitting authority for all licenses required for siting, construction or alteration of a major energy facility (at least 40 MW) in Rhode Island (R.I. Gen. Laws § 42-98-2(4) consolidating licensing authority with the EFSB; § 442-98-3(d) setting 40 MW threshold for EFSB jurisdiction; § 442-9-4 requiring permit from the EFSB).

Relevant timelines: Details

The Energy Facility Siting Board has 30 days to say whether an application is complete and, if it is, to docket the application. Within 60 days after docketing an application, the EFSB shall convene a preliminary hearing on the application to determine the issues the board will consider in evaluating the application and identify agencies to provide advisory opinions. Those advisory opinions are due within six months, unless the board sets an earlier deadline. The board holds a final hearing within 45 days after the deadline for advisory opinions and must issue its final decision on the application within 60 days after the final hearing (R.I. Gen. Laws § 42-98-8 et seq.).

Public involvement: Details

The Energy Facility Siting Board is required to hold at least one public hearing in each town or city that will be affected by the project. The board also holds a final hearing on the application (R.I. Gen. Laws § 42-98-9.1; § 42-98-11(a)).

Published resources: Details

Siting and permitting guides

Solar: State of Rhode Island Office of Energy Resourcers. (2023). Solar guidance and model ordinance development. https://energy.ri.gov/ renewable-energy/solar/solar-guidance-andmodel-ordinance-development

Wind: State of Rhode Island Office of Energy Resources. (2017). Rhode Island land-based wind siting guidelines. https://energy.ri.gov/sites/g/ files/xkgbur741/files/documents/landwind/ WindSitingGuidelines 1-31-2017 FINAL.pdf

Model ordinances

Solar: State of Rhode Island Office of Energy Resources. (2023). Solar guidance and model ordinance development. https://energy.ri.gov/ renewable-energy/solar/solar-guidance-andmodel-ordinance-development

Wind: State of Rhode Island Office of Energy Resources. (2017). Rhode Island land-based wind siting guidelines. https://energy.ri.gov/sites/g/ files/xkgbur741/files/documents/landwind/ WindSitingGuidelines 1-31-2017 FINAL.pdf

South Carolina

Choose another state

Principal authority category

> Contingent State > 75 MW

Relevant timelines

Yes

Public involvement

Public hearing

Published resources

Solar: Not found Wind: Not found

Authority summary

Local governments oversee the siting of projects 75 MW or smaller, and the Public Service Commission (PSC) of South Carolina oversees the siting of major utility facilities larger than 75 MW.

Local authority details: The siting of any renewable energy facility that produces no more than 75 MW is regulated at the local level (S.C. Code Ann. § 58-33-20 setting threshold for state review at more than 75 MW; § 6-29-310 et seq. defining the powers of the local planning commission).

State authority details: The South Carolina PSC regulates the siting of major utility facilities larger than 75 MW, applying to both solar and wind energy. The PSC grants a certificate of environmental compatability and public convenience and necessity to permit the project. The commission must consider local laws and regulations in its permit but may preempt those regulations to issue a certificate if it finds them to be unreasonably restrictive (S.C. Code Ann. § 58-33-20 defining "major utility facility" as greater than 75 MW; § 58-33-110 requiring a certificate from the PSC for any major utility facility; § 58-33-160(e) allowing the PSC to refuse to apply any local laws that are unreasonably restrictive).

Relevant timelines: Details

In the case of a major utility project (larger than 75 MW) the PSC shall set dates for a public hearing no less than 60 and no more than 90 days after the receipt of the application (S.C. Code Ann. § 58-33-130).

Public involvement: Details

The PSC must hold a public hearing on any application for a major utility project (S.C. Code Ann. § 58-33-130).

South Dakota

Choose another state

Principal authority category

> Contingent State ≥ 100 MW

Relevant timelines

Yes

Public involvement

Public hearing

Published resources

Solar: Not found Wind: Yes

Authority summary

Local governments have authority over projects smaller than 100 MW or expansions less than 25 MW where the total project is smaller than 100 MW. The state has authority for projects of at least 100 MW.

Local authority details: Local governments have authority over solar and wind projects smaller than 100 MW and expansions less than 25 MW where the new total will be less than 100 MW (S.D. Codified Laws Ann. § 49-41B-2 setting 100 MW threshold).

State authority details: The South Dakota Public Utilities Commission (PUC) has authority over solar and wind projects of at least 100 MW and expansions of at least 25 MW where the new total will be at least 100 MW (S.D. Codified Laws Ann. § 41B-2).

Relevant timelines: Details

The PUC must schedule a public hearing within 30 days of receiving an application for a wind or solar facility permit and must make its determination within nine months of receiving the application (S.D. Codified Laws Ann. § 49-41B-15; § 49-41B-25).

Public involvement: Details

A public hearing is required on an application for a wind or solar facility permit (S.D. Codified Laws Ann. § 49-41B-15).

Published resources: Details

Siting and permitting guides

Wind: Department of South Dakota Game, Fish and Parks. (n.d.). Siting guidelines for wind power projects in South Dakota. https://gfp.sd.gov/ userdocs/docs/wind-energy-guidelines.pdf

Model ordinances

Wind: South Dakota Municipal League. (2012). Guidelines for municipal permitting of small wind systems. https://cdn.ymaws.com/ sdmunicipalleague.org/resource/resmgr/library/ wind_systems/guidelines.for.permitting.pdf

Choose **Tennessee** another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Yes Contingent **Public hearing** Wind: Yes Wind: State ≥ 1 MW and > 200 feet height

Authority summary

Siting decisions are made at the local level, but wind facilities of at least 1 MW and taller than 200 feet also require state certification.

Local authority details: Siting, permitting and zoning for construction of generation facilities falls under general local government powers and duties. This allows local governments to set standards for wind and solar projects (Tenn. Code Ann. § 65-17-105 specifically allowing local governments to regulate wind energy).

See: Tennessee Advisory Commission on Intergovernmental Relations. (2023). Managing solar energy development to balance private property rights and consumer protection with the protection of land and communities, p. 3. https://www.tn.gov/content/ dam/tn/tacir/2023publications/2023 Solar.pdf

State authority details: If a wind project produces at least 1 MW and is taller than 200 feet, the owners of the facility must obtain certification of public convenience and necessity from the Tennessee Public Utility Commission in addition to local approval (Tenn. Code Ann. § 65-17-101(12)(A) setting 1 MW and 200 feet threshold; § 65-17-104 requiring a certificate for projects above the threshold).

Relevant timelines: Details

A public hearing is required within 60 days of the application date for wind projects undergoing local review (Tenn. Code Ann. § 65-17-105(d)(3)).

Public involvement: Details

Wind projects undergoing local review require a public hearing (Tenn. Code Ann. § 65-17-105(d)(3) describing the review and public hearing and public notice processes).

Published resources: Details

Siting and permitting guides

Wind: Southern Wind Energy Association. (2017). Tennessee wind energy siting guide. https://www.southernrenewable.org/ uploads/1/9/8/9/19892499/f-tennessee_wind_ siting document.pdf

Model ordinances

Solar: TenneSEIA Solar Association. (n.d.). Model Tennessee solar zoning ordinance. https://tenneseiasolar.com/policy/

Wind: Brown, K. G. (2023, October 15). Sample ordinance for adopting regulations governing wind energy facilities. Municipal Technical Advisory Service. https://www.mtas.tennessee. edu/mknowledge/sample-ordinance-adoptingregulations-governing-wind-energy-facilities

Texas

Choose another state

Principal authority category

Local

Relevant timelines

Not found

Public involvement

Not found

Published resources

Solar: Yes Wind: Not found

Authority summary

Local governments have authority to site wind and solar energy projects through broad zoning authority.

Local authority details: Municipal governments and, in certain unincorporated areas, county governments oversee all zoning and siting for buildings and other

structures (Tex. Loc. Gov't Code §§ 211.003 (municipal zoning); §§ 231.001 et seq. (county zoning)).

State authority details: The state does not regulate siting of renewable energy projects.

Published resources: Details

Model ordinances

Solar: North Central Texas Council of Governments & State Energy Conservation Office. (2016). Model ordinance guidelines for municipalities. https:// www.gosolartexas.org/getmedia/4f320710-7d0d-40b7-aaf8-49d18294623c/Solar-PV-Model-Ordinance-Guide.pdf



Dallas Events Inc./Shutterstock

Utah Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Not found Not found Solar: Yes Local Wind: Yes

Authority summary

Zoning and siting for wind energy projects are controlled by local governments.

Local authority details: Authority on zoning and siting for wind energy projects belongs to local governments. Renewable projects on any type of land must submit an application for a conditional use permit for county review (Utah Code Ann. § 10-9a-501 on municipal land use regulation; § 17-27a-501 on county land use regulation).

See: Utah Governor's Office of Energy Development. (2019, July 31). Siting renewable energy in Utah: Identifying locations compatible with Department of Defense operations, p. 41. Utah State University; Utah Geological Survey; U.S. Department of Defense. https://energy.utah.gov/wp-content/uploads/7-31-2019-Final-Report-Siting-Renewable-Energy-in-Utah.pdf

State authority details: The state's Resource Development Coordinating Committee reviews proposals from the Utah Public Lands Policy Coordinating Office to lease trust land to renewable energy projects. Developers of solar power plants must obtain any necessary permits from the Utah Department of Environmental Quality (Utah Admin. Code § 850-170-150 regarding review of proposals to lease trust land).

See: Utah Governor's Office of Energy Development, 2019, p. 73.

Published resources: Details

Siting and permitting guides

Solar and wind: Utah Governor's Office of Energy Development. (2019, July 31). Siting renewable energy in Utah: Identifying locations compatible with Department of Defense operations. Utah State University; Utah Geological Survey; U.S. Department of Defense. https://energy.utah.gov/ wp-content/uploads/7-31-2019-Final-Report-Siting-Renewable-Energy-in-Utah.pdf

Model ordinances

Solar: Utah Clean Energy. (n.d.). Solar permitting toolbox. https://hub.utahcleanenergy.org/solarpower/for-policy-makers/best-practices-storageand-grid-planning/

Wind: Utah Geological Survey. (2010). Model wind ordinance. https://geology.utah.gov/model-windordinance/

Choose Vermont another state **Principal authority** Relevant **Public Published** category timelines involvement resources Not found Solar: Not found **Both** Public hearing(s) Wind: Yes

Authority summary

The state has minimum setback requirements for solar, prescribes the ways in which municipalities may establish their own siting standards and remains the ultimate authority for issuing a permit. The Vermont Public Utility Commission (PUC) is also required to give "due consideration" to the recommendations of the municipal and regional planning commissions, as well as the municipal legislative bodies.

Local authority details: Municipalities may adopt screening requirements for ground-mounted solar projects. Facilities must meet these requirements to receive a state permit, as long as the requirements do not have the effect of prohibiting installation or interfering with the facility's intended functional use (30 V.S.A. § 248(b)(1)(B) requiring compliance with local screening requirements).

State law prohibits municipalities from regulating the height of small wind projects (with blades less than 20 feet in diameter) or rooftop solar collectors less than 10 feet high on sloped roofs, unless the municipality

establishes specific regulatory standards (24 V.S.A. 4412(6) prohibiting local governments from the height of certain renewable energy facilities).

See: Vermont Department of Public Service. (2017, January 13). Act 56 report: A report to the Vermont General Assembly on municipal adoption of solar screening regulations. https://legislature.vermont.gov/ assets/Legislative-Reports/Act-56-Report-DPSACCD-Final.pdf

State authority details: The PUC must issue a certificate of public good before site preparation or construction of any electric facility that generates power for off-site consumption can begin (30 V.S.A. § 248(a)(2)). The state also requires minimum setbacks for solar generation facilities (30 V.S.A. § 248(s)).

See: Vermont Department of Public Service. (n.d.). Siting generation projects. https://publicservice. vermont.gov/renewables/siting-generation-projects

Public involvement: Details

The PUC, if asked to do so by any party or member of the public or at its own discretion, must hold a nonevidentiary hearing to listen to members of the public and derive areas of inquiry that it should address in deciding whether to issue a certificate of public good. The commission also must hold evidentiary hearings if contested issues remain or when any party to a case requests it (30 V.S.A. § 248 (a)(4)).

See: Vermont Public Utility Commission. (2023, January 18). Section 248. https://puc.vermont.gov/ document/section-248-procedures

Published resources: Details

Siting and permitting guides

Wind: Vermont Department of Public Service. (2002). Wind energy planning resources for utility-scale systems in Vermont. https:// publicservice.vermont.gov/sites/dps/files/ documents/Renewable_Energy/Resources/Wind/ PLANNINGPACKET.pdf

Virginia Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Contingent Yes Solar: Yes **Public meeting** Wind: Yes Solar: State > 5 MW and 10 acres Wind: State > 5 MW

Authority summary

Projects larger than 150 MW are sited and permitted by local governments but may require a certificate of public convenience and necessity (CPCN) from the State Corporation Commission. Smaller projects may require a permit by rule from the Virginia Department of Environmental Quality (DEQ) instead of certification from the commission.

Local authority details: Virginia zoning statutes provide local governing bodies authorization to development standards and/or conditions for the installation of solar facilities (Va. Code Ann. § 15.2-2288.7 on local regulation of solar facilities). Local governments are also given general statutory guidance on how their jurisdiction in siting of renewable energy projects may support the state's clean energy policies (Va. Code Ann. § 45.2.1708 on the role of local governments in achieving state clean energy policy).

State authority details: State-level authority and inclusion in the siting and permitting process is contingent upon the size and impact of the project.

Projects larger than 150 MW may require a CPCN from the State Corporation Commission, though

self-consumption projects are exempt (Va. Code Ann. § 56-265.2 describing certificates of convenience and necessity requirements for public utilities; § 56-265.1(b) defining "public utilities"; § 56-265.1.(a) defining "company"; § 56-265.1(b)(2) exempting self-consumption companies from the definition of public utility).

Projects no larger than 150 MW may be eligible for a permit by rule, the guideliness for which are established by the Virginia DEQ (Va. Code Ann. § 10.1-1197.5 defining "small renewable energy projects" as not exceeding 150 MW; § 10.1-1197.6 allowing a permit by rule for projects no larger than 150 MW). This permit by rule obviates the need for a CPCN (Va. Code Ann. § 10.1-1197.8). A permit by rule is required for small solar projects that are larger than 5 MW and disturb more than 10 acres (9VAC15-60-20 on the applicability of permit by rule for small solar projects; see also 9VAC15-60-130 describing exemptions for projects not covered under 9VAC15-60-20). A permit by rule is also required for small wind projects larger than 5 MW (9VAC15-40-30 describing permit by rule for small wind projects).

More information on the permits and regulations can be found on the website of the Virginia DEQ.

Relevant timelines: Details

For small projects requiring a permit by rule, the Virginia DEQ has 90 days after receiving all the required documents to decide whether the application meets the requirements (9VAC15-40-30; 9VAC15-60-30).

Public involvement: Details

An applicant needing a permit by rule must hold a public meeting in or near the location of the proposed facility and conduct a 30-day public comment period (9VAC15-40-30; 9VAC15-60-30).

Published resources: Details

Siting and permitting guides

Solar and wind: Virginia Department of Environmental Quality. (n.d.). Renewable energy. https://www.deq.virginia.gov/laws-regulations/ renewable-energy

Model ordinances

Solar: Local Government Outreach Group, Department of Environmental Quality. (2012, December 21). Model ordinance for larger-scale solar energy projects in Virginia. https://cms7files1. revize.com/southamptonva/Planning%20 Commission%20Agendas/2016/march/12%20 21%202012%20LARGER%20SCALE%20SOLAR%20 model%20ordinance.pdf

Washington another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Yes Contingent Public meeting/ hearing(s) Wind: Yes Developer's choice

Authority summary

The developer of a project can choose to go through one of three permitting pathways: (1) local permitting, (2) the Energy Facility Site Evaluation Council (EFSEC) pathway or (3) the process for a designated clean energy project of statewide significance (CEPSS). The siting council and CEPSS siting processes are more rigorous and may be more time consuming (unless review is expedited), but they offer a more standard and predictable process for developers.

Local authority details: Counties and zoning boards have siting authority over renewable energy projects, including establishing setbacks, tip heights and other requirements (RCW 35A.63.100 on municipal authority to enact ordinances; RCW 36-70-750 on county authority to create zoning regulations). The EFSEC can preempt local siting setbacks through an adjudicative hearing procedure.

State authority details: Developers can opt in to one of two state-level processes. The first is the EFSEC permitting pathway. The second is the process for a CEPSS, led by the Department of Commerce.

The siting council has opt-in permitting authority for any renewable energy project, very broadly defined. When a developer opts in, the council makes a recommendation to the governor, who has final

authority to approve or deny the project (RCW 80-50-020 defining "alternative energy resource" as including wind and solar; RCW 80.50.060 creating pathway for council certification of "alternative energy resource facilities"). The council can preempt local laws, as long as there is no significant impact or as long as the impact can be mitigated to a nonsignificant level (RCW 80-50.090(4)(b) allowing the state to preempt local laws; RCW 80-50-100(2) directing the EFSEC to specify which local ordinances should be preempted).

A state law adopted in July 2023 established a new program for the designation of a CEPSS (RCW 43.158 et seg. setting criteria for designating energy projects as having statewide significance; RCW 43.148 et seq. establishing the permitting process for clean energy projects of statewide significance).

See: State of Washington, Energy Facility Site Evaluation Council. (2024, January). Focus on: Pathway options for environmental review and permitting clean energy projects, p. 2. Department of Ecology, State of Washington. https://apps.ecology.wa.gov/publications/ documents/2406001.pdf

State of Washington, Energy Facility Site Evaluation Council. (n.d.). Certification process. https://www.efsec. wa.gov/about-efsec/certification-process

Relevant timelines: Details

Each process may have different timelines. For example, the EFSEC must report recommendations to the governor within 12 months of deeming an application complete or later if agreed to by developer (RCW

80.50.100(1)(a)). For a project proposed in a county with coal generation, the time period is expedited to 180 days (RCW 80-50-100(1)(c)). The governor has 60 days to act on a recommendation of the EFSEC.

Washington continued

Public involvement: Details

Requirements depend on which process the applicant opts in to. For example, the EFSEC must conduct an informational public hearing within 60 days of an application for site certification. After that hearing, the council must conduct a local public meeting to determine if the proposal conforms with local zoning ordinances and plans. Additional public hearings may be required if projects require mitigation, change their environmental permitting checklist or seek expedited review prior to a recommendation of project approval to the governor (RCW 80.50.090 establishing public engagement opportuninities and exemptions).

Published resources: Details

Siting and permitting guides

Solar and wind: Washington State Department of Commerce. (2021). Energy facility siting in Washington: Projects, strategies and resources. https://www.commerce.wa.gov/wp-content/ uploads/2021/09/Energy-Facility-Projects-Strategies-and-Resources_Aug-2021.pdf

West Virginia Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Not found **State Public hearing** Wind: Not found

Authority summary

The Public Service Commission (PSC) of West Virginia grants certificates of public convenience and necessity (CPCN) for generation projects and oversees the renewable energy facilities program that fast-tracks the approval process for certain solar projects.

Local authority details: Although local governments may practice land use planning, the state has sole authority to regulate energy generation facilities serving the public.

State authority details: The PSC must issue a CPCN before construction can begin on an energy generation facility for service to the public (W. Va. Code § 24-2-1(a)(6) on the jurisdiction of the PSC over electric utilities; § 24-2-11 setting requirements for a CPCN).

Developers of eligible solar generating facilities no larger than 200 MW can apply for alternative certification by the PSC pursuant to the renewable energy facilities program (W. Va. Code § 24-2-10 on the renewable energy facilities program).

Relevant timelines: Details

For a CPCN, the PSC has 270 days from the filing of an application and 90 days from final application submission after a hearing in which to give its decision (W. Va. Code § 24-2-11).

For projects utilizing the renewable energy facilities program before December 31, 2025: The PSC holds a hearing within 90 days of the applicant's public notice of filing and any anticipated rate changes — unless the commission receives no opposition to the rate change. In that case, the commission shall issue a final order within 150 days of the application filing date (W. Va. Code § 24-2-1o).

Public involvement: Details

For both types of approval, the PSC holds a public hearing, although it can be waived if no one objects to the application (W. Va. § 24-2-11; § 24-2-10).

Wisconsin Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Yes Contingent Public meeting(s)/ hearing Wind: Yes State ≥ 100 MW

Authority summary

Siting authority is based on facility size. Generally, local governments have authority to site projects within the constraints established under Wisconsin law. The Public Service Commission (PSC) of Wisconsin has authority over public utility projects and projects of at least 100 MW.

Local authority details: Local governments are responsible for permitting projects smaller than 100 MW. Local governments cannot adopt restrictions on wind that are more stringent than state restrictions (Wis. § Stat. 66.0401(1m); Wis. Admin. Code § PSC 128.03). State law also prohibits local governments from placing any restriction on wind or solar systems unless that restriction "(a) Serves to preserve or protect the public health or safety; (b) Does not significantly increase the cost of the system or decrease its efficiency; [or] (c) Allows for an alternative system of comparable cost and efficiency" (Wis. Stat. § 66.0401(1m)).

State authority details: The PSC establishes restrictions on wind projects that local jurisdictions may adopt governing noise, shadow flicker, tip heights, setbacks and more (Wis. Stat. § 196.378(4) (g)(b) authorizing the PSC to write rules on local restrictions). The PSC also has siting authority for projects that require a certificate of public convenience and necessity (CPCN) or a certificate of authority those of at least 100 MW or to be built by a public utility (Wis. Stat. § 196.491(1)(g) setting the 100 MW threshold; § 196.491(3)(a)(1) requiring a certificate for projects that meet or exceed the 100 MW threshold).

See: Public Service Commission of Wisconsin. (n.d.) Energy filing requirements. https://psc.wi.gov/Pages/ ServiceType/Energy/FilingRequirements.aspx

Relevant timelines: Details

For projects subject to local review, the local authority has 45 days to say whether a filed application is complete (Wis. Stat. § 66.0401(4)(a)(1)). If the application is complete, the local authority must make a final decision within 90 days of the completeness determination, with the possibility of a 90-day extension (Wis. Stat. § 66.0401(4)(d)-(e)).

When reviewing an application, the PSC has 30 days to say whether the application is complete. The PSC then has 180 days in which to take final action on the application (Wis. Stat. § 196.491(3) setting timelines).

Public involvement: Details

Projects under local review must be the subject of at least one public meeting (Wisc. Admin. Code § PSC 128.30). The PSC must hold a public hearing on a complete application for a CPCN. (Wisc. Stat. § 196.491(3)(d)).

Published resources: Details

Siting and permitting guides

Solar and wind: Great Plains Institute. (2020). Siting utility-scale solar and wind in Wisconsin: A guide for local governments. https://www.betterenergy. org/wp-content/uploads/2020/04/Solar_and_ Wind in Wisconsin Siting Guide-1.pdf

Model ordinances

Solar: Solar: Great Plains Institute. (2020). Wisconsin solar model ordinance. https://www.growsolar. org/wp-content/uploads/2020/09/WI-Solar-Ordinance-2020.pdf

Wind: Southeastern Wisconsin Regional Planning. (2016, November). SEWRPC model zoning ordinance: Zoning regulations for wind energy systems. https://www.sewrpc.org/SEWRPCFiles/ CommunityAssistance/ModelOrdinances/ Modelordinanceforwindenergysystems.pdf

Wyoming Choose another state **Principal authority** Relevant **Public Published** category timelines involvement resources Yes Solar: Yes Contingent **Public hearing** Wind: Yes Solar: State > 30 MW or ≧ 100 acres Wind: State ≥ 20 turbines

Authority summary

Siting authority for renewables is based on project size. Counties retain permitting for smaller projects. For large wind (at least 20 turbines) and large solar (larger than 30 MW or disturbing at least 100 acres) facilities, a permit from the State Industrial Siting Council is required.

Local authority details: The board of county commissioners oversees county permit approval, which is required before project development (Wyo. Stat. § 18-5-502 requiring a county permit; § 18-5-503 on application to a board of county commissioners).

Local regulations for wind projects may not be any less stringent than state standards (Wyo. Stat. § 18-5-503(a)(iv)).

State authority details: The State Industrial Siting Council issues permits for large wind and solar facilities, based on project size: at least 20 turbines for wind; more than 30 MW or at least 100 acres of disturbed land for solar (Wyo. Stat. §§ 35-12-102(a)(vii) (E) setting 20-turbine threshold; §§ 35-12-102(a)(vii)(G) setting 30 MW and 100-acre thresholds; §§ 35-12-106 on when a permit is required).

Relevant timelines: Details

Counties have up to 30 days to rule on completeness of an application. If additional information is requested, they must make a request within 30 days of receipt, and the applicants must provide the information within 30 days of receipt of a request (Wyo. Stat. § 18-5-505).

County boards must hold a public hearing no less than 45 days and not more than 60 days after an application is deemed complete (Wyo Stat. § 18-5-506). A public comment period must extend at least 45 days from the date of a completeness determination (Wyo Stat. § 18-5-506).

Public involvement: Details

A public hearing is required on a complete application to a county board to build a wind or solar facility (Wyo Stat. § 18-5-506).

Published resources: Details

Siting and permitting guides

Solar: Wyoming Renewable Energy Coordination Committee. (2021). Guide to permitting solar energy projects in Wyoming. https://wyoenergy. org/wp-content/uploads/2022/11/WEA-Solar-Permitting-Guide-Final-1.pdf

Wind: Wyoming Renewable Energy Coordination Committee. (2022). Guide to permitting wind energy projects in Wyoming. https://wyoenergy. org/wp-content/uploads/2022/11/WEA-Wind-Permitting-Guide Final-20220110 Electronic-1.pdf

Appendix: Methodology

team of researchers, each assigned to several states, began by searching out the most current literature and resources on the topic. After finding relevant resources, the researchers refined and expanded their searches using the bibliographies and online resources from the publications themselves.

Four publications were particularly relevant and formed the basis for the team's own research.

- 1. Khan and Shields (2020)¹ published state-bystate utility-scale wind siting and permitting requirements.
- 2. Essa, Curtiss and Dodinval (2021)² published state-by-state utility-scale solar siting and permitting requirements.
- 3. Stanton (2012)³ published state-by-state siting and zoning practices.
- 4. Eisenson (2024)⁴ prepared an analysis of states that have the authority to preempt local restrictions on siting authority.

For each state, the project team documented the enabling statute(s) and searched for relevant rules, regulations, ordinances, guidebooks and public engagement requirements. Finally, they consulted nonprofit reports and local news sources.

The researchers merged the primary data they collected with information from Stanton (2012) and Eisenson (2024). Using this comprehensive database, the authors sorted and categorized the states' practices, yielding the six high-level observations and the profiles summarizing each state's approach to siting and permitting.

Kahn, J., & Shields, L. (2020, September 2). State approaches to wind facility siting. National Conference of State Legislatures. https:// www.ncsl.org/energy/state-approaches-to-wind-facility-siting

² Essa, E., Curtiss, K., & Dodinval, C. (2021). Solar siting authority across the United States. (Working paper No. 50). Center for Local, State, and Urban Policy, Gerald R. Ford School of Public Policy, University of Michigan. https://closupstage.fordschool.umich.edu/research/ working-papers/solar-siting-authority-across-united-states

³ Stanton, T. (2012). Put it there! — Wind energy & wind-park siting and zoning best practices and guidance for states. National Association of Regulatory Utility Commissioners; National Regulatory Research Institute. https://pubs.naruc.org/pub.cfm?id=539BA6EE-2354-D714-5157-359DDD67CE7F

⁴ Eisenson, M. (2024, January 27). Overcoming unreasonably burdensome restrictions on the use of farmland for solar generation. SSRN (publication forthcoming in Case Western Law Review). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4666386. This project team was provided a prepublication excerpt.

Resources

* Denotes a key reference

Federal Agency Resources

Environmental Protection Agency. (2023). What Is the National Environmental Policy Act? https://www.epa. gov/nepa/what-national-environmental-policy-act

Regulatory and Permitting Information Desktop Toolkit. (2018). Solar Regulations and Permitting. U.S. Department of Energy. https://openei.org/wiki/RAPID/ Solar/Jurisdictions

Solar Energy Technologies Office. (n.d.). SETO FY2019 - Balance of Systems Soft Cost Reduction. U.S. Department of Energy, Office of Energy Efficiency & Renewable Energy. https://www.energy.gov/eere/solar/ seto-fy2019-balance-systems-soft-cost-reduction

U.S. Department of Defense. (n.d.). DOD Military Aviation and Installation Assurance Siting Clearinghouse. https://www.acq.osd.mil/dodsc/

U.S. Department of Energy, Office of Energy Efficiency & Renewable Energy. (2021). Land-Based Wind Energy Siting: A Foundational and Technical Resource. https://www.nrel.gov/docs/fy21osti/78591.pdf

U.S. Department of the Interior. (2022). Interior Department Outlines Roadmap for Continued Renewable Energy Progress on Public Lands [Press release]. https://www.doi.gov/pressreleases/interiordepartment-outlines-roadmap-continued-renewableenergy-progress-public-lands*

U.S. Department of the Interior, Bureau of Land Management. (n.d.). Solar and Wind Energy Rule. https://www.blm.gov/programs/energy-and-minerals/ renewable-energy/laws/solar-and-wind-energy-rule*

U.S. Fish & Wildlife Service. (n.d.). Energy Development. https://www.fws.gov/project/energy-development

U.S. Forest Service. (2011). Strategic Energy Framework. https://www.fs.usda.gov/specialuses/documents/ Signed_StrategicEnergy_Framework_01_14_11.pdf

WINDExchange. (n.d.). Permitting and Zoning. U.S. Department of Energy, Office of Energy Efficiency & Renewable Energy. https://windexchange.energy.gov/ projects/permitting*

Nonprofit Resources

Association of Fish and Wildlife Agencies, Energy and Wildlife Policy Committee, & State Wind-Wildlife Assessment Working Group. (2024). State Mechanisms for Supporting Low-Impact Wind Siting and Operation. https://www.fishwildlife.org/application/ files/4817/0481/7850/SFWA_Consultation_Policies_ update_Jan2024_FIN.pdf

Center for a New Energy Economy & The Nature Conservancy. (n.d.). State Policy Opportunity Tracker for Clean Energy. https://spotforcleanenergy.org/about/

Interstate Renewable Energy Council. (n.d.). Introducing Green Workforce Connect: A New Platform for Weatherization Careers. https://irecusa.org/

Renewable Energy Wildlife Institute, https://rewi.org/

State and Local Government Resources

Cook, J. J., Aznar, A., Dane, A., Day, M., Mathur, S., & Doris, E. (2016). Clean Energy in City Codes: A Baseline Analysis of Municipal Codification across the United States (NREL-66120). National Renewable Energy Laboratory. http://www.nrel.gov/docs/fy17osti/66120.pdf Essa, E., Curtiss, K., & Dodinval, C. (2021). Solar Siting Authority Across the United States (Working paper No. 50). Center for Local, State, and Urban Policy, Gerald R. Ford School of Public Policy, University of Michigan. https://closupstage.fordschool.umich.edu/research/ working-papers/solar-siting-authority-across-unitedstates

Kahn, J., & Shields, L. (2020). State Approaches to Wind Facility Siting. National Conference of State Legislatures. https://www.ncsl.org/energy/state-approaches-to-windfacility-siting

Tribal Resources

Beshilas, L., Belding, S., Wadsack, K., Weber, E., Anderson, M. J., Dillon, K., Drescher, S., Glavin, J., & Martinez, R. (2023). Addressing Regulatory Challenges to Tribal Solar Deployment (NREL/TP-7A40-85741). National Renewable Energy Laboratory. https://www. nrel.gov/docs/fy23osti/85741.pdf

Other Resources

American Wind Energy Association. (2008). Wind Energy Siting Handbook. https://aeinews.org/ aeiarchive/wind/winddocs/noise/AWEA_Siting_ Handbook Feb2008.pdf*

Great Lakes Wind Collaborative. (2010). State and Provincial Land-Based Wind Farm Siting Policy in the Great Lakes Region: Summary and Analysis. https:// www.glc.org/wp-content/uploads/2016/10/2010-windfamr-siting-policy.pdf











