

LET THE SUN SHINE:

A Primer on Utility Scale Solar Development in Ohio

Matt Warnock, Energy & Utilities Attorney
Dylan Borchers, Energy & Utilities Attorney
Kara Herrnstein, Energy & Utilities Attorney

Prior to 2018, Ohio had no meaningful development and installation of utility scale solar facilities. Between 2018 and early 2020, however, seven large utility scale solar projects (ranging from 80 to 300 MW) were approved by the Ohio Power Siting Board, with approximately **twenty** additional projects in late stage development by the end of 2020 (nearly all of which are sized at 100 MW or larger).

Recently, research and analysis firm Wood Mackenzie ranked Ohio as the top state in the Midwest for solar.¹



Bricker & Eckler
ATTORNEYS AT LAW

¹See, "Wood MacKenzie: Ohio set to lead Midwest solar development in next five years" (April 9, 2019), available at: <https://ieefa.org/wood-mackenzie-ohio-set-to-lead-midwest-solar-development-in-next-five-years/>.

A variety of factors are driving utility scale solar development in Ohio:

- **Corporate demand:** Much of the project demand is being driven by the private sector, as internal and external forces are pushing companies to focus on sustainability, including the development of new renewable energy generation projects. When coupled with the concept of “additionality” within a specific state. (when a company’s investment directly results in new renewable energy capacity), the result is increased development in the renewable energy sector, including in Ohio.
- **Ohio’s location in PJM:** Projects in Ohio can supply projects throughout the PJM Interconnection, the world’s largest electricity market. In some cases, Ohio projects can also help fulfill other states’ renewable energy requirements.
- **Access to transmission capacity:** Ohio sits in the middle of the PJM Interconnection transmission system, and Ohio’s legacy industrial and fossil generation sectors required significant transmission. As Ohio’s industry and traditional generation sector transitions, more transmission capacity has become available. For example, since 2010, at least nine coal-fired plants in Ohio have retired, representing over 10,000 MW of generation capacity.
- **Access to land:** Much of Ohio is rural, with flat land located close to transmission lines available for development.
- **A pro-competition regulatory framework:** In 1999, Ohio restructured its electricity sector to require non-utility generation. Ohio has since become accustomed to project development by independent power producers and merchant generators. The Ohio Power Siting Board (discussed more below) provides a clear permitting framework for projects with a design capacity of 50 MWs or more.
- **Growing local government demand:** In addition to growing corporate demand, political subdivisions in Ohio are increasingly seeking supply from in-state renewable resources, which is helping to drive project development and financing in the state. For example, residents of Ohio’s largest city, Columbus, voted in November 2020, to form a municipal aggregation with the intent of procuring in-state renewable energy supply.

The paper below provides an overview of some of the primary considerations when developing utility scale solar in Ohio. One of the primary development considerations is whether a project must receive a certificate of environmental compatibility and public need from the Ohio Power Siting Board. As a result, this paper first addresses this siting process. The paper then provides an overview of a number of topics that will apply to *all* utility scale projects, including site selection and real estate, as well as tax abatements. The paper concludes with a discussion on brownfield development and incorporating battery storage with a utility scale solar project in Ohio.

THE OHIO POWER SITING BOARD

Before construction can begin on any large-scale solar facility within the state of Ohio, a certificate of environmental compatibility and public need (certificate) must be obtained from the Ohio Power Siting Board (OPSB or Board). The Board is comprised of 11 members. Seven of those members are permitted to vote, and must include the Chairman of the Public Utilities Commission, the Director of the Environmental Protection Agency, the Director of the Department of Agriculture, the Director of the Development Services Agency, the Director of the Department of Health, the Director of the Department of Natural Resources, and a Governor-appointed engineer. The other four non-voting members are legislators.

The OPSB has a comprehensive, multi-phased process for siting solar facilities that fall within the definition of a “major utility facility.” Ohio Revised Code (“R.C.”) 4906.01(B)(1)(a). A solar project falls within this definition if it is “designed for, or capable of, operation at a capacity of fifty [50] megawatts or more.” This definition also includes electric transmission lines and associated facilities of a design capacity of one hundred [100] kilovolts or more.

The Process

Broadly, the OPSB process consists of five distinct phases that generally take around a year to complete, absent any appeals: 1) Preapplication; 2) Application completeness; 3) Investigation; 4) Hearing process and decision; and 5) Post certificate.



1. **Preapplication phase.** The project must hold a public information meeting in the county in which the project is located no more than 90 days in advance of submitting an application to the OPSB. This meeting is an opportunity for the public to learn about the project and to ask questions. The project also conducts a number of environmental, cultural, visual, decommissioning, and other studies to determine the overall impact of the project on the landscape and the public. These studies will be summarized within and submitted along with the application. The application requirements are outlined in Ohio Administrative Code Chapter 4906-4, and applications are typically organized by mirroring this chapter of regulations. Finally, the OPSB rules permit an applicant to file a motion for the waiver of certain requirements; such waiver requests are usually identified during this phase.
2. **Application completeness.** After the application is submitted to the OPSB, its staff conducts a 60-day “completeness review.” This is a preliminary review to ensure that the application contains enough information for the staff to conduct its investigation. At the end of the 60-day review period, the OPSB will deem the application “complete,” or reject it as incomplete. It is crucial to maintain dialogue with the OPSB staff during this time period, as

many perceived deficiencies in the application can be addressed and supplemented by the project in order to avoid rejection. If the application is deemed complete, the staff initiates its formal investigation of the application. If rejected, the applicant will receive information about any deficiencies and start the application process over.

3. **Investigation phase.** During this phase, which lasts around 60-90 days, the OPSB staff conducts a thorough investigation of the application. This can include informal or formal questions and data requests from the OPSB staff. At the end of this process, the staff releases its Report of Investigation, with a recommendation concerning project approval and certificate conditions.
4. **Hearing process and decision.** The OPSB process allows for intervention by interested parties, including the opportunity to conduct discovery. The OPSB process requires two hearings. The first is a local public hearing, which is the opportunity for non-intervening parties to share their opinions about the project. The second is the adjudicatory hearing with an administrative law judge presiding over argument and expert witness testimony, including cross examination, for or against the application. If the application is contested, a written briefing may follow the hearings. If the project and intervening parties are able to negotiate a settlement or a stipulation prior to the adjudicatory hearing, the adjudicatory hearing will be a truncated presentation of that agreement. At the end of this process, the OPSB hopefully approves the project and issues a certificate.
5. **Post certificate.** An OPSB decision approving the project will include a set of conditions for the project's construction and operation. After the certificate is issued, projects will typically commence the financing process and then initiate construction. Both the project and intervenors have 30 days after the Board decision to file an "application for rehearing," requesting reconsideration of all or part of the OPSB's decision. If/when the request for rehearing is declined by the Board, there is a 60-day window in which to file a "notice of appeal" to the Ohio Supreme Court.

Once the project's application is filed, the OPSB process generally has fairly predictable timelines for completion of the completeness review, investigation, and hearings. However, a number of variables can impact the overall timing of a decision. For example, if the application needs to be supplemented or amended, the proceeding may be suspended until that information is provided. Moreover, a highly contested case will likely take longer. There is no set timeline for the Board to issue a decision after the hearings (and if necessary, briefings) are completed. Typically, the Board meets on a monthly basis, and on average the OPSB issues a decision between 2-4 months after the hearings or briefing. However, the Board will often take longer to reach a decision, depending on the complexity of the case and the Board's overall case load.

The Timing

In all, the standard certificate process generally takes 9-12 months to complete, absent any appeals. However, certain types of projects under OPSB jurisdiction are subject to accelerated OPSB review. The accelerated process is most often applied to electric and gas transmission lines that are shorter length, although the accelerated review process may also be applied to generation facilities and other infrastructure in limited circumstances. The review and approval of accelerated applications is typically 90 days or less. An applicant may also request expedited approval of accelerated applications to 28 or 21 days, depending on the type of project.

OPSB Certificate Amendments/Assignments

It is not uncommon for projects that have received a certificate to later require changes that are significant enough to trigger the OPSB amendment process. The OPSB amendment application process is similar to the standard process discussed above, with some important differences. First, the amendment application process does not require a pre-application public information meeting. Second, amendment application may only require formal hearings in certain circumstances. In all, the length of the amendment application process is typically months shorter than the standard certificate process.

Ohio law permits a certificate to be transferred to a new entity. However, the transfer must be approved by the OPSB, and the holder of the certificate must agree to comply with the terms and conditions of the certificate (R.C. 4906.04).

REAL ESTATE

Securing all of the necessary real estate documents (e.g., leases, easements, options, and crossing agreements) is one of the most critical and state-specific items in the development of utility-scale solar projects. Most developers have template real estate documents used for projects around the country and which are modified and updated depending on the state in which a project is located. Having “Ohioized” such template documents for countless renewable energy developers, below are the top five considerations relating to the real estate aspects of solar project development in Ohio.

1. **Document margins.** For purposes of recording a document with a county recorder in Ohio, the margins for the first page of a document need to be 3” at the top and at least 1” on all other sides. For all other pages, there needs to be a 1.5” margin at the top and at least 1” margins on all other sides. Failure to do this results in increased recording costs, which can add up on projects with significant numbers of recordable documents.
2. **Acknowledgements and remote/electronic notarization.** Under Ohio law, a lease with a term longer than three years must include notarized signatures. Having the memorandum acknowledged and recorded does not alleviate the requirement for the lease to be notarized/acknowledged. Recent changes to Ohio’s notary law also require that the following be added to the notary block for most real estate documents other than affidavits: “No oath or affirmation was administered to the signer with regard to the notarial act.” Further, Ohio’s Notary Modernization Act, which took effect on September 20, 2019, does allow for both remote online notarization (a notarial act performed by an Ohio notary public who has been authorized

to perform notarizations when a signer personally appears before the notary using audio-visual technology instead of being physically present in the same location as the notary) and electronic notarization (a notarial act performed by a notary public using his or her electronic seal and electronic signature on a digital document). Importantly, an electronic notarization is an in-person act where the notarial act procedures remain the same (e.g., appearance in person, verification of the signer). The Ohio Secretary of State's office has a database of remote online notaries. You can select a specific county, and indicate "yes" in the "Online Notary" drop-down found [here](#).

3. **Local zoning and the OPSB.** The developer should be aware of township or municipal zoning classifications for each property located within the project site. For utility-scale solar projects, however, Ohio law indicates that a project with an OPSB certificate will preempt any specific zoning challenges. This preemption stems from Ohio Revised Code 4906.13(B), which states "No public agency or political subdivision of this state may require any approval, consent, permit, certificate, or other condition for the construction or initial operation of a major utility facility or economically significant wind farm authorized by a certificate issued pursuant to Chapter 4906 of the Revised Code." In fact, the Ohio Supreme Court interpreted this statute to mean that "power siting projects are exempt from local regulation." *State ex rel. State Edison Co. v. Parrott* (1995), 73 Ohio St.3d 705, 707. While this preemption argument can assist a developer with local zoning issues, it is not a failsafe and you should be prepared to face challenges and educate the local government (e.g., the county prosecutor) regarding this issue. If the project does not trigger OPSB jurisdiction and must comply with applicable local zoning ordinances, there should be an understanding from the beginning of the formal and informal processes regarding how variances or other changes are granted.
4. **Be strategic about choosing a surveyor and title company.** Whether as part of the initial development of the project, or during the financing process, it is important to strategically select a surveyor and title company familiar with the development of energy projects in Ohio. For example, an Ohio surveyor with experience in the county in which the project is being developed can provide very practical advice about the local approval processes (e.g., the lot split/subdivision process) and help ensure those processes are completed more quickly and cost-effectively.
5. **Legal Descriptions.** As most developers know, each county recorder's office operates a little differently. To be safe, all legal descriptions in Ohio should include a metes and bounds description of the relevant property (whether under an option, lease or easement) along with the section/township/range, the county auditor's tax parcel number(s) and a prior instrument reference. Taking a more comprehensive approach to the legal description will increase the odds that there are no issues with getting documents recorded.

SITE SELECTION: LANDFILL AND BROWNFIELD SOLAR DEVELOPMENT

Brightfields, defined by the U.S Department of Energy as solar projects on brownfields (i.e. contaminated land or closed landfills), are attractive opportunities for solar developers to diversify their development pipeline beyond traditional rooftop and greenfield locations. The number of potential locations for solar development on brownfields is enormous. As of 2019, US EPA had pre-screened more than 80,000 brownfields and contaminated lands for renewable energy. Brownfield sites often have the right combination of characteristics—infrastructure, proximity to load centers, and low lease costs—needed to build successful projects.

Additionally, some of these sites have unique attributes that can lower development costs and shorten development timeframes. Many of these properties can offer developers a unique value proposition for renewable energy deployment (e.g., clear ownership and site control, completed site cleanup, and a motivated “offtaker” for the energy generated), and the ability to:

- Leverage existing infrastructure
- Offer streamlined permitting and zoning
- Reduce land costs and provide tax incentives
- Gain community support through land revitalization efforts
- Protect open space

But, while brownfields offer unique opportunities, they also pose challenges. Steep slopes and impenetrable surfaces historically made many landfills unfeasible for development. Brownfield locations are often contaminated or Superfund sites, requiring remediation and permitting with environmental regulators at the federal and state level. For example, Ohio EPA does not allow for extensive, below-surface work on landfills. Thus, to maintain the integrity of the landfill cap, developers typically utilize a ballasted solar racking system in which the panels and supports rest on concrete blocks, rather than driven steel posts.

COORDINATION WITH OTHER AUTHORITIES AND STAKEHOLDERS

In addition to (and as typically also required by) the OPSB Certificate, solar projects are subject to environmental permitting and coordination requirements with other state and federal agencies, including the United States Army Corps of Engineers, United States Fish and Wildlife Service, Ohio Environmental Protection Agency, Ohio Department of Natural Resources, and the Ohio History Connection. For example, a project may require a storm water construction general permit, wetlands-related permits, endangered species and cultural resources surveys, or some combination of these.

Unhappy landowners, both within and nearby the project area, are a common source of pushback and even litigation for project developers. Early engagement, clear communication, and the careful drafting of agreements can help avoid these conflicts down the line.

Along with county commissioners, school districts, and township trustees, other local stakeholders a project should consider coordinating with include local economic development organizations, the Ohio Farm Bureau Federation, and local land trust organizations.

TAX ABATEMENTS

Increasingly, solar project financing and local economic development go hand-in-hand. Utility scale renewable energy projects in Ohio can benefit from a real and tangible personal property tax abatement under the Qualified Energy Project (“QEP”) framework with R.C. 5727.75. To be certified as a QEP and acquire the abatement, a project must submit an application to the Ohio Development Services Agency and receive approval by the county where the project is located. A county can approve the abatement by adopting a project-specific resolution or by establishing itself as an “Alternative Energy Zone” (“AEZ”), whereby county authorization is automatically granted to projects applying for QEP certification.²

In exchange for the abatement, the project must pay a payment-in-lieu-of-taxes (“PILOT”). For solar projects, there is currently a minimum PILOT of \$7k/MW. The host County also has discretion to add up to an additional service payment amount of \$2k/MW. The mandatory \$7k/MW PILOT is distributed to the county and local taxing districts on a mileage basis. The discretionary additional service payment, if any, goes to the county general revenue fund.

The project must also meet other requirements, including:

- Employ at least 80% Ohio-domiciled employees in construction
- Repair roads, bridges, and culverts affected by the construction
- Provide training to local first responders
- Coordinate with an Ohio university of apprenticeship program to establish an educational/training program

A detailed overview memorandum on the QEP tax abatements prepared by Bricker & Eckler can be found [here](#).

The Ohio Air Quality Development Authority (“OAQDA”) is another abatement program for projects that contribute to better air quality, such as solar projects.³ Through revenue bond-based financing, OAQDA can provide the same level of property tax abatements as QEP but with flexibility regarding the terms of the PILOT to be negotiated by the project owner and affected jurisdictions. A project financed through OAQDA bonds receives a 100% exemption on real property, tangible personal property, and sales-and use-tax for qualified project costs, and interest on the bonds may be exempt from certain Ohio taxes. Here, too, coordination with local stakeholders is key. The project must obtain a Memorandum of Understanding (or some other preliminary acknowledgement or agreement) from the county, school district, and township(s) supporting the utilization of OAQDA financing and abatements, along with a summary of proposed payment terms and conditions to local governments.

² The QEP Program website is located at https://development.ohio.gov/bs/bs_qepte.htm.

³ The OAQDA Clean Air Improvement Program website is located at <https://ohioairquality.ohio.gov/Our-Services/Clean-Air-Improvement-Program>.

PAIRING BATTERY STORAGE WITH PROJECTS

OPSB jurisdictional solar projects considering the inclusion of a battery energy storage system (“BESS”) should anticipate the need to also address the BESS in the OPSB permit application. It is likely that the OPSB will treat the BESS at an “associated facility” to the generation facility and therefore within its jurisdiction (see, O.A.C. 4906-1-01(F)). Applicants should be prepared to include information about the location of the BESS within the array, dimensions, descriptions of components, manufacturer and safety information, and hazardous materials information. The BESS should also be included when determining the project’s impacts, such as noise and visual impact.

For additional information, contact:



[Matt Warnock](#)

Partner

614.227.2388

mwarnock@bricker.com



[Dylan Borchers](#)

Partner

614.227.4914

dborchers@bricker.com



[Kara Herrnstein](#)

Senior Associate

614.227.4908

kherrnstein@bricker.com



This is for informational purposes only. It is not intended to be legal advice and does not create or imply an attorney-client relationship.