

Ohio Wind Power FAQ

Who oversees wind power development in the state of Ohio?

The Ohio Power Siting Board (OPSB) regulates wind farms that are greater than 5 megawatts. The OPSB reviews each application for a certificate of environmental compatibility and public need by gathering information from stakeholders and conducting an independent technical review of the likely impacts. The OPSB does this before making its decision on the application.

What is the status of wind power development in Ohio?

Since 2008, developers operating in Ohio have moved several wind farm projects forward. The Blue Creek Wind Farm (Van Wert and Paulding counties), the Timber Road Wind Farm I-III projects (Paulding County), and the Hog Creek Wind Farm I and II projects (Hardin County) are operational. Combined, these wind farms consist of nearly 300 wind turbines with a generating capacity of more than 550 megawatts of electricity. The OPSB has approved wind power facilities in seven additional cases, several of which are currently under construction. Additional wind power projects are either pending before the OPSB or in the pre-application stage.

What are the setback requirements for siting wind turbines in Ohio?

Wind turbines must be located at least 1,125 feet from the tip of the turbine blade at ninety degrees from the nearest adjacent property line, including a state or federal highway, unless the applicant obtains the appropriate waivers. Turbines must be located at least 1.1 times the total height of the turbine structure as measured from the tower base to the tip of a blade at its highest point from electric transmission lines, gas pipelines, gas distribution lines, hazardous liquid pipelines, and public roads.

How does the OPSB address health and safety concerns such as ice throw, blade shear, and noise?

Ohio Administrative Code requires that applicants perform a site-specific ice throw risk evaluation and describe the potential impact from ice throw at the nearest property boundary and public road. Safety considerations include restricting access to the wind farm, installation of ice detection and warning systems.

Applicants must perform a similar evaluation for blade shear. All wind turbines must be equipped with two independent braking systems; a pitch control system; a lightning protection system; and turbine shutoffs in the event of excessive wind speeds, uncontrolled rotation, excessive blade vibration, stress, or pressure on the tower structure, rotor blades, and turbine components.

Additionally, applicants are required to give careful consideration in evaluating and describing the operational noise levels expected at nearby residences. Wind farms must be operated so that facility noise does not result in noise levels at non-participating residences within one mile of the project boundary that exceed the project area ambient nighttime average sound level by five decibels. Applicants must review the impact and possible mitigation of all noise complaints through a complaint resolution process.

How does the OPSB address shadow flicker?

Shadow flicker from wind turbines can occur when moving turbine blades pass in front of the sun, thereby creating alternating changes in light intensity or shadows. Shadow flicker primarily occurs at sunrise and sunset when the sun is low on the horizon and a turbine is facing a receptor. Wind farms must be designed to avoid unreasonable adverse shadow flicker effect at non-participating residences within 1,000 meters of any turbine. Shadow flicker levels may not exceed 30 hours per year at any such residence. Applicants must review the impact and possible mitigation of all shadow flicker complaints through a complaint resolution process.

Does the OPSB consider the effects on aviation by a wind farm development?

Yes. The applicant must notify and obtain approval from the Federal Aviation Administration. The OPSB will consult with the Ohio Department of Transportation's Aviation Division to determine if the proposed wind farm would have an effect on navigable air space and airport, and, if applicable, develop appropriate mitigation measures. All structures that require lighting by the Federal Aviation Administration must be lit with the minimum lighting required.

How does the OPSB address the issue of roads and bridges within a wind farm development project?

Transporting commercial wind turbines often presents a logistical concern for the applicant and community because of the intensive use of local roadways. The OPSB requires developers to evaluate and describe the anticipated impact to roads and bridges associated with construction vehicles and equipment delivery. Typically, the applicant enters a road use agreement with local officials, requiring pre-construction upgrades, post-construction repairs, and financial assurance to return all roads to pre-construction condition or better.

What happens when the turbines are decommissioned?

Commercial scale wind turbines typically have a life expectancy of 20 to 25 years. Applicants must describe a detailed plan for decommissioning each proposed wind farm and ensure adequate funding necessary to safely and properly disassemble the facility. The site must be restored to the same topography that existed prior to construction of the wind farm.

Where can I find more information?

Additional information about the OPSB, its process, and rules may be found at www.opsb.ohio.gov.