

Landowner Guide to Wind Leases and Easements

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Leasing Your Land

If you own land with a wind resource, and a wind energy developer is planning a wind farm in your area, you may wish to consider leasing your land for development. Leasing land to a wind developer is a decision that will have long-term implications, so it is important to make sure that this decision is well-informed. This document provides overview of the land leasing process as well as information regarding typical elements of leases and easements, to help inform the landowner's decision.¹

It is important to note that while many landowners negotiate with wind developers as individuals, this is not the only method. In some cases, multiple landowners in a development area have formed a landowners' association and hired an attorney to negotiate lease terms for them. This method ensures that all landowners within a project receive the same benefits, and may help landowners to negotiate more favorable terms. This option should be investigated early in the process, since it is typically impossible to engage in collective negotiations once individual leases or option agreements have been signed.

Overview of the Land Leasing Process

Generally, a wind developer would only be interested in leasing a parcel of land as part of a larger wind development project. The wind development project may include many parcels owned by many different landowners, within one or more municipalities. However, not every parcel within the development area will have a good wind resource, or be suitable for development.

If you own a parcel of land within the planned development area that has a good wind resource and is suitable for development, the developer will likely contact you to discuss the possibility of leasing your property. Leases are usually sought for the purpose of erecting wind turbines, but there are also other uses that wind developers may have for leased land; for example, the developer may need to site an electrical substation or power line.

The following series of steps provides a rough outline of the process wind developers and landowners generally follow when negotiating land leases. It is important to recognize, however, that the steps associated with the negotiation of land leases constitute only one part of the development of an entire commercial wind project. The developer will also have to comply with

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an environmental review process to determine the nature of the impacts the project will have on the immediate and surrounding environment; conduct economic modeling for financing purposes; perform an interconnection study to determine the nature of necessary transmission facilities and associated costs; and comply with all necessary permitting requirements.

1. Option Period. Before any sort of long-term agreement is entered into, the developer needs to be sure that the wind resource at a particular location is suitable, and that enough electricity can be generated at the site to justify the placement of a turbine. To determine whether a parcel of land has enough wind, the developer must first gain access to the land to install wind monitoring equipment. This access is accomplished through what is called an “option agreement” with the landowner. The developer should pay the landowner for the right to place wind resource measurement equipment on the site, and sometimes developers pay fees to compensate for construction-related disruptions. The option agreement also gives the developer the right to lease the land if the developer so chooses according to the terms of the agreement – in other words, the developer may “exercise the option” to lease the land.

It should be noted that the option agreement will not indicate exactly where turbines and other structures will be placed (if anywhere). This level of detail would typically be addressed in the actual lease agreement.

2. Testing the Wind Resource. Once developers have access to the property, they will install wind resource measurement equipment, such as meteorological towers with anemometers and other instruments, to measure wind speed, wind direction and temperature. A developer usually needs between six months and two years’ worth of data to determine whether there is a sufficient wind resource at a location, so the option period can last anywhere from one to five years to allow sufficient time for installing the equipment and gathering the data.

3. Exercising the Option or Letting it Expire. If test data indicate a good wind resource and the developer decides the location is a good one, a long-term lease would be completed (the developer would exercise the option). If not, the option can expire. If the project does not go forward, the expiration of the option means the developer is not tied to unwanted property and payments, and the landowner can put the land to other use.

4. Lease Agreement/Easements. If the developer decides to proceed with the project and exercises the option, he or she will enter into a lease with the landowner. The leased area is often a smaller parcel of land than the optioned area. The lease is a written contract between the landowner and the developer that spells out the rights and obligations of both parties. Under a lease, the developer rents part of the property for a term of years (often from 20 to 50 years). There are several provisions that are typically found in leases, as described in greater detail below.

In addition to leases, developers can gain some rights to use land through easements. Easements do not give the developer the right to possess the land, but they do allow the developer to make certain uses of it. Easements will often be negotiated at the same time as the lease. Some examples of rights conveyed in easements include:

- The right to lay cables connecting the wind turbines to substations and the power grid

- The right to cross non-leased land for construction, operation, and maintenance of the turbines and related equipment
- The right to prevent the introduction of obstacles (buildings, trees) that might interfere with the free flow of wind across the turbines
- The right to produce noise, shadow flicker, radio interference, vibrations or other impacts related to operation of the wind turbines

5. Decommissioning/Repowering. When the lifespan of the turbines has expired (generally in about 15 to 25 years), they may be decommissioned, meaning that the developer will remove the turbines and most associated equipment and return the land to a condition as close to its previous state as possible. Decommissioning is discussed in more detail below. Alternately, the developer may wish to repower the turbines. Repowering usually means removing the old turbines and replacing them with new ones. The landowner's rights and the developer's responsibilities regarding decommissioning and repowering depend upon the language in the lease.

Typical Lease Provisions

From the standpoint of most landowners, the critical elements of the lease include provisions dealing with payments (how much, when and under what conditions) and their ability to continue to use the property for farming, hunting or other purposes. While the details of each wind lease will be specific to the unique circumstances of each particular site, there are several general provisions that landowners should expect to see:

- Term: Wind power leases generally have terms of 20 to 50 years, often with an option for extending the lease. A typical wind power project has a useful life of 15 to 25 years. A term of 20 years allows one project to be developed and operate for its useful life, while a term of 40 or 50 years would likely cover two project cycles (one project, and then a repowering cycle on the same site at the end of the useful life of the first project). Landowners should understand clearly the developer's rights to extend or renew the lease, and their own rights to terminate the lease, before signing.
- Area Leased: The lease should clearly state where wind turbines, roads, construction storage areas, and operations and maintenance areas can be located. Any desired setbacks from residences and property lines should be stated. Landowners should provide input regarding the placement of wind turbines on their property.
- Approved Uses: The lease should clarify what land uses the landowner reserves for the land around the turbines. Often, landowners can continue to use the land in any way that does not interfere with the operation of the turbines. While most rural land uses are compatible with wind power projects, there can be some restrictions. Developers also will be concerned with any uses that could affect the wind in the area of the turbines, so tree crops or large structures could be restricted. It is important to consult with an attorney to make sure that there is no ambiguity in the lease as to which rights the landowner wishes to reserve.

- Access and Access Control: The turbine needs to be accessible both by road and electrical cabling, so the lease should identify responsibilities for maintenance of existing and new access roads to be constructed on the landowner's property. Generally, the wind power developer is responsible for such maintenance. Provisions for signs, gates, locks, and security patrols should also be included in leases.
- Upwind Blockage: Developers typically want to ensure that no structures are developed upwind from the site that could negatively impact the wind resource for the turbines. If the same landowner owns the upwind land, the lease may include provisions or an easement addressing this issue. Details of these provisions will depend upon the distance between the potential development and the turbine, the size and shape of the potential development, the topography of the area, and wind characteristics.
- Noise: Landowners may want to include sound limits for construction activities and for wind turbine operation, measured at the turbines themselves or at nearby homes. Sound standards can be set as absolute numbers, or as numbers relative to background noise, and they can differ during the day and night. Landowners may also wish to include language confining truck and construction operations to daylight hours. Municipal sound standards may also apply.
- Crop Protection: While wind turbines normally operate in productive fields with minimal interference, crop damage may occur in some situations, such as when turbine maintenance is required, and the lease should address how this will be handled. Typical leases require developers to use best efforts to minimize damage, but allow for the possibility that damage may occur, and specify how compensation will be provided.
- Restoration of Property After Installation: Many leases contain provisions ensuring that the land will be restored to a certain extent after installation of the turbines. Some leases might require that access roads be removed or narrowed, and that the land be restored to its original state after construction. Subsoil decompaction and the addition of imported topsoil may be required during restoration. Often there will be leftover material, such as gravel or fill, following road and land restoration, and leases should include specific language detailing who owns and is responsible for this material.
- Decommissioning: Leases should include provisions for decommissioning or repowering the project at the end of its useful life. Decommissioning includes removing wind turbines, transformers, above-ground wiring, and the top part of foundations, and returning the land as nearly as is practical to its original condition. Repowering includes removing and replacing turbines, but other elements, such as transformers and wiring, may remain. The lease should also address the timely removal or disposal of damaged equipment. Leases may also contain provisions addressing the costs associated with the decommissioning of the project, and these provisions would discuss mechanisms such as the establishment of a decommissioning fund or the posting of bonds to cover the costs.
- Compensation: Leases should clearly identify how payments are calculated, and when payments will be made. Payments can be structured in a variety of ways, such as royalty payments based upon the amount of electricity generated from the turbines, a combination of royalty payments plus a guaranteed minimum payment, fixed annual/monthly fee, or a one-time lump-sum payment.

- Taxes: While the developer generally assumes responsibility for any increases in property taxes associated with the project, exact terms should be defined in the lease. Because the landowner will receive increased income, professional tax planning is recommended.

Landowner Frequently Asked Questions

What are the benefits to leasing my land to wind developers?

While the decision to lease one's land for wind power development will be based on each individual's unique circumstances, landowners might be interested in doing so for one or more of the following reasons:

- Increased Income. This is the most significant reason landowners choose to participate in wind power projects. Wind leases can provide valuable additional income; at the same time, most of the land surrounding the turbines will remain available for farming, ranching or other activities, meaning landowners can sometimes enjoy two income streams from their property.
- Income Diversification. The addition of wind lease-related income can provide needed income diversification. For example, a farmer can receive payments from a wind power lease whether the fields lie fallow or are in production.
- Economic Development for the Local Community. Wind energy development can bring a boost to the local economy through job creation and increased taxes or payments in lieu of taxes (PILOT payments) to municipalities.

What is the downside to leasing my land for wind development?

Leasing your property for wind development means committing to hosting turbines on your property for at least 20 years (or the duration of the lease). Landowners must be prepared for construction activities and impacts including noise, truck traffic, alteration of the landscape, and the presence of contractors and others on the property. Construction activities may require that roads be built, paved or widened, that fields be leveled, and that trees be removed.

Once the turbines become operational, impacts to landowners can include noise, shadow flicker, visual alteration of the landscape, and land use changes. Periodic maintenance may be required, and some types of maintenance, such as reblading (replacing turbine blades), can require cranes and other heavy equipment. There is also the possibility that post-construction environmental studies may involve third parties working at the site. If the landowner's residence is not near the turbine, these impacts may not be a concern, but those who will have a turbine or turbines near their homes should discuss these potential impacts with the wind developer, and include any desired mitigation requirements in the lease.

How long will my land be used for?

There are two different periods of time during which the land will be tied up. Before a developer commits to installing a turbine, the developer will need to first study the wind resource in a particular area to make sure it would be a suitable location. Because the developer needs anywhere from six months to two years' worth of data, the right to access the land (set forth in an option agreement) usually lasts from one to five years (including time to install and remove

equipment). If a lease is eventually signed, the lease agreement, which defines specific terms of the project, could last anywhere from 20 to 50 years, with possible options to renew the lease.

How much of my land will be used?

During the initial study or option phase, the developer will need access to a large area of land in order to determine where the best wind resources are located. Once these are identified, the developer will provide, as part of the lease agreement, a more detailed location of where turbines will be placed. Typically, the area leased will be substantially smaller than the area optioned. The developer may also use easements in order to have the right to make use of certain parts of the land without actually taking possession of it (as would be done in a lease). For example, easements may give the developer the right to lay cables connecting the wind turbines to substations, cross non-leased land for construction, operation, and maintenance of the turbines and related equipment, or prevent the introduction of obstacles (buildings, trees) that might interfere with the free flow of wind across the turbines. Typically, wind turbines and access roads require only a small percentage of the total land area, but this varies from case to case.

How much will I get paid?

The exact amount landowners will be paid must be negotiated on a case-by-case basis. However, there are several possible payment structures. The most common compensation structure is the royalty payment. In royalty arrangements, the developer pays the landowner a percentage of the revenue received from the electricity produced by the turbines. Note that the wind farm operator may also be receiving other types of income, for example, a production tax credit; this type of tax incentive is not generally calculated into the royalty payment. Often, royalty payments are supplemented with a specified per-turbine annual lease payment. This serves as a “floor price” and guarantees that landowners will receive some revenue, even if production is lower than expected or maintenance outages limit production.

Alternately, a developer may offer a flat- or fixed-fee arrangement. This means the developer and landowner agree on a fixed fee—per turbine, per unit of land or per MW of installed capacity—to be paid by the developer on a monthly or yearly basis, reflecting the total amount of land made available by the landowner for the equipment and related fixtures installed on the property. This type of payment is not dependent on the amount of electricity generated.

Finally, the landowner may want a one-time, lump-sum payment. This type of arrangement usually means the landowner will receive less over the entire life of the wind farm; however, if the landowner needs a large sum of cash, this type of up-front, lump-sum payment may be preferable.

Due to the various methods of compensating landowners, and because every wind development is different, it is impossible to know ahead of time what a particular parcel of land would be “worth” if leased to a wind developer. However, some examples from existing New York State wind farms may give an idea of what kind of income a landowner might expect for leasing space for a turbine. At the Maple Ridge Wind Farm, annual lease payments to participating landowners reportedly average \$6,000 - \$7,000 per turbine, plus production payments based on the amount of electricity generated. At the High Sheldon Wind Farm, leaseholders are

reportedly paid \$8,000 - \$8,500 annually per turbine, with the potential for additional payments if royalty amounts exceed this baseline.

Will I still be able to use my land?

The lease should be clear about what land uses the landowner reserves for the land around the turbines. Often, landowners can continue to use the land in any manner which does not interfere with the operation of the turbines. For example, landowners can typically continue to grow crops, raise cattle, or otherwise use the land, although such uses may be restricted in designated areas during turbine maintenance activities. Most rural land uses are compatible with wind power projects; however, there can be some restrictions. For example, a developer may ask that hunting be restricted in the area around the turbines, because stray bullets could damage expensive equipment. Developers also will be concerned with any uses that could affect the wind in the area of the turbines, so tree crops or large structures could be restricted.

Will the turbines affect the value of my property?

Researchers are still trying to answer this question. Several recent studies have examined whether wind turbines affect the value of nearby properties. A 2006 study in Madison County, New York,² and a 2009 study conducted nationally,³ both found no correlation between property values and the proximity of wind turbines. However, a 2011 study conducted in upstate New York found that wind turbines reduced property values in Clinton and Franklin Counties, but not in Lewis County.⁴ It is unclear whether the property value impacts found in Clinton and Franklin Counties were temporary or permanent. Because there were very few post-operational property sales (sales made after the wind farms became operational) to analyze in Clinton and Franklin Counties, but many post-operational property sales in Lewis County, this study may have detected a temporary decline in property values. This temporary decline has been noted by some other researchers, one of whom coined the term *wind farm anticipation stigma theory* to describe this phenomenon.⁵

What types of provisions will the lease cover?

Leases should be carefully developed so they clearly address issues important to the project developer and landowner at the time the lease starts, as well as years later during project operations. Landowners are most often concerned about the length of the term, which portions of their land will be affected, and payment structures. Typical provisions include:

- Term
- Area leased
- Approved uses
- Access and access control
- Upwind blockage

² Hoen, Ben, *Impacts of Windmill Visibility on Property Values in Madison County New York*, Bard College, April 30, 2006.

³ Cappers, P., Hoen, B., Sethi, G., Thayer, M. & Wisser, R. *The Impact of Wind Power Projects on Residential Property Values in the United States: A Multi-Site Hedonic Analysis*. December 2009. LBNL-2829E. Ernest Orlando Lawrence Berkeley National Laboratory. <http://eetd.lbl.gov/EA/EMP/re-pubs.html>

⁴ Heintzelman, Martin and Tuttle, Carrie, *Values in the Wind: A Hedonic Analysis of Wind Power Facilities*, 2011, Clarkson University (unpublished at this writing)

⁵ Hinman, J. *Wind Farm Proximity and Property Values: A Pooled Hedonic Regression Analysis of Property Values in Central Illinois*. May, 2010. Illinois State University, Department of Economics. <http://renewableenergy.illinoisstate.edu/wind/publications/2010%20Wind%20Farm%20Proximity%20and%20Property%20Values.pdf>

- Noise
- Crop protection
- Restoration of property after installation
- Decommissioning/repowering
- Taxes
- Compensation