



HARVESTING THE WIND:

A Legal Guidebook for Landowners



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"Harvesting the Wind" is one of a series of reports and guides that are all part of the NYSERDA Wind Energy Tool Kit. Interested parties can find all the components of the kit at: www.powernaturally.org. All sections are free and downloadable, and we encourage their production in hard copy for distribution to interested parties, for use in public meetings on wind, etc.

Any questions about the tool kit, its use and availability should be directed to: Vicki Colello; vac@nyserda.org; 518-862-1090, ext. 3273.

In addition, other reports and information about Wind Energy can be found at www.powernaturally.org in the on-line library under "Large Wind."

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HARVESTING THE WIND: A LEGAL GUIDEBOOK FOR LANDOWNERS

I. Introduction

Clean and renewable, utility-scale wind power is more than just the fastest growing sector of the energy industry. For many farmers with windy land, it's also the latest cash crop. Thanks to the strong, steady winds that blow across large portions of New York, you, too, may have a valuable wind resource associated with your property.

Although you can try to develop this resource yourself, building a utility-scale wind farm is a complex, expensive undertaking. Many landowners have found it preferable instead to enter into agreements with wind developers who have the experience and financial backing necessary to install and operate a wind farm. Indeed, wind developers may have already approached you for this purpose. If so, you probably have a number of questions about how such an agreement would affect you and your property.

This guide answers the most common questions landowners have about wind development and gives guidance as to how the issues that concern you should be addressed in an agreement between yourself and a developer. These are only general guidelines, however. A wind agreement is a legally binding contract that may impact your property for years to come. Please have your attorney review any proposed legal document.

The remainder of this guide is organized in three sections. Section II describes the legal instruments that are commonly used to secure the right to harvest wind. Section III discusses the wind development process, and the provisions of the lease agreement that will spell out the important rights and responsibilities of the parties as the development moves forward. Finally, Section IV highlights some other issues the landowner will want to explore before entering into a wind lease.

II. Securing the Right to Harvest Wind

In order to tap your wind resource, a developer must enter into a legal arrangement with you. In New York, this arrangement is usually a *lease*, although the developer may also employ *easements* to secure certain rights. Additionally, the lease/easement may include, or be preceded by, an *option agreement*, by which the developer obtains the exclusive right to conduct further site characterization, and ultimately, to develop the site if tests (and expected market conditions) validate the project.

As described below, leases and easements are legally distinct instruments, and are usually used to secure different kinds of rights. Depending upon local custom, however, the terms “lease” and “easement” may be used interchangeably or in combination. In fact, they are sometimes confused, and a document that’s labeled as a lease may actually be an easement. Because leases and easements can have very different legal and tax implications, be sure to have your attorney carefully review your agreement to ensure that it is what it claims to be. With that caution in mind, however, after the general introductions below, this guide uses the term “lease” to describe the agreements developers use to secure access to wind resources, unless the context requires otherwise.

The Lease

Under a lease arrangement, the developer rents a portion of your property for a term of years. The lease will take the form of a written contract between you and the developer. It will spell out your rights and obligations, and similarly, the rights and duties of the developer. This document will govern your relationship with the developer over the life of the wind project. From the standpoint of the developer, the most important aspect of the lease is that it secures the exclusive right to use defined sections of your property for development, installation, operation and maintenance of wind turbines and related equipment. 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 your ability to continue to use your property for farming or other purposes.

A well-crafted lease will deal with all other facets of the wind operation from its inception to its decommissioning. It will address matters such as the duration of the agreement; the total acreage affected; ownership of the wind farm equipment; responsibility for taxes and utilities; liability insurance; the developer’s right to install signs and give tours of the facility; and every other aspect of the relationship between you and the developer. Several of these issues are covered in more detail below.

Easements

There are several other important aspects of the wind project that the developer can usually secure from you and your neighbors by means other than taking full physical possession of the land. These include:

- The right to lay cables connecting the wind turbines to substations and ultimately to 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 obstacles (buildings, trees) which might interfere with the free flow of wind across the turbines
- The right to produce noise, shadows or other minor nuisances

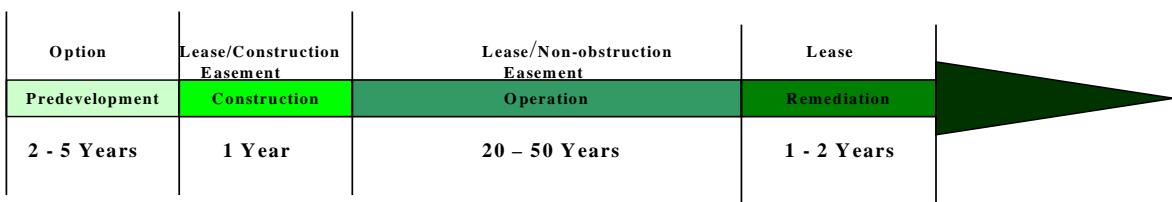
Easements are commonly used for these purposes. An easement is non-possessory property interest that gives the holder—in this case, the developer—“a right of use” over your property or that of your neighbor; or that prevents you from doing something that is otherwise lawful, but that would be detrimental to the wind project. (For instance, an easement might prohibit you from putting up a grain silo directly upwind of a turbine.) Because easements convey property rights, they must be in writing and they must be filed with your county or municipality’s recorder. The easement will “run in perpetuity” (that is, forever) unless the instrument granting the easement provides for a term of years. Developers usually offer a one-time, lump-sum payment for the easement.

Contract tip: Consult with your attorney or accountant on the tax consequences of conveying an easement. You may have to depreciate the property subject to the easement by the value given up with the easement.

III. THE LEASE AGREEMENT: WHAT IT SHOULD INCLUDE

A. How long will the agreement last?

There are four primary stages in the life of a utility-scale wind farm: pre-development, construction, operation and maintenance, and de-commissioning. The developer will need access to your property throughout the life-cycle of the project, but the kind of access—the nature of the rights required—will be different at each stage. Thus the type of agreement and its terms—from duration of the contract to payment structure—will depend on which stage of development the wind farm is in.



Pre-Development Phase

During this phase the developer lays the groundwork for the proposed wind farm. This is also the stage when the developer begins to approach landowners about leasing property for the wind farm. In the short-term, the developer will need to exercise site control in order to establish the technical and economic viability of the project. Overall, this phase

can last from two to three years or longer. Key aspects of the pre-development process include:

Gathering wind data. The developer will need your permission to erect anemometers to test the strength and direction of wind that blows across your land. At least one year's worth of wind data will generally be needed. The developer will be unable to get financial backing for the project unless it is able to show that it has access to good, windy land.

Negotiate power purchase agreements. Once a good wind resource is established, the developer attempts to negotiate a long-term contract, called a power purchase agreement or PPA, with a buyer (usually a utility or power marketer) for the power the proposed wind farm will produce. Although the PPA is between the developer and the power purchaser, it will also have an impact on you because without this contract the wind farm won't be built.

Environmental permitting. The developer may need to obtain permits from various local, state and federal agencies before construction begins on the project. The developer will need access to the site to conduct necessary environmental reviews, and may seek certain assurances that you will assist in this effort.

In order to assure that these pre-development steps can be carried out, the developer will probably ask you to sign an **options agreement**. Under this contract, you also agree to give the developer the exclusive right to enter into a **long-term lease agreement** for your property if the wind farm moves forward. A copy of this future long-term agreement is typically included in the options agreement as an exhibit. Be sure to compare it with any other offers you might receive: Once you sign an options agreement with one developer, you won't be able to lease your wind rights to another until and unless the first one decides not to exercise its option or the options period expires.

The options agreement should remain in effect long enough to give the developer reasonable time to conduct the necessary studies to determine the project's feasibility, but shouldn't tie up your land for more than a few years. Terms of two to five years are typical, and you should negotiate a provision that will allow you to withdraw from the agreement if the developer does not begin construction within a certain number of years. If the options period is extendable, make sure that the extension isn't automatic.

Contract tip: Consider negotiating for a copy of the wind and meteorological data the developer will be collecting from your land during the options period and/or short-term lease agreement. If the developer doesn't exercise its option, you can show this information to future developers as a demonstration of your property's wind resource potential.

Development and Construction Phase

If the wind farm moves forward, the developer will exercise its option and the **long-term lease agreement** will come into effect. Most wind leases are for terms of 20 to 50 years, with a 20- to 25-year term allowing for the lifecycle of one project, and a 50-year term allowing for two, successive projects. If the lease is extendable, make sure that the extension isn't automatic; you may want to negotiate new financial terms after the first term expires.

Many wind agreements contain a clause that specifies that the developer will pay the landowner a fixed fee during the construction phase. Be sure your contract specifies what constitutes the beginning of construction. Additionally, because there may be a lag between when the developer commits to the project and the start of construction—and thus, the start of rental payments—some developers pay landowners a **commitment bonus** of a few hundred to a few thousand dollars.

Depending on the size of the project, construction itself may take from six to nine months, and possibly longer. This will probably be the most active and visible phase of the project: Construction crews will be on your property on a daily basis, excavating roads and turbine foundations, digging trenches to lay cable, and operating the heavy equipment to install the large turbine components. Be sure that the payment terms for this period are sufficient to compensate for any loss of income you may incur as the result of an inability to farm portions of your property. The lease agreement should also provide for compensation in the event any crops are damaged or destroyed as a result of the construction process.

Contract tip: The large cables that will carry the power generated by the turbines should be buried at least three feet below the ground's surface to accommodate farming needs. Be sure your agreement specifies the depth to which the cables should be buried on your property.

The New York State Department of Agriculture and Markets has developed a comprehensive set of "Guidelines for Agricultural Mitigation for Wind Power Projects". These guidelines set forth best practices in the siting, construction and remediation of wind farms in County adopted, State certified agricultural districts (see Appendix A). Although these guidelines do not have the force of law, you may wish to refer to them before entering into negotiations with the wind developer.

Operations and Maintenance Phase

After the wind turbines and other wind farm infrastructure are installed, the project begins its useful life, generating energy. Most wind turbines have an operational life of 15 to 25 years. During this period, your farm operation and the wind power project will co-exist; this will typically be the least disruptive phase of the project from your perspective.

The developer will, periodically need to access your land to maintain the project's equipment and to make any necessary repairs.

Depending on the payment structure in your particular contract, the way in which your payments are calculated in this period may differ from how they were calculated during the construction phase. If so, make sure that your agreement specifies what constitutes the commencement of operations.

Decommissioning and/or Contract Renewal

At the end of the wind farm's life the developer should remove and dispose of all the project's structures. Your lease should contain a provision specifying the developer's duties during this decommissioning period. These duties are discussed in more detail below.

If the developer has an option to renew its lease, it may choose to do so at this time and build a new project on your property using the latest technology. Be sure that your original agreement gives you the right to renegotiate the financial terms for the new project.

B. How much land will the developer need and will I still be able to farm my land?

Large wind projects require 10–30 acres of land per turbine to ensure adequate exposure to the wind and proper setbacks from homes and roadways. Thus, a single wind farm may extend over hundreds—even thousands—of acres. However, the wind turbines and other structures that comprise the wind farm will actually occupy only a small portion of that area, usually 5% or less. A typical rule of thumb is that a 750 kW turbine will take up about a quarter acre and a 1.5 MW turbine about a half acre.

Dirt or gravel access roads account for most of the area needed for a wind farm. These roads should be built at the same level as the surrounding farm land to allow easy cross-access for farm equipment. During construction, the roads may need to be as wide as 50 feet to accommodate the turbine and tower components and the large cranes necessary for installation. After construction, the roads will need to remain wide enough for the developer's service vehicles, usually pickup trucks or vans.

Contract tip: The agreement should specify that the developer is responsible for maintaining these roads. It should also give you the right to use them.

In addition to the land occupied by the access roads, space will be needed around each turbine for a 10x12-foot concrete pad for an electrical transformer and a 30–60-foot-diameter excavation for the turbine's foundation. Additionally, a substation will be

needed to collect the power and “step up” voltage levels for export to the transmission grid.¹

The property that’s not actually occupied by the wind farm’s equipment should be as suitable for agriculture as always. In fact, many landowners are able to farm and graze livestock right up to the turbine pads and other physical structures of the wind farm. Your agreement should specify which uses you intend to reserve for your property.

Contract tip: The lease agreement should explicitly provide for all interests reserved by the landowner. Common reservations include: farming, grazing, mineral extraction, and hunting. Note, however, that hunting may be an issue for the wind developer concerned about damage to turbine blades or other system components.

Although only a small portion of your property will actually be used for the wind farm, the developer will probably want the right to develop all of it. This is because at the time the agreement is being crafted, the developer will not yet know specifically where the best winds are, and thus the optimal location for each wind turbine. Wind speeds can vary dramatically, even over just a few acres. And because the power a wind turbine produces is a cubic function of wind speed, even a slight increase in wind speed will result in a large increase in power—and revenue. Thus developers want to tie up as much land as possible at the outset to make sure they’ll have access to the best wind sites on it.

Nevertheless, care should be taken to limit the land subject to the agreement to just the area that is reasonably necessary for the wind farm. Your agreement should define the plot(s) that will be needed for the wind farm with as much precision as possible. It should specify any special site features, such as farm structures or certain fields that are off limits; and it should take into account buffer zones that may be necessary to prevent noise and visual impacts from the wind farm from interfering with your enjoyment of your property and that of your neighbor. Then, within these general constraints, the developer should have discretion in placing the turbines to maximize the wind farm’s production.

Contract tip: Request permission to review and approve the final project plan. Some developers will grant landowners this right, on the condition that approval will not be unreasonably withheld.

C. How much money can I expect to receive?

The amount of money you can expect for leasing wind rights will depend on the location of your property, your wind resource, the value of the electricity, the value of your land for alternative uses, and the availability of other windy sites in your area. Similarly, the amount and structure of payments offered to you will vary widely from developer to developer. The following discussion highlights the terms you are likely to encounter, and

¹ For a more detailed discussion of land use requirements, please refer to the NYSERDA Wind Power Toolkit, “Wind Power Project Land Requirements”.

their advantages and disadvantages. *It is important to bear in mind that all of these terms are negotiable; as with any negotiation, do not feel bound by the terms being offered you.*

Option Payments

Under an option agreement you can typically expect a modest one-time payment, which may be calculated as a base amount, and/or a fee of several dollars per each acre subject to the option.

As previously discussed, during the option period the developer will need to take detailed measurements of the wind on your property. Whether this right is granted in the option agreement or in a separate short-term licensing or lease agreement, you can expect an additional fee for it of a few hundred dollars per year.

Payments Under the Lease

If the wind farm moves forward and the developer decides to exercise the option on your land, the long-term lease or easement agreement will come into effect. Depending on factors ranging from the phase the project is in to the number and capacity of the wind turbines or other structures on your property, annual payments could range from \$300 to \$3,000 per megawatt. The payment and rate structure in your particular agreement will determine precisely how much and when you'll be paid.

There are a number of possible structures, each with advantages and drawbacks.²

Royalty Payments: Royalty payments are the most common payment arrangement. The developer pays you a percentage (usually 1–4%) of the revenue received from the electricity generated by the turbines on your land. Thus, your payments will vary depending on, among other factors, seasonal fluctuations in the wind, the turbines' operating availability, and how much the developer is being paid for the energy produced. This variability can work to your advantage or disadvantage, depending on how much power the turbines actually produce in a given period and how much the developer is paid for that power.

Contract tip: The lease agreement should specify how often payments will be made and how revenue is to be measured: Negotiate for the right to periodically review the data on which the revenue calculations are based and to have the payments due certified by an auditor.

² Much of the following discussion regarding payments is derived from Global Energy Concepts, LLC's "Wind Power Toolkit," prepared for NYSERDA and available online at <http://www.powernaturally.org/programs/Wind/>.

Royalties Plus a Guaranteed Minimum Payment: Here, in addition to a percentage of the revenues, you'll also receive a guaranteed minimum payment. Thus, even if the turbines experience operating difficulties or if the winds are lower than expected, you're guaranteed some revenue. This arrangement allows you to share in the wind farm's prosperity, while offering some protection against possible problems in its operations.

The text box below illustrates the royalties that might be generated from a 5 megawatt wind farm:

How much can I expect in royalty payments from leasing my land?

Capacity = 5 MW

Capacity Factor = 25%

Market price = 5 cents/kWh

Gross revenues = \$547,000

Royalty = 2% of gross

Total annual royalties = \$10,950 or \$2,190/MW installed

Fixed Fee: In this type of agreement, the developer pays you a flat, fixed fee on a monthly or yearly basis. The fee can be per turbine, per unit of land, or per MW of installed capacity. Although potentially less lucrative than royalty-based arrangements, fixed-fee payments have the advantage of simplicity (no complicated review of receipts or auditing is required), and you can count on receiving a certain amount of money each period. From a national perspective, typical annual fixed-fee payments have ranged from \$1,200–\$3,800 per MW.

One-Time, Lump-Sum Payment: In this arrangement, the developer would give you one large payment up front as compensation for use of your property over the lifetime of the wind project. This has the advantage of putting a substantial sum of money in your hands immediately. However, this arrangement generally results in a smaller lifetime payment than would be the case under an annual royalty associated with a successful wind farm because it shifts additional risk to the developer, and because of discounting for the "time value" of money. Additionally, if you sell the property later, the new owner would acquire the burden of hosting a wind farm without the on-going economic benefits of royalty or fixed-fee payments, making your property less valuable to future buyers.

Contract tip: Carefully review the terms of the royalty payment amount to make sure that the percentage is calculated on a base amount of revenues that includes any revenue derived from the sale of the non-energy related output of the wind farm. Renewable energy certificates (also called renewable energy credits or renewable attributes) represent the environmental attributes of electricity produced from renewable energy sources, and are often sold separately from commodity electricity.

Regardless of the type of agreement and payment structure, be sure that the amount you receive represents a fair price for the property rights you're granting. One way to ensure that you're getting a fair deal is to negotiate a clause that requires the developer to treat you as favorably as your neighbors executing similar agreements. You may also request that an inflationary factor be built into your payment agreement.

D. How do I protect myself from any legal liabilities arising out of the construction or operation of the wind farm?

Just as on traditional farms, accidents can happen on wind farms, too. Your agreement should contain provisions to protect you from any legal liability arising out such accidents.

First, your agreement should explicitly place responsibility on the developer for any damages it might cause to you, your property, or a third party. For instance, if one of the developer's service vehicles were to crash into a section of your fencing, the developer would be required to pay the reasonable cost of replacing the fence.

Next, both you and the wind developer will want to be protected from any liability arising from the other's actions. To accomplish this, your agreement should include a **mutual indemnification** clause. Under this clause, you and the developer agree to absolve one another from any responsibility for damage or other liability resulting from your separate operations on the property.

Finally, your agreement should shield you from liability for any damage or harm the developer's activities may cause to a third party. For instance, the developer might give people such as potential investors tours of its operations on your property. If one of these people were to trip over a cable or other piece of wind farm equipment and break a wrist, he or she might try to sue not only the developer, but you as well. Your agreement should indemnify you against such a suit.

To give effect to all of these provisions, your agreement should require the developer to carry a general liability insurance policy of at least \$5 million, on which you are named as an additional insured. As an additional insured, you, as well as the developer, will be covered by the developer's insurance policy. Thus, you will probably want to check the insurer's rating, a grade which assesses the company's financial strength and ability to meet ongoing obligations to policyholders. You can find insurance company ratings through resources such as A.M. Best Ratings and Analysis (www.ambest.com). While a rating of A- or higher is preferable, keep in mind that there are only a few insurance companies that provide coverage for wind developers. Thus, a developer's choices in insurers are somewhat limited.

Contract Tip: Your agreement should provide that the developer's insurance policy cannot be cancelled by the developer without prior written notice to you.

Even if you are named as an additional insured on the developer's policy, you will need to maintain your own comprehensive farm liability policy just as you did prior to leasing your wind rights. Have your insurance agent review your existing policy and your wind rights agreements to determine whether you'll need additional coverage. You should consider requesting the developer to assume responsibility for any increase in your insurance premiums as a result of the wind farm operations.

E. What about damages to my crops?

In general, wind farms are unobtrusive tenants, causing little interference with agricultural uses of the underlying land. There are, however, situations where damage to your crops may occur, particularly during construction or repairs. If a turbine needs to have a blade replaced, for instance, the old blade may have to be removed and set down in one of your fields, flattening crops. Your agreement should require the developer to use best efforts to minimize any such harm and to compensate you for any damage that does occur.

Your agreement should include a crop-damage formulation for determining what would constitute sufficient compensation. For instance, a typical provision would require the developer to pay damages as calculated by multiplying the amount of lost product by the market price for the particular crop in the season in which the crop was damaged or destroyed.

F. What obligations and duties might the developer have, and what happens if the developer fails to live up to them?

The developer's primary duties to you will be to make payments according to your agreement and to avoid interfering unduly with your use of your property. Additional developer obligations may include the following:

- Duty to keep the land free from liens, and to indemnify you against any costs, expenses or damages you might incur as the result of a lien.
- Duty to comply with all state, federal, and local laws.
- Duty to obtain and comply with all necessary permits, at no cost to you.
- Duty not to use, store, dispose or release hazardous substances on the land.

If the developer fails to live up to one of its obligations under the contract, it may be in breach of the agreement. Your agreement should give you the right to sue the developer or pursue any other legal means available to you to enforce the obligation. Even if the developer breaches one of its obligations, however, the contract will remain in effect and you will be required to continue to live up to your duties under it (see below), unless the developer is in "material" breach.

A material breach is one that excuses the non-breaching party from performing its contract obligations. Your agreement should specify what events would constitute a material breach. For instance, the developer's failure to make a payment to you when it's due might be a material breach, if such failure continues for a specified period of time

after you've given written notice of it. Most agreements give the party that's in breach a chance to cure any defects before a breach is considered material.

G. What duties and obligations might I have?

Your primary duty will be to allow the developer to construct, operate and maintain a wind energy facility under the agreement without unduly interfering with those rights. Additionally, your duties and obligations will probably also include the following:

- Duty not to engage in activities that would impede the wind, cause wind turbulence, or otherwise interfere with the wind turbines' energy production. (For instance, the agreement may limit your ability to construct buildings above a certain height, within a certain distance of any turbine.)
- Duty to assist and cooperate with the developer in obtaining any permits necessary for the construction or financing of the wind project. This duty should be at no cost to you.
- Duty to cooperate with the developer in obtaining any necessary subordination agreements or approvals from existing lien holders.

H. What rights and duties might others have in the lease?

Wind farms require considerable up-front capital. Oftentimes a bank or other third-party lender will finance these projects under a mortgage with the developer. The bank will want to take certain steps to protect its investment, including ensuring that it has the right:

- to cure any default of the developer's obligations;
- to foreclose on its lien; or
- to sell and assign the lease to another wind energy operator.

These and other provisions (such as a requirement that the bank be given adequate notice of any default) will be included in the lease to enable the bank to take prompt action and to provide reasonable assurance that the wind farm will continue to operate.

I. How do I protect my interests when the wind farm ceases operation?

Even at the end of the project's life, much of the wind farm's equipment will still be valuable, and for this reason, the project developer or its successor is unlikely to leave it sitting idle on your land. Nevertheless, your lease should stipulate what duties developers will have when your agreement comes to an end. Usually, these duties will include removing the turbines, towers, transformers, and all other structures that protrude above ground. The developer should also be responsible for removing the tops of the turbine foundations to a certain depth below the surface; the bulk of the foundations, however, will remain in place, as will all the underground cable. Removing these underground structures would be more disruptive than leaving them in place. Unless otherwise stipulated, the roads, too, will remain.

Contract Tip: Some developers may provide a bond or letter of credit or otherwise place money in escrow at the beginning of the project to ensure that funds will be available to pay for decommissioning. If the agreement presented to you does not already require the developer to take similar steps, you may want to negotiate such a requirement.

IV. OTHER CONSIDERATIONS

A. Will leasing my wind rights affect my participation in government farm subsidy or conservation programs?

Allowing wind development on your property may void or otherwise impact your participation in government farm subsidy or conservation programs. If you participate in such a program, contact the program's local administrator before entering into an agreement with a wind developer. If the wind agreement would violate any restrictions under the program, consider negotiating a clause that would require the developer to compensate you for any lost government payments or the imposition of any penalties.

B. What about property taxes?

Under existing New York State law³, the assessment of additional property taxes resulting from an increase in the value of your property as a result of the wind energy development may be exempt for a period of 15 years. There are three important limitations, however, that you should bear in mind as you negotiate the lease agreement.

- The exemption is at the discretion of the local taxing jurisdiction; although local taxing districts have generally granted the exemption this has not always been the case.
- The current exemption is set to expire on January 1, 2006. Landowners negotiating lease agreements should carefully evaluate the risk of this tax exemption not being renewed.
- The operating life of the wind turbine may exceed the tax exemption period.

Your agreement should specify who would be responsible for any such increase. Generally, the wind developer takes responsibility; however, developers in New York have been hesitant to do this. If property taxes associated with the value of the wind farm remain yours, consider this in negotiating the terms of payment.

Similarly, the New York State agricultural district law⁴ allows owners of eligible land to file for Agricultural Value Assessment on their property. This designation may be advantageous from a tax perspective because the value of the land is based on its soil

³ New York State Real Property Tax Law, ¶487. For a summary of the property tax exemption afforded by this law and its fiscal impact on state school aid please refer to Pace Energy Project, "Fiscal Implications of Property Tax Exemption for Wind Projects on State School Aid Formula" (June 2004), available at <www.powernaturally.org>.

⁴ New York State Agriculture and Markets Law, ¶300.

quality and agricultural value rather than on its market value or other local criteria. However, a penalty of 5 times the tax savings for the last year of participation (plus an interest charge) is imposed when the land is converted to non-agricultural use. Placement of wind turbines on the subject property will probably constitute a conversion and trigger the penalty provision. Landowners are urged to consider the potential impact of this rollback on the economic value of leasing their wind rights.

You may currently be taking advantage of one of the many other tax credits, exemptions and reduced assessments that could be affected by wind development. These include:

- Reduced assessment for Woodlots over 50 acres (Form 480-a)
- Farm Property School Tax Credit (Form IT-217)
- New York State Investment Tax Credit (NYIC Form IT-212)
- Real Property Tax Credit (Form IT-214)

Again, before entering into a lease agreement, you should consult with your attorney. Other good sources of information on these tax benefits (and actions which may negate them) include your county Department of Real Property Services or your local Cornell Cooperative Extension. Several helpful publications are also available on the New York State Office of Real Property Services website at <http://www.orps.state.ny.us/>.

C. What else should I do before entering into an agreement?

Educate yourself about wind energy and the wind energy development process. Some good sources to investigate include the following:

- New York Energy Research and Development Authority – NYSERDA administers the **New York Energy \$martSM** program, which is designed to support certain public benefit programs during the transition to a more competitive electricity market. NYSERDA's Wind Power...Naturally website offers a variety of useful information on New York's wind resource, siting and permitting information, case studies and available incentives, as well as a wind power "toolkit". <http://www.powernaturally.org/>
- American Wind Energy Association (AWEA) – National trade organization. Includes contact information for developers, consultants, equipment suppliers, and other members. Provides details on large and small wind technology, policy initiatives, locations of installed wind projects, and links to other information. <http://www.awea.org/>
- National Wind Coordinating Committee – Consensus-based group made up of wind developers, utility personal, government representatives, environmental groups, economic development organizations, and others. Investigates and discusses issues associated with wind energy, in particular avian issues, siting, transmission, and economic development. Includes numerous web links to other wind energy sites. <http://www.nationalwind.org/>
- National Renewable Energy Laboratory/National Wind Technology Center – US DOE. Laboratory focused on wind energy research and development.

- Includes extensive information on the technology and associated research activities, publications, photos, and links. <http://www.nrel.gov/wind/>
- U.S. Department of Energy Wind Program – Includes information on DOE's wind program, the technology, publications, and links.
<http://www.eere.energy.gov/windandhydro/>
- Windpowering America – US DOE program with specific focus on the use of wind power generation as a source of income for American farmers, Native Americans, and rural landowners.
<http://www.eere.energy.gov/windpoweringamerica/>
- Windustry – Non-profit organization that promotes wind energy through outreach, educational materials, and technical assistance to rural landowners, local communities and utilities, and state, regional, and nonprofit collaborations.
<http://www.windustry.org/>
- National Renewable Energy Laboratory – What does clean energy have to do with me? http://www.nrel.gov/clean_energy/cleanenergyandme.html

Learn about the particular developer, too. Conduct research to find out if you're dealing with a reputable business: Does it have a track record of successful development? Is it willing to give you references? If the company has a website, take time to read it. If your neighbors are also negotiating wind deals, talk with them about their experiences. In short, do your due diligence on the developer.

Finally, consult your attorney before entering into any kind of legal arrangement.

APPENDIX A

NYS Department of Agriculture and Markets: Guidelines for Agricultural Mitigation for Wind Power Projects

The following recommendations and guidelines apply to construction areas for those wind power construction projects located in County adopted, State certified agricultural districts. The project sponsor is encouraged to coordinate with the New York State Department of Agriculture and Markets (Ag. and Markets) to develop an appropriate schedule for milestone inspections to assure that the goals of these guidelines are being met. For larger projects, the project sponsor shall hire an Environmental Monitor to oversee the construction and restoration in agricultural fields.

Siting Recommendations/Goals

Minimize impacts to normal farming operations by locating structures along field edges and in nonagricultural areas where possible.

Locate access roads, which cross agricultural fields, along ridge tops where possible to eliminate the need for cut and fill and reduce the risk of creating drainage problems.

Avoid dividing larger fields into smaller fields, which are more difficult to farm, by locating access roads along the edge of agricultural fields and in nonagricultural areas where possible.

All existing drainage and erosion control structures such as diversions, ditches, and tile lines shall be avoided or appropriate measures taken to maintain the design and effectiveness of the existing structures. Any structures disturbed during construction shall be repaired to as close to original condition as possible, as soon as possible, unless such structures are to be eliminated based on a new design.

Construction Guidelines

The surface of access roads constructed through agricultural fields shall be level with the adjacent field surface.

Where necessary, culverts and waterbars shall be installed to maintain natural drainage patterns.

All topsoil must be stripped from agricultural areas used for vehicle and equipment traffic and parking. All vehicle and equipment traffic and parking shall be limited to the access road and/or designated work areas such as tower sites and laydown areas. No vehicles or

equipment will be allowed outside the work area without prior approval from the landowner and, when applicable, the Environmental Monitor.

Topsoil from work areas (tower sites, parking areas, "open-cut" electric cable trenches, along access roads) shall be stockpiled separate from other excavated material (rock and/or subsoil). At least 50 feet of temporary workspace is needed along "open-cut" electric cable trenches for proper topsoil segregation. All topsoil will be stockpiled immediately adjacent to the area where stripped/removed and shall be used for restoration on that particular site. Topsoil stockpile areas shall be clearly designated in the field and on the on-site "working set" of construction drawings.

In cropland, hayland and improved pasture a minimum depth of forty-eight inches of cover will be required for all buried electric cables. In unimproved grazing areas and land permanently devoted to pasture, a minimum depth of thirty-six inches of cover will be required. In areas where the depth of soil over bedrock ranges from zero to forty-eight inches, the electric cables shall be buried entirely below the top of the bedrock or at the depth specified for the particular land use whichever is less. At no time will the depth of cover be less than twenty-four inches below the soil surface.

All excess subsoil and rock shall be removed from the site. On site disposal of such material may be allowed if approved by the landowner and, when applicable, the Environmental Monitor, with appropriate consideration given to any possible agricultural or environmental impacts.*

In pasture areas, work areas will be fenced to prevent livestock access, consistent with landowner agreements.

All pieces of wire, bolts, and other unused metal objects will be picked up and properly disposed of as soon as practical after the unloading and packing of turbine components so that these objects will not be mixed with any topsoil.*

Excess concrete will not be buried or left on the surface in active agricultural areas. Concrete trucks will be washed outside of active agricultural areas.*

Restoration Guidelines

Following construction, all disturbed agricultural areas will be decompacted to a depth of 18 inches with a deep ripper or heavy-duty chisel plow. In areas where the topsoil was stripped, soil decompaction shall be conducted prior to topsoil replacement. Following decompaction, all rocks 4 inches and larger in size will be removed from the surface of the subsoil prior to replacement of the topsoil. The topsoil will be replaced to original depth and the original contours will be reestablished where possible. All rocks 4 inches and larger shall be removed from the surface of the topsoil. Subsoil decompaction and topsoil replacement should be avoided after October 1, unless approved on a site-specific

basis by the landowner in consultation with Ag. and Markets. All parties involved should be cognizant that areas restored after October 1st may not obtain sufficient growth to prevent erosion over the winter months. If areas are to be restored after October 1st, some provision should be made to restore any eroded areas in the springtime, to establish proper growth.

All access roads will be regraded to allow for farm equipment crossing and to restore original surface drainage patterns, or other drainage pattern incorporated into the design.

All restored agricultural areas shall be seeded with the seed mix specified by the landowner, in order to maintain consistency with the surrounding areas.

All surface or subsurface drainage structures damaged during construction shall be repaired to as close to preconstruction conditions as possible, unless said structures are to be removed as part of the project design.

Following restoration, all construction debris will be removed from the site.

(*Any permits necessary for disposal under local, State and/or federal laws and regulations must be obtained by the contractor, with the cooperation of the landowner when required.)

Two Year Monitoring and Remediation

The Project Sponsor will provide a monitoring and remediation period of no less than two years immediately following the completion of initial restoration. The two year period allows for the effects of climatic cycles such as frost action, precipitation and growing seasons to occur, from which various monitoring determinations can be made. The monitoring and remediation phase will be used to identify any remaining agricultural impacts associated with construction that are in need of mitigation and to implement the follow-up restoration.

General conditions to be monitored include topsoil thickness, relative content of rock and large stones, trench settling, crop production, drainage and repair of severed fences, etc. Impacts will be identified through on site monitoring of all agricultural areas impacted by construction and through contact with respective farmland operators and the Department of Agriculture and Markets.

Topsoil deficiency and trench settling shall be mitigated with imported topsoil that is consistent with the quality of topsoil on the affected site. Excessive amounts of rock and oversized stone material will be determined by a visual inspection of disturbed areas as compared to portions of the same field located outside the construction area. All excess rocks and large stones will be removed and disposed of by the Project Sponsor.

When the subsequent crop productivity within affected areas is less than that of the adjacent unaffected agricultural land, the Project Sponsor as well as other appropriate parties, will help to determine the appropriate rehabilitation measures to be implemented. Because conditions which require remediation may not be noticeable at or shortly after the completion of construction, the signing of a release form prior to the end of the remediation period will not obviate the Project Sponsor's responsibility to fully redress all project impacts.

Subsoil compaction shall be tested using an appropriate soil penetrometer or other soil compaction measuring device. Compaction tests will be made for each soil type identified on the affected agricultural fields. The subsoil compaction test results within the affected area will be compared with those of the adjacent unaffected portion of the farm field/soil unit. Where representative subsoil density of the affected area exceeds the representative subsoil density of the unaffected areas, additional shattering of the soil profile will be performed using the appropriate equipment. Deep shattering will be applied during periods of relatively low soil moisture to ensure the desired mitigation and to prevent additional subsoil compaction. Oversized stone/rock material which is uplifted to the surface as a result of the deep shattering will be removed.