Transcript – How Much is a Landowner Compensated for Hosting a Wind Turbine on His or Her Property?

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This presentation is part of a series by the Illinois Wind Working Group from the Landowners Forum called Wind Energy 101.

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In this presentation we will discuss the compensation or the income from the landowner’s perspective that would result from hosting a wind turbine on their property.

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To begin with we’ll discuss some of the variables that will affect the actual landowner’s lease price that will be agreed upon. Some of the things that will affect the value of that lease are:

**Number 1** is the wind resource. The wind resource has a tremendous impact on the amount of energy that will be generated; clearly, the wind developer wants to see as much wind energy as possible so they can sell as much energy as possible. So land that has a greater wind resource will be much more valuable to them than land that has a low wind resource.

**Number 2** is the transmission availability. This is the ability of the wind developer to bring to market the product that they are producing. If they can produce electrons but they would have to spend a great deal of money to bring those electrons to a market, then that is not going to be as desirable of a location as a location where there is ready access to transport those electrons to a market, which is to say, to a transmission grid.

**Number 3** is the local land prices. Clearly this will have some impact. They do take up (the turbines take up) some amount of land, not a great deal, but some. So if they are taking up land that is more valuable to the land’s owner then typically those prices will be higher.
Number 4 is the local electricity prices. This really has to do with the value of the product that is being produced by the wind farm. If the product that is being produced by the wind farm, which is electricity or electrons, if the product is more valuable, locally, in that market, then that would be a more valuable location for the wind farm to be in and probably would lead to higher lease prices.

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There are several different forms that the compensation could take and we’ll talk about that a little bit in this slide.

Number 1, which is really not very common any more, is a lump sum payment. That would be an up-front payment at year zero or construction of the wind farm and no payment thereafter; it’s really not very common anymore.

Number 2 is periodical annual payments. This is definitely the most common, usually an annual payment but it wouldn’t necessarily have to be. It could be quarterly, monthly or whatever the lease specifies and

Number 3 would be other - some combination, and there are a variety of combinations that it could take. We’ll talk about some of the other combinations that it could take in the next few slides.

Other considerations are:

Number 1 – Is the payment going to be at a fixed rate, which is to say ‘X’ dollars per year for the next fifty years or is it going to increase at some point for some reason or another.

Number 2 is whether it is going to be put at a variable rate, and the most common way this could happen is if there is some kind of royalty payment and we’ll talk about that later, but basically it is a percentage of the production of the wind turbine. In this way, the landowner would be rewarded if the wind turbine generator on their land produces a large amount of electricity.

Number 3 – Something to think about is inflation. Is there some provision for the dollar amount paid to increase through the years or will it be flat through the years. Typically, this is something that you really want to think about since a lot of these contracts are pretty long in term, sometimes up to fifty years, possibly even more, so clearly a certain dollar amount today is not worth the same dollar amount fifty years from now. So that is definitely something that should be considered.
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It’s usually two phases to a landowner lease agreement and we’ll talk about both of them in greater depth.

*Number 1 is the evaluation period or option period.* You can also think of this as the preparation time for the wind developer to get everything in order for the construction and operation of the wind farm and *Number 2* is the operational period where the wind turbines are spinning, they’re generating electricity, and hopefully everyone is making money and happy.

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For the first phase we talked about in the last slide was the evaluation or option period, and we said that this could also be the preparation period from the wind developer’s perspective. This is when they’re going around lining up landowners, trying to get contiguous landowners in place, especially if there is room for a wind farm to be built. It is a binding agreement between the landowner and the wind developer because the wind developer needs that certainty to be able to start developing that wind farm. So the landowner lease is typically one of the first things they’ll start doing. If they don’t get enough leases, then there’s really no point in going any farther because they need enough land to build the wind farm on. That is to say that once the lease is signed, the landowner cannot go to another wind developer and negotiate with them; it is a binding agreement.

It’s a relatively short time period compared to the operational phase. Usually the evaluation or option period is in the neighborhood of two to five years. This is when all the studies take place, all the paperwork takes place, when the wind developer really is getting all the ducks in a row, getting everything in line for the construction to occur and ultimately for the operation to begin.

Compensation is fairly low during this stage. It is an average of roughly $5-$10 per acre but one thing to note is that is $5-$10 per acre for the entire tract of land. So, typically, in this stage, the wind developer will not be able to tell you where precisely the wind turbines, the individual wind turbines will be located. They probably haven’t done that siting work yet. So what they’ll do is lease that entire land and compensate at $5-$10 per acre for that entire tract of land.

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The operational period begins, typically, when the wind turbine is fully constructed. There are a couple different ways that the compensation can occur during the operational period.

First would be with purely a periodic payment, most typically on a yearly basis, and I do want to stress that these dollar amounts are pretty anecdotal. There’s not a lot of academic research that’s been done on it. And it’s not easy to get these numbers. What we have found, roughly, in Illinois is $2,500 to $4,000 per Megawatt of turbine capacity per year. I do want to stress that per Megawatt because most of the wind turbines that are being installed now are between 1.5 to 2.1 to 2.3 Megawatts so you can multiply that number by 1.5, 2.1 or 2.3, whatever the size of the wind turbine is in Megawatts, per year.

The second possibility is a production incentive or a royalty payment and this provides for payment to the landowner based on the amount of production the wind turbine on their land provides, generates. And if this is the only form of compensation, what we've seen then is typically 4% to 6% of the revenue from the production from the wind turbine on their property. Oftentimes it will be some combination between these two, between the periodic payment and the royalty payment, and in that case, you would see a lower dollar amount, accordingly; you would see a combination, so each individual number would be less for the periodic payment plus the royalty payment.

A lot of different structures out there and there is no one dominant structure, so it pays to be informed about what the common practices are.

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