What is the Development Timeline for a Wind Project?
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Slide 1:
This presentation is part of a series by the Illinois Wind Working Group from the Landowners Forum called Wind Energy 101.

Slide 2:
Wind project development timeline. This is a quick overview of the process for a wind farm development.

Slide 3:
Basically, that timeline looks very much like this. You've got a one to five year time frame that's actually the development time window. And then you've got about a year that's devoted to construction. And then you've got the longer time period which is 20+ years that's actual operation timeline of it, and a decommissioning time at the end. So really, while the development frequently seems like it's a very long process, in the grand scheme of things, it's a much shorter time period than a lot of the other pieces of it.

Slide 4:
Timeline development can be broken into three basic pieces: the site selection and feasibility studies, the plan development, and the final detail development.

Slide 5:
What local residents will notice, whenever it starts with the the site selection piece of it, rumors of the development, maybe some meteorological towers being installed, contacts for lease options are made with some landowners, maybe a landowner meeting to gauge the receptiveness of the community, and to talk to landowners as a group about what the opportunity is, what their project thoughts are.
Slide 6:

Within this are a number of feasibility studies that will be going on behind the scenes. They’ve got the site selection looking at what are the opportunities, what are the difficulties with different areas, what does the wind profile look like, interconnect studies, grid capacity, looking to see if they actually can put the energy to develop onto the grid at the location they’re looking at, if that’s even an opportunity or a possibility. The wind studies are out there to actually assess if what the rough estimates of wind out there that are already existing are close to correct, and to actually make the project output estimates more valid. There’s a market assessment, is there a market for the resource they’re trying to put onto the grid at that location. And then they start looking at defining the project boundaries, and begin contacting landowners associated within those boundaries.

Slide 7:

Then as they start with the planned development becomes the case of starting with landowner contacts, and the community relations piece of it, starting to look at can we get this area that we have kind of designed, laid out, speculated on, are there enough receptive landowners in that area that we can actually make the project go, start looking at the road repair plan, what’s going to have to be upgraded in those areas to make the construction possible. Then there’s things like the preliminary design and layout that needs to be developed, the interconnect agreements have to be signed with the utilities with the grid system so they know they can upload that energy once it’s produced. There need to be studies done, environmental, historical, operational impact studies that have to be done as part of the planning process.

Slide 8:

Then there’s the final development, final detail development. This is where construction service agreements are made with local contractors and other contractors to make sure that things can get done. There’s the final lease and easement agreements, getting all the details worked out with landowners on easements of where lines are going to be put in, leases signed for where the turbines are going to be, those types of issues. There’s the plan of the construction routes, where are the large pieces coming in at, where are the smaller vehicles going to be operating in what areas such as small towns with schools, those kinds of areas, that they have to stay out of during construction with all the traffic, those kinds of things need to be worked out. The blade, tower section, crane routes, where are they shipping them in from, where are they going to lay them down, the routes to get them into the laydown yard, or into where they need to be onsite for construction.
Then part of it is the final zoning permit, this is where it’s open to the public comment period. Depending on how the county goes through the zoning process, there may be neighborhood review meetings as part of that process. Some of the final site designs, pieces have worked out at that point, the turbine micro-siting, in other words going from we’re going to put a turbine in this 40 acre area to this is exactly where we are going to put the turbine. The survey work of actually putting those flags out there where the turbines are going to be at, where the other pieces of equipment are going to be at. And what’s called the civil site design is put together how the roads are going to be put in, and those kinds of things that have to be addressed and have to be designed and planned out.

Then the construction phase begins with the upgrade of the roads, development of the staging areas, and starting to stage the equipment both for construction and the turbines themselves as part of the plan.

So, while it seems like a long timeline, there are a lot of things that happen in that one to five years depending on how the wind company wants to put it together, how quickly they are able to pull things together, they’ve got the construction now down to within a one year window, most of the time it’s like a six to eight month window where they’re actually able to put these together.

This presentation was provided by the Illinois Wind Working Group. For more frequently asked questions about wind energy, and corresponding presentations, please visit our website at www.RenewableEnergy.ilstu.edu/wind/landownersforum.