

February 4, 2009

Dear wind committee and CCLEP colleagues:

I had a good conversation with Melissa Peterson of Windustry this morning that clarified greatly the next steps for us in our investigation of a commercial-scale wind project for Cook County. I wanted to apprise you of what I learned and what we should anticipate doing for the next several months.

Most important is Melissa's view concerning the size of our project. I had told her we were looking at a project of between 1.5 and 7.5 megawatts. She recommends that we limit the project to between 1.5 and 5 megawatts. There are two reasons for her recommendation: Projects of 5 megawatts or less are controlled by local permit requirements (the county), whereas projects of more than 5 megawatts require PUC permits. Obviously the former is much easier than the latter. Second, MISO fees involved in a project of 5 megawatts or less are about half what they are for a larger project. MISO stands for Midwest Independent Transmission System Operator.

We have a grant application pending with the Northern Minnesota Sustainable Development Project for \$10,000 primarily to underwrite our specific-site wind monitoring effort. Prof. Mike Mageau of UMD says it is very likely we will get that grant. Mageau and graduate students he hires would do the actual wind monitoring.

Assuming we will indeed get the NMSDP grant, we need to begin doing ground work for the wind monitoring – which we would like Mageau to start this summer.

Our first need is for a map that marries the existing wind data and the information Jeremy Lopez has been gathering from Arrowhead about the location of existing electrical transmission and distribution lines. I believe we discussed creating such a consolidated map at the last committee meeting on Jan. 14. Can someone remind me of conclusions we reached, what needs doing next to create such a map? There is one additional wrinkle: It would be very good if the map could also outline all publicly owned land.

Working with that map and with Mageau, Melissa suggests we select 10-12 prospective sites that appear to combine high potential wind speed and close proximity to existing transmission and distribution lines. In choosing those sites, we should take care to avoid state or federal lands and lands close to environmentally sensitive areas such as state natural areas; it is Melissa's view that the permitting hassles on such lands are simply too great. I will be talking with Mageau tomorrow (Wednesday, Jan. 28) about this task.

Once those sites are selected, we need someone, or several someones, to consult the county plat books and make a record of who owns the land on and around those sites.

Sometime soon, too, CCLEP needs to make a fairly formal approach to Arrowhead, with two purposes:

A. To secure their agreement to cooperate fully with us in siting our wind monitoring devices, including sharing all knowledge about the capacity of existing transmission and distribution lines to accept wind-generated power from any of the potential sites, plus any knowledge they may have about land ownership on and around the potential sites.

B. To make them aware that we have identified them as the most likely power purchaser for this project, and that if the project is built, at some point we will be approaching them to enter into formal negotiations for a power-purchase agreement. If they turn us down at the outset, we obviously will need to rethink, but it would be good to know that early. It's also possible they might refer us to Great River as a better potential power buyer. If that occurs, one good result would be that we could add Arrowhead to our development group, if, when we get to the point of organizing one.

If neither Arrowhead nor Great River looks like good potential power purchasers, we could then approach Minnesota Power, but because of their tangential involvement in Cook County, they should be considered backup choice. The Southern Minnesota Municipal Power Agency, with which the Grand Marais PUC is associated, has already met its statutory wind generation requirement, Melissa says, and would not be so eager to be our partner in this venture.

With our list of potential sites in hand and information on land ownership, we would then be ready for an important meeting bringing together Arrowhead, Mageau, Windustry and CCLEP. The purpose of the meeting would be to work through the list of potential sites to whittle the list to the three or four sites that score highest for a combination of wind potential, proximity to existing lines and ownership.

Melissa suggests that once we have identified our monitoring sites, we negotiate leases with the landowners. She suggests leases that would carry through the actual construction and operation of turbines on the sites. Windustry can help us work up the leases, which she says should give us a five-year option for monitoring wind and making a decision of whether to build on each site. Such leases, she says, typically provide that the owner will get a percentage of any revenue derived from power sales attributable to a turbine on the owner's property.

A major unanswered question at this point would be: With what entity would the leases be executed? With the county? With CCLEP? With a development group?

With leases in hand, CCLEP could give Mike Mageau the go-ahead to begin wind monitoring.

Even as all of this activity is taking place, the wind committee needs to begin thinking about a full-fledged feasibility study that would encompass everything except the issue of wind potential: financial modeling for both costs and revenue potential; preferred organizational structure for an entity to own the wind project; regulatory and permitting issues, etc.

We are just beginning to explore what such a feasibility study would entail. As a ballpark figure, I estimated it would cost between \$50,000 and \$75,000 (which is about what the feasibility study for the Cook County Broadband Initiative will cost). In my discussion with Melissa today, she said that the Legislature committed \$1 million to the Rural Energy Development Initiative to cover just such costs. The Arrowhead Regional Development Commission has access to some of that money, which must be spread across the state. Since there aren't many energy initiatives in our area, Melissa was hopeful that we might be able to get REDI funding to underwrite our feasibility study. Some time soon, she and I will have a conference call with the ARDC folks to explore this possibility.

The idea would be to get to work on raising funds for the feasibility study, do an RFP and secure a consulting firm to do the study while Mike Mageau is getting on with his wind monitoring work.

This is as far as I can take things at the moment. Everything I have said is very tentative and conjectural. But we need a plan – a flexible, adaptable plan – in order to get started. I would very much like feedback on all of this, and I'm looking for volunteers to do the things we can do at the moment:

1. Put together a composite map showing wind potential, electrical line routes and publicly owned land.
2. Once we have identified 10 to 12 potential sites, do a detailed report on land ownership at those sites and around them, plus along obvious easement corridors for linking to power lines.

There will be more tasks to parcel out at our next committee meeting, which is scheduled for Feb. 11. On Feb. 10, I plan to attend a "Community Based Energy Development Workshop" that is co-hosted by Windustry. It is in St. Cloud, and Melissa says there will be a number of community wind folks there to talk with.