

“Getting the Best Wind Agreement...a seminar for landowners”
Northwest Clean Energy Resource Team (CERT) Meeting in Partnership with the Southwest Initiative Foundation and hosted by Marshall County

June 18, 2008
Marshall County Courthouse, Warren, MN 56762

Meeting Purpose: To educate the audience on wind rights and development choices, on how to ensure you get a fair agreement, on your options, about where to access resources for advice, and on some sense of the “big picture” and why this is an opportunity.

People present (We apologize for any misspelling): Scott Peters, Lissa Pawlisch, Brad Stevens, Cheryl Glaeser, Lisa Daniels, Steven Noack, John Ihle, Terry Carlson, Jim Jackson, Linda Kingery, Jan Kaspari, Beverly Benson, David Benson, Charles Seeger, Janice Seeger, Emily Johnson, David Johnson, Ben Kleniht, Sybil Cwikla, Ken Cwikla, Paul Aakre, Dex Gonsorowski, Howard Person, Loren Lusignan, Jeff Anderson, Iris Berggren, Lyle Braff, Barbara Braff, Roger Larson, Judy Larson, Russell Grandtial, Dick Wikstrom, George Crocker, Randy Knott, Conrad Holten, Kenneth Asp, Mike Anderson, James Tostep, Margaret Anderson, Marla Braff, Michael Triptett, Jim Steenerson, Cam Farfulik, M Taus, Donavon Hamrick, Dennis Hjelle, John Wawrzyniak, Annette Wawrzyniak, Sharon Bring, Roger Anderson, Palma Anderson, Bric Schwankl, Deb Myrfield, Richard McGregor, Ramond Benke, Jeffrey Benke, Dawn Benke, Bill Craig, Kevin Kjellberg, Harold Mowder, Lurne Kramka, Steve Shwialkowski, Sharon Scwialkowski, Wayne Larson, Mary Beth Edman, Richard Edman, Dan Edman, Mike Moore, Keith Mykleseth, Leon Heath, and Betty Younggren.

Presentations: presentations from our first two presenters can be found @ <http://www.cleanenergyresourceteams.org/publications/regional-presentations#windforums>. These presentations provide all of the nitty-gritty details and thus, the notes here are simply a summary and document responses to additional questions fielded by our presenters and panelists.

Wind Opportunity Overview: Brad Stevens, University of North Dakota, Energy and Environmental Research Center

- Minnesota is ranked 9th in wind resources and 3rd in development – it’s not just about wind resource; it’s also about policies and frameworks that encourage/enable wind development.
- Contracts are based on production – need to know wind resources (wind velocity is key to how much power you can produce) and understand the wind turbine power curve (see presentation) Capacity Factor = kWh(a)/kWh (t)
- Wind projects are capital intensive – from the tower to the nacelle, it all takes a good chunk of cash
- Economics – one should think about both lease payments, potential ownership payments, tax revenues, and potential job creation
 - o Direct revenue: only goes to certain landowners and/or investors
 - o Tax revenue: has broader impact
- Value of wind – 40% capacity factor each MW. \$220,000 per year of electricity
- What about using wind for something other than electricity?
 - o Basin Electric has a project in Minot, ND to use wind to power a fuel cell and make H₂ that then runs converted vehicles
 - o UM Morris is taking the hydrogen a step further and converting it to anhydrous ammonia
 - o These sorts of applications allow wind to be usable beyond electricity and side-step the interconnection questions
 - o Land values – Lawrence Barkely Labs – wind project doesn’t affect value of the land
- Under current Minnesota Law, lease option period can’t go beyond seven years, but landowners can sign leases for their land (or wind resource) for longer periods.

C-BED and REDI: Cheryl Glaeser, Southwest Initiative Foundation

- CBED – locally owned projects, commercial scale 2-50 MW

- General term - Locally owned, commercial-scale wind projects that optimize local benefits. Locally owned means that members of the local community have a significant direct financial stake in the project other than through land lease payments, tax revenue, or other payments in lieu of taxes.
- Legislation: https://www.revisor.leg.state.mn.us/bin/getpub.php?pubtype=STAT_CHAP_SEC&year=curent§ion=216b.1612&image.x=7&image.y=6 or www.c-bed.org for overviews of different stipulations
- Lots of drivers but particularly rural economic development; who will own projects? This question is relevant in terms of economic development as local ownership results in more money flowing through the local economy, often more local jobs, etc.
- REDI: Rural Energy Development Initiative (<http://www.swmnfoundation.org/documents/REDIFactSheet3-08.pdf>) – this program is administered by the Southwest Initiative Foundation and seeks to build renewable energy capacity and expertise across the state by providing technical assistance to community wind projects. The program is three-pronged: outreach and education (like these events); technical assistance with formation of energy project development entities and low-interest rate revolving loan program. Communities interested in technical assistance should fill out the REDI Interest Form: <http://www.swmnfoundation.org/documents/REDIInterestForm.pdf>
- Minnesota Department of Commerce just released a dispersed generation study documenting “sweet spots” for adding 600 MW of community energy (10 MW – 40 MW) at the distribution system level. See an overview here: <http://www.swmnfoundation.org/renewableenergydevelopmentinitiative.html> and all the details here: <http://www.state.mn.us/portal/mn/jsp/content.do?contentid=536916459&contenttype=EDITORIAL&agency=Commerce>

Wind Risk and Reward: Lisa Daniels, Windustry

- Options for landowners:
 - lease land: lower risk and responsibility, lower reward
 - join in a cooperative ownership/investment pool/partnership: intermediate risk and reward
 - individual ownership (be it a school, tribal governments, private individual): higher risk and responsibility, higher potential reward
- Need to think through the range of options and how you might evaluate these on your own and with your friends and neighbors. All projects will require land leases – it’s just whether or not you land lease with a local set of owners or a more distant set of owners. A community-owned project also allows one to share in the ownership of the project (or at least have the option to do so).
- Leasing your land to a developer is probably the most common way that landowners participate in a wind project; there are few standards however about length of term of lease, compensation, etc. You will want to consider who it is that you’re leasing to, for what length of time, and consider the various provisions included in the lease, from non-disclosure agreements to decommissioning provisions.
- Good questions to ask include:
 - How much of my land will be tied up and for how long?
 - How much will I be paid and how will I receive payments?
 - Are the proposed payments adequate now and will they be adequate in the future?
 - How will a wind project impact my other land uses?
 - Have I considered all of my other options and is this the best one for me?
- Community owned projects provide the same benefits of larger wind development while also facilitating greater stimulation of local economies, increased local energy independence, increased competition in energy markets & garnering greater acceptance of wind power
- Community owned projects can be owned by: farmers &/or private owners, municipal utilities or rural electric coops, public schools (K-12), public universities or private colleges and tribal communities
- Available resources from Windustry:
 - Community Wind Toolbox: <http://www.windustry.org/CommunityWindToolbox>
 - Leases overview: <http://www.windustry.org/leases>

- Lease/Easements: <http://www.windustry.org/sites/windustry.org/files/LandEMain.pdf>

Panel Discussion: above listed presenters and John Ihle, Terry Carlson, Steven Noack

- How would I get involved in wind development? John did the first community owned project in Hewitt. Parker's Prairie: trial by fire, get your feet wet, start with a met tower to measure the wind resource; talk to other developers, do a lot of reserach
- Helpers/facilitators
 - Community wind tool box (referenced above on Windustry website)
 - REDI program – will help provide consultants, technical assistance and loans
- Timeline for developing a wind project?
 - Predevelopment – Terry Carlson mentioned he spent well over 50 hours/week for months and months
 - Fast project is 2 years. Need 1 year of data beforehand.
 - 3-5 years is the average time for development
 - Steve – some clients have been working on the same project since 2000; they've gone through 3 developers to pull together a 150 MW and they're now raising money for development
- Capital raising for project – sometimes taken on individually (like Terry's) or can pull it from the community, or do a flip-model project to bring in outside money – the cost of projects is on the rise with steel prices rising, the value of the dollar falling, and turbines being in short supply
- Lifespan of equipment, scheduled maintenance: blades, gear boxes, level/quality of maintenance
 - All equipment requires on-going maintenance; the bigger the machine the more effort this requires (i.e., the bigger the equipment); often folks look to co-locate machines of a similar model so that maintenance can occur on multiple turbines at the same time
 - 1.0 MW – 1.5 MW are easier to get a crane and crew to maintain, easier to get replacement parts
 - May eventually see a resurgence in slightly smaller machines... midsize 100-200 kW
- By 2009 – Minnkota will have nearly 24-25% renewables in its supply mix - very close to its RES requirement, could perhaps do carve outs with local distribution coops
- Folks want least cost supplies – C-BED projects: first 10 years pay a higher price, 2nd 10 years pay a lower price; all C-BED project must be competitive
- Decommissioning – your site is likely to be valuable. A lease should discuss options to renew; reclamation (worst case scenario), etc.
- Piggy back model – community get to own a share of a larger project (maybe 100 MW project with 10 MW of local ownership) – timing is everything, must be involved in early discussions. Community projects benefits from the scale of the overall project (for ordering turbines, O&M contracts, etc.)
- How much production can you get per section of land? Depends on the power curve (wind resource and turbine) but must also remember that blades are around 300 ft diameter and you must have at least 3000 to 3500 ft between each turbine
- Cap and Trade – every \$10/ton of carbon will make electric rates go up by 40%. This means we'll want to integrate lower-carbon fuels into the electric mix, but we can't do all wind because it doesn't provide energy all the time. Need a mix of energy sources.