

**Notes from Meeting with Black River St. Lawrence RC & D Regarding
Community Energy Project for Cape Vincent
December 19, 2009, Cape Vincent Fire House**

(notes taken by Kathleen Moore, Integrated Environmental Data, LLC)

Hester Chase began by talking about her goals & priorities in pursuing a community energy project: a) enhance farming economy b) preserve the existing economic base of Cape Vincent c) directly benefit the community

She noted that the project is a feasibility study, not a commitment to a particular project. Ultimately "we" (Cape Vincent community members) will be the project developers.

She would like to use the local landscape to power the community, in effect to consume power produced locally. She outlined several options as she's thought of them:

1. Form an aggregate in order to purchase power
2. Become an ESCO
3. Form a rural electric co-op (cheaper rates & more reliable than investor-owned utility)
4. Own the local distribution lines (noting that there is a PSC rule that expires in 2011, which would pertain to this situation and that power from Massena and Niagara Falls hydro plants will be reallocated in 2025).

Hester suggested that wind development rights could be treated as "tradable development rights" so that there could be some compensation to landowners in sensitive areas for *not* having a turbine. Behind-the-meter projects are also of interest.

Last, feed-in-tariffs were discussed. These pay an incentive for putting renewables on the grid. Fifteen states have these (NYS is not one).

Hester pointed out that these ideas need to be tested. She called for a development team to be formed which would tackle questions and arrive at the best solutions for the community.

Chanda Lindsay spoke about the RC&D (Resource Conservation and Development Council) and its role in this community energy project.

The RC&D is a Non-Profit organization made up of a group of locally-based volunteers who work on grass roots ideas to support the mission of RC&D.

This RC&D works in 7 counties in northern NY in the areas of agriculture, recreation, forestry and renewable energy. The RC&D Council is made up of a pool of volunteers who have expertise in a wide range of fields. These volunteers promote agriculture, forestry, recreation and renewable energy in our communities. The governing body of the Black River-St. Lawrence RC&D Council is the volunteer membership.

Chandra spoke about the mission of the RC&D. Promotes environmental conservation, community improvement, economic development & wise use of natural resources.

RC&D's renewable energy goals:

education and partnerships to move region forward in renewable energy

promote efficient, sustainable, effective utilization of natural resources

work with partners to assure that the program is beneficial to the community

RBEG: UDSA Rural Development Rural Business Enterprise Grants: are for small emerging rural businesses. The RC&D helps with grant application, grant administration, meeting organization and communication among project partners.

The RBEG grants are "80/20" grants, i.e. 80% of the funds are provided by the grant and 20% are covered by project partners either directly or as in-kind contributions. The funds are available as reimbursement for expenses. This grant is scheduled to go through September 2011. It represents just one piece of the renewable energy picture for the community, and RC&D's involvement with renewable energy.

Chanda asked the audience members to consider two questions: 1) what do you value about the Cape Vincent community? and 2) What renewable energy needs or alternatives should be addressed? She urged audience members to use the 3 X 5 comment cards to express their thoughts and questions.

Loren Pruskowski of Sustainable Energy Developments, Inc. gave a presentation about the scope of work encompassed by the RBEG grant.

He gave some background on SED as well as Integrated Environmental Data, LLC (of which Kathleen Moore is President). Loren talked about his motivation to work on community-scale wind energy: as development proceeds in China and India there will be more pressure on earth's resources. There will be a need for more locally-produced goods as well as energy. There will be an increasing need for local economic development.

Loren discussed the Renewable Portfolio Standard in NYS (25% renewables on the grid by 2013) and how this creates a second revenue stream for the sale of electricity: first the sale of the electricity itself, and second the sale of the green attributes. This second revenue stream provides an incentive for the development of wind energy projects. He noted that the PSC is having a difficult time tracking attributes.

Loren presented this definition of community wind: *A wind project developed and owned wholly or partly by an entity representing the community (a group of locals, local government, municipal electric company) selling wholesale power.*

Loren emphasized three aspects of community wind energy as he is promoting it: Transparency, Awareness, and Involvement. Direct participation of community members is essential.

He discussed the proposed scope of work under this grant, which is essentially for a feasibility study for community-based wind energy. The work will require the formation of a community-based development team to evaluate options, and the creation of a communication infrastructure that will allow the pursuit of other project types, perhaps even in parallel with the wind energy project type.

There are six steps or aspects of the scope of work:

- Site Prospecting (which must include a survey of the transmission & distribution infrastructure in the town)
- Wind Resource Assessment and Energy Yield Assessment
- Development Team Formation
- Proforma development & Recommended Next Steps
- Land Lease Evaluation Work
- Environmental Study (collect existing information, look at the validity and applicability of existing work, use the local community base as a resource for collecting and evaluating information).

He then discussed whether community wind directly competes with the larger utility-scale projects that are in the works. He pointed out that competing directly will divide the community further. We should focus on connections to distribution lines and thus avoid the sense of competition with bigger projects.

A lively Question & Answer period ensued.

Q: How can community members be involved in environmental studies?

Kathy M. proposed a kind of study group for interested community members that would evaluate the primary sources of existing environmental studies.

Q: With regard to permitting: what kinds of project ownerships (public, private, not-for-profit, etc.) are represented by community wind?

Loren discussed various projects that SED has done, mostly in MA, where electricity prices are higher due to heavy reliance on natural gas.

Q: With regard to "wholesale", grid-connected projects. How does that work? How can electricity stay in the area, essentially?

Loren: in a regulatory sense it does.

Q: Can a variety of electricity sources be accommodated locally?

It hasn't been done in NYS. With a feed-in tariff it might work. Solar may not be economical (it is much more expensive). Biomass may be realistic. Locally-produced natural gas may be realistic.

Q: Will it save the community money? (i.e. lower bills)?

Loren: not necessarily lower bills--only if you own both the lines and the generation. But the revenues from the (wholesale) sale of electricity become available for the community to use in whatever way they want, for example. to offset taxes.

Q: If National Grid is paying a premium for renewables, how can they possibly save money? You may get the satisfaction of green electricity, but not cheap electricity.

Loren: there is an assumption there that wind is more expensive. It isn't always.

Q: Do we need to assess the electrical load of the town?

Loren: yes that is a good idea. What is the population?

A: 3,500 year-round, 8,500 summer.

Are there large consumers? schools, restaurants, dairy farms.

(a variety of comments ensued):

The seaway exists for cheap power but it doesn't stay local... If National Grid owns the lines then we can't save locally-produced electricity for Cape Vincent...Hester commented that that's why she likes behind-the-meter projects...National Grid has not been helpful in distributed generation....but they are beginning to change...we need politicians to do their job, they need to get on board with regard to their oversight of the PSC, etc....National Grid is too big and they have all the control...state-level politics are being influenced by large corporations so in effect community wind *will have to* compete with the larger projects & developers....owning distribution lines is very complicated, e.g. getting power to/from islands, maintenance of lines (ice storms etc.), compared to just producing electricity for sale.

Q: At our initial meeting there was a rep from NYS Municipal Utilities (?) present. Wouldn't it be better to have municipal ownership? Fairport NY bought their distribution lines.

Q: Conservation of energy is not discussed enough. One advantage of decentralized power generation is a reduction in line losses. We waste too much energy getting electricity from where it is generated to places far away. The solution is local sources of power.

Q: Is it part of the grant to include line ownership as part of the model? I'm not seeing the advantage without line ownership.

A: Buying the lines is outside the scope of the RBEG-funded work.

Q: Why study the capacity of the distribution lines here? If part of the mission is to generate our own electricity isn't it obvious that the lines we have are adequate for our needs? Might we have to build a line?

Q: Larger developers get incentives for building projects. Would a local organization be able to use those incentives?

Loren: Some incentives are designed for projects like this. There are some tax incentives that only large corporations can use, but there are for instance Clean Renewable Energy Bonds (CREBS) available for municipalities and not-for-profits, which provide 0% financing.

Presently "RECS" are only available for projects that connect to 69 kV lines or greater. The PSC doesn't know how to track generation that goes onto lines less than 69kV. Again this is a state policy issue which legislators really need to deal with.

Q: Will the data and services under this grant be available for project types other than wind? Can we change horses? What if the measurement tower doesn't get a permit?

The project is to research community-owned wind energy. If we can't put up a measurement tower the project will die.

Q: Do you have a business model as to how such a project could be put up? Is there any track record for community-based not-for-profit project ownership? If there is a state policy that would provide for or promote small projects, then the big companies would want it too (again, this would be competition between the two).

Loren mentioned revenue bonds as a means of financing the project. The Federal government may implement feed-in-tariffs, which would facilitate projects. There are a number of regulatory options that would benefit community-scale wind.

Loren explained that the project, in the development phase, is developing assets which have value. Among these are wind resource assessment and energy yield analysis. These assets make it possible to attract financing.

Q: what is the smallest turbine you would consider?

Loren: In terms of physical size the tallest tower possible is usually the best because there is more wind as you go higher (and the power in the wind goes with the cube of the wind speed). In terms of capacity, a turbine with 600 kW to 900 kW would be on the small end of the range that would be considered for a project like this.

Q: Since farms can net meter up to 700 kW, could a project accommodate both behind-the-meter and grid-connected (wholesale) turbines? Also, should turbines in a project be size for existing power lines?

Loren: there is a size that is not economical for a given project. This can be determined from the economic model.

Q: Would they be centrally-located or spread out? It seems intuitive to put them together. How many turbines do we need?

Loren: that will be part of the model that is developed in this project. We don't know a lot about Cape Vincent yet but as we learn more it will become more apparent what the viable project options are.

Q: Do you have a detailed scope of work? Will there be reports? Is there a time line?

Loren & Chanda indicated that the scope of work, minutes of meetings, and other documents as they are developed could be put on the RC&D website. That could also be a place where people can submit questions.

The tower should go up in late spring (2010), but the time it takes to get a permit is an important factor.

Q: I've heard that wind energy varies not only in quantity but also in quality (that is, frequency). How much of this frequency-varying type of power can the grid absorb without causing problems?

Q: Owning lines means having to maintain them. We get ice storms here--how could we handle this maintenance?

Hester: Various municipal electric utilities back each other up. That is, they have agreements where crews come from cooperating towns and help each other out in the event of an ice storm or similar event.

Q (comment): For turbines that are built on an island, there are big problems with transmission.

Hester: big problems come with bigger projects. That might be an advantage of smaller projects.

Q: Do you have any data comparing noise levels, shadow flicker, avian issues with different turbine models? What's out there?

Kathy: with respect to noise, there is an IEC standard for noise testing that is followed by the manufacturers. It is the manufacturers that do these measurements. Even with this type of measurement though some kind of model must be used to account for the effects of atmospheric stability on the transmission of sound.

Q: Do you need a permit for a met. tower? Who makes the application (landowner, SED)?

Loren: The site prospecting has to come first, in order to provide the necessary documentation for the tower permitting application. But everything in the project depends on the met. tower data. If there is insufficient community support for the measurement tower, then there is insufficient support for a community-scale wind project.

Q (again): Say we decide early that we don't want wind, can we use the grant money for another type of community energy project?

Loren: No, we have a contract to do a feasibility study for wind energy.

Q: What are the next steps?

Loren: Site prospecting is the next step. For this we will use tax maps, distribution line maps, and a gross estimate of the wind resource. A number of options will be presented to the community. (Q: what if all the viable places already have contracts with someone else?) Hester: I think we have at least 3 sites. She would like landowners to have a choice.

The meeting was called to a close, with Chanda giving the website for the Black River-St. Lawrence RC& D website: www.brsrld.org . Again, people were encouraged to leave comments and questions on cards in the box provided.