



PO BOX 1447, OAK BLUFFS, MASSACHUSETTS, 02557, 508-693-3453
FAX 508-693-7894 INFO@MVCOMMISSION.ORG WWW.MVCOMMISSION.ORG

Minutes of the Commission Meeting Held on January 14, 2010 In the West Tisbury Emergency Management 33 New York Avenue, Oak Bluffs, MA

IN ATTENDANCE

Commissioners: (P = Present; A = Appointed; E = Elected)

P Bill Bennett (A- Chilmark)	
P John Breckenridge (E – Oak Bluffs)	- Katherine Newman (E –Aquinnah)
P Christina Brown (E - Edgartown)	- Ned Orleans (A – Tisbury)
P Peter Cabana (E – Tisbury)	- Jim Powell (A – West Tisbury)
- Martin Crane (A – Governor Appointee)	- Camille Rose (A - Aquinnah)
P Fred Hancock (A – Oak Bluffs)	P Doug Sederholm (E – Chilmark)
P Lenny Jason (A – Dukes County)	P Linda Sibley (E – West Tisbury)
P Jim Joyce (A – Edgartown)	P Holly Stephenson (E – Tisbury)
P Chris Murphy (E – Chilmark)	- Andrew Woodruff (E – West Tisbury)

Staff: Mark London (Executive Director), Bill Veno (Senior Planner), Jo-Ann Taylor (Coastal Planner/DCPC Analyst)

Attendees: Approximately fifty people, including: Carlene Gatting (Dukes County Commission), Carlos Montoya (Aquinnah Planning Board), Richard Toole (Oak Bluffs Planning Board), Mike McCourt (Edgartown Planning Board), Clarissa Allen (Chilmark Board of Assessors and Chilmark Site Review Committee), Mitchell Posen (Chilmark Planning Board), Gail Blout (Gosnold Board of Selectmen), Alan Wilder (Gosnold), Sander Shapiro (West Tisbury Energy Committee), Henry Stephenson (Tisbury Planning Board), Chris Fried (Tisbury Energy Committee), Richard Knabel (West Tisbury Board of Selectmen), Riggs Parker (Chilmark Board of Selectmen), Joanie Ames (West Tisbury Conservation Commission and Vineyard Conservation Society),

Christina Brown opened the meeting at 5:40 p.m.

1. WIND ENERGY SITING PLAN FOR DUKES COUNTY

1.1 Introduction and Presentation

Christina Brown explained that the purpose of the meeting is to begin gathering information on developing a wind energy siting plan for Dukes County. The Commission is looking for input into how to gather and organize objective information about wind.

Bill Veno said that MVC staff had recently completed a document “*Wind Energy Siting Plan for Dukes County - Draft Working Document - Version 1 – Background and Possible Approaches*”. It

was distributed to most participants in this meeting and was available on the MVC website. He gave a PowerPoint presentation summarizing the report (appended to these minutes).

- Martha's Vineyard is in a great location for wind with high quality local wind resources.
- A small number of large scale turbines would provide a much greater amount of energy than a larger number of smaller turbines.
- At this time there are no standards for siting large-scale turbines.
- The wind siting plan could serve several purposes.
 - It could help the MVC revise its DRI Checklist to require referral to the Commission of applications for wind turbines with regional impact, and provide criteria for evaluating these proposals.
 - It could help with the Wind Energy DCPC and associated regulations.
 - It could determine "appropriate scale" for offshore projects according to the requirements of the Massachusetts Ocean Management Plan.
 - It could be useful to towns in adopting regulations or in reviewing projects at the town level.
- The following are some of the factors to be considered in developing a wind siting plan
 - Wind Availability
 - Safety
 - Noise and vibration
 - Flicker Effect
 - Natural Environment
 - Economic Activities
 - Recreational Activities
 - Visual Impacts and Scenic Values
 - Cultural Values
 - Electromagnetism
 - Construction/Decommissioning
 - Operation and Maintenance
 - Setbacks
 - Others?

1.2 Participant's Comments

Richard Andre said the cabling that goes hand-in-hand with turbines needs to be considered.

Riggs Parker added that the method of cabling is important. If merely laid on the seabed, it poses a problem for fishermen doing dragging.

Christopher Wright discussed a number of issues.

- Lubricating oil and the possibility of leaking needs to be taken into account. Each turbine needs a 180 gallon tank, and there would one 40,000-gallon generator. Vegetable oils can be used instead of petroleum, but in the winter the vegetable oil can get denser in cold climates. There are companies trying to make synthetic petroleum and vegetable oils.
- The black-and-white graphics don't show the wind strength around the south shore of the Island. The strongest area is east and northeast of Cape Cod in federal waters. Floating

and deepwater wind turbines are being developed, and should be operational within three to five years, making turbines closer to the coast obsolete.

Another speaker added follow-up comments.

- As new technology is developed, adequate money for decommissioning and maintenance needs to be built in to proposals because there will be transition between old and new technology.

Robert Kenney asked about the relationship between the distance offshore and cost.

Dave McGlinchey, Vineyard Energy Project, responded with some statistics.

- The added cost of going offshore, which is primarily cabling, is \$1.0 to \$1.5 million per mile, which could be spread over a large number of turbines. Exact offshore costs are unknown.
- The floating technology is still in development, so it is not clear what those costs will be. The costs of monopoles, used close to shore, is better known. Oil rig technology is being looked at for turbines farther offshore and has seen some success in Germany. Floating turbines are on-line in Norway.

Riggs Parker added that another aspect of cost is the amount of wind that you get. Going farther offshore might be more expensive, but results in greater production of electricity.

Gary Harcourt said he would love to get beyond discussing the new technology because it will be changing. He asked planners to consider what the benefits are for the Vineyard, especially in terms of supplying clean power, and how the Vineyard can attain some of the benefits from projects.

Richard Knabel explained the West Tisbury School project.

- The West Tisbury Energy Committee just completed a four year process of trying to put a 250-kw wind turbine up at the West Tisbury School.
- After four years of effort, the school district hired a sound consultant. The sound report said the sound of the turbine wouldn't be acceptable to the community.
- We seem to be beset by an overarching sense of urgency and haste. There are a lot of unknowns.
- Land projects will impact town boards a lot more than offshore projects.
- It worries him that we're proceeding headlong into something that we don't have a complete understanding of. We should proceed cautiously.

Riggs Parker added that the predominance of resources come from wind energy developers and government. There's enormous money being poured into research, etc., by various parties, in return for what we're not sure. He asked the Commission to be very careful about looking at the sources of information for a particular bias.

Ken Wentworth, Aquinnah, made several comments.

- The report suggests that much information comes from either developers and government departments in favor of wind, or citizens groups opposed to it, and that it is hard to get objective information in between. He thought that there are more than these two types of

sources of information. Also, people with wind in their communities should be given a weight, as they can speak directly about the impacts.

- There's an idea that if we have the power lines come to the Island that somehow makes us greener. Either way, you have to have an oil or coal or nuclear plant to run the grid. If you're siting turbines next to us, we're sharing our burden either way, whether the lines come through the Island or not. He fails to see how if the electricity comes through the Island, that makes us somehow greener.
- We are being asked to take the words of developers that these projects will actually reduce carbon, but there is no guarantee that this will happen. Dollar for dollar, there may be other ways to reduce carbon more than with large-scale industrial turbines.
- The Commission's enabling legislations states that the Commission is to protect the Island from large-scale industrial development of any kind. There's been nothing that's come this close in any way. It seems as if there's a foregone conclusion that we have to do this. Germany doesn't do this within twelve miles of the coast, because they consider it too close.

Henry Stephenson said there are two issues that Tisbury is concerned with, for which the Commission could assist in developing regulations.

- The town has had some opportunities associated with municipal electrical demand. There may be one or two places where turbines might work on land. Landfills are usually located away from important viewsheds.
- The other concern is the way in which wind turbines can be developed on agricultural property, and the possibility that turbines can be developed as farm structures which don't have to conform to zoning regulations. The MVC could have standards for these projects. He'd be concerned about exempting a whole category of properties from project review.

Joe Brickett, Chilmark, added that MIT is working on tension leg platforms.

Christopher Wright added that professor Alex Slocum is working on this right now, endeavoring to harness both wind and wave energy. Floating turbines could easily power 1/3 of U.S. energy consumption. He encouraged people to watch the YouTube video on Alex Slocum's work.

Joanie Ames spoke about the importance of energy conservation, and referred to a recent op-ed article by VCS Director Brendan O'Neill.

- She hears very little about any current power plants being taken off line.
- She asked whether adding wind turbines is just going to feed our insatiable appetites for energy.
- Why the rush to build huge industrial complexes? All these projects put up around us will be obsolete in five years.
- She added concerns about lighting on the towers with strobe lights all over the horizon. We're one of the few places left on the eastern seaboard that's dark at night . . . where you can still see the Milky Way.

Linda Sibley said that the purpose of this workshop is to talk about how we're going to do the planning. What we're looking for is not just an expression of concern, but direction for what we

can do in our planning efforts to ensure, as much as possible, that all concerns are dealt with, including the need for energy conservation.

Doug Sederholm spoke about the Commission's role.

- What we can do as a community is develop a framework of regulation that allows us to control the development of wind energy here that is compatible with the culture, economy, and lifestyle here and with the values that we hold most dear.
- The Commission is not promoting wind energy. We're trying to develop a reasonable framework to deal with proposals.
- We have to focus on what we can do as a community within our geographic jurisdiction. We have little input on what happens in federal waters. But if we develop our framework in a responsible way, we may be able to control that part of our destiny that is within our jurisdiction.

Riggs Parker said that something the Commission might be able to work on is energy equivalencies, to show how much energy is saved with a given expenditure on wind turbines, solar panels, or energy efficiency.

Holly Stephenson added her thoughts.

- The idea that America is rushing to wind energy is ludicrous. We're way behind. We should use European countries that have developed wind power as sources for information.
- Energy conservation is absolutely critical. She wishes that this committee could be tied to conservation.

Gary Harcourt agreed that energy conservation is key. We might not be able take a coal plant off-line, but we may be able to prevent another from coming on-line.

Tad Crawford said he wants to build on the notion of conservation. He suggested that there could be an energy conservation contribution equivalent to the affordable housing contribution.

Peter Cabana suggested that, regarding conservation, everyone could contact their state representatives to reinstate funding for the Mass Energy Collaborative. The Cape Light Compact's funding allowed for an exceptional level of energy efficiency for 250 State Road, but that funding has now dried up.

Christopher Wright added that it's important for people to note that turbines will be allowed in federal waters and to consider how many turbines might be in waters close to the Vineyard.

Christina Brown explained that the Minerals Management Service has put together a task force to discuss wind turbines in federal waters. A delegation of 11 from Martha's Vineyard attended the last meeting. It's not clear how seriously MMS will take the Island or task force.

Nick Peck, of Stockbridge, said we just went through the ethanol debacle, where people hadn't done the math. We need to ask the government and private developers questions about long-term demand. Do we really need to generate all this electricity at 3 a.m. when we haven't developed a way to store it?

Henry Stephenson said it would be helpful to develop the siting plan and develop the criteria for siting. We might find that the number of potential sites on land is very limited. He suggested that we extend our planning horizon beyond the area under the authority of the Commission.

Tyler Studds, West Tisbury, said he would encourage a proactive approach, looking at wind from all sides.

- Benefits derived to the community should be considered, such as through ownership.
- Technical criteria as well as community-generated criteria need to be developed.
- He suggested engaging the public to develop a series of siting criteria whereby if we chose a particular set of criteria then we can come up with a series of sites that are possible.
- He would encourage a proactive and interactive approach to develop community siting criteria based on public input and high quality information.

Gary Harcourt emphasized the importance of community benefits such as the Vineyard Energy Project's work on a cooperative.

Peter Cabana suggested estimating future electrical demand as we transition to electric vehicles. Perhaps the state can help us make this estimate.

1.3 Sources of Additional Information

Participants made the following suggestions for additional sources of information.

- Visit, have discussions with, and/or develop sister relationships with communities that have installed turbines such as Vinylhaven (Maine) and Samsø (Denmark). We could invite representatives to come here and tell us what worked and what didn't. Visiting would allow seeing them in operation.
- Use information from the documentary being developed by Liz Witham and Ken Wentworth. They will visit these locations.
- Get information about energy storage, such as A123 Systems, developing new battery technology.
- The Consensus Building Institute has a successful track record dealing with disputes, particularly in terms of wind energy.
- Mass Audubon could help with avian data.

1.4 Involving the General Public

Christina Brown posed the question of how to get the general public involved. Lots of people are interested and concerned.

Patrick Philips suggested getting good information onto a website. We could use social networks and video to get community information out to enormous number of people. Socially spread that around through Facebook and Twitter. It's possible to do grassroots work through the tools that are available. The guidelines could be voted on at Town Meetings.

Riggs Parker suggested developing a tax-free foundation to accept money from people who wanted to conserve energy. The foundation's sole purpose would be fund energy efficiency or put solar panels for affordable housing. Let the people who would have otherwise put up wind

turbines donate the cost to conserve energy. Perhaps the MVC could do this. **Chris Murphy** said that the Commission may not be the appropriate vehicle for that work, but there must be an organization on the Island that could take that on.

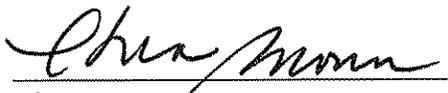
Dave McGlinchey said the Vineyard Energy Project might be the right organization where renewable energy and conservation go hand in hand. He said that the sense of haste is because there are real problems. We need energy efficiency efforts, but we also need to work on generating renewable energy.

Linda Sibley said it's virtuous of us to try to make affordable housing as energy efficient as possible, but solar energy is not conservation. So far, they [solar panels] are more expensive than wind turbines. In terms of our waste as a community, waste is being done by McMansions that are heated all year and that have heated swimming pools. For conservation, we have to look first at places where there is massive waste.

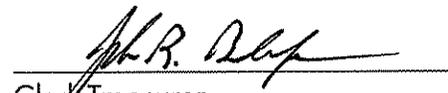
Holly Stephenson noted that the MVC is made up of nine elected and seven appointed Commissioners, who could liaise with the towns.

Christina Brown concluded by reiterating that the Commission and towns need to put together the wind siting plan. She would like to put together a small working group of commissioners, selectmen, and members of planning boards and energy committees to work on this.

The meeting adjourned at 7:05 p.m.


Chairman

5/10/10
Date


Clerk-Treasurer

5/20/10
Date