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# Wind Energy Plan for Dukes County

## Notes of Work Session with Planning Boards

*DRAFT - APRIL 4, 2010*

Wednesday, March 31, 2010 at 5:00 pm  
MVC Offices – 33 New York Avenue, Oak Bluffs

### Present:

Carlos Montoya	Aquinnah	Wind Work Group
Camille Rose	Aquinnah	Wind Work Group
Andy Goldman	Chilmark	Wind Work Group
Janet Weidner	Chilmark Planning	Wind Work Group
Mike McCourt	Edgartown Planning	Wind Work Group
"Skip" Tomassian	Edgartown ZBA	
Alan Wilson	Edgartown Planning	
Mark Wallace	Oak Bluffs Planning	Wind Work Group
Adam Wilson	Oak Bluffs Zoning	
Chris Fried	Tisbury Energy	Wind Work Group
Tucker Hubbell	West Tisbury ZBA	
Doug Sederholm	MVC Commissioner	Wind Work Group Chair
Christina Brown	MVC Commissioner	Wind Work Group
Mark London	MVC Executive Director	
Jo-Ann Taylor	MVC Coastal Planner and DCPC Coordinator	
Bill Venno	MVC Senior Planner	

### **1. Status of Wind Regulations in Each Town**

The group checked and revised the summary document prepared by the MVC about current and proposed regulations. See revised summary, enclosed.

### **2. Resources Used to Create Regulations**

For existing and proposed regulations, the group discussed the sources of information in drafting the regulations, the level of confidence that existing regulations address community concerns, and how they have worked in practice.

#### Aquinnah

- The regulation was first drafted three years ago. It passed MVC conformance, but didn't get a 2/3 vote at town meeting. It was subsequently reorganized and some language was changed.

- The bylaw is based on internet research. In some cases, they called up people in various localities and asked if they were satisfied with their bylaws. They circulated a web questionnaire to town residents and got about forty responses.
- Setbacks: In establishing minimal setbacks, some people favored a more liberal approach such as requiring a setback equal to the height of the turbine, perhaps with a little extra distance; others wanted a more conservative approach with greater setbacks. They compromised and took an average. As a result of more recent information about noise, vibrations, and safety, they are now thinking that the minimal setbacks should be greater. A utility scale turbine collapsed in New York State two weeks ago. Nantucket and Hyannis had recent failures, with blades flying 150'-200'. Turbine blades are now made of lighter weight carbon fiber and fly farther distances.
- Noise: They had difficulty getting a handle on it. They required meeting the state standard and also have requirements to address low tonal noise. They won't know this is okay until it happens. Aquinnah has a high ambient noise level because of the sound of the surf, audible from most of the town.
- They spent a fair amount of time dealing with how to handle communal windmills, including related legal issues.

#### Chilmark

- The Town re-examined its wind bylaws after approving two turbines two years ago.. After a discussion with the ZBA and a public hearing in fall, the prepared proposed amendments for the upcoming April 2010 town meeting. Subsequently, the ZBA got two new applications, was concerned that the proposed bylaw was too permissive, and it was taken off the warrant. The Town set up a wind energy committee that is working on it, made up of Billy Megan, John Flender, Kent Healy, and Wendy Weldon.
- Noise is a big issue. People have said that they don't want to hear something like the Yoga Barn's turbine.
- They are aiming for special this fall or next April.
- There were two applications, and both were withdrawn. On Middle Road, the owner of 60-acre applied for a turbine located relatively close to the edge of the property line in order to maximize wind resources. He did notification within 1000' and put up a tower to indicate the height as proposed in the bylaw amendments. At a hearing last week, the ZBA held a straw vote that indicated that it was not favorably disposed largely on the basis of abutters complaint of visual, noise, and electromagnetic impacts; the applicant withdrew. The applicant for the other project also withdrew.

#### Oak Bluffs

- The journey started on 2006 when Gary Harcourt applied to put a turbine at his home. It had to go to the ZBA because it was higher than 70'. At the time, the setback was the turbine height plus 20' (to check) and he had letters of support from neighbors. The technology was so rapidly changing that he came back to the ZBA several times with changed proposals re nacelle, size of blade, etc..

- Adam Wilson worked on the draft that will go to town meeting in April. He used Gary Harcourt as the main resource person, as someone offering expertise across the nation. He also used information from the Wind Energy Association and the US Department of Energy, and he looked at Aquinnah's regulations.
- Although the proposed bylaw allows turbines as of right, there is a limited scope for wind energy development in Oak Bluffs because most of the lots are so small.
- The critical issue was the minimal setback to make sure that a collapse would not affect an abutter's property.

#### West Tisbury

- The planning board proposed a rewrite of the bylaw a year ago. The planning board pulled it from the 2009 warrant and appointed a seven member committee to work on it. It was largely drafted by Simone Desourcy based on bylaws around the Cape. Worked on it this winter.
- Some people thought the bylaw should allow turbines as of right and others favored a very restrictive approach. They ended up in the middle.
- They took out the height limits and regulate by setbacks. They took out discussion of viewsheds from previous review criteria.
- They considered using noise requirement – limiting each octave band to 3 db above adjacent bands, but concluded that it was too complicated so they threw it out.
- Originally, the proposed bylaw said ZBA would have to make finding that the turbine would a) not interfere with abutters' use of property, and b) would not significantly detract from important public viewsheds. Tucker and others felt it gave too much power to neighbors and this was taken out. They left language requiring that applicant minimize the visual impact of "components", so if there is an issue in having a turbine in a viewshed and it could be moved to help a neighbor, that could be done.
- The proposed bylaw now requires a site visit and expanded notification.
- The review criteria for all special permits as set out by the state allows for denial on the basis of visual impact.
- The previous draft of the by-law required going to NStar to tie into grid before going to the ZBA. Now this would take place after ZBA approval as a normal necessity of the project rather than as a stipulation of the town's permit.

### **3. Existing Wind Turbines**

The group reviewed existing turbines, including how the town approval process went and subsequent reaction. The comments are from the town representatives attending the meeting and are not necessarily comprehensive. It was felt that additional research on this would be useful, starting by getting information from installers and the building inspector. There was discussion about whether it might be useful, in a second stage, to seek feedback from a selection of abutters.

There are 12 turbines presently installed.

- Aquinnah: There are no turbines.

- Chilmark: There are two turbines. Both went up two years ago under the current bylaw. There have been complaints about the noise and visibility of the one off Old Farm Road (the owner is Green). They had put up mockup, and it was moved in response to abutters' comments, but there was no public notice of the new location which turned out to also have problems. The turbine had significant noise and visual impact on a neighboring property that was not an abutter and therefore had no standing.
- Edgartown: There are two turbines. The first turbine on the Island was built on Cape Pogue, at what is now called the Windmill House, by someone using plans from Popular Mechanics and old helicopter blades.
- Oak Bluffs: There are two turbines, the one at the High School and Gary Harcourt's. There have been noise complaints about the High School turbine.
- Tisbury: There are no turbines.
- West Tisbury: There are six turbines. There are now six. Most are 2.5 or 5.0 kw, and there have not been noise or shadow flicker problems with these small ones. There have been noise complaints about the 10kw turbine at the Yoga Barn, which subsequently had the turbine replaced. It is on a 17-acre parcel, and is set back 165' from the road. Since it is in the Island Road DCPC (200' from the road), it should have been reviewed by the ZBA before approval, but was not sent; it went to the ZBA a year later and the board issued a variance.

#### **4. Discussion**

The following comments were made by individuals.

- We have to be aware that information from installers or industry sources is not objective.
- Are the DEP's noise requirements adequate; 10db above ambient is quite loud, especially for an intermittent noise that is going on and off every day.
- Noise is subjective. Home emergency generators create a lot of noise, even if muffled, and it is interesting that there are never any complaints about them.
- We should clarify that a town can be more restrictive than the DEP's noise regulations. Aquinnah draft bylaw does.
- It may not be clear whether or not there is a noise problem until after a turbine is up. Having a provision requiring an owner to shut down or take down a turbine that exceeds regulations would place a significant risk on the owner.
- Small turbines don't offer much public benefit and an individual doesn't have the right to impinge on quiet enjoyment of an abutter's property.
- The Woods Hole Research Institute has had problems with shadow flicker, which hits the building and disturbs workers. The turbine is turned off at times.
- Are towns able to address birds and wildlife issues, or should this be left to other entities? Zoning cannot deal with wildlife for issuance of an as-of-right permit, but certain areas such as avian flyways could be excluded based on this type of concern. This could also be a criterion for issuance of a special permit.
- In Chilmark, they discussed the possibility of a minimum lot size, say 5 or 10 acres, to help limit the impact on abutters. In Edgartown, there was a large lot (perhaps 100 acres),

largely open meadow with lots of birds. There were concerns that where they wanted to put the turbine was in an important waterfowl area, so the turbine was put up in a slightly different location.

- A ZBA gives considerable attention to abutters, but after weighing the benefits and detriments, has the flexibility to approve a project even though an abutter objects. With a special permit, it is desirable that regulations allow for some flexibility and subjectivity by the reviewing board.