



## Orleans Renewable Energy / Wind Power Committee

### Minutes of Committee Meeting April 21, 2009

TOWN OF ORLEANS  
TOWN CLERKS OFFICE  
09 MAY 26 PM 3:47

The April 28, 2009 meeting of the Orleans Renewable Energy/Wind Power Committee (REWP) was called to order at 4:02PM in the Nauset Meeting Room of the Town Hall. Present were Chairman Allen Kolchinsky, Committee members, Dave Hubbard, Ken Rowell, Dick Philbrick, and Mary Jane Curran. Bob McCoy was absent. BOS liaison John Jannell was present. Others present: John Hodgkinson.

REWP Committee did not have minutes for April 14 meeting.

#### Old Business:

**Energy Survey** - Discussion centered on what to do about the survey. Plans are to putting it on Town Website with having publicity about it to explain it for the public. Revised the form and Ken will complete the revision for the website and possible distribution at the Post Office and Transfer Station.

**Draft Resolution** - A resolution by Bob McCoy has been changed to a Recommended Action. This pertains to the Committee and it's stand on the placement of a wind turbine on the Town watershed. Action calls for addition information to be collected. Recommended Action is attached.

Long discussion on the action took place. Bob wants Town action to move forward. Others thought the action should be held until the Final Report. John Hodgkinson commented that the action should be completed without mention of the municipal model. Comments on whether there was money to completed the additional work was raised. Money should be left from previous Committee. As much as \$20,000+ should be available. Committee should get commitment from the BOWC on the wind turbine in the watershed. Consensus was to table until after BOS authorizes membership in the Cape and Vineyard Electric Cooperative(CAVEC).

**Future Energy Committee** - Mary Jane Curran and Dick Philbrick wrote up a "Mission Statement" for a future energy committee for the Town. This will be corrected after a few changes with additions and deletions. Allen asked for Committee to review the Town Charge for present Committee and asked if committee members present would be willing to continue until new Committee is organized. All present responded with an affirmative.

**Wind Workshop** - Allen stated that the workshop was very positive(7<sup>th</sup> annual land-based wind workshop). Mr Steven Clarke of the Mass. Dept. of Energy Resources was present.

**Municipal Ownership Model** - No information on attempts to obtain pro-forma data on a Cooperative-owned facility.

Adjourned at 6:00PM

David L. Hubbard, Clerk

# REWP COMMITTEE

## RECOMMENDED ACTIONS ON

### WIND TURBINE GENERATOR INSTALLATION

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After looking at all of the original wind sites and additional wind sites throughout the Town, the Committee recommends that a single turbine be installed on the site known as Site 1, in the Orleans Watershed.

After looking at the facility types proposed in the original two turbine project, and touring the watershed and meeting with staff from the Water Department, the Committee recommends that a 600KW class or similar turbine be installed on the recommended site, Site 1, in the Orleans watershed.

After reviewing the published report by the engineering firm of Weston and Sampson, the Committee understands that a municipally owned and operated 600kw turbine is a viable project on Site 1. The Committee recommends that the Town move this project forward for development.

After requesting a detailed financial pro forma for a Cape and Vineyard Electric Cooperative (CVEC) owned and operated turbine in the Orleans watershed and receiving none, the Committee realizes it will conclude its charge without this important information. Therefore the Committee recommends becoming a Cooperative member to learn more about the organization and become an active member. At this time, the Committee does not recommend that the above recommended facility in the Orleans Watershed be owned and operated by the Cooperative.

The Committee also recommends that if any of the variables that led the Committee to this recommendation change, such as electrical rates, net metering legislation, and regional ownership opportunities (CVEC), that the Board of Selectman should re-visit this recommendation and modify, if necessary, so that this recommended action is in the best interest of the Town.

The Committee recommends that the BOS authorize the additional work necessary to develop this project. Funding for this feasibility work can be achieved through the available balance (\$18,533) of the original 2003 article for the feasibility of wind in the watershed. This additional study should include specifications on access, a purchase strategy along with accounting recommendations, a shipment and transport plan of the turbine to the site, and details on the cost of the assembly and the necessary electrical connections. This effort would be used to prepare documents for local, regional and state approvals of the project. The goal of the further study is to obtain the necessary documents that will lead the Town to a turn- key purchase, installation and operation of a turbine. Specifically, the following should be looked at more by a Town Board, staff or outside expert to provide some answers:

#### *Access to Site*

*The Committee recommends that a new site plan be prepared so that it can be used for local approval of the project.*

### ***Financing Strategy***

*The Committee recommends an investigation of how best to fund the initial 5 years of the project. Zero interest construction loans, free cash, and reserve accounts should all be examined to determine the best way for the Town to finance the project.*

*Under the Green Communities act provisions are detailed for the establishment of an enterprise fund. As the project creates revenue via avoided electrical costs, the Town would like a detailed strategy on how to manage electrical accounts that are used to create revenue for the project through virtual net metering. The strategy should include which Town electrical accounts are to be used and show how the net benefits will be redistributed.*

### ***Assessment of Risks***

*The Committee recommends that an assessment be made to estimate the costs/risks to the town in the event of two worst case equipment failures. Although early failure is not expected, the Committee would like a better understanding of some of the costs associated with a worst case scenario. The first scenario would involve description of costs to the town of an "in-warranty failure" such as a gear box failure that would necessitate the lowering of the nacelle to ground level for repair. The second scenario would involve description of costs if the same event occurs "out-of-warranty". Availability and cost of insurance to cover such failures should be included in the analysis. This work would also include the financial impact due to the out of service time of the failures.*

### ***Operation, Maintenance, and Management***

*The Committee recommends an identification of possible operation and maintenance plans together with an evaluation of these plans. At a minimum these should include credible Town directed options as well as the turn key purchase of operational and maintenance service from qualified suppliers.*

Finally, because the facility is located in the Orleans Watershed and under the jurisdiction of the Board of Water Commissioners, the Committee recommends that the project be referred to the Orleans Board of Water Commissioners. In doing so we anticipate they would have the support of the Board of Selectman in following up with the additional work needed and moving the project forward as an Orleans Water Department capital plan item to be submitted in FY10. In the event that the Board of Water Commissioners do not accept this recommended project, the Committee recommends that the Board of Selectman support this project at an alternate site in Town if feasible.