

**MINUTES
ALTERNATIVE ENERGY COMMITTEE
MEETING OF JULY 29, 2009**

Committee members present: Ron DiPippo (Chair), Nathalie Dias, Paul Lopes, Raymond Medeiros, Saul Raposo, Arthur Larrivee, Kevern Joyce, Roger Race.

Committee members absent: Ed Iacaponi (excused), Joseph Sousa (excused).

Others: Robert Barboza, Ken & Joan Castino, Kathryn Carvalho, Roseanne O'Connell, Margo Moore, Tom Kirby, Lara Stone and Bridget Earle.

Chairman DiPippo called the meeting to order at 7:00 P.M. on Wednesday July 29, 2009.

1. Approval of Minutes.

A motion was made and seconded; it was voted unanimously to accept and approve the Alternative Energy Meeting Minutes of July 1, 2009.

2. Presentation and Discussion of Progress by Atlantic Design Engineers on the Town-funded Feasibility Study.

Chairman DiPippo presented a Powerpoint presentation that gave the status of studies on (1) noise, (2) shadow-flicker (S-F), (3) balloon tests-photosimulation, (4) FAA-MAC applications, and (5) preliminary site plans. The entire presentation may be seen on the AEC web page at <http://www.town.dartmouth.ma.us/altenergy.htm>

- (1) The noise study has concluded the measurement of ambient noise at three receptors on the west side of the DPW property, close to nearest neighbors. The background noise is being correlated with wind speed data taken contemporaneously at the UMass Dartmouth MET location. The noise generated by the wind turbines will be calculated and compared to the background noise to be sure that the 10 dBA over ambient is not exceeded at the property line.
- (2) Shadow-flicker study is complete. Contour plots for both 80-m and 100-m towers were presented. The taller tower exposes more locations to potential S-F, but many of these sites may have obstructions such as trees, bushes, or other buildings. Detailed studies can be conducted for those places that seem to have higher exposures. The table on the next page summarizes the two situations.
- (3) Photosimulations are complete. Fourteen vantage points were selected and the results of several of them were presented. These confirmed that the 100-m turbines would be more visible than the 80-m turbines, to no one's surprise.
- (4) The FAA and MAC applications for clearance have been filed. The FAA decision should be received within 90 days of submittal, and the MAC approval is expected in 2-3 weeks.
- (5) The preliminary site plans are being developed as part of the final report.

Number of residences or businesses potentially impacted by shadow-flicker. Trees, bushes or other structures may prevent shadows from reaching locations. West and East refer to locations relative to the North-South axis of the turbines. Based on plots dated July 27, 2009 developed by Atlantic Design Engineers. Counts made by R. DiPippo - Accuracy estimate: about +/-2

80-m TOWERS			100-m TOWERS		
0-9 hours per year (0-0.10% of year)					
West	East	Total	West	East	Total
64	180	244	69	279	348
10-19 hours per year (0.10-0.22% of year)					
West	East	Total	West	East	Total
5	3	8	11	7	18
20-29 hours per year (0.23-0.33% of year)					
West	East	Total	West	East	Total
1	0	1	1	0	1
>30 hours per year (>0.34% of year)					
West	East	Total	West	East	Total
0	0	0	0	0	0
Total		253	Total		367

3. Consideration of pros/cons for the 80-m vs. 100-m tower cases.

During the discussion, the AEC members were polled as to their current opinion regarding which height tower should be favored. The membership favors the 80-m over the 100-m by a 6-2 margin. Reasons in favor of the 80-m tower included: (1) less shadow-flicker impact, (2) less visibility, (3) not that great a reduction in monetary gain for the town, (4) 80-m is already going to be a significant height for New England so why push the technology to 100-m. Reasons in favor of the 100-m tower included: (1) better economics, (2) you can't build a wind turbine too tall since everyone who builds one wishes they had built it taller, (3) shadow-flicker will probably not be as problematic as the sheer number of residences might indicate, (4) the economic study by the FinCom is probably on the conservative side and the economics may turn out even better than they predict.

4. Other business

It was decided that August 4 was too close a deadline for us to complete an application for the next round of CREB funding (near-zero interest Clean Renewable Energy Bonds). We will go after the following round.

After we receive the ADE feasibility report, a firm decision will be made regarding the height question, and a Special Permit will be applied for from the Special Permit Granting Authority (the Select Board) in accordance with Section 34 of the Town Bylaws.

5. Public comments and questions

Two members of the audience expressed the opinion that the 80-m towers would be preferable. Some questions were posed about the methodology of conducting the noise study and the AEC members attempted to explain what ADE is in the process of doing.

After a motion was made and seconded, it was voted to adjourn the Alternative Energy Committee meeting. With no further business to discuss, the Chairman declared the regular meeting adjourned at 8:48 P.M.



Attest:

Ronald DiPippo, Chairman