Cape Elizabeth Alternative Energy Committee Minutes: November 13, 2008

Present: Wyman Briggs, Ted Hawkes, Ernie MacVane, Bill Slack, Dave Whitten

Absent: Peter Cotter, Peter Ingraham, Sara Lennon, Alan Lishness

Guests: Rick Fontana, Steve Linnell

I. Approval of Meeting Minutes

Minutes for October 9, 2008 meeting were unanimously approved

Energy Audit

Ernie will set up interviews on November 20, 3:00 to 4:30 at Town Hall with members of the committee, Town Manager and School Board representative.

The group met to discuss the proposals and is proceeding with process to conduct interviews. Town has the flexibility to pay for the completed audit and perform the recommended improvements on its own, utilize the auditor's plan for performance contracting, or a combination of the two.

The Report

Wyman tracked down Chris R. and got his permission to use his report as the basis of the final report. Wyman has made some initial changes to the report by adding some Wind information including what the Town has done regarding siting of windmills.

Wildlife, noise, natural beauty issues are often raised regarding the siting of windmills. Wildlife concerns generally stem from experience with older equipment. Early on, towers were often the lattice type which accommodated nesting birds. Predator species were subject to being hit by the slow moving blades when they flew in to feed. The use of mono-poles has largely removed this threat. Noise has been markedly reduced as well, especially with larger turbines. Recommend one 50 KW turbine.

For testing, it is possible to use one pole with two anemometers at different heights (say one at 100' and one at 125') to show the potential benefit of going higher.

Herb Strout has given permission to mount an anemometer on an existing tower. A contractor gave an estimate of \$15,000 to put up a 120' tower with an anemometer.

The Committee would like to involve schools in helping to identify windy locations in the town. A number of different methods were discussed.

Bill has reconstructed Chris' calculation tables on Net Present Value (NPV).

It was asked whether it would be possible to get a copy of the building plans for the high school.

Rather than NPV should do a Break Even analysis to give the Council an easier way to see how much things need to cost to be feasible.

Discussed pros and cons between closed and open loop geothermal systems.

Ernie to look at assumptions on Geothermal heat pump analysis.

Dave look at assumptions on solar thermal. Collect

Need to ID grants and incentives for the report.

Ernie to send Bill information on propane and NG conversion costs.

Contact Peter about cost of NG pipeline

Need better headings for tables.

Standardize the results to the Least Favorable, Neutral, Most Favorable Matrix.

Rick presented some assumptions about combining ground source heat pumps with cogeneration to even out the electric load and waste heat losses.

Talked about using wastewater treatment effluent for capturing waste heat rather than drilling wells.

Add LED section

Parking lot section of the report for ideas that need further study.

One page summary for comparing all the technologies.

Doodle Next meeting week of Dec. 1.