

**Cape Elizabeth Alternative Energy Committee  
Minutes: March 25, 2009**

**Present:** Wyman Briggs, Alan Lishness, Bill Slack, David Whitten, Ted Hawkes, Sarah Lennon, Ernie McVane, Kathy Ray

**Absent:**

**Guests:** Rick Fontana, Mike McGovern, Ann Swift Kayata, Penny Jordan  
CM3 – (Mike Hanson, CM3 team)

**I. Approval of Meeting Minutes**

- Approval for February meeting minutes was delayed until the April meeting.

**II. Presentation of Audit Findings by CM3**

- Mike Hanson of CM3 presented the results of audit for school and municipal buildings. Hard copies of the audit report were presented to the committee. The major findings as presented by Mr. Hanson include:
  - CM3 said that the school and municipal buildings were managed very well and that they took it as a challenge to find meaningful energy conservation measures.
  - The following buildings were evaluated...MS/Pond Cove School, High School, Public Works building, Community Center, Police Station, Transfer Station, Town Hall, Library. High school and MS/Pond Cove School are the largest energy consumers and have the greatest potential for energy savings thru conservation.
  - CM3 believes that there is \$2,663,792 in energy conservation measures (ECM's) that can be considered at the town/school buildings. The major ECM's in terms of cost and savings include the boiler replacement/biomass upgrade at high school and lighting replacement. CM3 calculated the following savings assuming that all of their proposed measures were undertaken:

Project Cost	Term	Annual Debt Service	10 yr Cumulative Savings
\$2,663,792	10 yr	\$340,798	\$32,382
Project Cost	Term	Annual Debt Service	15 yr Cumulative Savings
\$2663,792	15 yr	\$252,317	\$2,000,954

With the following assumptions:

- A finance rate of 4.75%
- A utility escalation rate of 5%
- Annual payment is made in arrears
- A cost per gallon of oil is \$2.75
- CM3 evaluated alternative energy options and believes that the lengthy payback would prohibit most options (with the exception of solar hot water as supplemental heating for pool)
- CM3 did not evaluate wind because they understand that the AEC is commissioning independent studies for measuring and analyzing the wind.
- CM3 recommends common energy conservations measures for all buildigs including;
  - Lighting retrofit

- Upgrade automatic controls
  - Boiler Controllers
  - Management of plug-in devices
  - Energy/education awareness
- At high school CM3 recommends that the boiler be replaced. The existing boiler is 30 years old, and is oversized. It is end of its useful life and should be replaced with a smaller more efficient boiler.
- At high school, CM3 recommends installation of a biomass boiler to supplement heating system.
- CM3 indicated that they did not have any luck with discussions with Unutil regarding bring a natural gas pipeline to service the schools and municipal buildings. If gas could be brought economically to the town center, then some of their analysis would change, particularly regarding cogeneration technology.
- The report includes a detail analysis for each building.
- The committee thanked Mr. Hanson and his team for their work and committed to review the detail report and provide feedback through Ernie to CM3.
- At that point the CM3 adjourned to allow the committee to attend to other meeting agenda items.
- **The committee to review the audit report in detail and provide any feedback through Ernie to CM3. Mike Hanson will provide breakout of the energy conservation measures for each building with cost, savings and payback provided (this has been provided, see attached).**

### III. Council Workshop

- Mike McGovern stated that the Town council recommended that the committee meet at workshop to formalize recommendations from audit as well as AEC's report presented to council in January. Mike suggested that a May 14 date might be an acceptable with Council. Mike later confirmed with Council that May 14 is indeed acceptable.
- **AEC to formalize audit and committee alternative energy recommendations at council workshop on May 14.**

### IV. Wind Measurement Progress

Wyman re-capped on-going activities related to wind turbine development.

- Dave & Wyman met with Herb Strout. Herb is very supportive of our wind project and will allow the town to set up wind measurement (anemometer) on cell tower off Spurwink. Tower is 180 ft tall.
- This location is considered acceptable (close enough) by our wind consultant (Jonathon Markey) for providing appropriate data either for the high school site or the transfer station site. Mike McGovern requested that we make sure that an appropriate agreement is created between the Town and Mr. Strout to allow the necessary access to the installed anemometer(s).
- **Wyman to work with Mr Markey to develop appropriate agreement for access rights to cell towers for anemometer**
- Wyman has proposal for \$3,500 from Mr. Markey to install and analyze two anemometers on the cell towers. This does not include the cost of the anemometers which is an additional \$1,500. Mike indicated that \$5,000. is within the AEC budget that

he can authorize based on previous authorizations from Town council. Mike requested a copy of the agreement with Mr. Markey.

- **Wyman to provide copy of agreement for Mr. Markey's wind engineering consulting service to Mike McGovern.**

## **V. Stimulus Money**

- Mike provided a very good summary of how the American Recovery and Reinvestment Act of 2009 (Stimulus Program) might help alternative energy funding for Cape Elizabeth. Although there is \$16.8 billion dedicated to Energy efficiency and renewable energy, most of that amount will not be available to our community because our town population is less than 35,000. There will be some smaller grant opportunities that Mike identified that we can apply (compete) for:
  - Federal...\$8,000,000 in competitive grants (nationwide for energy efficiency and improvement upgrades)
  - State
    - \$1,000,000 for energy efficiency engineering studies
    - \$3,000,000 to install energy savings measures (up to \$15,000)
    - \$2,000,000 energy demonstration technologies
    - \$1,500,000 LED traffic signals
    - \$1,000,000 renewable Energy resource Grant for schools and communities
    - \$500,000 solar thermal, photovoltaic, and wind rebate program
    - \$200,000 expand the anemometer program
- **Bill agreed to contact Efficiency Maine to see if there may be renewed potential for Cape to receive a grant for the meteorological stations. Also to research the grant opportunities listed above.**

## **VI. Action Items/Schedule for Next Meeting**

- **The committee to review the audit report in detail and provide any feedback through Ernie to CM3. Mike Hanson will provide breakout of the energy conservation measures for each building with cost, savings and payback provided (this has been provided, see attached).**
- **AEC to formalize audit and committee alternative energy recommendations at council workshop on May 14.**
- **Wyman to work with Mr Markey to develop appropriate agreement for access rights to cell towers for anemometer.**
- **Wyman to provide copy of agreement for Mr. Markey's wind engineering consulting service to Mike McGovern.**
- **Bill agreed to contact Efficiency Maine to see if there may be renewed potential for Cape to receive a grant for the meteorological stations**
- **The next meeting will be the 2<sup>nd</sup> or 3<sup>rd</sup> week of April. Bill will send around a Doodle.**