

## TOWN OF CAPE ELIZABETH

### MEETING Minutes

**MEETING: Alternative Energy Committee 2016**

**DATE: Tuesday, August 16, 2016**

**TIME: 7:00 p.m.**

**PLACE: Town Hall: Jordan Conference Room**

**Welcome/Roll Call 7:05 pm**

Julia Bassett Schwerin, Chairperson

Members Present

Members Absent

Rick Smith

None

James Masi

Laurenz Schmidt

Wes Doane

Greg Market, Director of Facilities

Patty Grennon, Town Council Liason

### Public Comments

No members of the public were present.

### Approval of Minutes from Previous Meeting held July 6, 2016

Ms. Grennon noted that the minutes did not reflect that the committee motioned (Mr. Doane), seconded (Mr. Smith), and fully discussed that due to the maturity and applicability to the community needs at this time, and after careful consideration of the range of alternative energy technologies available on the market today, that the Alternative Energy Committee moved to focus on solar electric and solar thermal technologies for the initial project recommendation to the Town Council. The committee voted unanimously to approve this decision at the July meeting. The committee agreed to accept the minutes with this fact added to the amended minutes for July, 2016.

### Reports and Correspondence

#### Old Business:

1. Grant research and presentation
  - a. Public Utilities and Efficiency Maine (update to Mr. Doane's presentation by Ms. Schwerin)

Efficiency Maine Trust, the State energy reduction program sponsors, has Prescriptive incentives under the Commercial & Industrial sector which includes municipalities. A prescriptive incentive is one where the upgrade of replacement of a system comes from a prescribed list and is installed by an approved contractor as opposed to a categorical rebate that is open-ended. We can take advantage at any time of the following programs that got new funding in June and July:

1. Heating: high efficiency boilers, furnaces, variable refrigerant flow systems, ductless heat pumps, heaters and controls. (July 1)
2. Lighting: high-efficiency fixtures and lighting controls, e.g. recessed LEDs occupancy sensors, etc. (June 1)
3. Cooling: heat pumps, variable refrigerant flow systems, programmable thermostats. (July 1)

4. Compressed Air: high efficiency systems & controls. (July 1)
5. Commercial Kitchen: high efficiency ovens, broilers, griddles. (July 1)

We should try to take advantage of these while funding lasts. We should keep in touch with Efficiency Maine to be informed immediately when other funding opportunities for Municipal energy projects become available.

b. National Renewable Energy Labs (Mr. Masi)

Mr. Masi will find out what projects they are currently looking to fund. Maine Technologies Initiative (MTI) has \$50k grants, which can include education, and which can get a foot in the door for larger, subsequent DOE grants as a proof of concept.

However, Mr. Smith suggests government funding may not be needed if we enter a Power Purchase Agreement, whereby another third party puts up the capital for the solar arrays and charges the town a fixed rate for electricity for a certain period in which they recoup their investment plus profit.

Mr. Masi recommends looking for some novelty in a project MTI could fund. Rutland, VT was a perfect system example. It doesn't have to be radical, as the most cost-effective system is off the shelf. But if employed in a novel way could get funding.

Discussion: perhaps the town does not want to showcase bright ideas, but principally pursue money-saving. There may be a 5 MW peak for permitting purposes to avoid a CMP queue.

Mr. Masi created a spreadsheet with a cost/benefit analysis formula built in for the committee to use, not including inversions. The committee welcomed the tool and promised to use it prior to the next meeting.

Mr. Smith recommended inviting vendors in to pitch their approaches to what we could do as a way to get numbers on projects such as Power Purchase Agreements and self-operating systems. Discussion: vendors want to sell, so they promote projects that benefit them, not objectively analyze a customer's needs, and that since we are charged with representing town needs, we should be pressing on with determining those needs and then issuing RFPs. Perhaps the two approaches can work together. The motion was made by Mr. Smith to invite three vendors in; Mr. Laurenz seconded. The motion carried.

2. Energy Audit Providers and Costs (Mr. Marles)

Mr. Marles reported contacting Siemens and Harriman for energy audit cost quotes, which were in the \$30k - \$50k range just for the schools. The whole town building complex could be \$45 - \$55k. Siemens would fold the cost into a Performance Contract, which, similar to a PPA, means the vendor has a long term contract to provide services, however, the town tends to avoid such agreements involving capital expenditures because it is far cheaper to use its own capital than to pay the middle man's costs and profit as well.

3. Zoning conflicts with using large tracts of open town land for a solar array (Mr. Smith)

Mr. Smith reported he found no mention of solar arrays in the zoning ordinances. All say if a specific use is not mentioned it is not allowed. However, municipal functions definitions include activity with utilities including wind energy, and so could be interpreted to include solar, however, it takes 1-6 months for planning board approval for something like a small solar farm on town land. Such uses should be explored and reviewed by the planning board. No specific action was taken.

4. Ratification of revised CE Renewable Energy Draft Pathway from last meeting (Mr. Masi).

#5 was moved down to 11, and the committee seeks Town Council approval of the pathway document in December. # 11 will add present recommendations to Town Council to accept and then pass to workshop, a timeline for the pathway should be added.

**New Business:**

Mr. Marles was asked to clarify where the needs for energy cost reduction in the town are most acute for the creation of a problem statement table. Discussion of Competitive Energy bulk energy purchase relationship followed.

Competitive Energy handles the town's competitive utility bid process, whereby bulk energy purchases get a lower price. We are currently in a 2 year contract based on electricity supply, @ \$0.0534, not delivery, another \$0.07. Propane and heating oil is also under this agreement. Scarborough, Gorham and Windham joined with Cape in the bulk purchase. Water is not included as a biddable commodity. The fire Station is 100% propane. The library is not part of it due to when it came online. Normally we use more than 30k gallons. We can switch between oil and propane in the pool.

Conducting preliminary cost/benefit analysis (Mr. Schmidt with Mr. Masi). Mr. Masi presented a spreadsheet for review. Discussion tabled until next meeting to give time for members to use it.

Update on working with local schools and students and working with CE citizens and local communities (Ms. Schwerin) including approach, timetables and deliverables for next tasks. Progress is underway. Discussion of working documents tabled until next meeting

Update on working with government agencies and foundations (Mr. Masi with Mr.Schmidt) including approach, timetables and deliverables for next tasks. Discussion tabled until next meeting, except for NREL discussion above.

Update on working with vendors and contractors (Mr. Doane with Mr. Smith) including approach, timetables and deliverables for next tasks. The subcommittee met and selected the following vendors: Revision Energy, NextEra, Borrego Solar, IGS Solar, SunGauge Financial (PPA), and Beltane (co-founded by Mr. Schmidt.)

Homework for next meeting: draft vendor questions; Ms Schwerin suggested they be multiple choice and quantitative (rather than narrative) for comparative purposes, and that there should be written power consumption and price bases. No vendors should be contacted informally.

Possible biogas project discussion (Mr. Smith) was withdrawn.

**Any other new business**

A motion was made by Mr. Doane and seconded by Mr. Smith, to create a template from Mr. Marles for vendors to prioritize energy cost reduction needs; motion carried.

Mr. Schmidt moved for Mr. Smith to attend a PPA negotiating seminar put on by an international consultancy to be paid for through the committee budget unless other sponsorship could be found; Mr.Masi seconded; motion carried.

**Next Meeting**

Date/Time/Place 20 September 2016, 6:30 pm., Jordan Conference Room, Town Hall. **Please note new start time.**

Possible Agenda Items TBD.

**Public Comment**

No public in attendance.

**Adjournment**

8:56 pm