

**Wellfleet Energy Committee
Minutes of the Meeting of June 20, 2016
Council on Aging
7:00 p.m.**

Present: Richard Elkin, Charles Cole, Lilli-Ann Green and Jeffrey Tash

Guest: Robert Shapiro

Chair Elkin called the meeting to order at 7:00 p.m.

A request to tape record the meeting by Lilli-Ann Green was made and the request was granted by the Wellfleet Energy Committee (WEC) Chair, Elkin.

BUSINESS

Minutes of the May 23, 2016 meeting¹:

Motion: Green moved to accept minutes as emailed with agenda of meeting. Seconded by Cole. The motion carried 4-0.

Energy Fair Review: The event was held on June 18th at the Council on Aging from 11-3. All agreed the event was a success. Green has received feedback from a number of the vendors who all state they were pleased with the event. It was noted that the food donations were extremely generous from the four restaurants, Flying Fish, PB Boulangerie Bistro, Van Rensselaer's Restaurant and The Wicked Oyster. Green will send thank you notes to the speakers and vendors and hand written thank you cards to the restaurants. All heard positive comments from those attending the event. Several suggestions were made to improve the energy fair including to hold it every other year and to separate the speakers and the vendors into different rooms. It was agreed to discuss the event further following feedback from participants.

Cape Light Compact (CLC) Ice Bear Project: Elkin and Green provided an overview of the proposed plan. Materials received from the Town Administrator (TA) and from Maggie Downey at CLC were reviewed.² All committee members were interested to learn more about the technology. Several concerns regarding the technology's efficiency, energy usage, cost savings, noise levels generated and long term maintenance were discussed. It was agreed that Elkin will write a letter to the Board of Selectmen and the TA expressing the conversation held.³

Website Update: No update

Potential Committee Members: Guest Robert Shapiro has applied to be a member of the committee

Correspondence: Magazine, *Bring Solar to Your Community* from the Solar Outreach Partnership was sent to the committee.

New Business: CLC is offering to write Green Community grants.⁴ Elkin will ask for additional information. Green will have a conversation with the Assistant TA, Brian Carlson regarding the

status of Wellfleet's Green Community grant and when there will be an opportunity to apply for the next grant.

Old Business: Green will follow up with Carlson and Seth Pickering at the Department of Energy Resources regarding opportunities for Wellfleet to participate in larger scale roof mounted solar photovoltaic projects offering solar renewable energy credits. This research is to help the committee may make an informed evaluation regarding recommendations for the best solar opportunities the town may have moving forward.

Motion: Green moved to adjourn the meeting. Tash seconded. The motion carried 4-0. The meeting was adjourned at 8:12 p.m.

Respectfully submitted,



Lilli-Ann Green, Committee Secretary

¹ Draft Minutes of the 5-23-16 WEC meeting

² Ice Bear Technology handouts

³ Letter to Board of Selectmen regarding Ice Bear Technology

⁴ CLC interest to write Green Communities grants for town

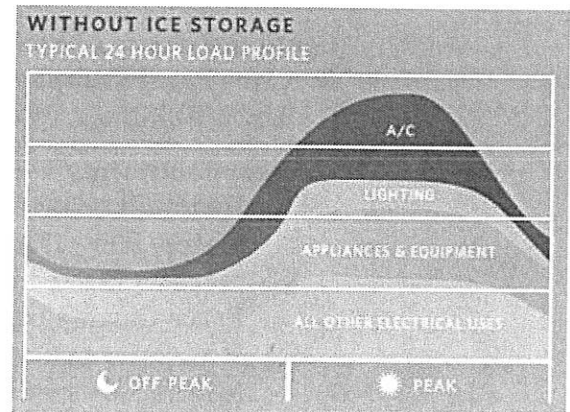
Cape Light Compact Demand Response Demonstration Offering – Ice Bear

Wellfleet Board of Selectmen -Tuesday, May 31, 2016

1. The Green Communities Act requires the Cape Light Compact (Compact) to develop energy efficiency plans that provide for the acquisition of all available energy efficiency and **demand reduction** resources that are cost effective or less expensive than supply.
2. The Compact is required to submit its 2016-2018 Energy Efficiency Plan (EEP) to the Massachusetts Department of Public Utilities (DPU) for review and approval.
3. The DPU approved the Compact's 2016-2018 EEP on January 28, 2016.
 - a. Compact's EEP proposes a demand response offering for commercial and residential customers.
 - b. The goal of the Compact's demand response offering is to reduce participating commercial and residential electric customers' kilowatt hour usage in the summer during specific hours of the day.
 - c. Compact's demand response offering focuses primarily on air conditioning load.

4. ICE Bear Technology

- a. Thermal storage system that works in concert with AC units.
- b. Reduces demand by making ice during evening off-peak hours, when other building equipment is less likely to be running. During the daytime on-peak hours, when lighting, electronics, etc. are running in the building, the ice is used to cool the building in place of the high-demand AC unit compressor.



5. Next steps

- a. Meet with to vendor to:
 - i. Size units for each site – verify units and installation are acceptable to Town and Compact
 - ii. Estimate demand reduction per site
 - iii. Calculate estimated cost savings for Town from reduction in monthly demand charges at each site
 - iv. Develop design plans for each building
 - v. Develop installation schedule
- b. Review the installation and maintenance proposal prepared by vendor. Compact and Town determine whether or not to move forward.
- c. If Compact and Town agree to proceed, sign Participation Agreement for the Demand Response Offering with Cape Light Compact.

Email to the Wellfleet Board of Selectmen
6-25-16

To All,

The Wellfleet Energy Committee met on Monday, June 20. One of the committee's agenda items was the Ice Bear storage system proposal for Wellfleet.

The committee discussed the Ice Bear system and is interested in pursuing the option to learn more. Several points need further clarification before we would recommend committing to an actual installation.

For the community as a whole, it appears the system lowers costs by shifting energy usage from peak usage periods (late afternoon and evenings on hot summer days) to late at night on those same days. The technology helps meet peak demand of electricity on the Lower Cape in the summer without building more infrastructure to the grid. It is not necessarily an electric saving technology. This is the primary benefit of the technology.

For the user who installs the system, electric usage is shifted to late at night. Nighttime temperatures are cooler, so it might take less energy to make the ice than it would during the day. On the other hand, the system is not 100% efficient, so it might take more energy. We would need to see actual data on this point.

Users will save money primarily if electric rates are lower in the middle of the night than during peak usage periods. We are not sure if Wellfleet's electric rates are, or will be, lower at night.

One concern about shifting usage is noise. There is no information about the noise level of the unit. A noise level that is acceptable in the early evening may not be acceptable at 2:00 AM. The noise levels for audible noise as well as infrasound and low frequency noise need to be measured and the location of the installation carefully considered in relation to nearby homes.

The vendor claims a 98% availability. That is actually a very low number and something of a red flag. It implies one hour of outage in every fifty, which translates to every other day if the system is used constantly; once a week if the system is used only half of the time. Again, these numbers require both further clarification and discussion with the vendor and actual users. We have contacted several users of the Ice Bear technology in Maine. They have not been completely satisfied. There have been adjustments and repairs in order for the system to function properly. Some were needed years after installation.

In summary, the committee urges the town to express interest, but also to learn more about the system, its economics and long-term maintenance before committing to an installation.

Regards,

Dick Elkin

6/20/16

All:

I am writing to you because you all have some role in Green Communities designation grants. I am also copying applicable board members from the Cape Light Compact who represent towns that are Green Communities.

I just wanted you to be aware that the Cape Light Compact was approached for the META Grant (attached here in Word Form) for Green Communities.

If you look at the bottom of page 2 and the top of page 3, it allows for up to \$5,000 per town for the following activities:

- Assist with grant application preparation
- Assist with procurement activities for approved grant funded projects
- Assist with Annual Report preparation

I know that many of you are doing this work in-house, and the Cape Light Compact is reviewing whether this might be something that we offer centrally for you all. We have not yet determined whether we will pursue this grant. This is where we need your help.

Would you be interested in having the Cape Light Compact manage the three bulleted items above?

Thanks for any guidance that you can provide on whether this might be of interest to you.

Best regards,
Margaret Song
Commercial and Industrial Program Manager
Cape Light Compact

From: Pickering, Seth (ENE) [mailto:seth.pickering@state.ma.us]
Sent: Thursday, June 16, 2016 9:26 AM
To: Margaret Song <msong@capelightcompact.org>
Cc: Maggie Downey <mdowney@barnstablecounty.org>
Subject: RE: RFP for META grant
Importance: High

Hi Margaret,
Here is the META Grant Application form. If you have any questions please feel free to call me or Paul Carey in the Boston Office @ [\(617\) 626-7372](tel:6176267372), he is the contract manager. You can always start with me if that's easiest for you. I spoke with Maggie yesterday in Boston, I think all of the Cape and Islands Green Communities could use help with their GC Annual Reports. Thanks.
Seth

Seth Pickering, *Green Community Coordinator, Southeast Region*
Massachusetts Department of Energy Resources