

**Dennis Alternative Energy Committee
September 11, 2023
Final Minutes**

Members Present: Mike Sarli, John Benker, Susan Klein, Mark Lambdin, Lyn Solomon, David SanClemente, and David Langan via Zoom
Members Absent: Andrew Lane (Alternate)
Others Present: Tom O'Connor (DPW Deputy Director and Committee Liaison)

A quorum was declared.

CALL TO ORDER

Meeting called to order by Chairman Mike Sarli at 5:03

PUBLIC DISCUSSION

None

APPROVAL OF AUGUST 7, 2023 MEETING MINUTES

Motion: Move to approve minutes of the August 7, 2023 meeting as amended. Motion made by David S, seconded by John. Approved unanimously

COMMITTEE MEMBERSHIP

Nothing to report

ANTICIPATED BUSINESS

Green Communities and Other Municipal Updates

Updates were provided by Tom.

• **Green Communities**

Tom has verbal notification that the DOER has approved the proposed package of projects: lighting upgrades for the remaining municipal buildings; replacement of the furnace at the Pines Golf Course, and; the EMS system at the Library. With these projects, we will have committed the remainder of our Designation Grant.

- ∴ Tom drafted up the contract for the Pines. The contract has been signed by the contractor and it is now with Administration for signature. He chose to do this project first because the money has already been budgeted and the Designation Grant will provide \$40,000 to offset some of these costs.
- ∴ For other two projects, he is waiting to get the approval from DOER in writing. Then there is a contract that the Town will execute with them. This process is being coordinated by Margaret Song at Cape Light Compact. After completing all the paperwork with DOER, contracts will be issued to get the work done.

- **EV Charging Station Pilot Program**

Shortly after the last Committee meeting, Tom had prodded Walter Gray at Power Options to get us an updated proposal from Lily Pad for the 5-year ChargePoint as a Service since the last proposal we had had expired. It took Walter a week or so to get back to him. It turned out that the 5-year program that they had quoted us on before was no longer being offered. Instead, CPaaS is only being offered as a one-year term. The equipment previously being offered was the 4000 series; the equipment in the new CPaaS would be a 6000 series unit. The previous cost was \$2,400 per year; the new lease cost would be a little over \$3,500 per year.

After some follow up with Lily Pad, Walter reported that we had three options: 1) move forward with the 6000 series equipment with CPaaS; 2) purchase the 4000 series equipment, or 3) explore option with companies other than ChargePoint. Tom noted that if we still wanted to move forward with ChargePoint as a Service, there is enough of a material change that we have to bring this up to Administration. We would be \$900-\$1,000 short per year with regard to the approved budget.

- ∴ Susan noted that at \$3,500 per year, the 5-year cost would be \$17,500...\$7,500 less than what was voted in at Town Meeting. The excess of the lease fee was intended to be used to cover electricity costs. The electricity costs were funded for the full projected electricity costs but we expected to start breaking even well before that, so the \$75,000 might cover the actual electricity costs. If, after some time in operation, say year 3, it looks like the \$7,500 wouldn't be enough to cover the electricity costs, we could go back to Town Meeting for supplemental funding. Tom agreed with the math but added that it was a material enough change from what was presented. Mike summarized that **Tom would need to confer with Greg Rounseville and Jose Cardinal Young to make some policy decisions on how to go forward.**
- ∴ Mike asked Tom whether Walter had gotten any information on how Eversource has reacted to this since it was Eversource's policy that a commitment for 5 years was required to qualify for the Make Ready Program. Tom had not had the opportunity to follow up on that issue but we definitely have to get that question answered. Tom plans to have another conversation with Walter, probably next week, and asked if Mike and Mark could join in on that. Mark agreed and Mike said he'd join in if he was not out of town. **Tom will arrange the meeting with Walter Gray.**
- ∴ Susan opined that it doesn't make sense for ChargePoint to prefer a one-year lease since they would go to all the expense of putting in the equipment and if we didn't choose to renew the lease at the end of one year, they'd have to come and remove their equipment, and then they'd have this used equipment on their hands.
- ∴ Tom wondered whether we should go back to considering buying the equipment but was hesitant to do so. Mike added that the ownership experience of the Town of Plymouth as related by Patrick Farah has become more and more burdensome and they are leaning away from the purchase option. Aside from the maintenance issue, one big problem they are having relates to the 4G cell phones imbedded in the charging

stations. The cell phone providers like Verizon and T-Mobile are committing more of their bandwidth to 5G, resulting in connectivity problems with the ChargePoint cloud. Susan wondered whether the new 6000 series has upgraded to 5G. Dave S. commented that 5G is not available anywhere on the Cape.

- ∴ Mark wondered whether we should be looking into competitors. Susan responded that she looked at the two other competitors suggested by Kristen Patneau of Power Options way back when. One of them did not offer a lease option; the other had a lease option but the Town would have to pay the lease fee but none of the proceeds from the user fees would be returned to the Town. It may be that in the ensuing time period since that research was done that things have changed but that was the situation a year or so ago.

Sub-Committee Updates:

- **Charging Station Pilot Project**

Based on Tom's report above, Mike asked that if any of the Committee members have any questions that we should be asking Power Options, they should be sent to him and they'll be added to the checklist for the meeting.

- ∴ Dave L. asked, if the Town declined to renew the lease, what the cost to the Town would be. The consensus was that there must be a "stick" to continue to lease. Susan commented that in the old agreement, there was not penalty to discontinuing after the term of the agreement (1, 3 or 5 years) elapsed. She allowed as how there is probably a new agreement given the changes to the program. She added that, with regard to the old contract, she had never seen a contract in which the terms were so favorable to the leasee.
- ∴ Mike recalled that, in his experience, you can't include a clause in contract A that you would be obligated to sign contract B. He felt that it would be in the interest of both parties if there was some kind of discount built in for not letting the lease lapse. For instance, if the first year fee was \$3,500, you could automatically renew for \$3,000 in a subsequent year.
- ∴ Dave S's suggested explanation for the changes in the program was that, formerly, capital was cheap and the interest rate steady—2-3% interest rate—so they could set a lease fee for a longer period. Now with commercial interest rates topping 6 and 7%, their ability to borrow and finance is probably running out. Mike felt their interest rate might be as high as 12-13%. Keeping the term of the lease to 1 year would allow them to adjust to the future uncertainties in the interest rate.
- ∴ Mike asked Susan to see if she can find an updated lease agreement and, if she finds one, to send it out to the rest of the Committee. **Each of the Committee members will look at it from their own perspective and maybe shed some light on our questions. Susan will also try to go back to her two ChargePoint contacts to see what they can tell her about the changes. Susan will also contact her contact at Eversource to see how the ChargePoint changes might affect our participation in the Make Ready program.**

∴ Mark asked whether anyone had seen the specifications for the 6000 series. Mike did a quick look at it, but none of the other Committee members had been aware of this whole change. Mike allowed as how it draws more amperage and therefore charges a car at a faster rate. He related Tom's concern that a preliminary design had already been done for the load created by the 4000 and with the changes in equipment to the 6000 series, that design might no longer be sufficient. Dave L. said that when he looked at the L2s, he noted that the upper bound was 50 amps so the cabling should be fine. He checked again and found that the ChargePoint 6000s go to 80 amps but it is adjustable and you can select it at 50 amps if cabling is an issue. **Mark will find the spec sheet for the 6000 series, take a detailed look at it and report back at the October meeting.**

➤ **User Fees**

Mike called for volunteers to work with Andrew in putting together a proposed process that the Committee can offer to the Select Board to facilitate setting user fees. It should include knowing what our expenses are, the market rates in neighboring towns, etc. We can help with the initial estimate, but establishing a process will help the Select Board re-set the rate annually going forward. He does not see this as very complex but mainly to demonstrate to Administration and the Select Board that all the variables had been considered. Susan added that, in the end, it will be the Finance Director, Josee Cardinal Young, who will propose the fee to the Select Board.

- ∴ Susan reminded Mike that way back when she and he first got a demo of the data ChargePoint could provide, they offered help in setting the rate using the charging station's user data. Mike allowed as how that might be a useful component to throw into the mix.
- ∴ As an aside, Mike related he had heard from Patrick Farah (Plymouth) that the Select Board in Plymouth had decided to institute a user fee for use of its previously free charging stations. It would not have been a surprise to see that use of the charging stations had dropped off some, but actually Patrick had not seen a drop in the number of sessions. In fact, several of the charging stations logged their highest usage ever. As the number of free stations dwindle, there will likely be less shopping around for free stations.

Susan commented that people who are simply on vacation would be more likely to shop for free stations, whereas as our pilot will be located at a place where people are there for recreational purposes and the availability of a charging station is a bonus.

- ∴ Susan suggested that we keep the process as simple as possible. She liked Dave Langan's suggestion from a previous meeting that the process would involve ramping up the actual electric rate by a given percentage, that percentage having

been calculated to cover the fixed costs, i.e. lease fee, over the estimated number of sessions, and then put a ceiling on the fee based on the fees in surrounding towns.

∴ Mark volunteered to work with Andrew.

- **Solar Installations**

No discussion

- **Residential Wind**

Dave L. agreed with Dave S. that we should be looking at the potential for wind. He noted that there are turbines on the market that don't need to extend way beyond the roofline. You could even have these at the concession stands at a beach. See www.flowerturbines.com . His main concern was how well these turbines would stand up to sand.

Dave S. has been in touch with a contractor here on the Cape that is supposedly doing residential wind turbine installations. The contractor indicated that the wind speed at Dave's house was sufficient but that his lot wasn't big enough. This seemed peculiar to Dave given that he had a reasonable size lot. Dave is still searching for a workable solution.

Mark noted that there have been huge technology gains in the smaller helical wind generators. There are different configurations, many of which are not unattractive. It has just taken a while for them to get to market.

Mike reported that UMass/Amherst, which began as an agricultural school (Stockbridge), has recently expanded its mandate to include the Clean Energy Extension which analogous to the agricultural extension program. They claim that they are a resource to individual municipalities and work together with the DOER and Green Communities. They have technical staff that might be a resource in our researching of wind technology. They might have a different perspective from, say, the Cape Light Compact. Mike will send a link to the **homepage** and encourages Committee members to check it out.

<https://ag.umass.edu/clean-energy>

Possible Projects For Green Communities Competitive Grant Applications

As a follow up to Tom's report that, with the approval of DOER the last three projects, we have committed all of the Designation Grant Funds, Mike has urged the Committee to start identifying other projects that we might propose for Competitive Grant funds.

Susan reminded the Committee that we won't be eligible for Competitive Grant funds until we have actually completed the projects and can submit paid invoices. At the earliest, that would make us eligible for the spring round of grants. We should push to complete the 3 projects so we can get into the next grant cycle rather than having to wait until the fall of 2024. Mike agreed and indicated that we need to keep that in front of Administration, particularly Liz Sullivan, to make sure that Tom has the resources he needs to complete the projects and to be able to prepare a proposal for Competitive Grant funds in a timely manner.

Susan had prepared a 2-page document, which she shared with the Committee, taking a first cut at identifying potential projects that were in line with DOER's priorities in accordance with the Program Opportunity Notice (PON) for the last round of grants. It is attached as Attachment 1. Susan emphasized that the documents was only her initial thoughts, categorized under the PON outline but stated that the PON was fairly complex and requires a lot more study. Projects which initially seemed like they might fit could turn out not to fit the priorities.

Key points include:

- ∴ Energy conservation measures. Tom may have some ideas for these types of projects.
- ∴ Replace administrative vehicles in the Town fleet that are scheduled to be replaced, phasing in hybrid, plug-in hybrid or electric vehicles.

Mike considers this one of the Committee's priorities. Vehicles used by the building inspector, health inspector, conservation officer, dog officers should be considered. We should find out whether we can help Tom on this, perhaps researching which are the best 4 or 5 electric vehicles would best suit this purpose. Susan recalled that Tom has already had discussions with the company that supplies the Town's vehicles about moving to electric vehicles.

Susan noted that data coming in shows that electric police cruisers may even have faster pick up than gas-driven vehicles and perhaps we should start having some discussions with Police Chief Brady on this. Mark noted that electric vehicles are far safer in a crash than the current SUVs currently used by the police department.

Mike allowed as how moving the fleet toward electric vehicles will trigger the installation of charging stations for municipal as well as public use. He added that, for instance, if we had charging stations at all of the beaches, the supervisor making the rounds checking up on the employees could stop at one of these stations to top off.

There is some concern about spontaneous fires associated with electric vehicles. Susan recalled seeing an article in the New York Times about spontaneous fires. Mike felt this was blown out of proportion. Part of the public anxiety harks back to the automakers themselves having sent out warnings not to park an EV in the garage or first floor of a parking garage. The warning was probably done to cover themselves legally in the unlikely event of such an occurrence.

- ∴ Mike picked up on the fact that decarbonization is a major priority and replacement of heating systems that burn fossil fuels will not be eligible for funding. Susan added that for the decarbonization projects, the Town has to provide a 25% match.

Susan mentioned that if we wanted to proceed with a decarbonization project for any of the Town buildings like Carlton Hall, she had planted the seed with Select Board Chair Chris Lambton that, to date, the Town had not spent any of the Special Solar Fund money on alternative energy projects and that the Board might want to consider doing so. He seemed to agree.

Mark noted that there is talk at the state level about encouraging towns to go to net zero carbon. We know it's doable because groups like Habitat are doing this.

- ∴ Mike also noted that photovoltaic systems will no longer be funded. Susan responded that, in light of the push for decarbonization, it doesn't make sense that Green Communities will no longer fund solar. Mike rejoined that it actually did make sense. The goal of Green Communities is to accelerate the rate at which project have a positive environment impact but don't currently have an economic payback. Solar has been shown to have economic payback, producing electricity cheaper than coal and oil (and possibly natural gas). PV can stand on its own and should therefore no longer require DOER incentives.

Mike asked if anyone thought there was something important left off of the list. Susan responded that, in the document, she noted categories where it would be best to have Tom weigh in on.

Susan will go through the PON in more detail and revise the document.

UNANTICIPATED BUSINESS

Susan noted that Mark was going to check with other towns to see if they would be interested in sharing an energy consultant. She asked if he had anything to report. Mark responded that this has apparently been moved up to the Cape Cod Commission. He is working with Select Board member Carlyn Carey to get an introduction to the appropriate contact.

As an aside, he added that, in doing that research, he discovered that every town on the Cape has an energy committee but not every town on the Cape has a specific committee for taking care of their pedestrians in vulnerable traffic.

He also learned that the user fees for chargers on the Cape range from a low of \$0.25/kWh at CCCC and is subsidized to a high of \$0.45/kWh. This does not include the free ones.

Finally, he learned that there is already a fairly robust recycling program for lithium ion batteries. It basically strips them down to atoms and makes new batteries. One in Arizona and one in upstate New York; there may be others. Susan commented that you would think that Elon Musk's battery factory in Nevada would have some sort of side business for recycling.

ADJOURNMENT

Motion: Move to adjourn. Motion made by Mark.; seconded by Dave S. Vote: unanimous
Adjourned: 6:20 pm.

Next Meeting: The next meeting will be on October 2 at 5 p.m. via 100% Zoom.

ATTACHMENT 1

Potential Projects Using Green Communities Competitive Grant Funds

Energy Conservation Measures/Projects

Tom—Any ideas. Weatherization projects?

Hybrid, Electric or Plug-in Hybrid-Electric Vehicles

- Replacement of administrative vehicles in the Town fleet
- Replacement of gas-driven golf carts to electric
- Talk to the PD about potential for supervisory vehicles or cruisers

Electric Vehicle Charging Stations

- Additional L2 charging stations. Each one thru CaaS @ \$2,400 for 5 years
- L3 charging station at Town Hall. Thru CaaS @ Approx \$12,000 per year for 5 years

Vehicular Efficiency Measures (such as idle reduction equipment and after-market battery electric retrofit kits)

Tom—is there any potential here for trucks or other equipment

Financing the Siting and Construction of Renewable and Alternative Energy Projects On Municipally-Owned Property

- Energy consultant to do assessment of potential solar projects around town. The title suggests that this is possible, but the list of non-qualified projects suggests it would be precluded. Need to follow up

Building Operator Certification Training for Staff Members

Tom—anything here

Energy Storage to Address Peak Demand

This refers to a battery back-up system

Decarbonization Projects

Applications will be accepted from municipalities seeking funding for comprehensive building decarbonization projects that extend beyond the typical grant in implementation time and cost. Awards for building decarbonization projects are capped at five hundred thousand dollars (\$500,000), require a minimum twenty-five (25) percent match, must demonstrate reductions in greenhouse gas emissions, and must be completed within three (3) years of grant contract execution. Grant awards in this category are highly competitive and will be limited. Projects that fully replace fossil-fuel fired heating systems are prioritized. Municipalities applying for a building decarbonization grant cannot apply for other projects in this PON. Building decarbonization grant awardees under this PON will be ineligible to apply for competitive grants for two (2) years after award.

Municipalities considering applying for building decarbonization projects are highly encouraged to contact their Green Communities Regional Coordinator to discuss potential proposals with DOER staff.

Administrative

- Cape Light Compact to file reports to DOER
- Part-time energy manager (up to 10% of the grant, not to exceed \$10,000)

NON-QUALIFIED PROJECTS

The following will **NOT** be funded in this grant round:

- Staffing beyond ten percent (10%) of the grant amount (not to exceed \$10,000) for program administration
- Solar PV
- Revolving loan funds
- Energy audits, feasibility studies or assessments
- Air or water-source heat pumps for space cooling only
- Non-commercial appliances
- Projects for buildings/facilities not included in the municipality's baseline and therefore not in the municipality's Energy Reduction Plan (e.g., a Regional School District), except for municipalities eligible under Section 4 as approved by the DOER.