

Town of Princeton Environmental Action Committee (EAC)

Meeting Minutes

July 15, 2021

Meeting called to order at 7:04pm

Committee members present (in person):

Claire Golding (CG), Phil Gott (PG), Corey Burnham-Howard (CBH)

Committee members present (via remote):

Chris Samoiloff (CS)

Committee members absent: Charlie Cary (CC); Matthew Charpentier (MC)

Student Committee members present: Anna White (AW), Paul Fuchs (PF)

Associate members present via remote: Caitlan Davis (CD)

Also present (via remote): Helga Lyons (HL) present as liaison from Advisory Committee

Public Comment: None.

Review & Approve Minutes from June 17, 2021 Meeting:

- **MOTION** to approve as written with minor typographical edits
Motion: CG; 2d: PG; Vote: 4-0

Green Communities Designation Application

- CBH provided update.
 - o In April 2021, Princeton was informed that it had been awarded Green Communities Designation from the Department of Energy Resources (DOER), with an award of \$130,869. The Town must, within 90 days, designate how those funds will be spent. Sarah Adams from Central Massachusetts Regional Planning Commission (CMRPC) coordinated and held the most recent meeting with interested town stakeholders on July 14.
 - PG attended the meeting and reported that some of the bids received were unsatisfactory because the statement of the energy audit was unsatisfactory. PG reported that a representative from Guardian would be putting together an HVAC proposal.
 - EAC members discussed a need for there to be a clear order of responsibility/leadership in the effort of working to implement Green Community funded projects. HL suggested that the Town's Building Maintenance Committee drive the effort and implementation.
 - **ACTION:** CBH to reach out to Sherry Patch and Sarah Adams to inquire as to where things are, and next steps in Green Community process.

Municipal Vulnerability Planning (MVP) Program

- PG reported that there are no new updates. MVP Plan has been submitted for review by the Executive Office of Energy and Environmental Affairs (EOEEA), and it is hoped Princeton

would soon hear about the official MVP designation.

Public Safety Building

- PG provided update: The new Public Safety Building (PSB) Committee had its first meeting on Monday 7/12. The goal appears to be “reduce the price without reducing the functionality” of the proposed PSB. EAC design considerations were not brought up at the first meeting. The committee will meet every two weeks and are due to report to the Selectboard at the end of September.

Princeton Municipal Light Department (PMLD)

- PG provided update. (See attached notes.)

PFAS Information Sharing

- CG provided update on behalf of MC (who was absent). Selectboard suggested that the EAC craft a PFAS-issue related acronym cheat sheet.
- **ACTION:** AW, who had suggested (and offered to create) an infographic will reach out to MC, including to possibly assist with acronym cheat sheet.

Waste and Recycling

- CG provided update on the Requests for Proposals (RFP) drafted by the Waste and Recycling Committee (WRC). The RFPs went out and there were 12 responses, including 2 from cart manufacturers. The WRC will use a list of criteria to evaluate proposals. Bids are due by 7/29. The WRC will meet on 8/3 to start its review of bids received.
 - o PG suggested that any contract include language as to who replaces a cart owned by the homeowner but destroyed by the hauler.

Communications /EAC Webpage Updates

- CS provided updates.
 - o Webpage:
 - CS spoke with Town Clerk as to “visits” to EAC webpage and he guesses the statistics of visitors represents “unique views”
 - CS posted EAC Environmental Speaker presentations & WPI presentation online via Town Clerk
 - CS updated information on the Speaker Series and updated other links and pages
 - **ACTION:** All EAC members to advise CS as to updates needed.
 - o Newsletter:
 - CS sent out July Newsletter with links.
 - August Newsletter: CBH and CG will write WPI project update on analysis of public attitudes on light pollution in Princeton and possible methods to mitigate light pollution in Princeton
 - **ACTION:** CBH and CG to draft article for August Newsletter.
 - CS suggests as Newsletter “space fillers” –profiles on EAC members

Curbside Composting

- AW provided update.
 - o AW had previously reported on Blackearthcompost.com, which offers curbside composting service. AW inquired via email as to what the threshold number of households that would need to participate for Black Earth Compost to service Princeton. AW did not receive a response. PG suggested she call them. CG noted that it could be a

- more urgent issue with potentially smaller trash barrels via WRC action.
- **ACTION:** AW to follow-up with Black Earth Compost as to what would be the threshold number of households participating for them to service Princeton.

WPI Project Updates

- **ACTION:** CBH and CG to write summary of Student Research Project on Light Pollution.

Local Cultural Council Grant Update/Speaker Series Update

- CBH provided update.
 - The EAC's next Speaker Series will be on drinking water quality: actions to protect the drinking water supply, how to test well water, and what to do with well water results. The event will be on September 9 at 7p and will feature Jim Starbard of RCAP Solutions.
 - **ACTION:** CBH to coordinate and confirm with Jim Starbard.
 - **ACTION:** CS to create flyer announcing next presentation.

Plant Sales Group with Wachusett Garden Club Idea

- CS had previously raised the idea of EAC helping Princeton residents to access native plants. CS reached out to Dot Odgren (President of Wachusett Garden Club) and they agreed a collaboration would be good but had no further details yet.
- CD discussed with her employer the idea of helping Princeton residents get native plants at wholesale price. Her employer is open to assisting and would provide shipping and tracking.
- EAC discussed how this might practically work best with personalized plant orders vs pre-purchased plants to sell. PG suggested this is best passed onto Wachusett Garden Club. CG thought this is something that could be jointly promoted.
 - **ACTION:** CS, CD to meet with Dot Odgren to further explore the details of the idea of offering native plants at wholesale prices to Princeton residents.

Town Draft Snow and Ice Policy

- CBH provided update. No new updates since last meeting.
 - **ACTION:** CBH, on behalf of the EAC, will analyze existing practices, guides, and plans in other communities; and identify opportunities for action items in Princeton—such as alternative materials or methods.

Priority Actions Items Review

- CBH had drafted an EAC priority action items list to eventually be sent to the Selectboard.
- PG noted that he was concerned about the bandwidth to tackle all of the items listed. EAC members discussed and generally agreed to move forward with the list with optimism for tackling it.
 - **ACTION:** CG to check it for grammatical errors.
 - **ACTION:** CBH to add to list a link to state webpage detailing municipal mosquito opt-out steps, and to finalize list to be sent to Selectboard.

Agenda Items for Next Meeting (August 19, 2021 at 7p)

- Public Comment
- Review and Approve Minutes of July 15, 2021
- New Member Application: Forrest Iwanik
- EAC Code of Conduct Draft
- Green Communities Updates

- MVP Updates
- PMLD Updates
- PFAS communication
- Waste and Recycling Committee Updates
- Communications/EAC Webpage Updates
- Curbside Composting Updates
- WPI Project Updates
- EAC Speaker Series Updates
- Plant Sales Group with Wachusett Garden Club Idea Updates
- Public Safety Building EAC Subcommittee Updates
- Snow and Ice Policy Updates
- Priority Action Items Updates
- Agenda items for Next Meeting

Meeting adjourned at 8:50 p.m.

MOTION to adjourn.

Motion: PG; 2d: CBH; Vote: 4-0.

Respectfully Submitted,

Corey Burnham-Howard

PMLD Board of Commissioners Meeting
July 14, 2021
Items of potential interest to the EAC

“Peak Shredding”

Peak Shredding is the reduction of electric power demand during period of peak use. Shredding reduces the charges to PMLD for Transmission and Capacity charges, which currently amount to about 5 cents per kWh and which is passed along to Princeton ratepayers as part of their monthly bill. There is a voluntary program for which ratepayers can sign up to help reduce peak power demand. One is a wifi-based system that automatically shuts off for several hours and then turns back on wifi controlled devices in the home such as close driers, dehumidifiers, AC units etc. to cut peak power demand. MMWEC controls power to these devices through the wifi connected devices. The homeowner receives a monthly credit on their power bill of \$5 or \$10 for each wifi device connected to this program. The second program is a manual program in which the homeowner gets a text or email message and is asked to cut power for several hours during peak usage times. The homeowner is then later notified that it is OK to turn devices back on and resume power consumption.

To date 28 households have signed up for the manual program, and a “handful” have signed up for the more convenient wifi program.

The MMWEC operated Diesel gen set installed at the wind farm site continues to catch peaks, saving PMLD on the order of \$20,000 per month when there are peaks. It should be noted that any power generated and used by this gen set reduces the efficiency losses of long distance power transmission, thereby reducing the net CO₂ production compared to a similar unit located some distance from Princeton.

Phil Gott reported on a Peak Shredding Battery Energy Storage System located in Reading, Mass. While battery systems are still considered experimental, this system is proving the operating feasibility of such a system. Financial viability appears somewhat uncertain until battery costs come down further.

Commercial HVAC

A HELPS-like program for Commercial HVAC systems is being developed that is similar to the program for residential units. Expected launch time is in 2022. Preliminary aspects of the program, subject to change, include a 50% reimbursement for each building installing a new qualifying HVAC unit, reimbursement capped at \$5,000.

Compliance with State Climate Policy

Sean McKeon reported that PMLD has an opportunity to buy into wind power generated by the Mayflower offshore wind project located about 30 miles south of Martha’s Vineyard and 23 miles south of Nantucket, with a name-plate capacity of 804 MW. The Board of Commissioners encouraged Sean McKeon to proceed, taking this into account with our power purchase agreement with NextEra.

Work continues to be able to “buy” our own wind power for use in Princeton. Using such local power should enable us to avoid large transmission charges and efficiency losses associated with more remote power sources.

Preparations for contract negotiations with Nextera continue as well. Compliance with S9 (An Act Creating a Roadmap for Massachusetts Climate Policy, March 26, 2021) will require more flexibility in PMLD's ability to secure power than the current contractual arrangements, and we are optimistic that we can continue to work with NextEra to provide Princeton and its ratepayers the flexibility needed.

Respectfully submitted by Philip Gott: Note that these notes reflect only his understanding of the meeting and have not been reviewed by other commissioners. Any discrepancy between these notes and the official approved minutes of the PMLD meeting is unintentional, and the official notes should prevail.

**Princeton Municipal Light Department notes
Board of Electric Light Commissioners Meeting
June 9, 2021**

Items of interest to the EAC are:

S9 compliance:

It appears that the best (lowest cost and risk) way to comply is to sell our wind RECS and buy lower costs RECS. Wind RECS are selling for a premium at the moment. Selling them will generate revenue that can be used to buy lower cost RECS for other “green” technologies. There was some discussion that the laws of supply and demand may cause the prices of all RECS to increase in the future.

There was further discussion about the life expectancy of the wind turbines going forward. One of the gearboxes is showing notable indications of wear in the last oil analysis undertaken. Various strategies and possibilities were discussed as to what to do about this, but no firm resolution of any action to be taken at this time other than to continue to monitor and maintain them.

Green Muni Meeting discussion

These meetings were conceived during discussions amongst MLP board candidates sponsored by the Environmental League of Massachusetts (ELM). This information was discussed by Phil Gott at the PMKLD meeting and is included below:

Meeting topic: Dealing with Solar installations, a topic suggested by Phil Gott, Princeton Electric Light Commissioner

After a brief introduction of the topic from Phil Gott, Commissioners from various towns gave their thoughts on how they are or should be dealing with this distributed power installations. While Phil’s intention was to address the topic of the rate structure and how it is impacted by decreasing demand for total power, it was clear that none of the towns have given much thought about how to sustain revenue for operation of the MLP in the face of potentially long-term declines of net sales of electric power. Nonetheless, the information provided was interesting. Below is a summary of what each town representative said.

Overall:

Participants agreed that for the moment, solar power installations in town should be handled the same way as efficiency improvements. In other words, they see no need to change their rate structure. No thoughts about what to do if and when revenues decline significantly. There was a lot of discussion about the benefits of peak shaving with batteries. There was a lot of interest in this with the chief hurdle apparently being the ability to pay the up-front costs.

Groton:

- Currently 64% carbon free with a combination of Nuclear, Wind and Solar (including MLP-owned arrays on rooftops of municipal buildings and on an abandoned landfill). Have part ownership of Seabrook, Millstone and Berkshire Wind. Their rate is \$0.11/kWh. Groton has \$3 million “in the bank.” (In a private meeting with another Groton Commissioner in 2019 I learned that at that time Groton had contracts to buy about 80% of their power at fixed rates, filling in the remaining 20% from the spot market at an average price of \$0.025/kWh or less.)
- Groton pays the wholesale power rate for power exported by homeowners back into the Groton grid.

- Is purchasing a 5 mW battery for peak shaving, to be recharged by purchased off-peak power or excess solar power as appropriate. Plans are to expand this to from 5 to 15 mW in the future.
- Installing 2nd generation Eaton smart meters for time-of-day billing. The Eaton meters were chosen for 2 reasons: 1) they can communicate by cellular links (a number of cellular receivers have been placed around town) and 2) advanced software enables billing features they seek. The Groton MLP is paying 50% cash for these meters, the balance being financed by MMWEC at 3%.

Wellesley

- Paying full retail for power exported by homeowners back into their grid.

Hull

- Investing in 48 mW of offshore wind (3 turbines) and a smaller underwater turbine in Hull Gut. Their goal is to be a net exporter of power to other users outside of Hull. I gather their intent is that this will financially isolate them from declines in power demand within their own grid.
- Solar power installations are limited to 15 kW
- Net metering is used, but any balance due the homeowner is zeroed out at the end of every year.
- Using smart meters (5G communications) and dynamic pricing

Wakefield

- Pay full retail for power exported by homeowners back into their grid.
- Investing \$100,000 per year to help homeowners install solar power. Average take is 10 customers per year.

Hingham

- Using smart meters with time of day pricing
- Expressed interest in buying power from Hingham

Belmont

- The impact of solar power installations should be treated just like the impact of efficiency improvements

Peaking Generator

The peaking generator is up and running and “caught” an unexpected peak in May, just after it was installed. Research into running it on biodiesel by both Sean McKeon and Phil Gott indicated that it would not be wise to do so at this time due to possible impacts on operation and reliability.

HELPS Program update

Sean is working with MMWEC to get a HELPS-like program in place for commercial buildings, similar to the one in place for residential.

Nextera contract

The Nextera contract is under review with the objective of meeting the S9 requirements for MLPs to reduce carbon emissions and increase reliance on renewable power. Discussions took place in executive session.

Respectfully submitted by Philip Gott: Note that these notes reflect only his understanding of the meeting and have not been reviewed by other commissioners. Any discrepancy between these notes and the official approved minutes of the PMLD meeting is unintentional, and the official notes should prevail.