

## Tisbury Climate Committee Meeting Minutes

**Date:** August 22, 2022

**Meeting called to order:** by Melinda Loberg, Chair, at 5:33 PM.

**Place:** Tisbury Town Hall Annex

[Zoom option was not available due to the Town adding another layer of security.]

**Attendance:** Committee Members: Melinda Loberg, Louise Clough, Rachel Orr, Kate Shands, Bill Straw

Guests: Ross Seavey, Building Commissioner, liaison to TCC  
Cole Powers, Electrical Contractor, Powers Electric

**Electricity Overview:** *[Recorder's Note: Discussion is rearranged for clarity and brevity.]*

Melinda introduced Cole Powers, who gave us a presentation on the problems we face as we transition to clean energy renewable resources in response to climate change. He made the following points:

- As we make the transition from fossil fuels to electricity, we are facing a big problem: as we make the switch, the grid will not be able to handle the increased electric usage. We want to get to the end point as soon as possible, but realistically, we are looking at a 10-20-year time frame: ten years to recognize the problem and another ten to fix it. Before we get to that point, there will come a time when we will be using more energy than we are producing, especially at times of peak loads, which occur in the late afternoon and evening hours when everybody is using electric appliances. These peak loads will become more frequent as more people switch over to electric power, including heat pumps and electric cars. Many people will have two at-home chargers for their cars (the average vehicle charger is 40 amps), and they will generally be using those chargers at times of peak load.
- In addition, some municipalities (for example West Tisbury and Aquinnah) are generating policies that may not be helpful. Restricting the use of fossil fuels in new buildings or requiring them to be all-electric is dangerous: it will accelerate the problem by increasing electricity usage in the short run. Instead, we need to design buildings that can go off-line and be independent of the grid and that run off battery inverters. We need to develop and use load-management systems that can help balance usage on and off the peak. He said the Edgartown wastewater plant worked out an arrangement with Eversource where, in exchange for a reduced rate, they agreed to be able to be taken offline with 24 hours' notice.
- The grid in California has already reached its peak, and they are experiencing rolling brownouts. The grid on the Vineyard is inferior and is approaching its peak. *[According to the MVC, the Vineyard's four 23.2 kilovolt underwater cables are vulnerable and hard*

*to repair, and the 50-megawatt peak electricity usage level is fast approaching their 62.5-megawatt capacity.]*

- We need to plan for this transition, and the two simplest and most important ways to do that are to manage the load and to use battery storage. Managing the load is also known as “shaving the peak”. For example, the Tisbury wells fill the water tanks overnight so the tanks can be used for storage and then supply water during peak demand times. We need to identify the top 5-20 peak users (such as the wastewater treatment plant, the water department, the Mansion House, Cronig’s and the school; Cole said he could give us a list of the electric bills for the five largest users) and find ways for them to shave their usage, especially during those peak times. If we are generating electricity with solar or wind power, we don’t want to sell it back to the electric companies; we want to store it, and the only way to store electricity is in batteries.
- Eversource had plans - which had been approved by the state Department of Public Utilities - to construct a \$15 million, 15-megawatt battery energy storage system (BESS) on the Island [*like the one they are building in Provincetown*]. They canceled those plans in 2021, electing instead to build a fifth submarine cable, which they said rendered the BESS redundant. [*Currently, they are relying on five 12.5-megawatt diesel-fired generators to supply backup power during high-load conditions.*] Eversource will not take the initiative to prepare for the increased demand during the transition. To handle the problem, they will increase the rates, likely at least doubling them, for peak times. It would be cheaper for all of us to charge batteries off-peak and then use power from them during peak times. (Note: Eversource does not generate electricity. They provide a path from the generator to the end user.) One of the biggest suppressors of development in the state is the power companies.
- The electric trade is way behind the curve, and so are building codes. The trades are starting to catch up. Building codes need to require load management systems (there are programmable controllers) and possibly batteries. Solar codes are changing very quickly, and batteries will not be far behind.
- Our targets should be load management and dealing with the utility companies over the transition.

Rachel pointed out that we used to generate our own power here on the island and that as things started to fail, the utility company wouldn’t fix them. AS a result, our grid does not have a single owner; instead, ownership is shared among property owners and the electric company, and easements are difficult to sort out. Cole responded that as development took off in the 70’s, utilities began being put in by private electricians, and there are now lawsuits over cables and lines. He said he doesn’t know what Eversource is going to do; they are resisting taking over the whole infrastructure. As things stand now, power companies are unfairly putting the onus on individuals to supply power to their homes. The best solution would be to have the government take a role so that everybody in the country is paying for an upgrade of the grid. Cole said that there is a liaison for all the power companies to the state, and he can get us the name of that person.

Rachel also noted that there is pushback about batteries because of the materials they contain.

She added that we need to be focusing on the island's vulnerable populations because heat emergencies are becoming a big problem.

Bill outlined a plan to have a walkway with solar panels above it at the Harbormaster's building that could make it independent of the grid. He also wondered how we could get batteries installed in every home in Tisbury and said it would cost about \$30,000 per home. Cole said that batteries are expensive, but the cost will come down as the volume increases.

Melinda pointed out that there is a group at the MVC that is interacting with Eversource.

**Review and Approval of Minutes:** Rachel moved that the minutes be accepted, Louise seconded, and the motion passed 4-0, with one abstention due to absence at last meeting.

**Green Communities Grant:** Ross had to leave early but said that he had received the paperwork for the grant, and Margaret Song said that because it is less than \$100,000, it doesn't have to go out for bids. He says he will have to interact with Eversource.

**Water Company Update:** Bill reported that he has concerns about the water company. He found doors open at the wells, meaning they were unsecured. He said Oak Bluffs has cameras at their wells, and we have none. He also found trees hanging over the lines. He said they operate independently (they are paid by the Enterprise Fund) but they are Town employees, so we have some influence over them. He wondered if we should have someone from the OB Water Company come to one of our meetings. He suggested that we look at a fiberoptic cable to tie the 3 wells together as a back-up and said we need to have a battery system somewhere for the 3 wells, even if not right at the wells themselves. Rachel suggested we work with the water commissioners. She noted that a report is mandated by law, and we don't have the latest one yet. Melinda suggested that she could contact David Schwab (Chair, Board of Water Commissioners) to come to one of our meetings.

**Invitation to Meet with School Building Committee:** Melinda said they had suggested meeting with us, she had replied positively, and they had not responded to her reply.

**Steering Committee Report:** Melinda reported that Keith said the CAP plan is up on the MVC website.

**Adjournment:** Motion to adjourn by Bill, seconded by Kate. The motion passed 5-0. The meeting was adjourned at 7:20 PM.

**Next Meeting:** September 12, 2022, at 5:30 at Tisbury Town Hall Annex. Melinda will invite Richard Andre (President, Vineyard Power).

**Minutes Submitted by:** Kate Shands