



Town of Greenwich

Conservation Commission

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Conservation Commission Energy Committee Meeting

Thursday, April 25, 2019

Land Use Conference Room, 2nd Floor, Town Hall

In attendance: Bob Brady, Steve Hall, Urling Searle, Skip Parker

Also in attendance: Patricia Sesto, director, Sarah Coccaro, conservation resource manager, James Michel, deputy commissioner DPW, Mitch Mailman, general manager – electric lines division at Welsbach Electric Corp.

1. Call to Order

The meeting was called to order at 11:05 a.m. by Patricia Sesto

2. Approval of Minutes

April 11, 2019 meeting minutes approved by consensus.

3. Winter Program

Pat Sesto summarized remaining winter program action items to the Committee. The Town is waiting to be reimbursed \$480.50 from the Clean Water Fund (CWF). Sesto explained the excess \$770 will be held by CWF until either the end of the calendar year, or if the Energy Committee determines a need for the funds before the end the year.

Sesto will complete the remaining thank you notes to speakers and sponsors from New Mark, Green Bank and Eversource.

Sarah Coccaro reported the video recording of the winter program is available on the Energy Committee website. The Energy Committee website was moved to be more easily located on the Town website. Town home page>Government>Committees>Energy Committee. Located here: <https://www.greenwichct.gov/288/Clean-Energy-Community>

4. Guest Speaker – Mitch Mailman

Sesto welcomed guest speaker Mitch Mailman and asked the committee to introduce themselves. Steve Hall first introduced himself and acknowledged Mailman as an expert in energy distribution. Mailman explained he has presided over an electrical contracting entity that builds power lines, substations and generation facilities for electric utilities. He has worked for over 50 utilities in 20 states, Mexico and Canada.

Mailman sees Greenwich's energy goal is to reduce the energy use the town. He explained the Town is in a difficult position; "no matter what you do, you are paying too much for power (electrically speaking). The town does not have its own generation." Mailman expressed two types of conservation: active and passive. He believes the country is not running out of energy, as the public has been made to be believed. Automatically people are doing something to save energy; equipment and machinery has gotten more energy efficient over time, so simply replacing light bulbs or old appliances will save money.

Hall asked if we transfer all our current HVAC units to automatic, would we save energy? Mailman believes little changes can make huge differences, such as staggered lighting in older municipal buildings. Yankee stadium, for example, has a basic lighting level and then they turn on a higher level of lighting during games.

Mailman explained no one in Town is processing each building's energy usage data. He recommended sitting down with Eversource and ask for weekly energy readouts. Mailman acknowledged it's a major expenditure, but worthwhile to audit every building: it's an investment and we should try to reset the thought process centered around energy conservation and payback periods.

Hall asked Mailman what he would guess the energy consumption saved would be- Mailman stated a drop of 20% in energy consumption just by changing the lighting and personal habits.

Hall asked about building management systems - computer-based control system installed in buildings and homes that controls and monitors the building's mechanical and electrical equipment. Mailman spoke highly of them and was surprised they are not used more often.

Skip Parker arrived at 11:23 a.m.

Mailman asked whether Greenwich schools are on natural gas, electric, or steam? Discussion ensued surrounding fuel cells in schools and particularly the hospital. Hall mentioned Bruce Becker's presentation in February during the energy program, which discussed using a fuel cell in a residential setting. Mailman believes that since hospital

have such a huge energy demand, to be productive, one would need to segregate the fuel cells.

Discussion turned toward wind power. Mailman expressed his concerns over wind farms. Primarily that the batteries are made in China.

Parker asked if the group had discussed the potential increase in demand due to electric vehicles? Mailman said the Town is not at risk; we're not going to spike the demand. Urling Searle referenced a comment made during a previous energy committee meeting presentation when it was explained the demand would surge at night when everyone is charging their vehicles. Mailman countered the peak demand is on a hot summer, early evening when people return home and raise the air conditioning. Parker asked if that will only exacerbate the peak demand when people plug in their EVs? Mailman does not believe it will. He believes it would only be an issue for people living at the end of some circuits.

Mailman spoke about the new substation being built in downtown Greenwich. He expressed concerns the substation has nothing to do with capacity. Parker asked if there is a future scenario where this substation would be needed for Greenwich. Mailman reiterated the substation has nothing to do with capacity or transmission. Greenwich already has enough transmission capability, it's a distribution issue. Parker asked if there is a different solution that could have been taken? Mailman stated the utility portrayed a scenario in which they were vulnerable if a second contingency failed.

Hall moved the conversation to discuss this Committee's main goal, which is to reduce energy use and how this translates into budget requirements. Mailman suggested picking three test buildings and attack low hanging fruit energy efficiency measures. Brady stated there is already a re-lamping project for Town Hall. Mailman acknowledged this is a great idea, but we should also be focusing on teaching people to turn off lights. Mailman said the first thing he would do is put LED lights in every athletic field in Town.

Hall asked Jim Michel how we change the perception in Town. Michel stated education was critical in trying to change behavior. Internally when doing renovations, DPW has painted rooms brighter so lights may not need to be turned on all the time, and are changing all lights over to LED throughout the entire building. In older buildings, the HVAC is dated and difficult to manage, but he's hoping to replace those. In Town Hall, for example, replacing the HVAC system would require a major renovation of the entire building and you can't just shut the building down.

Mailman asked if there have been classroom conversions of incandescent and fluorescents to LEDs in all the schools? He went on to ask about how much data we have for Town

Hall. Hall followed up to ask if anyone knew how much we spend per square foot for this building? Brady stated that no one is analyzing the energy data in each building. Mailman believes that energy meters should be changed every 10 years building because they can be incorrect and shouldn't be trusted alone.

Mailman went on to mention that we haven't even discussed water usage in town. The Committee briefly discussed building vs. resident water usage and waste.

Hall asked Mailman what should a public building's energy use intensity (EUI) be and how is the baseline determined for other similar buildings? Mailman asked why the Committee focused on the Town Hall building and not a Board of Education building. Sesto explained that the BoE more or less, operates as a separate entity. It adds a layer, which made Town Hall a better candidate. Hall discussed his comments from the energy audit (see last meeting's minutes). Mailman offered advice to change every light switch in the building to a motion sensor and expressed approval of Co-Generation.

Hall revealed he listened to a micro grid seminar recently highlighting a case study in California. Mailman stated utilities are very forward thinking there and Los Angeles has its own municipal electrical company. Mailman did caution that if Greenwich had a Co-Gen system, for example right next to Town Hall, it would produce more energy than we could use. The utility would probably not let you use their lines, so you would have to sell the energy to the utility, which would then turn around and sell it.

Mailman stated we should change mindsets before we address changing equipment. Brady articulated the Town spends roughly \$6.1 million/year on our energy bills and he gathered two things from Mailman's visit today: 1. Focus on energy demand management in the form of financial incentives and behavior change through education and 2. the Town should have a vested interest in knowing every municipal building's energy usage every month.

Sesto and the Committee thanked Mailman and Michel for joining their meeting. Mailman and Michel left the meeting at 12:20 p.m.

5. Town Hall Energy Audit and report

The Committee discussed Rusty Parker's correspondence with Ed Stein's report on the Glenville solar system. Committee agreed this should be included in the Town report. Stein had follow up items in his report, such as correcting the warranty issue. Cocco will ask if R. Parker will stay on top of this.

Sesto would like to see a holistic sustainability plan for the Town Hall. Searle noted that even though it's too late to include any energy efficiency measures in the 2020 budget, she

would like to explore a PR campaign to educate staff and residents on energy conservation. Brady noted the first hurdle is convincing people that sustainability makes economic sense.

6. Next meeting

The next meeting will be Thursday, May 9, 2019.

7. Adjourn

With no further business, the meeting adjourned at 12:31 p.m.