

BOLTON ENERGY COMMITTEE
REGULAR MEETING
7:00 PM, Wednesday, January 3, 2018
Notch Road Municipal Center, Room 9
Minutes

Members Present: Chairman Richard Dziadul, Vice-Chairman William Hebert, Andrew Macomber and John Stewart

Members Absent: Brian Blass, Rodney Fournier, and Jim Adams

1. Call to Order: Chairman R. Dziadul called the meeting to order at 7:03 p.m.
2. Public Comment: No public comment.
3. Approval of the December 6, 2017 meeting minutes: The December 6, 2017 meeting minutes were amended as follows:

Replace paragraph 5b with the following:

5b. Using Photovoltaics to reduce the cost of Town electric bills: R. Dziadul said there is the possibility of using virtual net metering but more research is needed. He explained the Town does not want to put solar on any of the historical municipal buildings, but virtual net metering could allow Solar electrical generation to be generated at the Notch Road Municipal Center and credited to other municipal buildings which have historic significance. Discussion followed. R. Dziadul described the Emergency Operations Center in Killingworth that uses high efficiency electric heat pumps, and is installing a photovoltaic system to produce electricity to reduce the electric bill which includes the draw of the heat pumps. He would like to see something similar utilized in Bolton.

Replace paragraph 6c with the following:

6c. Impact of the State budget deal on future plans of the Town of Bolton to make energy improvements on Town buildings: R. Dziadul reported he testified before DEEP In opposition of the State plan (Comprehensive Energy Plan) to limit net metering to 20 megawatts. Currently there is no net metering limit, there has been approximately 100 megawatts installed during the last year. He explained that 2018 will be the last year to apply for the Zero Renewable Energy Credit (ZREC). A plan from the Town would have to be filed by April 2018 in order to take advantage of the ZREC program. 2018 is expected to be the last year of the ZREC program.

End paragraph 6d in the third line after "Town of Bolton".

Dziadul MOVED to approve the December 6, 2017 meeting minutes as amended. MOTION CARRIED 4:0.

4. Correspondence

- a. Committee must submit its annual report. A draft will be sent around for comments.
- b. "Schedule of Meetings" for scheduled meetings in 2018 has been emailed to the Town Clerk and Assistant Town Clerk and J. Stewart delivered a paper copy.

5. Ongoing Business

a. Current state budget plan has serious implications for our promotion and use of energy efficiency (EE) and solar photovoltaic (PV) systems because the plan takes about 175 million dollars from the Energy Efficiency Fund, 16 million dollars from the CT Green Bank, and 200 million from the utility funds. These actions endanger half of the EE and SV jobs in the state and many of the discounted loan rates for EE and PV will become unavailable. Dziadul argued that the committee must put together and file an energy plan within 60 days and may need to meet on a weekly basis. (Its actual implementation can come later.) Several plan constraints mentioned in the discussion included: a) use of virtual net metering (VNM) was probably not available for our plan, b) the solar panels would be installed and owned by a SP company and we would purchase the generated power from the SP company, c) this allowed immediate savings without the need to put any money up front (as would be needed if purchasing a SP system), d) the sum of the projects must generate enough power to create financial interests from the Green Bank (through its Solar Lease 2 program) and SP installers, and e) such lease or power purchase agreements often have a 3% annual increase in costs. Four possible sites were discussed.

1) Fire station used about 18 kWh/year and the cost seemed to be \$.25/kWh, which is very high (and Dziadul will recheck the data). The best SP option would be carport arrays with a 15 kW system. (Google's Project SunRoof also indicated the station roof had good exposure, if it is strong enough to support SP arrays.) Dziadul showed some pictures of car port systems from Coventry. This system alone would probably be too small to "qualify" for a Solar Lease 2 project, so more capacity is needed.

2) Bolton Center School's roof seemed to have over 1000 square feet available, which would support a 100kW system that would supply about 25% of BCS needs. The local transformer could handle this load and such a system would only need one inverter, which saves costs. There was some discussion as to whether the roof was strong enough.

3) Bolton High School is the largest electricity consumer among town-owned buildings. The new addition to the school has a strong enough roof and could support a SP system that supplies 15% of BHS electricity demands.

4) Bolton Library uses 22,500 kWh per year and its roof has good solar potential, but more information is needed to assess its size and strength.

b. As discussed above, the current state budget plan requires fast action to utilize current benefits. Once a proposed SP system is approved by CT Green Bank it is put out for bids by SP companies. The zero-emissions renewable energy credits (ZRECs) from the systems are valued at a ZRECs auction in early April and that may be the last chance to earn ZRECs because of state budget issues, thus we need to have a SP plan approved by March. If we don't pursue this option, then our only money saving options for electricity seem to be reducing the utility "ghost" fees on the various electric meters controlling seldom used electric outlets.

c. The possible use of SP to reduced electricity charges was discussed above.

d. Bolton Energy Vision still needs some development, but initial focus on SP arises from the deadlines noted above. The town has selected natural gas (NG) heating with a projected savings of \$48,000 per year (over older fuel oil systems), but it was noted that these savings may

change as NG prices will probably rise in the future as our country's excess production is permitted for sales on the international market. An alternative to heating with NG (and cooling with electricity) is using heat pumps that use electricity to heat and cool, but pumps can be powered by electricity from SP systems, as done in Killingworth. It was noted that the high school already used geothermal heating/cooling. The Energy Vision also needs to consider other issues, including energy efficiency in heating and lighting. The vision needs to extend the same types of actions to Bolton businesses and residents. A good motivational slogan should be developed.

- e. LEED by Example Program works by having town do an energy audit of its buildings and then CT Green Bank will facilitate financial and logistical work with possible installers. However, the LEED by Example contract person has ignored contact efforts by R. Dziadul. This program may be dropped with the state budget plan.
- f. Scheduling a Special Meeting with the new Board of Selectmen (BOS) and Re-introduce the Energy Committee and/or meet with a BOS subcommittee to discuss energy issues before going before the BOS. William Hebert will contact Town Administrative Officer Joyce Stille to set up a meeting.
- g. Discussion on Education Outreach to High School Students was tabled for later meeting.
- h. Consider and act upon follow-up targeted CVC presentations like the one in August 2017. Possible presentation topics discussed by the Committee included SP, heat pumps, energy efficiency, and battery back-up systems.

6. No new business

7. Adjournment: Dziadul MOVED to adjourn the meeting at 8:25 p.m. Macomber SECONDED. MOTION CARRIED 4:0:0.

The next regular meeting is scheduled for February 7, 2018.

Respectfully submitted by John Stewart

Please see minutes of subsequent meetings for approval of these minutes and any corrections hereto.