Peterborough Energy Committee Minutes December 13, 2023

Present: Emily Manns, Jim Hassinger, Anne Huberman, Joel Huberman, Bruce Tucker, Tony Cassady, Trisha Cheever

Capital Improvement Program Planning

A member of our committee met with Danica Melone, who is in charge of Town's Capital Improvement Program (CIP), and Lilli Gilligan, Finance Director. The CIP funds any project over \$10,000 and has a six year planning cycle. We wanted to understand how rebates and incentives from renewable energy projects could be incorporated into the CIP process. The short answer is we can incorporate any future renewable energy or EV project into the current CIP structure. It is also advantageous to incorporate RE projects into the traditional planning process.

Our committee may collaborate with the Town in devising a 6-year renewable energy CIP plan for Town Municipal Buildings. We might also consider where EVSEs should be installed in the Town over the next six years.

Peterborough Fire Energy Modeling - Preliminary

We spent the rest of the meeting looking at the latest energy modeling done by Resilient Buildings Group, linked above. We had a lot of questions about the numbers in this model. We need more time to look it over and think about it.

From this model it looks as if the yearly cost savings of ground source heat pumps over water source heat pumps would amount to around \$10,000. This would lead to a very long payback time for a ground source system (GSHP) because of the very high initial cost. We wondered if it is worth advocating for a GSHP system. The problem is that once that parking lot is paved, the option of switching later to GSHP is lost.

It is possible that there will be tremendous advances in the efficiency of heat pumps in the near future. We could look at the water source system currently proposed as a temporary system that would be replaced at the end of its life with very efficient heat pumps.

We think batteries are an important part of this project, not just in reducing demand charges. They also keep a lot of the electricity produced by the solar panels behind the

meter, reducing distribution and transmission costs, and, very importantly, they supply electricity when the grid goes down.

We noted that savings from the IRA rebates and incentives are not included in the energy modeling. Although those savings aren't available until after construction, they should be included in calculation of the payback time.

We expressed our gratitude to Trisha for attending our meeting. We look forward to working together.

Next Meeting

Our next meeting will be held at the Library on December 27 at **3:00** PM rather than 3:30.