

Three Town Meeting on Energy Efficiency for Schools
Northfield, Warwick, Bernardston
November 14, 2017. 7:15 p.m.
Dickinson Library-- Community Room
Meeting Minutes

Attendance: Bob Pasteris, Susan O'Connor, Lynn Hansell, Annie Chappell, Janice Kurkoski, Steve Kurkoski, Tim Brandl, Brian Keir, Stephanie Ciccarello.

Welcome and introductions

Background information on Ashrae audits:

Steve suggested we ask what is exactly needed for an Ashrae II audit. Need estimated cost of project and payback in years, projected savings in oil and electricity. Need heat load calculation. What is an Ashrae II audit? It includes all components of an Ashrae I walk-through. It is used to justify project implementation and includes detailed energy calculations and an analysis of proposed energy efficiency numbers.

<https://www.smartwatt.com/whats-difference-ashrae-level-1-2-3-audits/>

Ben Weil from CEE has said in the report that the CEE numbers aren't adequate that he did using google view for square feet of building, so we need the Ashrae II information. Stephanie underscores that it doesn't have to be comprehensive, but can target the issues that Ashrae I audit surfaced.

Update from Tim Brandl and ECI audit of schools

- Ed Kordash from ECI did the lighting audit for schools was done a while ago for BES and NES, but reports aren't done.
- Tom Dexter from ECI has completed an Ashrae II exam on all boilers and machines. The way they make money is they fill everything out and get the rebate money. Susan asked if they have looked at insulation and air sealing issues.
- Action item: Tim will send an email and ask them to tackle this. He will also let them know that the Energy Committees need the information no later than mid-January, so that we have time to get estimates and decide what will go into the Green Communities report.
- Action item: Janice will make sure Tom has the CEE reports and PPT.

Other questions and updates

- Question: The electrical information is not in the baseline for NES and we need it.
- Action item: Janice is collecting names for weatherization. Energia might be good.
- Electric aggregation. Susan explained what electric aggregation is and that FRCOG and FC CPR are holding a meeting on Tuesday, November 21, 6:30-8:00 for towns to discuss

the idea. It would require informing town about it and bringing a warrant article to Town Meeting to approve. FRCOG would then help each town fill out the application. Brian explained that Bernardston has been doing this for one year, with a focus on cost. A question came up about the separate contract for the schools, and Tim said that they buy the cheapest and this would likely stay separate from the rest of the aggregation contract.

- Tim asked about re-districting: Julia explained that it might just be shared administrators. But it could be more than that, but it is too early to say. If we can't move forward, we just spend funds another way.

Town feedback on options

- Bernardston is still working on spending out their initial Green Communities grant, and then will have to do a final report. They might be ready in Spring 2019 to do some work on the schools in their competitive Green Communities grant. If they have any money left over after finishing town buildings in this grant, they could consider some school effort.
- Northfield just met this evening with their Select Board so the SB understands that just Northfield and Warwick will be moving forward now and with a primary focus on the library and Northfield Elementary School. If there is room in our GC grant for PVRs activities, we are open to that.
- Warwick will work on WCS and a bit on PVRs.
- NOTE: Bob reminds us to check utility incentives from CEC or FRCOG. GSHP or pellet boilers and things like that would need funding from other places. Janice said that Warwick got a rebate on heat pump by asking the supplier if rebate could be passed onto the consumer. (Look at Table 4 on Annual Report).

Review guiding principles (see below)

We made some minor revisions in the guiding principles and would like to do a survey in WCS and NES. Tim will find the draft and results for PVRs. Susan will revise draft. Lynn and/or Janice will disseminate the surveys in January. Here are the final guiding principles:

1. Implement conservation and improve energy efficiency and reduce energy costs for our towns.
2. Utilize renewable energy sources.
3. Select approaches that lead to a healthy environment, taking into account air quality and noise levels and occupant comfort.
4. Engage the school community in a collaborative effort by gathering their input, involving them in decision-making, and in creating curriculum opportunities for children and youth..
5. Build buy-in for the project among public officials and the broader public through information sharing, community meetings, and press coverage.
6. Tap expertise of DOER and Clean Energy Extension and other resources(CEE)

Review of possible strategies from each school

- Demand factor will only lower the peak, so it might not be a Green Communities item. Lynn suggested we put it into our report and ERP, and then determine if it can go into GC grant for the spring.
- For Warwick, some items have been on our list for a while, and how to pay for the improvements with so little ROI. The district agreement was holding us up. To see these things back on the list feels great. Code may not allow us to take fire suppression out of the attic.
- On PVRs, building envelope first. We would need to look outside of GC for solar panels in parking. Annie will start doing research on where there is money for PV for schools
- Janice shared estimated cost savings that she got from Ben at CEE today. While GC won't pay for solar, the yearly cost savings is \$69,000 for PVRs, so well worth trying to find a way to do this. Steve suggested we consider GSHP for NES, combined with Solar to move renewable.

Next steps:

- Get signatures from School Superintendent. Ask Ruth if it needs to go through Buildings and Grounds Committee or just her.
- Do we need to meet in January when the audits are available? Bernardston wants to be in the loop but doesn't need to meet. Janice and Steve will be away, so we will have a conference call about the audits when they are free.

NES

Replace boiler system (Pellet or GSHP)

Air Sealing and increase insulation

Thermal performance analysis

Demand and load factor analysis

PVRs

Insulation and air sealing

Domestic hot water tank converted to thermal energy storage

Window Film (low e film)

Solar Panel in parking lot

Replace current boiler-ground source heat pump

Thermal performance analysis

Demand and load factor analysis

Warwick

Thermal Performance Analysis

Demand and Load Factor Analysis

Removal of Glycol and Heating in Vestibules

Envelope Insulation and Air Sealing

Removal of Dry Fire Suppression System

Heat pump in cafeteria

Approved by Energy Committee Dec. 12, 2017
Silvia O'Leary