

Meeting Minutes 20141008  
Town of Underhill  
Energy Committee  
08 October 2014

DRAFT MINUTES

CALL TO ORDER

Jerry Adams, Pete Bennett, Peter Duval, Bob Murphy, Steve Webster, and Chris Miller in attendance, the regular meeting was called to order at 6:38pm in the Town Hall Kitchen, with Chris in the chair and Peter D. recording minutes as secretary.

Agenda

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Steve W. asked to add Solar Community to the agenda. Peter D. asked to add Town Garage to the agenda.

6:42

Steve Haenel, Underhill resident, arrived and set off a round of introductions.

Renewable Energy Vendor Presentation

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Steve W. presented the tentative format for the event: 5 minute presentations followed by general questions and then time to visit vendors individually. Steve wrote an article for the Mountain Gazette and sent a draft to Chris, deadline for publication is tomorrow. Confirmed vendors include Suncommon, Real Goods and Solar Specialists. Many others have been invited.

6:46

Tom Moore arrived.

Steve reserved the town hall for 28 October, 7pm-9pm. Chris volunteered to bring cider and cups. Pete B. asked about the contacted vendors. Steve read a list of solar thermal, solar PV and heat pump vendors. Pete B. suggested AllEarth. Tom suggested adding car vendors. Bob suggested Vermont Energy and Maheux.

Advertising and promotion activities were discussed, including Mountain Gazette, Front Porch Forum, flyers, Clark's electronic billboard.

A non-vendor informational presentation was discussed. Bob volunteered to give the presentation. Steve H. suggested that people will want to know about applicable law and incentives. Bob offered to bring a projector and screen, and recommended dsireusa.org.

7:05

Town Plan Draft Energy Chapter

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The committee discussed the 3 October 2014 draft of the chapter as revised by Chittenden County Regional Planning Commission.

Many problems were identified in the charts and data, including: the data exhibited an inexplicable spike; the charts are uninformative,

poorly designed and poorly referenced; there is no consideration of propane; wood is a major fuel but its associated CO2 emissions are not quantified; Underhill's CO2 emissions shown as equivalent to the emissions of the entire US in both a table and the main text. Chris felt that information would confuse or mislead people. Tom said that it is not ready. Steve W. observed that we have no confidence in the data Pete B. said that it raises more questions than answers.

7:20

Discussion turned to the main revision of the text, paragraph 8.2. Chris read the paragraph and noted that the reference to compact fluorescents was dated. Steve W. suggested changing references to electricity to energy.

Peter D. commented that all of the text, and much of our past effort, has been considered relative to the past rather looking forward to the goal, and that can lead to a failure to accomplish the goal, by local suboptimization. A gradient descent optimization, following the steepest path downhill, can lead one down the wrong side of a hill and too high an elevation. Tom rephrased it as baby steps don't work, every once in a while a giant step needs to be taken. Peter responded that at least a giant planning horizon is needed so that the entire terrain is understood and a path to the goal identified, which may even be uphill for awhile.

Peter D. said that the plan is completely tractable. The only reason that the town plans have then same chapters is that the planners and planning consultants looked at the statute and followed its pattern and that's why there is this "cookie cutter" language. There is nothing that requires town plans to follow this pattern. We could start from scratch using Underhill ideas and issues.

Jerry said that the current plan is bulky compared to former plans and the planning commission is trying to reduce it, so that deleting the CCRPC additions would be well received.

Chris said that the plan is not educational, is a document that gets buried, and that we need to be expedient to meet the deadline.

Peter D. said that the planning industry generally looks to copy from models. If we did put out a significantly different model, say that included a passivhaus energy standard, it wouldn't affect many houses in Underhill, but it could lead to bigger towns to follow suit.

Tom said that we have to deal with what we have in front of us.

Steve W. suggested that Peter write a new draft for later review in parallel with this draft.

#### MOTION

Jerry moved, and Tom seconded, to keep paragraph 8.2 (approximately line 25-34) with edits changing "compact fluorescent" to "energy-efficient", "electricity use" to "energy use" and delete all other new text, charts, tables and data. Passed unanimously.

7:35

Post Office

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Bob reported that the ceiling has been completely insulated, with the mini-split to be installed soon. Bob, Tom and Jerry removed a lot of rock wool and debris by hand. Jerry moved the plumbing vent so that it now exits the roof. Tom took care of patching the floor and roof where the big vent pipe was removed.

The total bill from Building Energy was \$7265, less the Efficiency Vermont incentive of about \$1600, left a net project cost of \$5708. The heat pump will be \$3000. The garage high bay lights will cost \$2215 with a \$750 Efficiency Vermont incentive. All will fit within the budget of the VHEC grant.

The blower door test was a disappointing 1318 CFM50, compared to 1730 CFM50 before the project began -- about 25% reduction. Bob would like to get to a 35% reduction to get an additional \$250 incentive from Efficiency Vermont. A smoke pencil test revealed major air flow at the windows, wainscoting, front door weatherstrip, Bilco door and furnace. Bob estimates that the air flow could be reduced another 400 CFM. He said that Mark Diego recommended sealing the basement door with a new frame and framed foam plug with Q-Lon gasket. Discussion of the ductwork versus the door ensued. Bob feels that an hour with some caulk guns would help with other leaks.

Discussion of whether to hire out the job of making the new basement door. Bob will ask Building Energy for a quote on the project, and order the high bay lights for the garage.

MOTION

Pete B. moved and Steve W. seconded to recognize the very good work done by Jerry, Bob and Tom on the Post Office project. Passed unanimously.

Peter D. asked if, when it fails, the furnace would be replaced with another furnace, or something else and whether removing the furnace now, then air sealing, would help avoid the problem of localized suboptimization. Bob said that there is no likelihood that a new furnace would be installed.

Chris asked about the control for the two heating systems. Bob said the project is an experiment. Jerry said that he has used identical thermostats, located side-by-side, with significant offset between the controls. Peter D. suggested using some real-time data loggers to monitor the building. Bob said that he hoping to get some help on this from VEIC.

7:55

Member Recruiting

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Chris read an ad for Front Porch Forum. Tom suggested recruiting at the vendor night. The process for recruiting and appointing was discussed and several questions emerged. Chris will discuss this with the selectboard and town administrator.

8:05

Steve suggested putting time limits on the agenda items. Agenda items, Solar Community and Energy Assessments were tabled without objection.

Town Garage  
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The status of the town garage was briefly discussed and Bob expressed concern about the town's energy-related decisions being made without consultation.

Peter D. asked if, since the garage was still in limbo, perhaps the VHEC grant money could be used on the post office to achieve a much tighter post office.

Bob said that the lights really need to be fixed, and they can be reused if have to be taken down for the roof repair.

MOTION

Steve W. moved, and Pete B. seconded, to send Chris and Bob to a selectboard meeting to discuss the need for consultation. Passed unanimously.

Chris observed that the selectboard's resolve to repair the roof is fading because it is so expensive, and yet at the same time the building is so young, it is too early to replace.

Minutes  
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MOTION

Bob moved, and Tom seconded, to accept the minutes of 10 September 2014 as submitted. Passed Unanimously.

ADJOURNMENT  
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On a MOTION by Jerry, seconded by Bob, the meeting was unanimously adjourned at 8:12.

Respectfully Submitted,

Peter Duval, Secretary

Approved \_\_\_\_\_ date: \_\_\_\_\_

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Chris Miller, Chair