

Net Zero Task Force

A committee for net zero metering in Derry, NH

Thursday, September 22, 2016

6:00 PM

14 Manning Rd. Derry, NH 03038

Board Members

Brewster Bartlett	Josh Bourdon
John Burke	Nick del Etoile
Mike Fowler	David Granese
Anthony Marciano	Ken Linehan
Jeff Moulton	Mary Till
	Will Stewart

Minutes

-Call to Order: Chairman Jeff Moulton called the meeting to order at 6:00 PM.

-In attendance: John Burke, Mary Till, Jeff Moulton, Anthony Marciano, Nick del Etoile, Dave Granese, Brewster Bartlett, and Josh Bourdon (arrived at 6:10 PM).

-Absent: Len Linehan, Mike Fowler, and Will Stewart

Also in attendance: Bob Mackey

-Consent agenda:

Approval of minutes from June 16th meeting (July and August meetings did not have a quorum and therefore there are no meeting minutes).

Motion made by Mary Till to approve items in consent agenda

Motion seconded by Nick del Etoile

Motion passed unanimously

-Pinkerton Academy energy usage update

Brewster Bartlett indicated that their new Finance Administrator, Michelle LaMarre Waldie, is behind green initiatives and would like to do more improve their energy usage and investigate renewable energy alternatives. Brewster will arrange a meeting with Michelle and the Task Force to introduce ourselves and explain some of the initiatives that we can assist with.

Brewster reviewed that there is an LED lighting program under way at Pinkerton with the assistance of Eversource and their electrician, Matt Cassidy. Three buildings have been completed (of 29) with projected savings of \$9000/year. A current LED replacement project for the gym is expected to save close to \$10,000/year.

There is also interest in computer shut-off software (\$0.50 per computer/day x 1000s of computers in the school), sub meters to allow individual building evaluations, and solar as an education tool. We will investigate if there are grants or other money available from the state, federal or utility side to help with Pinkerton's plans (Jeff M).

-Derry schools energy usage update

Ken Linehan was not in attendance but we agreed to check with Ken to see if he could arrange a meeting with key stakeholders at the school for our offer of assistance with the Honeywell project. A letter will be prepared providing the salient areas of where the Task Force could be of assistance (Jeff M). Bob Mackey mentioned that Honeywell was already inquiring about permits for their program.

-Derry municipal energy usage update

Discussion whether we had energy usage for all Town buildings. Josh Bourdon will contact Town Administrator for a complete list.

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Mary Till indicated that an initial test by Purpose Driven Power Systems of their BPU, showed up to 8.6% extra power production on a cloudy day for a residential solar system. We will check with Mike Fowler to see how his field trial is progressing with the same device.

Anthony also requested that we get more detailed oil, gas and propane use for the Town buildings so that the model can be refined (Mike F).

-Derry Building Code

Bob Mackey reviewed the current codes in use by the Town for new construction. There are minimum energy standards already in the code but these do not achieve an Energy Star designation. It was agreed that we would investigate a voluntary handout to go with building permits that would educate the builder and owner with regard to energy conservation options, along with typical payback periods. Bob Mackey will investigate with the State of NH to see if a document(s) already exists.

-Other

The Town Council will be requested to extend the 6 month charter for the Net Zero Task Force and to confirm the Board members. It was also agreed to change the Parkland (John Burke) and Chamber of Commerce (Will Stewart) representatives to alternates, and add Bob Mackey as regular Board member.

-Next meeting has been scheduled for October 20, 2016 @ 6:00 PM

Meeting was adjourned at 7:30 PM

Respectfully Submitted,
Jeff Moulton

Derry Schools
Honeywell Proposal for Energy Efficiency Project
Comments from Derry Net Zero Task Force
June 18, 2016

Observations:

- Schools buildings have been modeled (EPA tool) and rank as follows compared to similar buildings throughout the USA, with adjustments for climate zones and other factors:

Derry Schools Analysis - EPA Tool

School	Yr Built	Sq Ft	Energy Use (kBtu/Sq Ft)	Energy Bill (\$)	Ranking Nationally
Ernest Barka	2005	154.6		93,809	2
South Range	1966	123.2		52,307	2
Derry Village	1967	94.0		61,788	19
West Running Brook	1995	69.4		112,037	36
Hood	1952	65.5		168,919	37
East Derry	1986	75.3		58,874	45
Grinnell	1950	60.8		80,047	74
SAU	1901	84.6		8,317	78
Total				636,098	

Note: Ranking is compared to other similar buildings nationally. Score of 2 means that 98 out of 100 other buildings have better energy performance.

- Some school facilities need urgent replacements and/or updates. Significant energy reduction opportunities have been identified by the Honeywell assessment.
- Proposal from Honeywell is a comprehensive project to update all school buildings:
 - Pros
 - Well known, reputable supplier
 - Familiar with school needs via the previous assessment
 - Ability to start project in the near future
 - Cons
 - Negative \$2.5M cash flow for 20 year project
 - \$15M Project - not clear if Honeywell is giving schools their best price – no competitive quotes
 - 20 Year guaranteed energy savings are contingent on performance by Honeywell and the Schools
 - Requires professional support for commissioning and to enact periodic report recommendations from Honeywell
 - No money is allocated in this project for the schools to perform these functions or for buying materials that be required from the Honeywell reports
 - What would be the impact on the building EPA scores if the Honeywell recommendations are followed?

- Is there the ability to delete a school from the Project without financial penalties (e.g. school closing)
- Recommendations from the Derry Net Zero Task Force:
 - Validate prices from Honeywell
 - Request for Proposal to other vendors, or
 - Ask Honeywell for agreement to follow government price list; Honeywell to provide detailed price list for validation
 - If price reductions are not achievable, re-prioritize project to achieve break-even point

Develop a commissioning and performance team and yearly budget to support the Honeywell project or evaluate a 3rd