

# Rye Energy Committee Meeting Notes

Tuesday, June 5, 2018  
6:00-8:00 PM, Rye Public Library

Member Attendees: Danna Truslow, Howard Kalet, Michael Joyce, Matt Maura, Tom Pfau, Guest Attendees: Carl Nicoletti, David Helfrich

The May meeting minutes were approved.

## **Building Audits**

Michael reported on his May 7 meeting with Library Director Andrew Richmond. His notes are included below.

### **Overview:**

Andy was very generous with his time, and willingness to speak with REC about the Public Library building Re: its past, present and future energy elements, concerns and plans.

The last comprehensive energy audit conducted at the Public Library was done on September 2013 (prior audit, 2009).

During February of 2012 the attic insulation was upgraded at a cost of \$67,208 which was funded by an Energy Efficiency and Community Block Grant. According to Andy, the energy savings were observed during the initial years following, but now he feels that this is no longer the case. We discussed reasoning for this and he believes it may be due to other deteriorating elements in the building i.e. windows, HVAC system - and specifically leakage within the 'historic areas' of the building.

### **HVAC System:**

There are currently 6 oil burners on premise at the Public Library which are approximately 20 years old. These burners are serviced on an annual contract but have recently had a recommendation to move to an air-to-air system.

The HVAC is being controlled by programmable (non-smart) thermostats which during the winter months run at 72 degrees F during operational hours and are lowered to 65 degrees F at night. Days of operation are Monday thru Saturday. On Sundays, the temperature is programmed to maintain 65 degrees F.

The oil is provided on automatic delivery, although the Library did run out of oil during this past winter's cold snap. There are low temp alarms integrated into the building's alarm system as a failsafe.

However, any significant updates or changes to the HVAC (and also to the larger premises) have been parked pending the outcome of a CIP being undertaken by the Board of Trustees.

Andy informed me that the Library Board of Trustees (BOT) are working on a comprehensive Capital Improvement Plan which will include proposals to extend/ expand the building. The BOT have engaged Tim Nichols of Acadia and are expecting to have a schematic design completed by end of summer 2018. The plans would endeavor to incorporate LEED influenced materials, design and construction when and where possible, though the historic aspects of the premises may hinder these best practices from permeating throughout the entirety of the building.

**Lighting:**

Andy believes the building is currently using C5 tube fluorescent lighting within and throughout most of the building's overhead assemblies. The library had been using C7 bulbs prior to the change which happened several years ago. (T8 and T12 bulbs?)

It is believed the last time Eversource did a lighting audit was ~ 3 years ago, and Andy is very open and willing to have them come back to look at the cost/ benefit of migrating to LED bulbs.

LED fixtures and bulbs will be a part of the CIP the Board of Trustees is working on.

**Other Areas:**

Andy and the BOT are very interested in incorporating rain gardens as part of the CIP, and would be happy to continue to provide updates to REC of their progress as they navigate through their process.

Danna and Tom reported on their May 21 meeting with Rye School Maintenance Supervisor Jim Gordon. Jim was able to provide many details about the work completed after the energy audits done in 2008. Most of the recommendations for the elementary school were completed while only some were done at the junior high. It was decided that it would be worth having Eversource complete a lighting audit of the PSB, Library and Schools. Tom offered to contact Eversource to discuss having the work done. Matt offered to get a quote for an oil tank monitor. A list of the audit recommendations and their status was presented. The work proposed by the audits that still needs to be completed is listed below.

**Rye Junior High**

- Attic space ventilation - Confirm attic space is properly ventilated in summer months to prevent build-up of heat and humidity
- Library attic insulation and air sealing - Confirm whether library rafter bays were insulated
- Replace boiler – Confirm that larger boiler is on list of capital improvements
- Oil Tank Level Monitor – Consider installing remote oil tank level monitor
- Upgrade thermostats and controllers – Get quote for HVAC control system similar to one installed at Elementary School

**Rye Elementary School**

- Oil Tank Level Monitor – Consider installing remote oil tank level monitor
- Hot Water Heater – Consider installation of hybrid water like the one installed at Junior High

Howard pointed out some common threads among all the audits that ought to be compiled to get the work done, including lighting audits. It's been suggested that town employees might be able to do some of the work but there may be funds available to hire a firm to perform the work.

## REC Survey

The tabulated results of 52 responses to the Rye residential energy survey were presented as follows.

<u>Question</u>	<u>Answer</u>	<u>Responses</u>	<u>Total</u>
1. Are you a Rye resident?	Yes	98.11%	52
	No	1.89%	1
2. Please indicate your age.	26-40	10.42%	5
	41-55	18.75%	9
	56-70	41.67%	20
	71+	29.17%	14
3. Were you aware Rye has an Energy Committee?	Yes	70.83%	34
	No	29.17%	14
4. Do you own or rent your home?	Own	97.92%	47
	Rent	2.08%	1
5. What is the primary fuel used to heat your home?	Oil	51.06%	24
	Propane	40.43%	19
	Electric baseboard	2.13%	1
	Electric heat pump	6.38%	3
6. The average NH residential electric bill is \$111. What is your average monthly electric bill?	\$26 - \$50	2.13%	1
	\$51 - \$75	10.64%	5
	\$75 - \$100	17.02%	8
	\$101 - \$150	34.04%	16
	\$151 - \$250	27.66%	13
	\$251 +	8.51%	4
7. Have you ever had an energy audit performed at your home?	Yes	34.04%	16
	No	63.83%	30
	Don't know	2.13%	1
8. LED bulbs use less energy and cost about the same as incandescent lights bulbs. Do you use LED bulbs in your home?	Yes	95.74%	45
	No	4.26%	2
9. More than 40 Rye homeowners have solar panels installed. Do you have solar panels installed on your home?	Yes	10.64%	5
	No	89.36%	42
10. What is your reaction to New Hampshire participating in a study of offshore wind turbines which would be located 10-50 miles off the coast?	Strongly agree	36.17%	17
	Agree but would like more info	36.17%	17
	Disagree	0.00%	0
	Strongly disagree	10.64%	5
	Unable to form an opinion without more info	17.02%	8
11. What would be your reaction to Rye installing solar panels to provide power for municipal buildings?	Strongly agree	54.35%	25
	Agree but would like more info	36.96%	17
	Disagree	0.00%	0
	Strongly disagree	0.00%	0

	Unable to form an opinion without more info	8.70%	4
12. Natural gas is currently the least expensive heating fuel. If natural gas became available in Rye would you consider using it to heat your home?			
	Yes	60.87%	28
	No	13.04%	6
	Unable to form an opinion without more info	26.09%	12
13. The average annual energy cost for the Town Hall is \$18,160. A more energy efficient Town Hall is under consideration in the upcoming election. How high a priority do you place on the energy costs for our Town Hall?			
	High priority	46.81%	22
	Moderate priority	29.79%	14
	Low Priority	17.02%	8
	Unable to form an opinion without more info	6.38%	3
14. Is there any information or activity the REC could offer to help you reduce your home or business energy usage?			
	Saving money on electricity and/or heating fuel	54.29%	19
	Community solar farm to share in lower cost renewable electricity	68.57%	24
15. Would you like to be included in the REC mailing list (typically quarterly correspondence)?			
	No	45.65%	21
	Yes	54.35%	25

## Website

Michael reported on the REC website update. There was a discussion of creating a REC Facebook page to provide more flexibility in communicating with residents and updating the existing information.

## Community Solar

Tom reported that ReVision Energy says due to the unknown costs of grid interconnection charges and lack of state incentives, a solar array at the Breakfast Hill landfill would not be economically viable at this time. He offered to contact Dan Weeks regarding photos of historic buildings having solar panels installed. There was some discussion of the REC meeting with the Historic District Commission to get a better understanding of what might be acceptable solar panel installation on municipal buildings.

## VW Settlement – EV Chargers

Matt reported on the State public hearing seeking comment on the VW settlement funds. He also met with Ben Fletcher of Portsmouth regarding their ChargePoint EV charging stations. He learned each station costs about \$12,000. CP is looking for a good location to install 6 stations for free.

Due to time constraints the Public Education Session ideas agenda item was postponed until the next meeting.

The meeting adjourned at 7:55. The next REC meeting will be on Tuesday, July 10 at 6:30 PM at the Rye Public Library.