

Newton Citizens Commission on Energy
November 29, 2017 Agenda
City of Newton

<http://www.newtonma.gov/gov/building/projects/energycomm/default.asp>



Eric Olson (Chair), Halina Brown (vice-chair), Lawrence Kaufman,
Ira Krepchin, Fred Brustman, James Purdy, Jonathan Kantar
Michael Gevelber, Andrew Savitz/Ann Berwick (*ex-officio*)

Advisory Members:

Edward Craddock, Frank Gundal
Brant Davis, Claudine Ellyin, Cory Alperstein

Setti D. Warren
Mayor

Telephone 617-796-1019
c/o Office of the Sustainability Director
Newton City Hall, 1000 Commonwealth Avenue
Newton Centre, MA 02459

**The November 2017 meeting of the Newton Citizens Commission on Energy will be held:
Wednesday evening, November 29th, 2017 at 7:30 p.m. in the Newton City Hall Cafeteria**

Agenda (Any other business properly brought to the Commission's attention)

(Review of October 2017 minutes)

....

New Business To be discussed

1. COMMUNITY CHOICE AGGREGATION (CCA)

a) Welcome to representatives of Peregrine Energy Group of Boston, MA. Peregrine is the Community Choice Aggregation consultant contracted by the City of Newton to conduct outreach and provide critical advice to the City of Newton on the timing and details of the electricity contract to be sought under a CCA program

b) Michael Gevelber and Halina Brown presentation of the "Willingness to Pay" green CCA survey. (Reminder: Green Newton CCA panel discussion Monday Nov 27 at the Library.)

c) Peregrine representatives discussion, including topics such as role of Willingness to Pay surveys in shaping details of a "green" CCA. How Peregrine experience advising sixteen cities and towns on CCA informs their current view of Newton, the role of DPU in the process, etc.

2. Update on Rumford Solar and related projects, including the addition of a high fence to address neighbors' concerns that solar panels, racks, ballasts, etc., are unsightly.

3. PV Net Metering Issues. Update on Eversource's proposals affecting large solar PV arrays and potential impacts on Newton's existing solar projects. For some of the largest projects recently erected on Newton property, the proposal would drop the net-metering price from 24 to 13 cents per kWh, a loss of revenue for projects financed under the existing rate structure. With Newton's leadership, other municipalities hosting large solar arrays have formed a consortium of sorts, to protest the change before the DPU. DOER, Northeast Clean Energy Council, UMASS, the Attorney General's office, the Mass Energy Council and a number of State Senators and Reps have all supported the municipalities' challenge to the proposed rate change. A decision is expected in late December.

Newton Citizen's Commission on Energy

Minutes of Meeting of Wednesday November, 29, 2017, 7:30 p.m.

City Hall Cafeteria

Present: Eric Olson, Chairman, Fred Brustman, Michael Gevelber, Jonathan Kantar, Ira Krepchin, Jim Purdy; Cory Alperstein, Ed Craddock, Brant Davis, Paul Gromer, Marlana Patton, Jon Klein

Chairman Eric Olson called the meeting to order at 7:30 p.m. Members and other attendees introduced themselves. The minutes of the October 2017 meeting were reviewed and approved with revisions.

1. COMMUNITY CHOICE AGGREGATION (CCA)

a) The Commission welcomed Paul Gromer and Marlana Patton, representatives of Peregrine Energy Group of Boston, MA. Peregrine is the Community Choice Aggregation consultant contracted by the City of Newton to prepare the submissions required by the state of Massachusetts, conduct outreach, and provide critical advice to the City of Newton on the timing and details of the electricity contract to be sought under a CCA program.

b) Michael Gevelber and Halina Brown presented the "Willingness to Pay" survey on green community choice aggregation. (Reminder: Green Newton panel discussion on community choice aggregation is Monday Nov 27 at the Library.) [The panel discussion is available through NewTV and can be viewed online.]

Highlights:

Willingness to pay by respondents to the survey generally ranged from \$6 -\$12 per month with the mode at \$8 and some outliers willing to pay more than \$12.

9% would opt out (these are termed "No-sayers"); the other 91% are called "yes-sayers".)

42% of yes-sayers said they would opt up to 100% Class 1 renewables.

The other yes-sayers cluster in the 30-50% range

Willingness to pay responses are clustered around \$8, which would translate to the 30%-50% total green share, depending on their power consumption. The average of all responses is approximately \$10, with a long tail in the distribution of responses.

Per Halina, 50% total green (= state mandated 13% in 2018, plus a 37% default) looks like the best balance between providing more green power while maintaining widespread public support and a reasonable price.

Eric suggested that Cory, Halina, and Michael write up the survey and the Monday presentations for GN newsletter, GN special issue, and TAB.

We need to brainstorm how to recognize people who opt up

c) Peregrine representatives discussion, including topics such as role of Willingness to Pay surveys in shaping details of a "green" CCA. How Peregrine experience advising sixteen cities and towns on CCA informs their current view of Newton, the role of DPU in the process, etc.

Paul Gromer talked about Peregrine's experience in other Massachusetts cities and towns. He emphasized that predicting the percentage of opt-outs as a function of price is complicated; the political makeup of the town is key – conservative politics – higher opt out, liberal politics fewer opt outs.

Paul stated that Peregrine can incorporate whatever default level of green that the city asks. An issue he's aware of is how to address people of limited means; (this category includes more than just customers with lower cost Eversource R2 accounts).

Eric noted that we should anticipate a range of views on Newton's program, including various possible objections based on political views, income issues, etc. We need to anticipate these, especially from people who don't opt out and later discover that they're enrolled.

Jim suggested that we can enlist the City's Council on Aging and social workers to reach seniors and lower income residents.

_____ suggested that we estimate how many wind turbines can be built as a result of Newton Power Choice, which might help to make the environmental benefits clearer and thus build support.

Jon Klein suggested that we describe the program in terms of how many cars taken off the road is this equivalent to.

Cory noted that the Newton Coalition for Climate Action, which prepared a letter to the City proposing a default of 50% green, will collect signatures in support of a higher default. She added that we need to stress the need for a high level of green: "unprecedented climate threat, needs unprecedented response."

Paul Gromer was asked if the launch materials could allow residents to indicate opt-out, opt down, and opt up choices on a postcard to be mailed back, (or on the Newton Power Choice website). No one has done this yet. There needs to be specific evidence of the resident's choice. State of Massachusetts rules about websites would need to be observed. Newton will need to consult with the state about this.

Jon Klein suggested that residents could request opt up or opt down online and then get a return phone call to confirm their choice, as is done with credit checks.

Jim noted that including a low-cost option within the aggregation could address some of these problems of building public support and serving the needs of lower income households.

_____ suggested that the opt-down could even include a little more green than the state mandate if it doesn't cost more than the Eversource rate. (That decision would need to be made when the actual price of the green component is known; also, the Eversource rate changes every 6 months.)

Paul stated that the City submitted its aggregation plan to DOER this month (11/2017), but the plan is mostly boilerplate and does not address default level or other options; the City is free to structure these as it sees fit.

In response to a question about the transition from a first aggregation contract with an energy supplier at the end of the term, Paul noted that the City can sign a subsequent contract before the end of the first contract, even a long time in advance if market is favorable. So there is some flexibility in the time to pin down the best rate without waiting until the first contract has expired.

Paul was asked if Peregrine has any interest in discouraging opt outs. He stated that it doesn't matter to Peregrine, but the electricity supplier might be concerned if there were to be a very high opt out rate (e.g., in response to a very high default level), but he doesn't anticipate opt outs at that high a magnitude.

2. Update on Rumford Solar and related projects, including the addition of a high fence to address neighbors' concerns that solar panels, racks, ballasts, etc., are unsightly.

Briefly discussed.

3. PV Net Metering Issues.

Eric provided an update on Eversource's proposals affecting large solar PV arrays and potential impacts on Newton's existing solar projects. For some of the largest projects recently erected on Newton property, the proposal would drop the net-metering price from 24 to 13 cents per kWh, a loss of revenue for projects financed under the existing rate structure. With Newton's leadership, other municipalities hosting large solar arrays have formed a consortium of sorts, to protest the change before the DPU. DOER, Northeast Clean Energy Council, UMASS, the Attorney General's office, the Mass Energy Council and a number of State Senators and Reps have all supported the municipalities' challenge to the proposed rate change. A decision is expected in late December.

Eric suggested that the NCCE should write a letter for the TAB recognizing and thanking the City for its leadership on this issue.

Brant noted that Eversource is also asking for a standby demand charge for residential installations based on monthly peak usage.

4. The Commission agreed to Eric's suggestion to hold the next meeting on January 10, 2018

The meeting was adjourned at 9:30 PM/

Respectfully submitted,

Jim Purdy

**Newton Citizens Commission on Energy
October 25, 2017 Agenda**
City of Newton

<http://www.newtonma.gov/gov/building/projects/energycomm/default.asp>



Eric Olson (Chair), Halina Brown (vice-chair), Lawrence Kaufman,
Ira Krepchin, Fred Brustman, James Purdy, Jonathan Kantar
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Advisory Members:

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Setti D. Warren
Mayor

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**The October 2017 meeting of the Newton Citizens Commission on Energy will be held:
Wednesday evening, October 25th, 2017 at 7:39 p.m. in Room 204, Newton City Hall**

Agenda (Any other business properly brought to the Commission's attention)

(Review of September 2017 minutes)

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New Business To be discussed

1. COMMUNITY CHOICE AGGREGATION

a) Gevelber analysis (version 3?) of "Willingness to Pay" green power survey results

MG presented GN survey with most recent data, which indicated a high proportion of people who stopped to be surveyed would pay more for additional renewable energy. About 13 percent said they would not be willing to pay more, but

Michael noted that Brookline received a low bid that priced their 25% default (plus 12 % state requirement = 37%) at about \$2 extra (compared to Eversource Basic service, but the town decided not to push beyond the 25% extra renewables that Town Meeting had approved.

MG suggested that the City should consider a special class of people who are getting the R2 rate from Eversource and provide an option for them and others who could stay enrolled in the aggregation without paying for the default level of renewables.

b) status of Community Choice Aggregation contract with Peregrine

Jim, who is on the City's working group along with Halina, gave a brief update on the contract and scope, which have been finalized. The City will be meeting with Peregrine early in November to discuss their preliminary drafts of public outreach materials.

- 2. Check-in with Bill Ferguson on efficiency efforts in Newton Public Buildings. Preliminary results given this summer's massive lighting swap out Newton North HS and next steps – can we compare additional weeks of performance. (Linked to this topic: understanding unexpectedly high consumption in Newton North at times during the past year.)**
- 3. Analysis of “how we get there from here”, an effort to outline steps needed to achieve 100% clean energy for City of Newton’s municipal sector.**
- 4. Recent results across our fleet of solar panels -- the massive Rumford array is up and running. Recent production data – do they match expectations? Also Issues with neighbors, costs related to fence.**
- 5. Update on Eversource’s proposal affecting rooftop solar installations and its potential impacts on solar projects. Newton has joined other communities in protesting the proposal.**

Newton Citizen's Commission on Energy

Minutes of Meeting of Wednesday October 25, 2017, 7:30 p.m.

City Hall Cafeteria

Present: Eric Olson, Chairman, Fred Brustman, Michael Gevelber, Jonathan Kantar, Ira Krepchin, Jim Purdy; Cory Alperstein, Ed Craddock, Brant Davis, Branden Houston, Jon Klein

Chairman Eric Olson called the meeting to order at 7:30 p.m. Members and other attendees introduced themselves. The minutes of the September 2017 meeting were reviewed and approved with revisions.

1. COMMUNITY CHOICE AGGREGATION

a) Gevelber analysis (version 3?) of "Willingness to Pay" green power survey results

MG presented GN survey with most recent data, which indicated a high proportion of people who stopped to be surveyed would pay more for additional renewable energy. About 13 percent said they would not be willing to pay more, but

Michael noted that Brookline received a low bid that priced their 25% default (above the 12 % state RPS requirement = 37%) at about \$2 extra for the average household, compared to Eversource Basic service. However, the Town decided not to push beyond the 25% extra renewables that Town Meeting had approved, even though their expectation was that the average monthly cost differential with Eversource Basic would be around \$7 extra.

Michael suggested that the City should consider a special class of people who are getting the R2 rate from Eversource and provide an option for them and others who could stay enrolled in the aggregation without paying for the default level of renewables.

b) status of Community Choice Aggregation contract with Peregrine

Jim, who is on the City's working group along with Halina, gave a brief update on the contract and scope, which have been finalized. The City will be meeting with Peregrine early in November to discuss their preliminary drafts of public outreach materials.

2. Check-in with Bill Ferguson on efficiency efforts in Newton Public Buildings. Preliminary results given this summer's massive lighting swap out Newton North HS and next steps – can we compare additional weeks of performance. (Linked to this topic: understanding unexpectedly high consumption in Newton North at times during the past year.)

Eric reported on his communication with Bill Ferguson

Future municipal solar projects may move from Power Purchase Agreements to city ownership.. The City might also purchase RECs for 31,500 kWh to achieve a renewables level 5% above the Massachusetts Renewable Portfolio Standard for power used by the City.

Bill looked at the fleet roster of 280 vehicles owned by the City; 87 have an EV version available on the market and could be replaced with electric vehicles at some point. More charging stations for EVs are also planned; they cost approximately \$7000 per station.

Jim stated that providing more charging stations should be a major priority for serving both private and City vehicles. Michael noted that Massachusetts DOER will pay 50% of the cost.

Changing to LED lighting at Newton North High School is approximately 60-70 percent completed.

Minutes of Meeting of Wednesday October 25, 2017, continued.

3. Analysis of “how we get there from here”, an effort to outline steps needed to achieve 100% clean energy for City of Newton’s municipal sector.

Not discussed.

4. Recent results across our fleet of solar panels -- the massive Rumford array is up and running. Recent production data – do they match expectations? Also Issues with neighbors, costs related to fence.

Briefly discussed.

5. Update on Eversource’s proposal affecting rooftop solar installations and its potential impacts on solar projects. Newton has joined other communities in protesting the proposal.

The Eversource petition to the Department of Public Utilities includes a request to sharply reduce the net metering rate for large solar installations, including Newton’s installations of school building roofs and at Rumford Avenue. If this is accepted, all of the City’s facilities will become major money losers, because the City’s contracts with Ameresco would remain in place without sufficient revenue to cover these obligations. Newton is working leading an effort to grandfather the existing rates. We need to publicly support this effort.

The meeting was adjourned at 9:15 PM.

Respectfully submitted,

Jim Purdy

Newton Citizens Commission on Energy
September 27, 2017 Agenda
City of Newton

<http://www.newtonma.gov/gov/building/projects/energycomm/default.asp>



Eric Olson (Chair), Halina Brown (vice-chair), Lawrence Kaufman,
Ira Krepchin, Fred Brustman, James Purdy, Jonathan Kantar
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**The September 2017 meeting of the Newton Citizens Commission on Energy will be held:
Wednesday evening, September 27th, 2017 at 7:45 p.m. in Room 2H, Newton Free Library**

Agenda (Any other business properly brought to the Commission's attention)

(Review of August 2017 minutes)

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New Business To be discussed

1. COMMUNITY CHOICE AGGREGATION

- a) progress report on "Willingness to Pay" green power survey
- b) status of Community Choice Aggregation contract with Peregrine
- c) interpreting Brant Davis' report on Eversource's basic service auction results ("death spiral"?) and consequence for aggregation (see chart below)

2. Monthly check-in with Bill Ferguson on efficiency efforts in Newton Public Buildings. Preliminary results given this summer's massive lighting swap out Newton North HS and next steps – can we compare some weeks of performance. In solar news, the massive Rumford array is up and running, why no ribbon cutting? No announcement?

3. Update on Eversource's proposal affecting rooftop solar installations and its potential impacts on solar projects. Newton has joined other communities in protesting the proposal.

4. Revisiting 2016 Eversource electricity consumption data for City of Newton residential, commercial/institutional, government sectors

**NSTAR ELECTRIC COMPANY
d/b/a EVERSOURCE ENERGY**

Fixed Price Option: October 1, 2017 – December 31, 2017

Residential	N/A
Small C&I	N/A
Large C&I (NEMA)	11.784
Large C&I (SEMA)	9.004
Street Lighting	N/A

Variable Price Option: October 1, 2017 – December 31, 2017

	July	August	September	October	November	December
Residential	N/A	N/A	N/A	N/A	N/A	N/A
Small C&I	N/A	N/A	N/A	N/A	N/A	N/A
Large C&I (NEMA)	N/A	N/A	N/A	10.803	11.474	12.947
Large C&I (SEMA)	N/A	N/A	N/A	7.876	8.640	10.421
Street Lighting	N/A	N/A	N/A	N/A	N/A	N/A

Newton Citizen's Commission on Energy

Minutes of Meeting of Wednesday September 27, 2017, 7:30 p.m.

Library Conference Room H

Present: Eric Olson, Chairman, Halina Brown, Fred Brustman, Michael Gevelber, Ira Krepchin, Jim Purdy; Cory Alperstein, Ed Craddock

Chairman Eric Olson called the meeting to order at 7:30 p.m. The minutes of the August 2017 meeting were reviewed and approved with revisions.

1. COMMUNITY CHOICE AGGREGATION

a) progress report on "Willingness to Pay" green power survey

Most of the meeting was used for Michael's presentation of survey results. Some key points:

Approximately 200 responses; would like to get the total up to 380 to permit a higher statistical confidence level.

46% of respondents would pay for 100% -need to design aggregation so as not to lose the 100 percenters

Ed proposed that the City should set the default percentage of renewables high enough to take advantage of willingness to pay

Zipcodes 02458 and 02467 are under-represented and need more surveys in relation to their population. Five other zipcodes are over-represented.

Selected results

- 13.5% **Would not** pay extra for green energy (No-sayers)
- 86.5% **Would** pay extra (Yes-sayers)
- Modal responses: approximately 20% of people surveyed would pay \$8 per month for more green energy; nearly 15% would pay \$18.
- 78% of Yes-sayers (67% of total responders) support 50% - 100% renewables (38-88% above baseline 12%)
- 44% of Yes-sayers (38% total) support 30-50% renewables
- 46% of Yes-sayers (40% total) support 100% renewables
- **A 30% default level (42% renewables) is supported by approx. 83% of Yes-sayers (72% of total)**

[to be verified against the ppt as presented]

We need to write up results and share with The City's aggregation working group. Halina will do this.

Jim will talk to Ann about putting it on the working group agenda for 10/4 [Halina made the presentation on that date.]

More surveys are planned for Sunday 10/1

b) status of Community Choice Aggregation contract with Peregrine

Halina gave an overview of the aggregation plan and the Peregrine scope.

Michael suggested that the City should consider additions to the scope to reach various segments of the population based on willingness to pay.

Ed suggested that the City could set the default level in terms of average cost.

c) interpreting Brant Davis' report on Eversource's basic service auction results ("death spiral"?) and consequence for aggregation (see chart below)

Not discussed.

2. Monthly check-in with Bill Ferguson on efficiency efforts in Newton Public Buildings. Preliminary results given this summer's massive lighting swap out Newton North HS and next steps – can we compare some weeks of performance. In solar news, the massive Rumford array is up and running, why no ribbon cutting? No announcement?

Not discussed.

3. Update on Eversource's proposal affecting rooftop solar installations and its potential impacts on solar projects. Newton has joined other communities in protesting the proposal.

Not discussed.

4. Revisiting 2016 Eversource electricity consumption data for City of Newton residential, commercial/institutional, government sectors

Not discussed.

The meeting was adjourned at 8:55 p.m. Respectfully submitted, Jim Purdy.

**NSTAR ELECTRIC COMPANY
d/b/a EVERSOURCE ENERGY**

Fixed Price Option: October 1, 2017 – December 31, 2017

Residential	N/A
Small C&I	N/A
Large C&I (NEMA)	11.784
Large C&I (SEMA)	9.004
Street Lighting	N/A

Variable Price Option: October 1, 2017 – December 31, 2017

	July	August	September	October	November	December
Residential	N/A	N/A	N/A	N/A	N/A	N/A
Small C&I	N/A	N/A	N/A	N/A	N/A	N/A
Large C&I (NEMA)	N/A	N/A	N/A	10.803	11.474	12.947
Large C&I (SEMA)	N/A	N/A	N/A	7.876	8.640	10.421
Street Lighting	N/A	N/A	N/A	N/A	N/A	N/A

Newton Citizens Commission on Energy
August 23, 2017 Agenda
City of Newton

<http://www.newtonma.gov/gov/building/projects/energycomm/default.asp>



Eric Olson (Chair), Halina Brown (vice-chair), Lawrence Kaufman,
Ira Krepchin, Fred Brustman, James Purdy, Jonathan Kantar
Michael Gevelber, Andrew Savitz/Ann Berwick (*ex-officio*)

Advisory Members:

Edward Craddock, Frank Gundal
Brant Davis, Claudine Ellyin, Cory Alperstein

Setti D. Warren
Mayor

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Newton Centre, MA 02459

**The August 2017 meeting of the Newton Citizens Commission on Energy will be held:
Wednesday evening, August 23rd, 2017 at 7:30 p.m. in the City Hall Cafeteria**

Agenda (Any other business properly brought to the Commission's attention)

(Review of July 2017 minutes)

....

New Business To be discussed

1. Update on Community Choice Aggregation contract with Peregrine
2. Update on "Willingness to Pay" green power survey
3. Conversation with Bill Ferguson on summer efficiency efforts in Newton Public Buildings
4. The Eversource rate request's potential impacts on solar projects. Ten public hearings have been held, no more are planned. The DPU is expected to make public a decision on the rate request in December. Newton has joined other communities in protesting Eversource's request.
5. Just in: 2016 Eversource electricity consumption data for City of Newton residential, commercial/institutional, government sectors

Newton Citizen's Commission on Energy

Minutes of Meeting of Wednesday August 23, 2017, 7:30 p.m.

City Hall Cafeteria

Present: Eric Olson, Chairman, Halina Brown, Michael Gevelber, Ira Krepchin, Jon Kantar, Jim Purdy; Cory Alperstein, Ed Craddock, Claudine Ellyn

Chairman Eric Olson called the meeting to order at 7:30 p.m. The minutes of the July 2017 meeting were reviewed and approved with revisions.

1. Update on Community Choice Aggregation contract with Peregrine

Jim and Halina gave a brief update; the contract scope is close to 100%.

Ed suggested that when the program is rolled out, people should have sufficient time to opt out before receiving the first bill at the default level.

Cory noted that the public outreach needs to give residents some background on the purpose of renewable energy so they can make an informed decision on what level of green power they may wish to be in when the program begins.

Issues for lower income residents were also discussed. Members felt that there needs to be some provision other than simply opting out altogether. (The Peregrine contract scope provides for addressing this issue.

2 Update on "Willingness to Pay" green power survey

There was discussion on how to structure the survey. Michael suggested that the willingness to pay question might be posed in terms of both the potential cost for alternative percentages of green energy and the percentage increase in the person's current average bill.

The people working on the survey include Halina, Michael, Cory, Claudine, and Jim. They are planning to conduct the survey in September, probably on Saturday September 16. Survey volunteers are needed. Green Newton will act as the sponsor, and there will be participation from Mothers Out Front and others who are participating in the aggregation group chaired by Cory.

3. Conversation with Bill Ferguson on summer efficiency efforts in Newton Public Buildings

Eric reported on the work being managed by Bill Ferguson. The grant for third round was reduced to \$186k and cost will be reduced accordingly by removing one of the five schools slated for work. The city did work on Newton North High School this summer.

Modeled performance estimates for the high school excluded the basement floor. Jon noted that as part of the work that was done they replaced the controls that were eliminated previously. Ira noted that maintenance cost savings for the LED lighting estimated total savings with reduced energy cost and longer bulb life is \$151k.

Jon noted that the City doesn't use the money in the enterprise fund from incentives and cost savings for future energy efficiency projects. Michael said that the NCCE should get a report on how the city is spending the money saved in reduced energy costs. Some councilors say "you can't spend savings.

Jim noted that Councilor Crossley has raised this issue in the past

Eric proposed that we should prepare an estimate of how much has been saved by these improvements to date and raise the issue of dedicating it to further efforts in the future.

The solar array at Rumford Avenue was turned on July 12, with no public announcement.

Bill Ferguson says they are committed to calculating actual energy use at the new Angier School based on a year of data. Jon noted that an air infiltration test was not done for cost reasons even though the overall project came in under budget and money was returned to MSBA.

The City is taking the initiative to explore new energy sources, e.g. ground source thermal. A grant from DOER has been announced – Cory will send the RFP to members . Claudine might be willing to be the volunteer coach. Jon noted that the engineer for library expansion recommended ground source heat pumps be considered for lowest life cycle cost.

4. The Eversource rate request's potential impacts on solar projects. Ten public hearings have been held, no more are planned. The DPU is expected to make public a decision on the rate request in December. Newton has joined other communities in protesting Eversource's request.

Claudine noted that the net metering ceiling was not raised last year, putting several solar developers out of business. This will lead to a 40% reduction in municipal solar.

Ed asked what about Global Warming Solutions Act? Eric noted that the MA Department of Energy Resources (DOER) have increased their planned efforts to meet the Act's goals.

5. Just in: 2016 Eversource electricity consumption data for City of Newton residential, commercial/institutional, government sectors.

Based on this data, overall consumption in all sectors increased about 1% from 2013 to 2016. Residential usage increased 1.9% (uncorrected for degree days).

6. Other business

Eric noted that the states participating in the Regional Greenhouse Gas Initiative (RGGI) just agreed to raise their goal – 30% reduction below 2020 level in emissions by 2030.

The meeting was adjourned at 9:30 p.m. Respectfully submitted, Jim Purdy.

Newton Citizen's Commission on Energy

Minutes of Meeting of Wednesday July 13, 2017, 7:30 p.m.

Newton City Hall Room 204

Present: Halina Brown, Fred Brustman, Michael Gevelber, Ira Krepchin, Jim Purdy; Ed Craddock, Councilor Deb Crossley

Vice Chairman Halina Brown called the meeting to order at 7:30 p.m. The minutes of the May 2017 meeting were reviewed and approved with revisions.

1. Report on the July 13 meeting this morning on community choice aggregation with Ann Berwick and Deb Crossley (Jonathan Kantar, Cory Alperstein and Halina attended)

Halina gave a summary of the morning's meeting, at which the question of the appropriate default level of Class 1 renewables was discussed but not decided.

2. Strategy for the EC participation in the Aggregation Program

There was a discussion among NCCE members of the potential cost per kWh for class 1 RECs, as well as the fee charged by aggregation broker.

The big question to be determined is default the level of Class 1 Renewables. Brookline's program which is going into effect this summer is a model: they have three plans – the default is 25% additional renewables, but also an opt-in plan for 100% renewables, and a "Brookline Basic" plan that people can opt down to and save money compared to Eversource rates.

Michael noted that Newton uses 40% more electric than Brookline: average consumption is 716 kWh per month in Newton. This number reflects a re-examination of Michael's study of electricity consumption in Newton by zipcode, after correcting for the portions of the Chestnut Hill zipcode area that are in Brookline and Boston.

Michael proposed that the NCCE should provide numbers for advocates of a higher default level to use.

Halina suggested that we produce a table for three levels of use based on today's prices and use this information in a survey of Newton residents.

The key question in the survey would be how much would people be willing to pay for a higher level of "green" energy. Brookline conducted a door-to-door survey of this type and concluded that the average household would be willing to pay an additional \$7 per month. The survey should provide information on cost for various levels of consumption. The question could be posed for "a program that was vetted by the city" for additional "green content." Jim said that it would be better to avoid getting into a discussion of RECs unless we're asked, because it just takes too much time to explain; the whole survey process should take only a couple of minutes of we expect to get a good response rate.

Michael offered the opinion that it would be sufficient to survey about 400 households.

Jim suggested that Green Newton would probably volunteer to conduct the survey so as to keep an arm's length from the City.

Deb Crossley noted that the next Public Facilities Committee meeting is Sept 6 and aggregation will be on the agenda.

One question to consider would be whether the default level of green would affect the negotiation with the broker.

The meeting was adjourned at 9:30 p.m. Respectfully submitted, Jim Purdy.

**Newton Citizens Commission on Energy
May 31, 2017 Agenda
City of Newton**

<http://www.newtonma.gov/gov/building/projects/energycomm/default.asp>



**Setti D. Warren
Mayor**

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Telephone 617-796-1019
c/o Office of the Sustainability Director
Newton City Hall, 1000 Commonwealth Avenue
Newton Centre, MA 02459

**The 2017 meeting of the Newton Citizens Commission on Energy will be held:
Wednesday evening, May 31st, 2017 at 7:30 p.m. in Room 204 of Newton City Hall.**

Agenda (Any other business properly brought to the Commission's attention)

(Review of April 2017 minutes)

....

New Business To be discussed

- 1A.** Halina Brown introduction of Ms Claudine Ellyin. Halina on update on Community Choice Aggregation: Recent discussions with Ann Berwick
- 1B.** Newton Buildings: Jonathan Kantar on emerging new policy documents re new and retrofit municipal buildings: design, energy use targets
- 2.** Current status of Rumford Solar large array and status of "Phase Three". Start date, issues.
- 3.** Newton Buildings: "preferred vendor" update and Newton North.
- 4.** Via Jenny Craddock, Ann Berwick, and Bill Ferguson: more insight into the Memorial Spaulding "experiment" and City-wide efforts to incorporate energy and climate education linked to efficiency and student/teacher/staff behavior
- 5.** Related: revisiting the suggestion to Newton officials to learn from the Acton-Boxborough experiment in school energy savings driven entirely by behavior. The "soft path" approach focus on behavior can be a powerful complement to the work being done on lighting and other "hardware" aspects of our schools.
- 6.** Geexchange HVAC in our area – preparing a list of completed projects, seeking data

Design and Construction Guidelines:

Questions and Short Answers Building Design and Construction Guidelines

DRAFT 5/22/17

Why do this?

To institutionalize what PBD needs to be doing. Articulate PBD and DRC goals and expectations. Create medium for learning and doing best practices.

Why do it now?

Newton expects more new construction in coming years. Facilitates policy of continual improvement. Leverage the knowledge we have gained through our recent design and construction experience.

How realistic is this?

Is realistic; Newton PBD is already heading in this direction

What will it change?

It will change the designer selection process, and RFQs and Contracts with designers. Encourages design teams to focus on issues we've determined to be important. Establishes the practice of "re-commissioning" after three years of occupancy.

What are the barriers to implementing this?

Long-standing industry design and construction practices.

What is it committing Newton to?

Implement smarter design. Commits to a process for learning from Newton's design and construction experience.

How will this impact Newton's costs?

Reduces operating and maintenance costs

May add to designer costs of initial analyses, with expected reductions in design development costs

Short term, construction costs may go up or down depending on each building's circumstances. (Recent PBD experience is that it has reduced construction costs.)

Reduces overall long term costs of constructing and operating Newton's public buildings

Newton Citizen's Commission on Energy

Minutes of Meeting of Wednesday May 31, 2017, 7:30 p.m.

Newton City Hall Room 204

Present: Eric Olson (Chair), Halina Brown, Fred Brustman, Michael Gevelber, Jon Kantar, Ira Krepchin, Jim Purdy; Cory Alperstein, Ed Craddock, Brant Davis, Claudine Ellyn

Chairman Eric Olson called the meeting to order at 7:30 p.m. The minutes of the April 2017 meeting were reviewed and approved with revisions.

Halina Brown introduced Ms. Claudine Ellyn, an engineer interested in the NCCE's work.

1A. Update on Community Choice Aggregation: recent discussions with Ann Berwick

Ann Berwick is conducting "negotiations" w aggregation consultants; down to two candidates. C The selection committee filling out evaluation forms. She wants input on public outreach. The working group on 100% renewables meeting on June 12.

EO: Decisions are needed on what public outreach campaign will be. CA: Several community environmental groups are interested in this.

EO said that adopting and implementing green aggregation needs to be long process with major outreach: TAB, flyers, meetings, etc. Brant noted that 6 months is needed after selection to sign a contract.

Eric said the City needs to clarify its "ask" to the MA Dept. of Public Utilities, especially the default level of Cal 1 RECs. (DPU asked Brookline if it would be contentious.) The price of RECs declined by the time Brookline's consultant obtained them, so the average household would pay an extra \$2 per month, not \$7 as they originally expected..

Ira and Eric both feel that Newton should provide the 25% green default as Brookline is, at a minimum. There was discussion about how the aggregation plan should be set up to provide a lower cost option for people of limited means. Currently Newton has 1200 households on the utility's R2 low income electrical rate.

At its own option a city can attach a fee structure for energy efficiency. This in excess of the utility's current rate as shown on the electric bill. (That rate is \$0.0005 per kWh, \$150k on 440k MWh.

EO will put Brant in touch with Ann Berwick about broker fees. Brant is working with Worcester. For their 18month contract the total fee is \$2.4 million = \$100/year/resident.

Halina expressed surprise that cost savings are so small. Brant noted that a broker can get a good deal on wholesale price for supply, but can't affect the renewables charge and the capacity charge.

Ed stated that the contract should incentivize the amount of greenness the broker can get for us.

Cory stated that Ann sees this the consultant contract negotiation as an opportunity to write into the contract more money for a public information campaign. Cory also thinks that we need to push the City on the default level of green.

Jon thinks the ultimate default green percentage may reflect a perspective of statewide norms.

Ed noted that there is a high level of commitment in the City Council for green energy: 23 councilors voted for a resolution urging state to enact a carbon fee.

Claudine noted that New York's "PlaNYC" contains a goal of 80% carbon footprint reduction by 2070; Boston's goal is for a major reduction in carbon by 2050.

Michael noted that Brookline says 25% additional Class 1 RECs will cost the average household \$2 per month, and 100% will cost \$12. (The average household in Newton used substantially more power than the average in Brookline.)

Halina said that the NCCE needs to send our position to Ann. Halina proposes that the consultant/broker contract should link their fee to level of renewables obtained.

The City should bargain hard on the agent's fee.

There was discussion of the process: select consultant and then determine default and other features for city council to decide. Eric should speak to Ann about whether the consultant selection is fee-based.

Halina was assigned to prepare a statement of NCCE points for the City to consider

1B. Newton Buildings: Jonathan Kantar on emerging new policy documents re new and retrofit municipal buildings: design, energy use targets.

Sustainability guidelines were approved in draft by the Design Review Commission and the City's Public Buildings Department. The guidelines are intended to push the design envelope toward net zero. They challenge each design team to be 15% better than the previous building. The guidelines lock in performance that is 35% better than code; equivalent to LEED Gold. These guidelines for City buildings can also be given to developers to achieve. The next step is to get a hearing at the Public Facilities Committee. One approved in final form, the guidelines will be implemented by the City's administration.

The guidelines can be used to encourage best practice during negotiation with developers who need a special permit.

The DRC is encouraging the developer of the Assisted Living project on the Clay Chevrolet site to incorporate the guidelines; they were receptive.

2. Current status of Rumford Solar large array and status of "Phase Three". Start date, issues.

Not discussed.

3. Newton Buildings: "preferred vendor" update and Newton North.

Newton North is getting re-lamped this summer under the Preferred Vendor program; it will also include more energy saving controls (which were engineered out in the original design.)

4. Via Jenny Craddock, Ann Berwick, and Bill Ferguson: more insight into the Memorial Spaulding "experiment" and City-wide efforts to incorporate energy and climate education linked to efficiency and student/teacher/staff behavior

Not discussed.

5. Related: revisiting the suggestion to Newton officials to learn from the Acton-Boxborough experiment in school energy savings driven entirely by behavior. The "soft path" approach focus on behavior can be a powerful complement to the work being done on lighting and other "hardware" aspects of our schools.

Not discussed.

6. Georexchange HVAC in our area – preparing a list of completed projects, seeking data .

The engineer for the library renovation proposed Ground Source Heat Pump. Michael reported that the payback period on GSHP around 20 years, so he is surprised at this recommendation.

The meeting was adjourned at 9:30 p.m. Respectfully submitted, Jim Purdy.

**Newton Citizens Commission on Energy
April 25, 2017 Agenda
City of Newton**

<http://www.newtonma.gov/gov/building/projects/energycomm/default.asp>



**Setti D. Warren
Mayor**

Eric Olson (Chair), Halina Brown (vice-chair), Lawrence Kaufman,
Ira Krepchin, Fred Brustman, James Purdy, Jonathan Kantar
Michael Gevelber, Andrew Savitz (*ex-officio*)

Advisory Members:

Peter Barrer, Edward Craddock
Frank Gundal, Brant Davis

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c/o Office of the Sustainability Director
Newton City Hall, 1000 Commonwealth Avenue
Newton Centre, MA 02459

**The April 2017 meeting of the Newton Citizens Commission on Energy will be held:
Tuesday evening, April 25th, 2017 at 7:30 p.m. in Room A of the Newton Free Library. (The
room directly across from Drucker Auditorium.)**

Agenda (Any other business properly brought to the Commission's attention)

(Review of March 2017 minutes)

....

New Business To be discussed

1. Update on Community Choice Aggregation: Recent meetings with community partners, agenda shaping up; conversation 25 April with Ann Berwick on current time line
2. Review of Lexington Energy Action Plan, do we encourage a similar plan? What are the costs and benefits? Is there a marketing role for glossy plans?
http://www.lexingtonma.gov/sites/lexingtonma/files/uploads/lexington_energy_emissions_inventor_y_report_3-2017_0.pdf
3. Update on Memorial Spaulding school, and City –wide efforts to incorporate energy and climate education linked to efficiency and student/teacher/staff behavior (teachers are swamped).
4. Update on Solar-On-Newton properties. “Solar porn” lets look at some photos oh yeah
5. Conversation with Betsy Harper, Sustainability Manager, MA Department of Housing and Community Development (DHCD) on a) geothermal geexchange HVAC for buildings; CEC grants, AEC market

betsy.a.harper@state.ma.us

Also, John Ballam is the guy at DOER who is in charge of monitoring and making sure that the credits that are sent into the AEC market are verifiable.

He didn't answer my question about how much the monitoring system will cost, but I'm projecting \$30k – plus \$5k for a one-year contract with a service company (ClearRESULT – the old CSG) so that the monitoring data is actually looked at.

These are costs that aren't often included in the original design of geothermal. We've had some hiccups with our first, smaller system. The monitoring equipment still isn't working, and the system needed to be rebalanced. And the contractor didn't follow the spec's and failed to install an air vent at the highest point of the system. And the original design assumed three phase power, which any layman should know was not going to be available on a rural road. So we had to go from continuous pumping to VSD's, which sounds good, but changes the diameter of the pipes and a fair amount of other things. There is a LOT of technical expertise involved in making sure these things work.

Ridiculous that I'm just now finding out about these design changes and contractor sloppiness 6 months after start-up. For a school in Newton to install one of these, there would need to be a Project Manager like me in charge for many years. I actually don't have time for this – at all, given that I oversee 30+ projects. So I'm going to hire third party commissioning for the larger 30 ton system. There will still be problems, but hopefully fewer.

-betsy

did not finish reading your email before responding. Regarding your questions about pricing and selling the AECs:

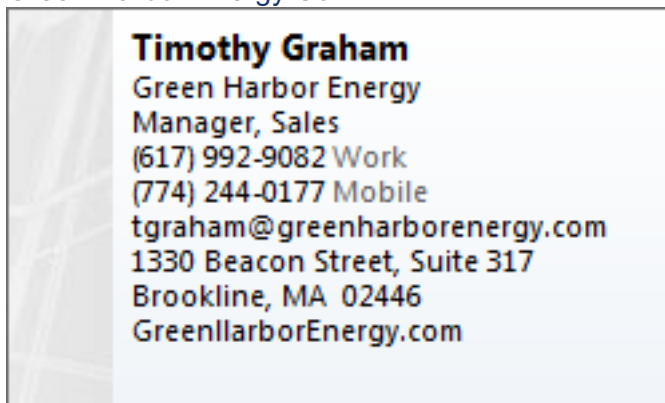
1) A conservative estimate of the current gross value per AEC would be \$19.00.

2) Late fall is more realistic for the incentive start date. However, AECs based on system meter reading data that has been accumulated by an approved metering system for operations prior to the start date can be credited back to the account.

3) Below are contact info. for a couple of firms that provide authorized representative services which include brokering the AECs as well as preparing, submitting and following the system statement of qualification application through to final approval. There will be a brokerage charge that will be deducted from the gross sale price.

Nexant Inc.
Christina Powell
cpowell@nexant.com
[\(480\) 768-6018](tel:(480)768-6018)

Green Harbor Energy Co.



Both of these firms will require that meter data be transmitted by the data acquisition system to the independent meter reader electronically with remote access.

Josh,

As you know from our conversation, the Attleboro Housing Authority is very likely going to install a 50 ton geothermal system. Our architect, Fay (copied above) is attempting to determine if this falls under the C&I program, or a Res/Multi-family program. The requirements Josh laid out for me were pretty simple – using an Energy Star piece of equipment and making sure there is a test boring hole drilled. The payments happen in two lump sums – the first (30% of the payment) is after the final design is complete and the equipment is ordered. (For our procurement, this would mean a bidding contractor would have needed to be chosen.) The remaining 70% is paid at certified project completion (requiring commissioning???). Josh, for you to know, we will commission the system at installation, and will hire ClearResult to monitor the operations of the system for the entire first year. These requirements are spelled out in detail on MassCEC's website.

John,

Fay is looking to determine exactly the requirements of the monitoring system needed for the AEC market. By the way, we're carrying an approximate \$30k cost for this

monitoring system (which needs Internet conductivity). There is no public Internet to the site yet, so I'm not clear whether this \$30k includes the price of establishing the latter. Perhaps you have a rule of thumb on how much a monitoring system would cost for this size installation. Also, I know that the AEC market isn't anticipated to be live for geothermal technology until sometime later this spring or summer. But is there documentation on the market that you could share? Also, is there typically a broker/aggregator who files the paperwork and transmits the funds to the HA? If so, is the price of that aggregator fixed (at what level?), or a % (and again, approximately how much \$)?

Many thanks. You can each respond directly to Fay, but it's a good idea to cc both me and the DHCD staff engineer, John Donoghue, on all your emails.

-betsy

Betsy Harper

Sustainability Program Developer

Department of Housing and Community Development

(DHCD)

Newton Citizen's Commission on Energy

Minutes of Meeting of Wednesday April 25, 2017, 7:30 p.m.

Newton Free Library Conference Room A

Present: Eric Olson (Chair), Halina Brown, Michael Gevelber, Ira Krepchin, Jim Purdy; Ed Craddock

Chairman Eric Olson called the meeting to order at 7:30 p.m. The minutes of the March 2017 meeting were reviewed and approved with revisions.

1. Update on Community Choice Aggregation: recent meetings; April 25 conversation with Ann Berwick

There have been discussions about the contract for an aggregation consultant, and some concerns have been raised about the rate of compensation that the consultants receive. In other recent contracts with Good Energy, the consultant teaming with Mass Energy in Melrose, Dedham, and Brookline, the incentive for the aggregation consultant is 0.001 per kWh bought. This amounts to a very large fee for services provided. For Newton the total fee would be about \$300K per year. Eric suggested that instead of a fee on the total volume of kW hours, the fee could be structured to incentivize a high percentage of Class 1 RECs.

The City received 3 responses to its RFP. Ann Berwick, Andy Savitz, and other city staff are on the selection committee - a time line is being prepared for evaluating proposals. They anticipate some hard decisions on negotiation to bring down the price.

There was discussion of whether NCCE could get a representative on the selection committee. Halina was asked to consider filling this role.

Brant agreed to be a continuing resource on technical input about the energy markets.

We will need to educate the community in order to persuade the city council to adopt a plan with significant green energy component. Should Newton do a household survey similar to Brookline's?

There was discussion of whether to poll the candidates for mayor and City Council in the fall election. Potential questions for candidates:

- How much are you willing to pay for 100% green energy?
- How would you promote a more sustainable energy system for the city's residential and commercial property owners. Would you support Newton's opting into PACE (MassDevelopment's Property Assessed Clean Energy program?)
- Are you a strong supporter of moving toward a 100% renewable energy system?

3. Update on Memorial Spaulding School initiatives

It appears that teachers feel swamped with work and don't feel able to develop and incorporate a new curriculum on energy. However, Ed says that this is coming in the new curriculum for grades 6-9.

4. Update on Solar on Newton properties.

Not discussed.

5. Betsy Harper, the Sustainability Manager at MA Department of Housing Community Development, is managing a new program to promote ground source heat pumps for renewable energy. [betsy.a.harper at state.us.ma]

Brief discussion.

The meeting was adjourned at 9:30 p.m. Respectfully submitted, Jim Purdy.

Newton Citizens Commission on Energy
March 29, 2017 Agenda
City of Newton

<http://www.newtonma.gov/gov/building/projects/energycomm/default.asp>



Setti D. Warren
Mayor

Eric Olson (Chair), Halina Brown (vice-chair), Lawrence Kaufman,
Ira Krepchin, Fred Brustman, James Purdy, Jonathan Kantar
Michael Gevelber, Andrew Savitz (*ex-officio*)

Advisory Members:
Peter Barrer, Edward Craddock
Frank Gundal, Brant Davis

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Newton Centre, MA 02459

**The March 2017 meeting of the Newton Citizens Commission on Energy will be held:
Wednesday evening, Feb 29th, 2017 at 7:30 p.m. in the Newton City Hall Cafeteria.**

Agenda (Any other business properly brought to the Commission's attention)

(Review of Feb 2017 minutes)

....

New Business To be discussed

1. Update on Community Choice Aggregation: listing of coalition of key partners advising/urging the City to offer a high renewable energy content in the default, as inspired by Brookline. Update from Larry Chretien on likely cost (low at this time but REC prices are and will be volatile). Outreach needed via us and a coalition of partners (350, Green Newton, Mothers-Out-Front, others?)
- 2 Seeking utility help with access to data on overall consumption; discussion with Paul Eldrenkamp, other town staff, and utility staff
3. Update on Memorial Spaulding school, and City –wide efforts to incorporate energy and climate education linked to efficiency and student/teacher/staff behavior
4. Update on Preferred Vendor Program and Energy Stabilization Fund quantity and its use by the City going forward
5. Update on Solar-On-Newton properties – where do we stand with already installed? Where will we be when Rumford goes live in May?

Newton Citizen's Commission on Energy

Minutes of Meeting of Wednesday March 29, 2017, 7:30 p.m.

City Hall Room Cafeteria

Present: Eric Olson (Chair), Fred Brustman, Michael Gevelber, Jon Kantar, Ira Krepchin, Jim Purdy; Ed Craddock, Brant Davis

Chairman Eric Olson called the meeting to order at 7:30 p.m. The minutes of the February 2017 meeting were reviewed and approved with revisions.

1. Community Choice Aggregation

1. Update on Community Choice Aggregation: listing of coalition of key partners advising/urging the City to offer a high renewable energy content in the default, as inspired by Brookline. Update from Larry Chretien on likely cost (low at this time but REC prices are and will be volatile). Outreach needed via us and a coalition of partners (350, Green Newton, Mothers-Out-Front, others?)

There was a discussion of the potential cost to consumers of going to 100% Class 1 Renewables. Brant presented relevant cost data.:

Class 1 RECs are now selling for \$26.50 per MWh and the market has recently been stable, although there has been volatility in REC price at times over past ten years.

The average household electricity use in Newton is 849 kWh/month according to utility statistics. At 19 cents per kWh, the average household spends about \$161 for basic service in an average month. The RECs for 100% of their power consumption would cost the average customer an extra \$22.07 per month, an increase of 13.7%. As Eric pointed out in his editorial letter published in the TAB, the additional increment for 100% green is equivalent to the cost of a large pizza at any of Newton's establishments.

For lower income Newton households for whom this would be a financial hardship, a lower cost opt-in provision could easily be provided, or they could opt out of the aggregation program entirely. (Brookline provides an opt-in for no additional percentage of green power for such households.)

Jim stated that we need to clarify these issues for discussion with the City Council.

Eric pointed out that offshore wind, where most of the green power for our area will come from, is getting more efficient and cheaper as larger 8 mW turbines are likely to be installed in the lease areas; 10 mW turbines are expected to be proven elsewhere in the world in the near future.

Michael noted that Brookline intends to control future price increases for consumers by adjusting the percentage of RECs in the future to maintain their promised \$7/month average cost of the additional RECs. At end of contract term, they will reestablish the percentage.

There was discussion of the selection of consultant/broker – Jim argued that there is no need to go through a separate selection process from the one already completed by MAPC and used by Dedham and Melrose, with good results reported so far. Doing a new procurement for Newton will require several months, with the possibility that a consultant could be hired in the end who is no more suitable and could be less so.

2 Seeking utility help with access to data on overall consumption; discussion with Paul Eldrenkamp, other town staff, and utility staff

Eric noted that the difficulty of obtaining data on energy consumption from National Grid and Eversource hampers the energy conservation efforts of municipal governments, and that the state should support the effort to get data to cities and towns every month. The available online data from MassSave lacks detail and is not frequently updated.

<http://www.masssavedata.com/Public/GeographicSavings>

3. Update on Memorial Spaulding school, and City –wide efforts to incorporate energy and climate education linked to efficiency and student/teacher/staff behavior.

The school will be using the energy consumption before and after lighting improvements in the 5th grade curriculum, but is stopping short of a behavior-based strategy to reduce energy use.

Eric reached out to Sustainability co-director Ann Berwick, who was interested.

Bill Ferguson is going in to explain the lighting change to the teachers.

4. Update on Preferred Vendor Program and Energy Stabilization Fund quantity and its use by the City going forward

Councilor Crossley talked to Bill Ferguson about how the Energy Stabilization fund is being used too conservatively to meet the City’s stated Green Community goals. A new scope of work is being developed for the next phase of work.

5. Update on Solar-On-Newton properties – where do we stand with already installed? Where will we be when Rumford goes live in May?

Eric showed a summary table of the capacity of the various solar installations on rooftops, canopies, and on the ground at Rumford Ave.

Michael noted that the City deserves credit for signing the big PPA which made it financially viable to install solar at Rumford Avenue and other locations.

[insert table if available]

Other business:

Jim Purdy noted that the survey on home energy assessments received 22 responses; 10 of the respondents were willing to share their utility data and 5 more asked for more information before they would do so. A reminder will be sent to the other people on the survey mailing list.

The meeting was adjourned at 9:30 p.m. Respectfully submitted, Jim Purdy.

**Newton Citizens Commission on Energy
February 28, 2017 Agenda
City of Newton**

<http://www.newtonma.gov/gov/building/projects/energycomm/default.asp>



**Setti D. Warren
Mayor**

Eric Olson (Chair), Halina Brown (vice-chair), Lawrence Kaufman,
Ira Krepchin, Fred Brustman, James Purdy, Jonathan Kantar
Michael Gevelber, Andrew Savitz (*ex-officio*)

Advisory Members:

Peter Barrer, Edward Craddock
Frank Gundal, Brant Davis

Telephone 617-796-1019
c/o Office of the Sustainability Director
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Newton Centre, MA 02459

**The February 2017 meeting of the Newton Citizens Commission on Energy will be held:
Tuesday evening, Feb 28th, 2017 at 7:30 p.m. in Room 204 of Newton City Hall.**

Agenda (Any other business properly brought to the Commission's attention)

(Review of January 2017 minutes)

....

New Business To be discussed

1. Progress now expected on the push for Community Choice Aggregation, the Mayor is supportive. Mark calendars for Wednesday, March 8 starting at 7pm in Room 204 at City Hall aggregation to be discussed by Newton City Council's Public Facilities Committee
2. Patrick Roche (Energy Coordinator, Metropolitan Area Planning Council) slide presentation about Community Choice Aggregation. We obtained a copy of this Feb 16 presentation and will skim through the slides
3. Greening with Aggregation: the meaning of RECs
4. Jim Purdy to present Survey Form for Home Energy Audit households
5. Communication from Buildings Dept. updating Deb Crossley on Energy Efficiency Program Results

Newton Citizen's Commission on Energy

Minutes of Meeting of Wednesday February 28, 2017, 7:30 p.m.

City Hall Room Cafeteria

Present: Eric Olson (Chair), Michael Gevelber, Jon Kantar, Ira Krepchin, Jim Purdy; Ed Craddock, Cory Alperstein

(Cory is a Green Newton Board member and a participant in the 350 Newton node, which is supporting a goal of 100% renewable energy.)

Chairman Eric Olson called the meeting to order at 7:30 p.m. The minutes of the January 2017 meeting were reviewed and approved.

1. Community Choice Aggregation

There was discussion of upcoming efforts to implement Community Choice Aggregation. Brookline is close to implementing a plan that has a default of 25% additional Class 1 RECs (43% including the state mandated Renewable Portfolio Standard, which is 12% this year.) Brookline also has an option level of 100% Class 1 RECs and an option to stay at the RPS level of 12%, which is expected to be less expensive than Eversource basic service.

Brookline did survey work in preparation for the proposal to Town Meeting and discovered that there was a breakpoint at \$7 per month (i.e., most respondents considered that a reasonable amount to pay for increased green share, but \$8 per month was considered too much to pay by many.

Michael argued for a larger default level of Class 1 RECS, even if there were a slight increase in their monthly electric bill. He noted that the cost of power is currently 21 cents per kWh and that a REC currently costs 2.65 cents per kWh. A typical Newton household uses about 10,184 kWh/year 849 kWh per month, so the cost of power for 100% Class 1 renewable would be about \$22 more per month (14%). To do what Brookline did would cost this household a quarter of that amount. And many larger Newton homes use closer to 800 kWh per month.

It was suggested that the NCCE should do a survey similar to the one done in Brookline. It would also be relevant to know how many Newton residents subscribe to MassEnergy's programs to support renewables.

It was also noted that 100% Class 1 renewable power would cost about the same as a large premium quality pizza, which most Newton households could easily afford. However, Jim noted that many Newton households receive food assistance and would not elect to buy more green; however, they would probably save money on their electric bill if there was an option to stay at the Massachusetts Renewable Portfolio Standard. Jon noted that some Newton residents would oppose any increase in renewables for ideological reasons.

2 Patrick Roche (Energy Coordinator, Metropolitan Area Planning Council) slide presentation about Community Choice Aggregation. We obtained a copy of this Feb 16 presentation and will skim through the slides

Eric urged all NCCE members to attend the City Council's Public Facilities Committee meeting on March 8.

3. Greening with Aggregation: the meaning of RECs

Eric noted that the a recent story in the Newton TAB claimed that municipal solar projects to date resulted in a green share of 25 percent of the City's municipal electric use (which is approximately 3 percent of the power used by all sectors in the city). This is not correct, because the photovoltaics mounted on municipal building roofs and on the ground at the Rumford Avenue site were developed through a power purchase agreement with the contractor Ameresco. As such, the contractor, not the city owns the RECs. To claim them for the City would be double-counting.

4. Jim Purdy to present Survey Form for Home Energy Audit households

Jim gave a brief report on finally getting the survey out to people who did Home Energy Assessments in the period from November 2015 through February 2016.

5. Communication from Buildings Dept. updating Deb Crossley on Energy Efficiency Program Results

Not discussed.

Other items:

Jon Kantar described the Boston Neighborhood Development Agency project that Sage Construction Co. is building on Fort Hill in Roxbury. The four-unit development is Net Positive owing to very robust air sealing and insulation and uses air source heat pumps for heating and cooling. It has a HERS rating of minus 30 (90 points lower than the state building code's requirement of no higher than +60.) Jon noted that the project uses a heat recovery ventilation system to minimize energy loss while meeting the standards for ventilation in the state code.

The meeting was adjourned at 9:00 p.m. Respectfully submitted, Jim Purdy.

**Newton Citizens Commission on Energy
January 25, 2017 Agenda
City of Newton**

<http://www.newtonma.gov/gov/building/projects/energycomm/default.asp>



**Setti D. Warren
Mayor**

Eric Olson (Chair), Halina Brown (vice-chair), Lawrence Kaufman,
Ira Krepchin, Fred Brustman, James Purdy, Jonathan Kantar
Michael Gevelber, Andrew Savitz (*ex-officio*)

Advisory Members:
Peter Barrer, Edward Craddock
Frank Gundal, Brant Davis

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c/o Office of the Sustainability Director
Newton City Hall, 1000 Commonwealth Avenue
Newton Centre, MA 02459

**The January 2017 meeting of the Newton Citizens Commission on Energy will be held:
Wednesday evening, January 25th, 2017 at 7:30 p.m. in the cafeteria of Newton City Hall.**

Agenda (Any other business properly brought to the Commission's attention)

(Review of November 2016 Minutes – no December meeting in 2016)

....

New Business To be discussed

1. Summary by Halina Brown on the hearing held by Planning and Development Board regarding Washington Square Development.
- 2 LED street lighting, update on possibilities. Ira Krepchin.
3. Rapid progress now expected on the push for Community Choice Aggregation, the Mayor is supportive. Mark calendars for informational meeting with presentation by Patrick Roche, Energy Coordinator, Metropolitan Area Planning Council. WHERE: City Hall Basement Cafeteria, WHEN: February 16, 7:00 - 8:30 PM.
4. City of Newton Energy/Climate Updates: Update on Rumford and carport solar; Solar Shares initiative; Transportation and Vulnerability Assessments
5. Energy Return on Energy Invested (ERoEI) for photovoltaic, discuss the true cost/feasibility of rooftop solar, in light of the true cost of continued burning of fossil fuels. Does the Newton EC have a consensus on the role of nuclear power?
6. Updates relevant to the City of Newton Action Plan
- (7. Hope to have an update on Memorial Spaulding Elementary School Energy and Behavior, City of Newton initiative. Memorial Spaulding Principal Tom Morris is supportive.)

Newton Citizen's Commission on Energy

Minutes of Meeting of Wednesday January 25, 2017, 7:30 p.m.

City Hall Room Cafeteria

Present: Eric Olson (Chair), Halina Brown, Michael Gevelber, Jon Kantor, Ira Krepchin, Jim Purdy

Chairman Eric Olson called the meeting to order at 7:30 p.m. The minutes of the August 2016 meeting were reviewed and approved.

1. Summary by Halina Brown on the hearing held by Planning and Development Board regarding Washington Place Development.

New Ecology is the developer's environmental consultant. Jon and Jim were impressed by their presentation to the Land Use Committee. Ed questions whether enough parking provided; the development should not depend upon parking on the street. Jim noted that Green Newton's board considers this project to be sustainable development and has voted to support it.

A hearing will be held in Council chambers on Tuesday February 28.

2 LED street lighting, update on possibilities. Ira Krepchin.

Ira has been consulting with a company that is re-manufacturing street lights from HPS to LED; this process retains the original fixture and thus reduces cost. They are looking to do a pilot program. Ira will talk with Andy Savitz. The industry is also developing LED color temperature controls.

Michael asked if it makes sense to go from T8 fluorescent tubes to LED. Ira replied that this would achieve perhaps 30% savings. NCCE could recommend making this change in school retrofit projects.

Jon observed that the school department energy cost is on the order of 1percent of the total school budget.

Burr, Mann, and Memorial Spaulding are planned for the next round of energy efficiency improvement; March 3 2017 is the deadline for submission under the DOER Preferred Vendor program.

3. Rapid progress now expected on the push for Community Choice Aggregation, the Mayor is supportive. Mark calendars for informational meeting with presentation by Patrick Roche, Energy Coordinator, Metropolitan Area Planning Council. WHERE: City Hall Basement Cafeteria, WHEN: February 16, 7:00 - 8:30 PM.

Eric explained the structure of community choice aggregation. Virtually all Newton residences and many small businesses would be included (only a small proportion typically opt out). If the default program includes an additional 5 percent of Class I RECs, the resulting investments in the New England grid would be approximately in 3MW of new wind. Michael noted that 1 REC is worth approximately 3 cents/kWh.

All present agreed that we should push for a higher price default level with a modestly higher cost to the consumer, as is being done in Brookline, and help to convince the City Council to do this. Brookline did a survey of residential customers and concluded that there is support for a default that increases the average monthly electric bill by \$7, but much less support for a renewable percentage that results in a monthly average increase of \$8 or more. Based on this their default case adds 25% to the renewables already in Eversource basic service. Brookline also will offer a cheaper opt-in plan with only the RPS level of renewables and a second opt-in plan that provides 100% renewable energy for extra cost.

4. City of Newton Energy/Climate Updates: Update on Rumford and carport solar; Solar Shares initiative; Transportation and Vulnerability Assessments

Eric showed photos of the solar canopies at Elliott Street and Newton South. Michael would prefer to spend the same money on energy efficiency improvements in city buildings.

The solar array at Rumford is expected to be in service the first week in February. There are 6678 modules there, producing 2.136 MW on 6.69 acres of land.

A typical house uses 6500 mWh per year, so the Rumford site produces the equivalent of power for 437 houses.

Michael asked how much imbedded energy there is in the solar array.

5. Energy Return on Energy Invested (ERoEI) for photovoltaic, discuss the true cost/feasibility of rooftop solar, in light of the true cost of continued burning of fossil fuels. Does the Newton EC have a consensus on the role of nuclear power?

Not discussed.

6. Updates relevant to the City of Newton Action Plan

Not discussed.

7. Hope to have an update on Memorial Spaulding Elementary School Energy and Behavior, City of Newton initiative. Memorial Spaulding Principal Tom Morris is supportive.)

Sustainability Director Andy Savitz has obtained a grant for encouraging behavioral change to reduce energy use. Some of this will be incorporated in the fifth grade curriculum, as has been discussed at past NCCE meetings. The principal is very supportive.

Michael recommends involvement of Kate Crosby, who runs a similar program in the Acton Boxborough schools.

Jon noted that Newton's new schools have many energy features that could be taken advantage of for teaching. In Cambridge the new MLK school has Plexiglas windows in the walls so the wall section and mechanical room can be seen. Students teach the subject and use the building as an object lesson.

At Zervas there are supposed to be circuit breakers that monitor power being used by each classroom. This feature could be used to provide a competition among classes for best efficiency. Could have an iPad available to the students in each classroom displaying energy use.

Jon also shared data on projected energy use at Newton's three new elementary schools.

The meeting was adjourned at 9:00 p.m. Respectfully submitted, Jim Purdy.