

**Sudbury, MA, Energy and Sustainability Committee
Meeting Minutes March 26, 2019**

OPENING:

The March 26, 2019 meeting of Sudbury’s *Energy and Sustainability Committee* was opened at 6:07pm at the DPW Building conference room.

ATTENDANCE:

Committee Members	Attending
Rami Alwan - Chairman, Energy and Sustainability Committee	X
William Braun – Emeritus Chairman	X
Jim Cummings	
Edward Lewis	X
Joe Martino	X
Robert Morrison	X
Mark Sevier	X
Facilities Director, Town of Sudbury	
William Barletta	X
Guests	
James Kelly	X
Tom Yelton	X

AGENDA:

1. Approval of Meeting Minutes
2. Follow-up comments on the Goodnow Library EMS/Controls project upgrade
3. Discuss potential annual allocation for DDC Controls maintenance from revolving fund
4. Discuss potential future Energy Conservation measures
5. Community Choice Electricity Aggregation Update
6. Request by Town Manager to investigate potential wind power on tipling rock
7. Committee Chairmanship and Membership
8. Other business?

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1) Approval of Meeting Minutes:

Minutes from the February 19, 2019 meeting were approved.

2) Follow-up comments on the Goodnow Library EMS/Controls project upgrade

Goodnow Library EMS / Controls Upgrade – this was a complex project, to save energy and to provide better environmental control at the Library.

This project has been completed and although energy savings and better comfort have been realized, the facilities director is working to resolve some controls issues and concerns.

The one remaining incentive issue has been resolved.

There was significant discussion on the status of the controls for the Library project and the status / functionality of the Building Management System(s) (BMS) Town wide.

The Library system is controlled utilizing Johnson Controls (JCI) Facility Explorer Supervisor. This system utilizes JACE controllers to provide connectivity from HVAC and other mechanical equipment via a Niagara framework.

Bill Barletta reports the JCI system is not functioning as expected. Bill reviewed the issues and concerns with Bob M. (who was deeply involved in the Library controls project) and Bob agrees it does not appear to be operating as was expected at job end.

ACTION: Bill to draft a letter describing the shortcomings of the BMS as it sits today, Bob M. to review vs. the job spec and work with Bill and the controls vendor to rectify.

There is concern the controls vendor may not have the technical know-how to resolve.

3) Discuss potential annual allocation for DDC Controls maintenance from revolving fund

The Library controls discussion extended into a much larger discussion revolving around deficiencies in the current Town / School BMS operations. Currently there is little integration between the various systems and this does not allow Bill Barletta, and his team, to reap the benefits of an integrated BMS system. These benefits include; remote operation and troubleshooting of HVAC and mechanical room systems, interrogation of current conditions and setpoints, adjustment of said setpoints, application of occupied / unoccupied schedule, etc.. These deficiencies are costing the Town money in terms of wasted energy and increased troubleshooting time, along with providing sub-optimal environmental control.

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The Committee agrees that an integrated / upgraded Town / School wide BMS system would yield many benefits in reduced energy costs, reduced trouble shooting time / expense and increased creature comfort in our buildings.

The Committee believes this may be a good application of funds from the Energy Efficiency revolving fund to get the system integrated / upgraded and also suggests the Town include funding from the Operating Budget to provide for yearly maintenance / upgrades of the system.

This is a very complex issue and there was significant discussion on approaches to accomplish this in an expedient manner, in the best interests of the Town, while adhering to all Municipal / State procurement regulations.

Rami referenced a prior project at the High School that remedied several deficiencies and increased capability of their BMS system, and he offered to research this and report back to the Committee.

ACTION: Rami – research HS Controls project, including scope derivation and procurement process, provide info to Bill and Energy Committee.

ACTION: Bob M. to work with Bill to determine potential scope of the BMS integration project.

4) Discuss potential future Energy Conservation measures

Projects to be considered for future grant funding were discussed. This is a working list and will be added to as potential opportunities arise.

- Upgrade Library boiler plant
- Upgrade Haynes boiler plant
- DPW building – envelope & heating upgrades

ACTION: Bill Barletta to review Town building EUI (Energy Utilization Index – an energy consumption benchmark in MMBTU/ft²/year) to look for buildings that might have high gain energy conservation projects.

ACTION: Ed to research this year's Green Community Grant opportunities and report the major categories to the committee.

5) Community Choice Electricity Aggregation Update

The goals of Sudbury's Community Choice Aggregation (CCA) Program are to increase the renewable energy content of residents and small business electricity supply, to help drive new renewable projects in the New England area and to provide stable pricing over the life of the contract.

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Sudbury’s program is doing that and is also saving residents money on their electric bills. Savings are typically seen over the life of programs like these, however they can not be guaranteed due to Eversource price change every six months.

By State law aggregations require opt-out so everyone who was on Eversource Basic rate was included in the aggregation, unless they opted out.

The default rate “Sudbury Local Green” is \$0.10749 for 19% total renewable generated electricity (5% above the State required 14% green energy.)

Also available are “Sudbury Premium One Hundred Local Green” with 100% local renewable energy, at \$0.13124/kWh, along with “Sudbury Basic” – with only the State mandated renewable content (currently 14%) at \$0.10624/kWh.

For reference – Eversource basic electrical supply is 14% green power and was priced at \$0.10759/kWh for July thru December 2018 and is \$0.13157 for January thru June 2019. By law Eversource reprices electrical supply every six months.

With these program typically over 90% of the participants use the default rate while only a few percent opt up to 100% renewable or opt down to state mandated 14% renewable basic rate.

The 100% renewable option does reduce Sudbury’s carbon footprint to a greater extent and drives / helps finance more renewable generation in New England.

Ed had an action item to research CCA’s from Arlington, Newton and Ashland to report at the next meeting the rates, renewable percentage and type. Note – due to time considerations this will be reviewed at the next meeting.

Town	Newton	Arlington	Ashland	Sudbury
Default - \$/kWh	\$0.1134	\$0.10756	\$0.10947	\$0.10749
Default - % extra green	60% Class 1	5% Class 1	9 %, 77% Wind	5% Class 1
Basic - \$/kWh	\$0.1087	\$0.10631		\$0.10624
Basic - % Class 1	State min – 14%	State min – 14%		State min – 14%
50% Green - \$ (Class 1)		\$0.11881		
100% Green - \$/kWh	\$0.1175	\$0.13131	\$0.10947	\$0.13124
100% - extra renewables	86% Class 1	86% Class 1	9 %, 77% Wind	86% Class 1
Program Dates	3/2019 - 1/2021	8/2017 – 12/2019	6/2018 – 12/2020	8/2017-8/2020
Consultant	Peregrine	Good Energy	Colonial	Good Energy

ACTION: Bill Barletta to contact Good Energy to request a meeting with program updates for the Energy Committee.

6) Request by Town Manager to investigate potential wind power on tipping rock

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The many challenges of wind power deployment in populated areas were discussed, however the committee is favorably inclined to fully evaluate any potential renewable energy option.

Bill Barletta took an action to review available wind power potential maps (DOER?) and grid connectivity to see if the tipping rock area (assumed to be where the antenna towers are, not the walking trail) could be a potential site for location of a turbine.

7) Committee Chairmanship and Membership:

The Energy Committee is chartered to have up to nine voting members, we currently have two unfilled positions.

To gather potential candidates for these two positions the Town Manager's office has posted the openings and the posting will stay open until filled.

Candidates can apply to the Town Manager, will be reviewed by the energy committee and will be interviewed by the Board of Selectmen, who appoint all committee members.

Jim Kelly, Sudbury resident, applied for membership on the Committee. Jim's help in his previous position, as the Town's Building Inspector then Facilities Director, was invaluable to the Energy Committee's mission and his application received unanimous approval from the Committee.

ACTION: Bill Braun to draft a letter of support for Jim Kelly's appointment to the committee from the Energy and Sustainability Committee and send to the BOS.

Bill Braun, the Committee Chairman, has announced that due to new work commitments he will be unavailable for many Committee meetings, and due to that has resigned as Committee Chairman.

Rami Alwan was nominated to be the new Committee Chairman. This nomination was approved by the unanimous consent of the Committee.

Congratulations to Energy and Sustainability Committee Chairman – Rami Alwan!

The Committee discussed adding a Vice-Chair position, there was general agreement on this and it will be put up for a vote in an upcoming meeting.

The Committee cannot thank Bill Braun enough for his leadership since the formation of this group. The Committee is almost ten years old and has many major accomplishments, a partial list includes:

- Becoming a Green Community in 2010
- Applying for and receiving over \$1.7M in grants for Energy Efficiency projects

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- Implementing an Energy Saving Performance Contract to increase energy efficiency of Town buildings, all paid for from the energy and maintenance savings from those projects.
- Launching a Town wide Municipal Aggregation Electricity purchase Program
- Deploying solar PV and solar thermal on our Fairbanks Building
- Deploying a canopy solar array at the High School (new Chairman Alwan was deeply involved in this)
- Deploying a first in the Commonwealth Solar Array on our closed and capped landfill

Well done Chairman Braun, well done!!

8) Date(s) and topics for next meeting(s):

Scheduled Energy Committee Meetings: (DPW Building conference room)

The public is welcome at all meetings.

April 16th at 6:00pm – note date change

May 15th at 6:00pm

June 19th at 6:00PM

9) Other Business?

A carry over discussion from last meeting involved a request for partial funding from the Energy Revolving Fund for the Parsonage restoration project.

A motion was made to help provide funding for the Parsonage restoration project, a vote was called and the motion did not pass with four voting against and two committee members abstaining.

Several Committee members felt the restoration would be an ideal use of Town CPA funds (10% of which are targeted for historical projects) and suggested this be requested at Town meeting.

Adjournment: The Energy Committee meeting was adjourned at 8:55pm.

Minutes submitted by: Edward Lewis, April 3, 2019