

**Town of Brookline
Advisory Committee Minutes**

September 24, 2019

Present: Vice-Chair Carla Benka, Ben Birnbaum, Harry Bohrs, Clifford Brown, Carol Caro, John Doggett, Dennis Doughty, Harry Friedman, Janet Gelbart, David-Marc Goldstein, Neil Gordon, Susan Granoff, Amy Hummel, Alisa Jonas, Janice Kahn, Steve Kanes, Bobbie Knable, David Leschohier, Carol Levin, Pamela Lodish, Mariah Nobrega, Carlos Ridruejo, Chair Michael Sandman, Lee Selwyn, John VanScoyoc, Christine Westphal, Neil Wishinsky

Absent: Kim Smith, Charles Swartz

By Phone: Claire Stampfer

Also Attending: Assistant Town Administrator Justin Casanova-Davis, Scott Ananian, TMM Pct. 10 (Petitioner WA 17), Hadassah Margolis, TMM Pct. 8 (Co-Petitioner WA 32), Zoe Lynn Town Sustainability Program Administrator.

The Chair called the meeting to order at 7:40 PM and made the following announcement:

Pursuant to this Board's Authority under 940 CMR 29.10 (8), Advisory Committee member Stampfer will be participating remotely via telephone due to geographic distance. I have reviewed the requirements of the regulations. There is a quorum physically present and all votes taken will be recorded by roll call. Advisory Committee member Stampfer will be allowed to vote.

- 1) 7:30 pm WA 12 – Solar Power Purchase Agreements for Rooftop Photovoltaic System Installations on Several Town Properties (Select Board)

Pam Lodish provided an overview of the Capital Subcommittee's consideration of Article 12, the details of which are captured thoroughly in the subcommittee report. The subcommittee voted 5-0 for favorable action on Article 12.

Questions and Comments

Q: Do we know the ages of the roofs that will have the installs? A: 2 may not be installed because roofs won't be ready by 2021. Heath is on the edge of may not be within this time period.

Comment: Four locations are schools, could you do educational component that shows how much energy is being collected, or something to that effect.

Q: Solar panel installation and replacement – list corresponds with the list in the WA with exception of Putterham and Health Department. Why aren't the Putterham Library and Health Dept not on the list?

A: 20 year mark in 5 years but will be in CIP in future years 2025 or 2026. Not ready for replacement now. This is really phase one and constituents want to see more solar.

Q: Estimate of costs of leases and the saving from the credits versus the contracts the Town has for electricity? A: The range is too large for potential savings and we haven't reviewed final contracts so hesitant to be specific. No hard number. We lease out the rooftops – payment in lieu of taxes. And we get electricity credit.

Q: We need a pro forma analysis with assumptions laid out to see potential risks and rewards, liability, etc. to the Town – and would like to table this until we have this. Program wasn't designed in a vacuum and we should have financial data to back it up. A: We are trying to reach a milestone to get an incentive. Select Board will be reviewing the contract and there will be a public hearing on that.

Q: Is this company going to stay up to date with the technology? What if something happens to the roof? Who is responsible for removing the solar panels and fixing the roof? A: These details are laid out in the contract that is still being reviewed. We have not yet chosen a company so not specified in this warrant. Unless they break, they will be on for the full 20 years. Seven years we have the option to buy out and explore other sites for direct ownership. It is uncommon in a PPA for vendor to come in and swap out technology.

Comment: Advisory Committee member Hummel highlighted that this article is just authorizing the Select Board to enter into an agreement.

Q: What is the process – next stage – can you come back to us before November 1 with answers? A: We are working with a vendor to get more information to get the PPAs, go to Select Board, provided Town Meeting approves this authorization. Then Town Counsel and Building Department come in.

Comment: Advisory Committee Member Wishinsky summarized Will we have more information on risks and rewards before November to give us comfort? Are you going through a thorough analysis of all of the risks – if you can't get exact term sheet, a level of assurance that you are going through a particular process.

Comment: Assistant Town Administrator Casanova-Davis noted that a financial assessment was done but because the energy climate changed, the financial assessment is out dated. It is a bit of a moving target but we will get that data as soon as possible.

Comment: What are other municipalities who have these agreements in place showing in terms of financial reward? That is public knowledge.

Comment: Suggestion to have an escape clause if we have to get out before 20 years.

Sustainability Program Administrator Lynn noted that there has been a team of staff and citizens working on this initiative and researching what has been done in other communities.

Assistant Town Administrator Casanova-Davis noted that we are seeing more and more communities going the PPA route.

Comment: A term sheet was requested or comparable contract; suggestion to extract data from the vendor.

Advisory Committee member Stampfer noted that we have a time limit on ability to take advantage of an opportunity that few of us understand and there is a will in the Town to move away from fossil fuels and toward photovoltaic systems. In favor of this but suggest we include our questions and concerns – concerns about outdated technology, pro forma, term sheet, etc. The Town is not able to pay for this up front.

A **MOTION** was made and seconded to table a vote until we get a term sheet, pro forma (or comparable, portfolio risk (something about kilowatts) by October 29 when we will be reconsidering other Articles.

By a **VOTE** of 25 in favor, none opposed and 1 abstention, the Advisory Committee voted to table further discussion until October 29.

BENKA	Yes	GORDON	Yes	NOBREGA	Abstain
BIRNBAUM	Yes	GRANOFF	Absent	RIDRUEJO	Yes
BOHRS	Yes	HUMMEL	Yes	SANDMAN	----
BROWN	Yes	JONAS	Yes	SELWYN	Yes
CARO	Yes	KAHN	Yes	SMITH	Absent
DOGGETT	Yes	KANES	Yes	STAMPFER	Yes
DOUGHTY	Yes	KNABLE	Yes	SWARTZ	Absent
FRIEDMAN	Yes	LESCOHIER	Yes	VANSCOYOC	Yes
GELBART	Yes	LEVIN	Yes	WESTPHAL	Yes
GOLDSTEIN	Yes	LODISH	Yes	WISHINSKY	Yes

2) 7:50 pm WA 17 – Open Air Parking Licenses and Electric Vehicle Charging – Resolution (Scott Ananian, TMM Pct. 10)

Janice Kahn provided an overview of the Public Safety Subcommittee consideration of WA 17, a resolution which seeks Town Meeting approval to direct the Select Board or its designee to appoint a study committee – to fund a pilot program for open-air parking licensees to provide EV Ready parking spots, and reform licensing process.

The subcommittee report provides a thorough explanation of the background, discussion and final vote which was 4-0-0 to recommend the amended language. Please see subcommittee report for amended resolution.

Petitioner Ananian noted that he deliberately didn't put a price tag on this.

Questions and Comments

Q: 15 % spaces to be EV ready requested in Article 14 – is there some coordination between these two articles? A: Different aspects of the same problem. This article tries to target the garage orphan problem. Narrowly focused on overnight parking in particular; new construction and shopping places is more Article 14.

Q: Instead of referring to the building code it would be using the new definition. Does this conflict with level 2 50 amp circuit, specifically for that, here we are staying there is level one and level two. A: State building code comes from a National Electrical Code requirement. Building code standards for both of those things and they will be consistent. "EV-ready space" is the same.

Comment: It was general understanding that if money is exchanged for the parking, it requires a license.

Petitioner noted that State law doesn't say who does the licensing or how it is done.

Advisory Committee member Wishinsky said that he see this as an effort to encourage EV charging but also adding the licensing process reform piece. Maybe there are problems with the licensing of open air parking lots but I don't see it as a burning issue where we should be spending our resources. Suggest removing 2nd and 3rd sentences in the Resolved section and focus on EV – if you want to study reforming the licensing process, study it but don't add it as an afterthought to this article.

Advisory Committee member Hummel said she would discourage artificially constraining the study committee.

Q: What is the difference between Level 1 and Level 2 battery chargers? A: All new cars can be charged by either.

A **MOTION** was made and seconded to recommend favorable action on the Article as amended by the subcommittee.

A **MOTION** to **AMEND** was made and seconded to remove 2nd and 3rd sentences in the Resolved section, so it now reads:

"NOW, THEREFORE, BE IT HEREBY RESOLVED that the Select Board appoint a committee to study the process of administering open-air parking licenses, with the following goals: (1) to fund a pilot program to provide incentives, including rebates on acquisition and installation costs, for open-air parking license holders who provide EV Ready parking spots, as defined in Section C405.10 of 780 CMR 13, the Massachusetts Building Code;

BE IT FURTHER RESOLVED that the Town endeavors to add multiple low-speed charging outlets to all Overnight Resident Parking Lots, and establish a program to facilitate their use for overnight charging of battery electric vehicles and plug-in hybrids."

By a roll call **VOTE** with 13 in favor, 11 opposed and 2 abstentions the AMENDMENT passes.

By a roll call **VOTE** with 24 in favor, 1 opposed and 1 abstention the Advisory Committee recommends favorable action on Warrant Article 17 as amended.

BENKA	Yes/Yes	GORDON	No/Yes	NOBREGA	No/No
BIRNBAUM	Yes/Yes	GRANOFF	Absent	RIDRUEJO	Yes/Yes
BOHRS	Yes/Yes	HUMMEL	No/Abstain	SANDMAN	----
BROWN	Yes/Yes	JONAS	Abstain	SELWYN	Yes/Yes

CARO	No/Yes	KAHN	No/Yes	SMITH	Absent
DOGGETT	Yes/Yes	KANES	Yes/Yes	STAMPFER	Yes/Yes
DOUGHTY	Yes/Yes	KNABLE	Yes/Yes	SWARTZ	Absent
FRIEDMAN	No/Yes	LESCOHER	No/Yes	VANSCOYOC	Yes/Yes
GELBART	No/Yes	LEVIN	Abstain /Yes	WESTPHAL	No/Yes
GOLDSTEIN	Yes/Yes	LODISH	Yes/Yes	WISHINSKY	Yes/Yes

3) 8:35 pm WA 32 – Language Change in Town By-laws: Chairman to Chair (Neil Gordon, TMM Pct.1 and Hadassah Margolis, TMM Pct. 8)

Janet Gelbart offered a summary of the Personnel Subcommittee deliberations on Warrant Article 32. This is aligned with gender neutral language resolution passed by Town Meeting in November 2017. IT indicated this would be simple to accomplish this electronically.

The petitioner highlighted that this is aligned with the Town’s commitment to be more inclusive.

Advisory Committee member Brown noted he would make a motion for no recommendation. The Advisory Committee doesn’t really add anything and Town Meeting is smart enough and sufficient to make this decision.

Advisory Committee member Gordon suggested that the Advisory Committee does have a responsibility based on the institutional history of Town government – boards, committees and commissions to review how they operate and what they call their particular participants. Thinks it is important to take a position.

One member said that he believes we shouldn’t be doing this on an ad hoc basis while another urged a favorable vote.

An **AMENDMENT** was made and seconded for no recommendation on Warrant Article 32. By a roll call **VOTE** of 5 in favor, 20 opposed and 1 abstention, the AMENDMENT fails.

BENKA	Yes	GORDON	No	NOBREGA	No
BIRNBAUM	No	GRANOFF	Absent	RIDRUEJO	Abstain
BOHRS	No	HUMMEL	No	SANDMAN	---
BROWN	Yes	JONAS	No	SELWYN	No
CARO	No	KAHN	Yes	SMITH	Absent
DOGGETT	No	KANES	No	STAMPFER	No
DOUGHTY	Yes	KNABLE	No	SWARTZ	Absent
FRIEDMAN	No	LESCOHER	Yes	VANSCOYOC	No
GELBART	No	LEVIN	No	WESTPHAL	No
GOLDSTEIN	No	LODISH	No	WISHINSKY	No

A **MOTION** was made and seconded for Favorable Action on Warrant Article 32. By a roll call **VOTE** of 23 in favor, 1 opposed, and 2 present, the Advisory Committee recommends Favorable Action on Warrant Article 32.

BENKA	Present	GORDON	Yes	NOBREGA	Yes
BIRNBAUM	Yes	GRANOFF	Absent	RIDRUEJO	Yes
BOHRS	Yes	HUMMEL	Yes	SANDMAN	---
BROWN	Yes	JONAS	Yes	SELWYN	Present
CARO	Yes	KAHN	Yes	SMITH	Absent
DOGGETT	Yes	KANES	Yes	STAMPFER	Yes
DOUGHTY	Yes	KNABLE	Yes	SWARTZ	Absent
FRIEDMAN	No	LESCOHIER	Yes	VANSCOYOC	Yes
GELBART	Yes	LEVIN	Yes	WESTPHAL	Yes
GOLDSTEIN	Yes	LODISH	Yes	WISHINSKY	Yes

4) 8:50 pm WA 33 – Language Change in Town By-laws: Inhabitants & Citizens (Neil Gordon, TMM Pct.1)
 Janet Gelbart offered a summary of the Personnel Subcommittee deliberations on Warrant Article 33.

Comments and Questions

Comment: Not sure a blanket change for all of these words is useful.

Comment: Changing “neighboring citizens” to “the public” it changes the nature (perhaps adversely by broadening it out). Each one needs careful look to see if we are changing the nature of the law.

Q: Did Town Counsel’s office weigh in on any of this? A: Not at the subcommittee hearing.

Q: Various terms have specific meanings and concerned about amalgamating them into one. Did you go over the implications of any of these changes? A: Looked at some of them and did not see any red flags.

Q: In the write up it mentions it may open up the Town to lawsuits but how by changing the language would do this? A: Anyone named would have standing to contest the law.

Advisory Committee Member Stampfer agreed that Neil had used the public as anyone who came through Brookline – and perhaps this may have unintentional or unforeseen results which could be detected by Town Counsel. Suggest they look at it to make sure we don’t introduce a new problem into the Town sphere. Suggest we table this until Town Counsel can review?

Advisory Committee Member Levin wonders if the cost involved in updating the bylaws – do we know how much? How much it costs of Town Counsel’s time? Is it worth human resources and cash resources to do this? We should be more thoughtful in our selection of words when drafting things but to go back now is not being respectful of the Town’s resources and time for the benefit we are talking about here.

Advisory Committee Member Knable noted that the language is trying to demonstrate inclusion. Our taking the time and effort to define who we are covering in this is worth the expense and the time.

Advisory Committee Member Westphal has no objection to the inclusiveness of this language, but finds the attempt just inappropriate in this blanket way. It doesn’t convey what we are trying to do. We need to consider each individually. There is no doubt when you are talking about the same person in the instance of Chair and Chairperson but not in this Warrant Article.

Petitioner Gordon stated that each and everyone one of these changes was carefully considered. It is not a universal search and replace. As far as cost is concerned, our Bylaws are in electronic form – not published so no cost in printing. If Town Counsel has to review, if IT has to flip a switch to make a change, so be it. The issue of cost has never been raised about changing any bylaws in the past.

Comment: Recommend using INHABITANTS in lieu of CITIZENS or RESIDENTS. What about WORKERS?

Comment: Define “members of the public”; in terms of Living Wage, that should be “residents”; “neighboring citizens” replace by “neighbors” instead of “the public.”

Comment: Recommend a legal review of these changes to see if any of them create a substantive change to the bylaw itself.

A **MOTION** was made and seconded to table Article 33 with referral to Town Counsel for legal analysis to determine if the language changes the bylaw substantially.

By a roll call **VOTE** of 25 in favor, 1 opposed and no abstentions, the Advisory Committee recommends tabling Warrant Article 33 with referral to Town Counsel for legal review.

BENKA	Yes	GORDON	Yes	NOBREGA	Yes
BIRNBAUM	Yes	GRANOFF	Absent	RIDRUEJO	Yes
BOHRS	Yes	HUMMEL	Yes	SANDMAN	----
BROWN	Yes	JONAS	No	SELWYN	Yes
CARO	Yes	KAHN	Yes	SMITH	Absent
DOGGETT	Yes	KANES	Yes	STAMPFER	Yes
DOUGHTY	Yes	KNABLE	Yes	SWARTZ	Absent
FRIEDMAN	Yes	LESCOHIER	Yes	VANSCOYOC	Yes

GELBART	Yes	LEVIN	Yes	WESTPHAL	Yes
GOLDSTEIN	Yes	LODISH	Yes	WISHINSKY	Yes

5) 9:05 pm WA 34 – Board/Commission Qualifications (Neil Gordon, TMM Pct.1)

Janet Gelbart offered a summary of the Personnel Subcommittee deliberations on Warrant Article 34.

Comments, Discussion, Questions

The word “citizen” seems more accurate or change it to “resident who is a registered voter.” This broadens the eligibility of who can serve on this committee at the discretion of the Moderator.

Q: Why did the subcommittee support this expansion? A: The Town has wanted to be more inclusive and since Town Meeting seems restrictive – yet as a resident of the Town I don’t have to be a voter to bring matters before Town Meeting.

Town Meeting members are elected by voters who are only US Citizens.

The Moderator is in violation of the bylaw and this change will put that to rights.

Should we not share this with Town Counsel also?

Q: Did you look at the state statutory law governing how many people have to be appointed from each precinct? A: State statute – doesn’t speak to appointees needing to be voters or citizens or any of the like.

Petitioner Gordon said he made no effort to go through this – the general bylaw for boards and commissions and committee – you had to be a voter, a citizen, or a resident. Reduced it to lowest common denominator of “resident” and made no other changes other than the requirement. Another anomaly, “To serve, to be appointed, to be nominated” and tried to make it universal to be “to serve.”

“To the extent practicable...” disagree with this. (Put in as a placeholder since it is our status quo)

Why would we limit a requirement to registered voter?

A **MOTION** was made and seconded to recommend favorable action on Warrant Article 34.

A **MOTION** was made and seconded to table further discussion of WA 34 and refer to Town Counsel. By a roll call **VOTE** of 15 in favor, 11 opposed with no abstentions, the Advisory Committee voted to table further discussion pending review by Town Counsel.

BENKA	Yes	GORDON	No	NOBREGA	Yes
BIRNBAUM	Yes	GRANOFF	Absent	RIDRUEJO	Yes
BOHRS	No	HUMMEL	No	SANDMAN	----
BROWN	Yes	JONAS	No	SELWYN	Yes
CARO	No	KAHN	Yes	SMITH	Absent
DOGGETT	Yes	KANES	Yes	STAMPFER	Yes
DOUGHTY	No	KNABLE	No	SWARTZ	Absent
FRIEDMAN	Yes	LESCOHIER	No	VANSCOYOC	Yes
GELBART	No	LEVIN	Yes	WESTPHAL	No
GOLDSTEIN	Yes	LODISH	Yes	WISHINSKY	No

6) Other business

Send Lisa your requests for parking stickers.

Long Range Planning and Policy Meeting to be scheduled.

Recorded votes – pros and cons will be shared so we can have a discussion at the next meeting.

Upon a **MOTION** made and seconded to adjourn, and voted unanimously, the meeting was adjourned at 10:05 pm.

Documents Presented:

- Public Safety Subcommittee Report on Warrant Article 17 Final Version
- WA 17 Resolution as amended by AC Public Safety Subcommittee 2019-09-10
- WA 17 Petitioner’s Corrections Email
- Capital Subcommittee Report on Warrant Article 12 and supporting documents – Solar Options Graphic and FAQs
- Personnel Subcommittee Reports on Warrant Articles 32, 33, and 34
- Brookline Advisory Committee Subcommittee Assignments FY 20 (updated)

Resolution regarding Open-Air Parking Licenses and Electric Vehicle Charging

As amended by AC Public Safety Subcommittee 2019-09-10.

Deletions in ~~strikeout~~, additions **bold underline**.

To see if the Town will adopt the following Resolution:

WHEREAS, according to the 2017 report to Annual Town Meeting of the Electric Vehicle Charging Study Committee, 50% of Brookline properties are rental, not owner-occupied, and residents living in rented dwellings who wish to transition from a fossil-fuel burning vehicle are not in a position to invest in or adapt their home for an Electric Vehicle; and

WHEREAS, although reducing reliance on single-owner vehicles has a number of beneficial effects in addition to reducing greenhouse gas emissions, the electrification of the remaining motorized transport is necessary to meet the goals of the Commonwealth and Brookline's commitments under the Paris agreement; and

WHEREAS, lack of a self-owned parking spot can make charging an electric vehicle logistically difficult, discouraging Town citizens from switching to an emission-free vehicle; and

WHEREAS, the current open-air parking license process administered by the Select Board is cumbersome, and enforcement against those renting out open-air parking spots without a license is practically-speaking non-existent;

NOW, THEREFORE, BE IT HEREBY RESOLVED that the Select Board appoint a committee **or direct their designee(s)** to study the process of administering open-air parking licenses, with the following goals: (1) to fund a pilot program **no later than FY22** to provide incentives, including rebates on acquisition and installation costs, for open-air parking license holders who provide EV Ready parking spots, as defined in Section C405.10 of 780 CMR 13, the Massachusetts Building Code; (2) to reform the license process to make it less burdensome to comply with the law in good faith and acquire and renew an open-air parking license, and (3) to more effectively enforce licensing requirements.

BE IT FURTHER RESOLVED that the Town endeavor to add multiple ~~low-speed~~ charging outlets **(possibly including L1 as well as L2)** to all Overnight Resident Parking Lots, and establish a program to facilitate their use for overnight charging of battery electric vehicles and plug-in hybrids.

or act on anything relative thereto.

Petitioner's article description:

One of the surprising findings of the Electric Vehicle Charging study committee was the large percentage

of “garage orphans”: Brookline residents who face obstacles switching to an electric vehicle because of the lack of a dedicated charger. The solution to the garage orphan challenge in our town must be multifold, including ensuring that Major Impact Projects in town provide sufficient charging capacity in parking structures, supporting a renters/condo-owners “bill of rights” to ensure they are able to install chargers at their own expense, and providing public chargers, for example in town lots and in town-provided overnight parking, to accommodate those without their own dedicated charger. This article addresses one additional piece of that challenge, in attempting to increase the number of rented parking spaces that provide electric vehicle charging facilities. A small pilot program of, for example, \$10,000 could provide \$500 rebates to the first 20 open-air parking license holder applicants, and would provide feedback on whether this incentive would be effective in increasing EV charger availability in our town.

It is worth noting that EV charging infrastructure is especially needed in the transition to fully-electric vehicles, when plug-in hybrids are expected to be the most common and cost-effective zero-emission option for many owners. Plug-in hybrid electric vehicles typically have very small batteries, and are only “zero emission” if that battery is kept charged! Once you drive past the limited range of the battery, a plug-in hybrid is just a plain polluting greenhouse-gas-emitting internal combustion engine car. So widespread charging infrastructure is even more important for plug-in hybrids, which might need to be topped off after every trip to keep them driving clean, than it is for a modern long-range fully battery-electric vehicle, which might need to be charged only once a week.

Many plug-in hybrids can fully charge their small batteries overnight from an ordinary 15A household outlet, which is what’s called a “level one” charger. The “low speed charging” language in the resolution is intended to allow the provision of such “level one” options as well as or in addition to the more typical “level two” chargers used for fully battery-electric vehicles.

As part of the Multi-State ZEV Task Force (zevstates.us) Massachusetts has committed to putting 300,000 ZEVs on the road by 2025. In 2016, we had 2.3 million vehicles registered in Massachusetts. Simple math indicates that 13% of our statewide fleet will need to be electric in the next six years to meet the state goal. Our Brookline goal, as proposed in another article in the warrant for this Town Meeting, is for 30% of our Town vehicles to be electric by 2030. **We need to begin addressing the needs of those members of our community who rent or who cannot afford to own property with dedicated parking.**

Town of Brookline Fall 2019
Warrant Article 12 — Solar System PPA

Frequently Asked Questions

Q: What is a PPA?

A: PPA stands for “Power Purchase Agreement.” Each of the prospective PPAs addressed in this Warrant Article is a contract between the Town and a private solar development company which finances, installs, owns and operates a solar system on Town property. The reason for a town to use a PPA is to avoid the high up-front cost of solar systems and to leverage the use of tax incentives (such as tax credits and accelerated depreciation) available to private sector investors but unavailable to the Town. Additionally, a PPA allows the Town to meet part of its electricity needs at a price that is fixed for 20 years, and therefore not subject to market volatility.

Q: How do we know if the company offering the PPA is reliable and does high quality work?

A: The company proposing the work here is Solect, Inc., a Massachusetts solar developer and installer based in Framingham with a long history of systems installation, ownership and operations in New England. Solect won a competitive RFP managed by the non-profit energy buying consortium PowerOptions for the Metropolitan Area Planning Council. This provides for Solect to enter into PPAs with governmental entities in Massachusetts, using a transparent pricing methodology, with oversight by PowerOptions. Solect has installed systems under PPAs with other Massachusetts municipalities such as Medford, Haverhill, Holliston, and Fitchburg. [\[VERIFY\]](#)

Q: What are RECs and the RPS?

A: A renewable energy certificate (REC) is a property right to the “green attributes” of renewable power and is created every time a renewable generator produces 1,000 kilowatthours (kWh) of electricity. In Massachusetts as in other states, the law requires that retail electricity suppliers annually increase the proportion of electricity provided to their customers that is generated by renewable resources, as one strategy for reducing carbon emissions. This is known as a Renewable Portfolio Standard (RPS). The supplier meets its RPS obligation by producing or purchasing RECs in proportion to its retail sales and “retiring” them with the state. In 2019 the required proportion is 14%, and it increases 1% annually. Suppliers can purchase RECs from brokers, on exchanges, or by contracting with owners of renewable resources. RECs prevent double-counting of the green attributes produced by renewables by allowing only the holders of RECs to claim that right. REC sales provide an additional revenue stream to owners of solar systems to help defray the capital cost. They can also be retained and retired to meet voluntary carbon emissions goals such as the Town’s, thereby counting directly toward those goals.

Q: What is the SMART program?

A: The Massachusetts Renewable Target program (SMART) is the newest state incentive program for solar energy and supplants the state’s solar REC (SREC) program. The SMART program went into effect on November 2018 and is projected to result in the addition of 1,600 megawatts (MW) of solar capacity in the state. SMART program participants receive

fixed per-kilowatthour (kWh) incentive compensation for 10 or 20 years. The incentive for new participants is set to decline in steps as deployment proceeds through the 1,600 MW target. The goal of programs like SMART is to provide a strong financial signal for early adopters that decreases over time as the cost of solar becomes more favorable relative to conventional electricity. Under SMART, customers receive a monthly payment corresponding to the amount of electricity their solar system generates. The payment is comprised of compensation for the power generated, as well as an incentive. In exchange for the incentive, the RECs associated with the system's solar production are transferred to the local electric distribution company (in Brookline, Eversource), which uses them for compliance with its RPS obligation.

Q: Doesn't the PPA approach prevent Brookline from counting these new solar projects as contributing to its carbon emissions goals?

A: These solar projects could not get built without the Town's participation. Their production over their lifetimes will increase the proportion of carbon-free electricity on the New England regional grid, and will help Massachusetts to meet its RPS and Global Warming Solutions Act carbon reduction targets. Decarbonizing electricity on the grid reduces the emissions associated with the power that the Town and Brookline consumers buy. These benefits—as well as the visible, tangible, and educational message that solar on school rooftops can send—are meaningful, even though Brookline can't count the systems' output directly toward its own goal. Moreover, the PPAs give the Town the option to purchase the systems after seven years, at which time it could reconsider whether to retain the RECs produced going forward.

Q: Is there a way for Brookline to own the solar systems and recover the SMART incentives or RECs produced?

A: Yes. The PPA offers the Town the option to purchase the solar systems after seven years, when the third-party investors have recovered their investments and the required waiting periods for the federal tax incentives have expired. The sale price would depend on the appraised fair market value at the time of sale, but typically is significantly below the initial procurement cost. If Brookline were to purchase the systems in the future, it could decide whether to continue to receive SMART incentive payments in exchange for the RECs produced, or to retain and retire the RECs to directly meet Town goals (versus, say, purchasing RECs on the market for that purpose).

Q: If Brookline can't retain the RECs produced by these solar systems on Town buildings, how else can it meet its 2050 zero carbon goal?

A: There are many ways for the Town to reduce carbon emissions:

- Improve the energy efficiency of existing and new buildings
- Purchase green power, RECs, or carbon offsets
- Convert gas-fueled buildings to electricity, and supply the buildings using green power / RECs
- Raise capital to build solar systems and retain the RECs instead of SMART incentives
- Invest in infrastructure to shift toward carbon-free transportation choices (see WA 31)

Comparison of Brookline PV Options — Town vs. 3rd party ownership

Option 1: Town Ownership

- Town finances, owns, operates system
- Town reduces electricity bills by the solar kWh produced (net metering)
- Town receives SMART incentive payments and solar attributes (“RECs”) go to meet state goals

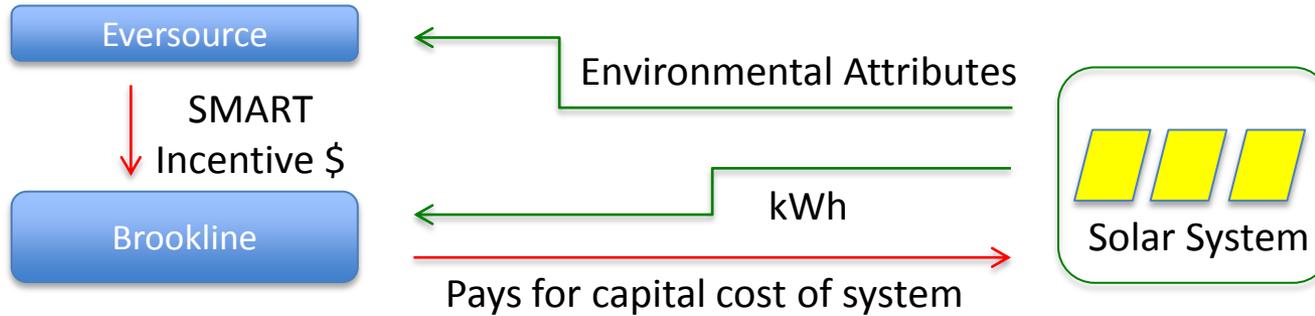
(Option 1a: Same as above, but Town opts out of SMART incentive payments and keeps RECs to meet town climate goals)

Option 2: 3rd party Ownership

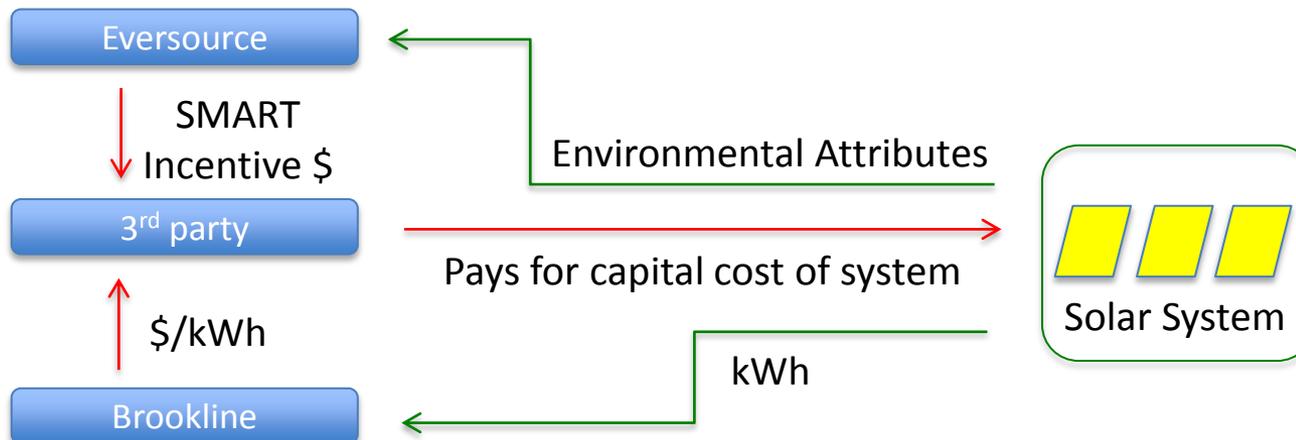
- Town contracts with solar company for PPA (power purchase agreement)
- SolarCo finances, owns and operates system and benefits from tax incentives unavailable to Town; Town pays nothing up front
- Town pays SolarCo for solar electricity at fixed contract price
- SolarCo keeps the SMART incentive payments, RECs go to meet state goals
- Town may purchase system after 7 years at Fair Market Value (usually a discounted price)

Town Ownership vs. 3rd Party Ownership with Power Purchase Agreement (PPA)

Option 1: Town Ownership



Option 2: 3rd Party Ownership with PPA



Lisa Portscher

From: C. Scott Ananian <brookline@cscott.net>
Sent: Tuesday, September 24, 2019 4:46 PM
To: Lisa Portscher
Subject: Fwd: Subcommittee write-up of WA17

Follow Up Flag: Follow up
Flag Status: Flagged

I had a few minor corrections to the WA 17 report which I made too late to make the final version, apparently. Could you forward these to the AC members, just so they have them in writing?

Also, it's worth noting that the petitioners are in favor of the subcommittee's amended text.
--C. Scott Ananian, TMM 10

----- Forwarded message -----

From: C. Scott Ananian <brookline@cscott.net>
Date: Tue, Sep 24, 2019 at 3:11 PM
Subject: Re: Subcommittee write-up of WA17
To: Janice Kahn <jske514@aol.com>

Three minor corrections to the report, apologies for not getting to this sooner:

1. "To meet the state goal by 2025 at least 500 vehicles in Brookline would need to be EVs;"
Should be "at least 500 of the 5,000 estimated open-air parking spaces would need to be used by EVs" (or something like that). There were ~28,000 vehicles registered in Brookline in 2010 according to MAPC data, so 10% of that would be 2,800 EVs. But this warrant article is concerned with open-air parking spaces, and Linda Pehlke's best estimate based on available data is that there are ~5,000 open air parking spaces in town. (Only 1,050 of these are properly licensed; there are only 53 licenses issued in the whole town.)

2. "there is a maximum. A property owner can have 5 spaces by right"

I would put this as, "there are maximums enforced by our zoning bylaws. Use 22 limits residential-zoned lots (S/SC/T/F/M) to 5 spaces or fewer by right." (Business and Industrial zoned lots have no maximum according to use 22; the largest licensed lot in town is at 808 Commonwealth Ave and has 143 spaces.)

3. "Level 2 (220 amp)" -- that should be "220 volt".

Otherwise looks great, thanks!
--scott