Appendix A

Surrounding Towns doing green CCAs

Exploring CCA:

- Brookline
- Cambridge
- Lexington
- Southeasterncommunities "SRPEDD" (some may not do additional renewable energy)

Beginning CCA contract:

- Melrose
- Dedham
- Salem

Currently part of MAPC procurement group

- Somerville
- Sudbury
- Newton

Appendix B

Brookline CCA warrant articles and vote

Article 13

Submitted by: Board of Selectmen

To see if the Town will authorize the Board of Selectmen to commence a Community Choice Electrical Aggregation Program and contract for electric supply for Brookline residents and businesses as authorized by M.G.L. 164, Section 134, or to take any other action relative thereto.

Article 14

RESOLUTION:

Boosting Renewable Sources of Electricity Should Be the Goal of Brookline's Community Choice Aggregation (CCA) Effort

Petition of Carol Oldham, 1496 Beacon Street, TMM-11

WHEREAS, the earth is facing a climate crisis;

WHEREAS, to avoid the worst impacts of this crisis, climate scientists tell us that fossil fuel burning must be dramatically curtailed, virtually immediately;

WHEREAS, serious steps to reduce greenhouse gas emissions must occur at all levels - from the individual, to households, to communities, to states to countries;

WHEREAS, ~25% of fossil fuel usage in the United States goes for the generation of electricity;

WHEREAS, Massachusetts cities and towns have a mechanism called "Community Choice Aggregation" (CCA), which can be used to reduce the burning of fossil fuels for the generation of electricity;

WHEREAS, forty Massachusetts' cities and towns have already implemented some form of CCA, and many more towns are in the process of passing CCA plans;

WHEREAS, many Massachusetts' cities and towns have made reducing greenhouse gas emissions the goal for their Community Choice Aggregation;

WHEREAS, Brookline has shown great awareness about the severity of the climate crisis and has shown an ongoing commitment to significantly reducing its greenhouse gas emissions;

WHEREAS, Brookline is committed to continuing to be a leader in the curtailing of greenhouse gas emissions in the future;

BE IT RESOLVED THAT the Town of Brookline:

1. Wishes to focus its Community Choice Aggregation effort on the goal of increasing its reliance on renewable sources of electricity with a concomitant decrease in its reliance on burning fossil fuels for electricity.

2. Wishes to offer its residents the option to pay a small premium on individual electricity bills (averaging \$7 per month), in order to boost the town's use of renewable sources of electricity by approximately 25%.

3. Shall cause a copy of this resolution to be presented to Brookline's Board of Selectman to help guide its deliberations on what the goal of its Community Choice Aggregation efforts should be.

Brookline Vote results:

2015 SPECIAL TOWN MEETING - FINAL RESULTS NOTES ARTICLE NUMBER SUBJECT BOARD OF SELECTMEN FINAL VOTE ADVISORY COMMITTEE FINAL VOTE TOWN MEETING VOTE

13 Community Choice Aggregation

Board of Selectmen Final Vote: Favorable Action (5-0)

Advisory Committee Final Vote: Favorable Action (20-0-0)

Town Meeting Final Vote: Favorable Action

14 Resolution on Renewable energy within Community Aggregation Plan

Board of Selectmen Final Vote: Favorable Action (5-0)

Advisory Committee Final Vote: Favorable Action (23-0-0)

Town Meeting Final Vote: Favorable Action

Appendix C

Glossary of Terms

- Global Warming Solutions Act: state law passed in 2008 that requires overall greenhouse gas emissions in Massachusetts to be reduced to 25% below the 1990 level by 2020 and to 80% below the 1990 level by 2050.
- MAPC: Metropolitan Area Planning Commission is the regional planning agency for the greater Boston metropolitan area. MAPC is in charge of hiring a "broker" to buy electricity for municipal governments in the region that choose to participate in Community Choice Aggregation.
- Mass. Renewable Portfolio Standard (RPS): state law that requires electric utilities to use renewable energy for a portion of their electricity supply. In 2015 it's 10%, and rises 1% each year.
- **RECs:** Renewable Energy Credits: renewable electricity that is eligible for the RPS is awarded RECs. Any company or person who generates renewable electricity earns RECs, which it can sell to the electric utilities or to others.
- Class I RECs: Class 1 renewables include only the "best" types of renewables, such as wind, solar, and certain types of biomass-generated power, and these must be from "new" sources - those built since 1997. Utilities can only use electricity from Class 1 renewables, which earn Class I RECs, to meet their obligation to buy 10% of their power from renewables in 2015.
- Massachusetts Electricity Restructuring Act of 1997: separated the distribution of electricity, which is done by the electric utilities including Eversource, from the generation of electricity. Utilities are no longer allowed to own generating plants, which are now owned by other companies that sell power to the utilities. The Restructuring Act included creation of the RPS requirement.

Appendix D

Renewable Portfolio Standard Program Summary

Using info from Executive Office of Energy & Environment Affairs <u>http://www.mass.gov/eea/energy-utilities-clean-tech/renewable-energy/rps-aps/rps-and-aps-program-summaries.html</u>

The Massachusetts Renewable Energy Portfolio Standard (RPS) is a statutory obligation that suppliers (both regulated distribution utilities and competitive suppliers) obtain a percentage of electricity from qualifying Units for their retail customers. The RPS began with an obligation of one percent in 2003, and then increased by one-half percent annually until it reached 4% in 2009. In 2009, as a part of the Green Communities Act of 2008, the RPS was broken into RPS Class I and RPS Class II and the Class I annual obligation was set to increase by 1% annually. Each Class has different Supplier compliance percentages, as well as different qualifying generation units used to meet the compliance percentage.

Suppliers meet their annual RPS obligations by acquiring a sufficient quantity of RPS-qualified renewable energy certificates (RECs) that are created and recorded at the New England Power Pool (NEPOOL) Generation Information System (GIS).

The NEPOOL GIS tracks all electricity generated within the ISO New England (ISO-NE) control area and fed onto the New England grid, as well as electricity exchanged between ISO-NE and adjacent control areas. For each megawatt hour (MWh) of electricity, whether renewable or not, one serial-numbered, electronic certificate is created and added to the NEPOOL GIS account of the Unit that generated the MWh. Certificates that represent renewable generation are coded accordingly and known as RECs.

Suppliers purchase those RECs from the generators, who then transfer the RECs from their own GIS accounts to the Suppliers' accounts. Retail Electric Suppliers are required to document compliance with RPS in annual filings submitted to DOER. Suppliers can meet their compliance obligations by purchasing **Renewable Energy Certificates (RECs)** from qualified generators and/or making **Annual Compliance Payments (ACPs)** to the Massachusetts Clean Energy Center. The revenue generated from ACPs is used to fund new renewable generation projects throughout the Commonwealth.

RPS Class I

What are RECs?

Electricity produced by new renewable energy generators qualified for the RPS program is broken into two products:

1) The electricity production that is used on-site or delivered to the grid

2) The positive environmental attributes associated with this clean energy production.

RECs represent the second product. One REC is created each time a qualified system generates 1 megawatt hour (MWh) of electricity. In order for Suppliers to meet their compliance obligations as set by the RPS, they must purchase a number of RECs equal to the percentage for that particular compliance year. For example, in 2016 all Suppliers are required to purchase an amount of RECs equal to 11% of the total load they serve in Massachusetts in order to comply with the RPS Class I requirement. This requirement increases by 1% each year.

RECs are created on the New England Power Pool Generation Information System (NEPOOL GIS). However, before a REC can be created on NEPOOL GIS, a generator must first apply to DOER and receive a Statement of Qualification to sell RECs.

Class I RECs

Currently, the 2014 RPS Class I requirement is met through electricity production from qualified New Renewable Generation Units. New Renewable Generation Units are facilities that began commercial operation after 1997 and generate electricity using any of the following technologies:

- Solar photovoltaic
- Solar thermal electric
- Wind energy
- Small hydropower
- Landfill methane and anaerobic digester gas
- Marine or hydrokinetic energy
- Geothermal energy
- Eligible biomass fuel

Appendix E

Synopsis of CCA law

MA Restructuring Act – Ch. 164, Section 134

(a) Any municipality or group of municipalities may aggregate the electrical load of interested electricity consumers within its boundaries to solicit bids, broker, and contract for electric power and energy services for such customers. (This does not apply to customers served by an existing municipal lighting plant.) The municipality, county, or group of municipalities or counties may enter into agreements for the sale and purchase of electric energy and other related services. The process is initiated with a majority vote of town or city council and the approval of the mayor in a city. The municipality develops a plan which:

1) Details the process and consequences of aggregation

2) Provides for: a) Universal access b) Reliability c) Equitable treatment of all classes of customers

3) Meets any requirements established by law or the DTE concerning aggregated service

4) Achieves a price for energy that either will a) Not exceed the price of Standard Offer Service, or b) Exceeds the price for Standard Offer Service due to the purchase of renewable energy

5) Automatically enrolls all customers then currently on standard offer service, but allows them to opt-out without penalty within 180 days

6) Participation by any retail customer shall be voluntary

7) The aggregation plan incorporates a) An organizational structure of the program, its operations, and its funding b) Rate setting and other costs to participants c) The methods for entering and terminating agreements with other entities d) The rights and responsibilities of program participants and termination of the program

8) The aggregated entity must fully inform all ratepayer classes in advance of a) Their impending automatic enrollment b) All charges and fees c) Their right to opt-out without penalty within the first 180 days d) The Standard Offer rate and how to access it

9) Procedurally, the plan is: a) Developed in consultation with the Division of Energy Resources b) Reviewed by the municipalities' citizens c) Filed with the Department of Telecommunications and Energy d) Subject to public hearing held by DTE e) Approved by DTE Energy Plan, Section 134 (b)

A municipality or group of municipalities establishing a load aggregation program pursuant to subsection (a) may adopt an energy plan that defines the manner in which it will implement demand side management programs and/or renewable energy programs. Upon adoption, the municipality shall submit the energy plan to the DTE for certification that it is consistent with state energy conservation goals developed pursuant to chapter 25A or chapter 164.

1) If the plan is certified, the aggregating entity may:

a) Apply to the Massachusetts Technology Park Corporation for monies from the Massachusetts Renewable Energy Trust Fund, pursuant to chapter 40J, and
b) Receive money from the demand side management system benefit charges or line charges in an amount not to exceed that contributed by retail customers within said municipality.

c) The municipality or group of municipalities adopts an energy plan in the same manner as an aggregation plan.

2) Within two years of approval of its plan, the aggregation shall provide written notice to the DTE that it has implemented the plan. Otherwise, the DTE may revoke certification of its energy plan.

Source: DOER. (See Appendix C for full text of Chapter 164, § 134 (a), (b)) A