Community Choice Aggregation: Municipal Bulk Buying of Electricity in Massachusetts

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Abstract

In this report, the authors recommend community choice aggregation (CCA) to their clients, the Metropolitan Area Planning Council (MAPC), the City of Medford, and GridSmart Energy. Municipalities served by investor-owned utilities may benefit by using CCA as a tool to procure competitive electric supply for residents and small businesses. The research team outlines the process and several precautions that can be taken to mitigate obstacles to implementation.

To inform these recommendations, the team researched background information on the enabling legislation, state energy guides, relevant Department of Public Utility (DPU) filings, broker websites, newspaper articles, and other professional reports. The team also interviewed officials from cities and towns that have adopted or are considering CCA, energy brokers, and representatives from state agencies.

The team concluded that savings reached through a CCA are modest and unpredictable, but there can be other worthwhile results, depending on the structure a community chooses, including environmental benefits, consumer education, and consumer protection. Overall, CCA can be a valuable and relatively inexpensive tool, but each municipality should independently evaluate its goals and the ability of CCA to meet them.
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Abbreviations

CCA – Community Choice Aggregation (Municipal Electric Aggregation)
DOER – Massachusetts Department of Energy Resources
DPU – Massachusetts Department of Public Utilities
EOEEA – Massachusetts Executive Office of Energy and Environmental Affairs
ESA – Electric Supply Agreement
IOU – Investor-Owned Utility
kW – Kilowatt
kWh – Kilowatt Hour
LEAN – Local Energy Aggregation Network
MAPC – Metropolitan Area Planning Council
Muni – Municipal Lighting Plant or Municipal Electric Utility
REC – Renewable Energy Certificate
RFP – Request for Proposals
RPS – Renewable Portfolio Standard
UEP – Graduate Department of Urban and Environmental Policy and Planning at Tufts University
Community choice aggregation (CCA), also known as municipal electric aggregation, is a way for one or a group of cities and towns currently serviced by investor-owned utilities (IOUs) to use bulk purchasing power to negotiate electric supply on behalf of their residents and small businesses. This applies to customers currently on basic service, who are not already purchasing electricity from a competitive supplier. Many of the 101 cities and towns in the Boston area that are served by the Metropolitan Area Planning Council (MAPC) have expressed interest in CCA.

Six CCAs currently exist in Massachusetts. This low number may reflect the disparity between the energy expertise that municipal officials have and that which they feel they need in order to understand this complex process. To provide more guidance to communities interested in CCA, MAPC – in conjunction with the City of Medford and GridSmart Energy – partnered with a graduate student research team from Tufts University’s Department of Urban and Environmental Policy and Planning (UEP) to explore the current state of CCA in Massachusetts, make recommendations for best practices, and provide user-friendly material to help municipal officials understand CCA.

To gain better understanding of the process and the concerns of municipalities, the research team interviewed officials from cities and towns that have adopted or are considering CCA, energy brokers, and representatives from state agencies. The team also researched background information on the enabling legislation, state energy guides, relevant Department of Public Utility (DPU) filings, broker websites, newspaper articles, and other professional reports.

The team concluded that any savings reached through a CCA are modest and unpredictable, but there can be other worthwhile benefits, depending on the structure a community chooses. For example, as energy brokers turn their attention to the residential electricity market, residents may be confused about the terms they should be looking for in an electricity supply contract. Therefore, CCA provides an opportunity for municipalities to educate and protect their constituents by providing a choice that is vetted by government procurement procedures. CCA can also offer significant environmental benefits to municipalities and residents, depending on its structure, including funding for energy efficiency services for residents, higher renewable energy content in the supply, reserve funds for municipal energy efficiency and renewable energy projects, and improved access to energy consumption data for energy reduction and climate change planning purposes.

A considerable amount of time and expense is involved initially in setting up the CCA plan, but most of that cost is borne by the broker, rather than the municipality. Overall, CCA can be a valuable and relatively inexpensive tool that each municipality should independently assess in order to meet the needs of its residents.
Community choice aggregation (CCA), also known as municipal electric aggregation, is a way for one or a group of cities and towns currently serviced by investor-owned utilities (IOUs) to use bulk purchasing power to negotiate electric supply on behalf of their residents and small businesses. This applies to customers currently on basic service, who are not already purchasing electricity from a competitive supplier.

It is important to note that CCA is distinct from affiliation-based aggregations, such as the aggregation of electric load for municipal-owned buildings. In recent years, many municipalities have joined the Massachusetts Municipal Association’s MunEnergy program, which facilitates the negotiation of supply rates for municipalities. Municipal electricity contracts usually have a longer term than CCAs – often two to five years – because municipalities often prefer the stability of longer-term rates for budgeting purposes. The Cape Light Compact, the first CCA in Massachusetts and currently the only regional CCA, initially included the load of municipal-owned buildings, but municipalities later negotiated separate longer-term contracts. Other Massachusetts CCAs have never included the load of municipal-owned buildings.

As of 2013, six states allow CCA: Massachusetts (1997), Ohio (1999), California (2002), Rhode Island (2002), New Jersey (2003), and Illinois (2009). In Massachusetts, there are currently six CCAs: the regional Cape Light Compact (serving 21 towns on Cape Cod and Martha’s Vineyard), the City of Marlborough, and the towns of Lancaster, Lanesborough, Lunenburg, and Ashland. Lowell, Ashby, Lynn, Swampscott, Natick, Greenfield, and the Hampshire Council of Governments (HCOG), which represents more than 20 municipalities, have also initiated the process to create CCAs.

The Metropolitan Area Planning Council (MAPC), whose mission is promoting smart growth principles and regional collaboration, serves 101 cities and towns in the Boston area. Many communities in the MAPC region have expressed interest in CCA. To provide more guidance to these communities, MAPC, along with the City of Medford and GridSmart Energy, partnered with a graduate student research team from Tufts University’s Department of Urban and Environmental Policy and Planning (UEP) to explore the current state of CCA in Massachusetts, make recommendations for best practices, and provide user-friendly material to help municipal officials understand the following questions:

1. What is CCA?
2. How can CCA be explained to municipal energy stakeholders and residents?
3. What are CCA’s potential advantages and disadvantages?
4. What are the steps required to implement CCA?
5. Can a municipality leverage CCA to promote or fund other municipal energy initiatives?
6. How can CCA be used to raise energy awareness within a community or region, while promoting energy efficiency and renewable energy projects?

The research team has synthesized this information into materials that can be easily distributed to interested stakeholders online, in print, or in the form of a presentation.
In Massachusetts, CCA was authorized in 1997 by the Electric Utility Restructuring Act, which deregulated the electricity market. Prior to this, IOUs (currently National Grid, NSTAR, Western Massachusetts Electric Company, and Unitil) were vertically integrated monopolies handling electricity supply (power plants), transmission (high-voltage lines), and distribution (local wires). The restructuring act required the IOUs, which service 310 of the 351 cities and towns in Massachusetts, to sell the supply side of their businesses and buy power from independent suppliers on the open market. Purposes of the restructuring act included lowering electric retail prices through competition between suppliers and increasing consumer choice. However, in reality, rates in deregulated states have risen more significantly than rates in regulated states, 3.1 cents per kWh since 2004 compared to 2.3 cents per kWh, respectively.

As a result of deregulation, electricity customers can now choose their own competitive suppliers. Customers who do not do this remain on their IOU’s basic service, also referred to as default service. Consumers who choose other suppliers still have the delivery of their electricity provided by the IOUs. However, while deregulation offers electricity customers a choice in suppliers, not all customer classes have participated equally in the deregulated market. While 90% of large businesses have negotiated with competitive suppliers, a comparable percentage of residential customers are still on basic service. Residential customers are less desirable to suppliers because they prove less profitable than large businesses. Most of their demand comes during peak hours (such as early evening), and it is more complex to administer multiple smaller accounts than a single large account. CCA is a way for smaller customers to negotiate as larger customers by aggregating their load into a larger one, and it offers municipalities a tool to advocate for residential and small commercial customers who have not yet been able to engage with the deregulated market.

Source: MAPC
Methodology

Interviews

To gain a better understanding of the process of implementing a CCA and the concerns of municipalities, the research team conducted 21 interviews with officials from cities and towns that have adopted or are considering CCA, energy brokers, and representatives from state agencies. The research team created four different sets of questions for interviewees from these different sectors and conducted interviews via phone and in person. MAPC, Medford, and GridSmart Energy suggested contacts from each group and provided feedback on the wording of interview questions. Medford and GridSmart Energy also agreed to be interview subjects.

For brokers and municipalities that have adopted CCA, questions focused on process, goals, customer response, and lessons learned. For municipalities considering CCA, the interviews focused on questions and concerns. For state agencies, interviews focused on potential stumbling blocks and issues related to pending CCA filings. These conversations were recorded when permission was granted. See Appendix J for a full list of interviews and interview questions.

Research

To understand the foundations of the current environment for CCA, the team researched background information on the enabling legislation, state guides, relevant DPU filings, broker websites, newspaper articles, and other professional reports. This provided a broad framework for understanding the complexity of the electricity market and the many actors who influence it. Academic literature provided insight into the deregulated market, but because CCA is a relatively recent phenomenon in Massachusetts, there has not been extensive academic study of it. As the team delved more deeply into the subject, we collected primary documents, such as broker and supplier contracts, requests for proposals, and public notification materials. We also compiled electricity rate and consumption data from these and other sources. This information was useful in comparing rates contracted through the CCA with the basic service rates offered by the utility.
Process

The process by which a municipality implements a CCA in Massachusetts is explained by the Guide to Municipal Aggregation in Massachusetts, but it has changed slightly since the guide was published by the Department of Energy Resources (DOER) in 2004. The following outlines the recommended process.

Implementation Timeline (months)

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<td>Approve</td>
<td>Issue RFP for broker</td>
<td>Develop plan</td>
<td>DPU review</td>
<td>Select supplier</td>
<td>Notify customers</td>
<td>Enroll</td>
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Implementation Stages

**INITIAL RESEARCH**

To learn about CCA and the potential role it could play in their communities, municipal officials and administrators should consider conducting independent research as well as meeting with multiple energy brokers for expertise and guidance. Municipal officials may also wish to speak with representatives from municipalities that have already implemented CCA.

Although recommended in the DOER’s guide, feasibility studies – which outline potential savings, analyze power supply information, and provide engineering evaluations of the distribution network – are not required. However, a broker often includes this information in its formal bid to the municipality or in informational sessions prior to release of the broker RFP. Therefore, paying for a formal feasibility study may be considered an unnecessary expense. The five individual municipalities in Massachusetts with approved aggregation plans did not separately contract for feasibility studies.

It is recommended that cities and towns contact the DOER as early on in the process as possible. If communities have questions in the initial research phase, they can reach out to the Green Communities Regional Coordinator for their region for additional support, even if the municipality has not received a Green Community designation by the DOER.

**AUTHORIZE CCA BY MAJORITY VOTE IN CITY COUNCIL OR TOWN MEETING**

Before a municipality can design an aggregation plan, there must be an affirmative vote at city council or town meeting. If two or more municipalities decide to pursue a joint CCA, they must individually authorize it by majority vote. A prospective energy broker may make an initial presentation at the meeting.

**ISSUE RFP FOR ENERGY BROKER (OPTIONAL)**

Massachusetts General Law does not require municipalities to contract with an energy broker to facilitate the CCA process, and the Cape Light Compact acts as its own broker. However, each of the five individual communities that have implemented CCA hired a broker (Colonial Power Group). Brokers can provide
significant value to municipalities that may have limited staff availability to devote to navigating the implementa-
tion and monitoring process. Brokers provide specialized industry knowledge and also assume the majority of the
upfront risk for the process, including legal and DPU filing fees. They do not receive compensation until after the
competitive supplier has been chosen. Brokers are paid by the supplier and in Massachusetts have historically
received $0.001 (a mil adder) per kWh consumed by the CCA. The broker helps develop the aggregation plan,
assists in the DPU approval process, and issues the RFP for a competitive supplier once the aggregation plan has
been approved. The broker also facilitates the customer opt-out notification (typically paid for by the supplier) and
provides ongoing customer support. Additionally, the broker monitors competitive supply and utility rates on an
ongoing basis and advises the municipality whether the program should be suspended if competitive rates cannot
be found. Due to the significant time investment and technical knowledge brokers provide, most cities or towns
pursuing CCA contract with an energy broker for assistance in the design, implementation, and ongoing
monitoring of an aggregation plan.  

Broker contracts are exempt from standard procurement procedure (M.G.L. ch. 30B), but it may provide
transparency and defend the validity of the municipality’s ultimate choice if those consulting services are obtained
through a competitive Request for Proposals (RFP). Using the competitive process outlined in M.G.L. ch. 30B,
even for exempt contracts, is considered a best practice by the Massachusetts Office of the Inspector General.  

**DEVELOP AGGREGATION PLAN WITH DOER**

Once a municipality has initiated the CCA process through an affirmative vote and has contracted with an energy
broker, its aggregation plan must be drafted. The plan must demonstrate how the CCA will provide universal
access, reliability, and equitable treatment of all classes of customers. The broker typically works to design the
plan, based upon the specific needs of the municipality. Each municipality is required to consult with the DOER
in the formulation of the aggregation plan prior to its submission to the DPU. Neither the timing nor the
frequency of these consultations is prescribed. Rather, each community should meet with the DOER as early
as possible and as often as needed for their specific aggregation plan. This consultation is intended to help
streamline the DPU approval process for municipalities by identifying areas in the plan that are unclear, that have
previously caused delays for other CCAs, or that may otherwise be flagged by the DPU or the Attorney General.
Aggregation plans must include at least the following items:

“An organizational structure of the program, its operations, and its funding; rate setting and other costs
to participants; the methods for entering and terminating agreements with other entities; the rights and
responsibilities of program participants; and termination of the program.”

**APPROVE AGGREGATION PLAN**

Once a plan has been developed in consultation with the DOER, a municipality must make it available for review
by its citizens through a public posting or hearing. After approval by the board of selectmen or city council, the
plan can be submitted to the DPU.

**SUBMIT PLAN TO DEPARTMENT OF PUBLIC UTILITIES (DPU)**

The municipality, with the help of the energy broker, must petition the DPU to officially authorize the CCA. This
is typically the longest part of the process. DPU staff recommend that municipalities budget six months for this
step. It includes an initial filing with DPU, comment periods where other parties may intervene with questions
or concerns (such as the Attorney General or the IOU in the service area), information request and discovery
periods, and public hearing. Information requests are typically issued by the DPU to clarify parts of the plan that
may be in conflict with the objectives of universal access, reliability, or equitable treatment. Electronic copies of
DPU filings, comments, and follow-ups are available on the DPU website, and municipalities should review the proceedings (in consultation with their broker) of previous CCA plans in order to avoid delays caused by questions that have been addressed and/or resolved in prior filings. Heretofore the DPU has not rejected an aggregation plan outright, but returned them to municipalities for revision. Two municipalities have subsequently withdrawn their aggregation plans. If a plan is found to be in compliance with regulation, it will be approved by a formal order from the DPU.  

**Issue RFP for Competitive Supplier**

The RFP for competitive supply should articulate the specific energy needs of the municipality identified in the CCA plan. Suppliers may be asked to bid on multiple supply and term options, depending on the goals of the plan. For example, if the municipality wants to offer residents an option to buy power that exceeds renewable generation required by the Massachusetts Renewable Portfolio Standard (RPS), they may request the supplier to provide pricing for both a basic rate and “green” rates with certain percentages of renewable content. Through 2013, the RPS requires that eight percent of electricity sales to end users come from new (built after December 31, 1997) renewable energy resources, increasing by one percent each year with no mandated expiration date. Many RFPs ask for 3-, 6-, 9-, 12-, and 24-month options. While longer-term contracts (6-plus months) may offer a certain amount of price stability, several of the approved aggregation plans have chosen to pursue six-month contracts to mirror the six-month timetable that the IOUs are required to follow to establish supply prices. The energy broker is typically responsible for issuing the RFP for competitive supply on behalf of the town, evaluating bids according to the specific goals of the municipality, and recommending a supplier.

**Execute Contract with Supplier**

While the energy broker solicits bids through the RFP process and makes recommendations, the municipality will ultimately choose the supplier, and it will execute the contract.

**Notify Customers of Opt-Out Period**

The CCA must inform basic service customers by mail at least 30 days prior to automatic enrollment that their electric supply will be switched to the chosen competitive supplier and the new rate. They must also notify affected customers that they have the right to opt out of the CCA within 180 days and without an exit charge and anytime thereafter (historically, also without an exit charge). The notification must also disclose the utility’s basic service rate and provide detail about how customers can opt out or choose another competitive supplier. The customer may also opt out or in at any point by contacting the broker or supplier. For the five individual municipalities that have authorized CCA, the opt-out process was funded by the supplier and administered by the energy broker. Customers could opt out by returning the initial opt-out postcard, by phone, or online by visiting the broker’s website.

**Begin Automatic Enrollment**

All ratepayers on the utility’s basic service who do not opt out of the CCA will be automatically enrolled in the plan. They will continue to receive an electricity bill from their utility, which displays separate delivery and supply charges. Delivery charges (distribution, transmission) will remain with the utility, but the supply section (generation charge) will list the new competitive supplier. Customers will pay one bill directly to the utility, and supply charges will be passed through the utility to the supplier.
**ONGOING MARKET MONITORING**

The broker continues to monitor the electricity market, secures rates when they are favorable, and notifies the municipality when utility basic service rates have dropped below competitive rates. This monitoring process helps municipalities determine if the program needs to be temporarily suspended.

**SUBMIT ANNUAL AGGREGATION STATUS REPORT**

Within 30 days of the end of the first year of operation, a CCA must submit an annual aggregation status report to the Director of the Green Communities Division of DOER. The status report should include the number of participants by customer type (residential, commercial, industrial), the number of customers opting out by type, load served, contractor costs, and savings data.\(^{31}\)

**Other Possibilities**

**PROGRAM SUSPENSION (OPTIONAL)**

The CCA may be suspended by the community if rates below basic service cannot be found or if the CCA is not meeting other community goals. Currently, the towns of Ashland, Lunenburg, and Marlborough have suspended their programs. If a CCA is suspended, customers will be returned to their IOU’s basic service. Suspended CCAs can be restarted simply by executing a competitive supply contract at any point that favorable rates are found.\(^{32}\)

**Pursue Energy Efficiency Systems Benefit Funds (Optional)**

The Massachusetts CCA legislation (Section 134b of the restructuring act) allows a municipality to administer the energy efficiency systems benefit charge currently paid by all ratepayers of IOUs. IOUs have administered energy conservation and efficiency programs through MassSave, but municipalities pursuing CCA may choose to take this funding to run their own localized efficiency programming that conform to MassSave guidelines.\(^{33}\) Currently, only the regional Cape Light Compact, which is further discussed in the case studies, has pursued this option.\(^{34}\) Several single-municipality CCAs expressed concern that the burden of administering efficiency programming might be cost-prohibitive for them due to economies of scale, and they did not pursue this option.\(^{35}\)

If a municipality decides to seek control of these funds, it must adopt an energy plan through an affirmative vote in city council or town meeting that articulates how the CCA will administer demand-side management programs. The plan must be approved by the DPU.\(^{36}\) Municipalities interested in administering the energy efficiency systems benefit charge should review the Cape Light Compact DPU filings and consult with the DOER.
Potential Advantages and Disadvantages

Potential Advantages

Benefits from CCAs could include improved access to electric consumption data, consumer education, consumer protection, funds to run energy efficiency programs an increased renewable portfolio, lower rates, rate stability, or a reserve fund paid to the town by the supplier. Some of these characteristics may not be able to be realized at the same time, such as rates lower than basic service and higher renewable energy content.\(^{37}\)

**Access to Electric Consumption Data**

By forming a CCA, communities are able to more easily obtain data on their residents' aggregate energy use. This data, which is extremely useful for energy reduction and climate change planning purposes, can otherwise be difficult to acquire from IOUs.\(^{38}\)

**Consumer Education**

Public meetings, posted notices, press releases, newspaper articles, and notifications enclosed in electric bills regarding the municipality’s choice to pursue CCA serve to inform customers of their ability to opt out of the CCA by choosing basic service or a competitive supplier, but can also lead to greater consumer awareness of where their electricity comes from and what other suppliers exist.\(^{39}\)

**Consumer Protection**

As more energy brokers enter the deregulated market, consumers are being increasingly approached by brokers attempting to sell energy contracts, even door-to-door. These salespeople can pressure uninformed consumers into paying for services that may be problematic. Potential issues can include teaser rates that dramatically increase after an introductory period or multi-level marketing that relies on new customers’ money to fulfill obligations to other customers.\(^{40}\) CCA offers municipalities a way to use government procurement procedures to vet brokers and suppliers on behalf of residents.

**Energy Efficiency Funds**

If a municipality chooses to collect the systems benefit charge for energy efficiency (currently 0.25 cents/kWh), the community will gain control of the funds to run its own energy efficiency programs.\(^{41}\) Only the Cape Light Compact has done so in Massachusetts – likely due to the economies of scale available from regional aggregation.\(^{42}\)

**Increased Renewable Portfolio**

CCA gives communities the opportunity to purchase energy with a higher renewable content than the Massachusetts RPS. Through 2013, the state RPS requires that eight percent of electricity sales to end-users come from new (built after December 31, 1997) renewable energy sources, increasing by one percent each year with no mandated expiration date.\(^{43}\) CCAs can have higher renewable content in their regular rate and/or offer higher-priced “green” options containing 50% or 100% renewables.

**Lower Rates**

CCA rates can be lower than basic service, depending on when rates are locked in and the bids received. When deregulation occurred, initial contracted rates were required to be lower than the IOU’s standard offer. The
standard offer was set in 1997 in an attempt to buffer customers from the initial increase in market prices after deregulation. Since the standard offer expired in 2005, this restriction no longer applies.\textsuperscript{44}

**Rate Stability**

CCAs can choose longer-term contracts in order to buffer customers from the volatility of the electricity market.

**Reserve Fund**

A municipality can choose to receive a reserve fund (also referred to as an administrative fee) from the supplier that they can dedicate to funding energy efficiency or renewable projects, such as the purchase and installation of high-efficiency streetlights or solar photovoltaic panels. The town of Lanesborough is currently receiving reserve funds matching the broker fee, and the Cape Light Compact, which is acting as its own broker, is using part of the administrative fee for a reserve fund. The town of Lancaster is pursuing such funds.\textsuperscript{45}

**Potential Disadvantages**

**Administrative Costs**

While brokers, who are paid by the supplier rather than the municipality, do much of the research and paperwork relating to the CCA, municipal employees must monitor the broker and deal with public response, if any. If a municipality chooses to conduct an independent feasibility study, it could impose an additional expense.

**Higher Rates**

After the contract has been executed, the utility’s basic service rates could drop below the CCA’s rate. This could mean that customers end up paying more for their electricity than they would have through basic service. This becomes more likely if the CCA contract is longer than the utility’s six-month timetable for setting supply rates. This very issue has led several communities, including Marlborough and Lunenburg, to suspend their programs until they can find more competitive prices from alternative suppliers.\textsuperscript{46}

**Political Fallout**

Some residents and small businesses may be upset that the program is opt-out rather than opt-in. Additionally, there could be backlash if basic service rates drop below the CCA rates. There could also be a reaction to the suspension of the program. While it is hypothetically possible that any of these scenarios could lead to a public outcry, there is little evidence that this has occurred.\textsuperscript{47}
Case Study: Ashland

Utility: NSTAR
Population: 15,593
Aggregation Plan Approved: November 30, 2011
DPU Filing: 11-28
Contract Took Effect: February 1, 2012
Energy Broker: Colonial Power Group
Competitive Supplier: ConEdison Solutions
Suspended: December 1, 2012

The CCA process in the Town of Ashland was initiated by the town manager and assistant town manager after an informational meeting with Colonial Power Group. Ashland issued an RFP for an energy broker in July 2010 and selected Colonial Power Group in October 2010. An affirmative town council vote authorized the town to pursue CCA in December 2010.49

An aggregation plan was developed by Colonial Power Group, in consultation with the Town of Ashland and the DOER, to service the roughly 8,000 electricity customers in Ashland. The plan was submitted to the DPU on March 14, 2011. A revised aggregation plan was filed with the DPU in July 2011. Ashland’s DPU hearing was held at the same time as Lanesborough’s and Lunenburg’s. The revised plan was approved by the DPU on November 30, 2011.50 With the execution of a supply contract with ConEdison Solutions in January 2012, the Town of Ashland became the fourth municipality in Massachusetts to select a competitive supplier for CCA.51

Ashland decided that it would not administer energy efficiency services. The town also decided it would not seek to establish a reserve fund. When Ashland began considering CCA, the town had recently become a Green Community and felt at the time that the funding opportunities presented by the Green Communities program were sufficient to cover Ashland’s energy plans.

Ashland initially signed a six-month electric supply agreement (ESA) with ConEdison Solutions. This contract was extended by several months after the original contract expired. The contract extension enabled the town’s contracting cycle to eventually match NSTAR’s six-month rate-setting schedule. This allowed competitive supplier bids for the town to be compared to NSTAR basic service rates.

The town initially decided to pursue CCA for potential savings that could accrue to customers. While savings to each customer were not anticipated to be substantial, CCA was seen as an available tool to demonstrate to residents that the government was trying to do what it could to help them save money.

The town has not received a significant amount of negative pushback from consumers regarding the initial decision to aggregate or from the decision to suspend the program. Once customers received notifications listing the name of the broker, some contacted the town to make sure that the program was an official town program, but that was the extent of consumer confusion regarding the program.

According to a former town administrator, one of the largest takeaways from the process was the value of an energy broker who could design the aggregation plan, navigate the DPU approval process, monitor rates, and provide expert guidance on items that local town officials did not have time to investigate.52

The town suspended the program on December 1, 2012, when NSTAR rates dipped below competitive supply rates, and is currently monitoring the market.53
Case Study: Cape Light Compact

Municipalities Served: Aquinnah, Barnstable, Bourne, Brewster, Chatham, Chilmark, Dennis, Eastham, Edgartown, Falmouth, Harwich, Mashpee, Oak Bluffs, Orleans, Provincetown, Sandwich, Tisbury, Truro, Wellfleet, West Tisbury, and Yarmouth
Utility: NSTAR
Population: 200,000+ customers
Pilot Aggregation Plan Approved: November 20, 2001
DPU Filings: 00-47, 01-63, 04-32
Pilot Project for Default Customers Initiated: March 22, 2002
CCA for All Customers Initiated: March 1, 2005
Competitive Supplier: ConEdison Solutions

The Cape Light Compact is an intergovernmental organization made up of 21 municipalities on Cape Cod and Martha’s Vineyard. The Compact serves more than 200,000 electric customers in Barnstable and Dukes counties. It was formed in 1997 after the Massachusetts restructuring act enabled cities and towns to seek competitive supply for their electric consumers.54

The Cape Light Compact was the first successful CCA in Massachusetts and is unique in that it is the only aggregation to have taken control of the energy efficiency systems benefit charge from its IOU. The Compact independently administers the funds to all electric customers in its service territory. The ability to manage and administer these efficiency funds at a local level, keeping them in the region, was a primary objective in the formation of the Cape Light Compact, and efficiency programming and education continue to be significant components of the organization’s work.

The Cape Light Compact operates as its own energy broker, and it collects $0.001 per kWh (a mil adder) from the electric supplier. The fee was disclosed in original plan filings and approved by the DPU. This rate is equivalent to the broker fee seen in later approved aggregation plans. The use of these funds is determined by the board of the Cape Light Compact in its budget plans each fiscal year, and it has been used to cover staff, program administration, and operating costs, and has helped to establish and finance a local cooperative for renewable project development.

There was a delay between the original DPU approval and implementation of the first plan. While a pilot program initiated in 2002 allowed the Compact to serve new electric (default service) customers, it could not transfer the bulk of consumers to the plan until 2005. The 1997 restructuring act required initial contract prices to be lower than IOU standard offer prices, which was not possible. When the standard offer was eliminated in 2005, the Cape Light Compact started serving all aggregation customers.

Larger commercial customers, as well as municipal-owned buildings, were originally part of the aggregation. The large electric load of these customer bases added bulk to the aggregate load. Municipal load was separated from the aggregation several years ago in order to negotiate longer-term contracts. As larger commercial electric users become more familiar with the competitive market, many of them also left the aggregation to establish their own competitive supply contracts.55

Prices for residential customers are contracted on a six-month schedule. Customers can choose Cape Light Compact basic rates, Cape Light Compact Green 50%, or Cape Light Compact Green 100%, or they can choose to pick an alternate supplier or return to NSTAR’s basic service. The renewable content options offered by Cape Light Compact Green (50% and 100%) are accounted for using the purchase of renewable energy certificates (RECs) for low-impact hydro, wind, and solar photovoltaic products. When new prices are negotiated, consumers are notified through advertisements in local papers and press releases. The relative electric supply costs for each
product option (basic rates, Cape Light Compact Green 50%, and Cape Light Compact Green 100%), as well as a description of the supply sources, are disclosed by the Cape Light Compact and are also available online.\textsuperscript{56}

Cape Light Compact is responsible for administering efficiency programs with the funding obtained by the energy efficiency systems benefit charge. Even if a customer chooses to opt out of the power supply part of the aggregation by selecting an alternate supplier, they continue to pay the energy efficiency systems benefit charge and they are still eligible for efficiency services offered by the Cape Light Compact. Administering efficiency programs requires additional administration, but this part of the CCA has been viewed as a success. The administrative burden of implementing efficiency programs may prove more challenging to individual municipalities with individual populations due to economies of scale.

A key takeaway for the Cape Light Compact is that substantial price savings should not be the selling point of a CCA, and that lower electric rates cannot be guaranteed at all times. In fact, rates offered under Cape Light Compact have occasionally exceeded utility basic service rates. The Cape Light Compact has never suspended its CCA, since the CCA provides value for customers by offering programs reflective of local objectives (such as local control over efficiency funds and energy education services). Program suspension would automatically suspend its administration of the systems benefit charge for local efficiency programs and services.\textsuperscript{57}
The Town of Lancaster’s CCA was initiated by the town administrator and the environmental officer. The time period from concept to implementation was roughly one year.

The primary goal for the CCA was lower rates. Lancaster’s CCA does not have a higher renewable content than the Massachusetts RPS. It also does not collect funds to implement residential energy efficiency programs. Lancaster is a Green Community, and the town’s larger energy goal is zero net electricity consumption. One step it has taken toward reaching this goal is installing solar on its landfill.

The town plans to collect a reserve fund equal to the broker’s fee of $0.001 kWh, which would generate around $25,000 a year. It may use this income initially to purchase streetlights from National Grid and retrofit them with LED bulbs.

Its competitive supply contract is currently for one year. The CCA has never been suspended.

Town-owned buildings are not included in the contract, because they are in the middle of a separate 18-month contract. The town administrator plans to include them in the CCA eventually.
Case Study: Lanesborough

Utility: Western Massachusetts Electric
Population: 3,091
Aggregation Plan Approved: November 30, 2011
DPU Filing: 11-27
Contract Took Effect: February 1, 2012
Energy Broker: Colonial Power Group
Competitive Supplier: Dominion Retail, Inc.

The Town of Lanesborough is the first aggregation in Berkshire County. Lanesborough’s DPU hearing was held at the same time as Ashland’s and Lunenberg’s. Its initial competitive supply contract lasted ten months, and it has never suspended its CCA program.

Lower rates for residents is the primary focus of this CCA. It does not have a higher renewable content than the Massachusetts RPS. The town also doesn’t collect funds to implement residential energy efficiency programs. The town’s larger energy goals include efficiency (to date, they have retrofitted lighting, an oil heating system, and a water heater in the town hall) and solar (panels on town hall). Lanesborough has an extremely active energy committee that includes three retired General Electric engineers. It is working towards becoming a Green Community.

Town-owned buildings are not included in the contract and are handled by a different broker than the CCA’s.

The town collects a reserve fund equal to the broker’s fee of $0.001 kWh (around $10,000 per year) that goes into the general fund for the town.

The town may eventually look at other options, such as the pending Hampshire Council of Governments aggregation, if the regional buying cooperative results in the ability to negotiate for lower rates.
Case Study: Lunenberg

Utility: Unitil
Population: 10,086
Aggregation Plan Approved: November 30, 2011
DPU Filing: DPU 11-32
Contract Took Effect: January 1, 2012
Energy Broker: Colonial Power Group
Competitive Supplier: ConEdison Solutions

The Town of Lunenberg decided to pursue aggregation because of dissatisfaction with its utility, Unitil. After the ice storm of 2008, some customers lost power for more than 20 days. As a result of a DPU investigation into the lengthy response time, the state now has the power to fine utilities that do not respond appropriately to emergency events. A group of residents wanted the town to create a municipal electric company. However, the town decided that it was not feasible to buy out Unitil, so the group decided that a CCA was the best alternative to improve rates for customers and empower the community to make its own energy choices.

The primary goal for the CCA was lower rates, since Unitil offered comparatively high rates. The contracted power supply does not have higher renewable content than the Massachusetts RPS. The town also doesn’t collect funds to implement residential energy efficiency programs and doesn’t collect a reserve fund from its competitive supplier.

The town is still trying to figure out its larger energy goals. There is a green energy committee, and the town implemented all the Green Community requirements except the stretch code. It completed a solar photovoltaic project on the roof of the middle school a year ago, there are three solar photovoltaic arrays under consideration, and it is purchasing net metering credits.

The energy broker performed a feasibility study at no cost, which provided the town with assurance that there would be suppliers interested in bidding on its load, even though it was relatively small. Lunenberg’s load may be of more interest than that of other towns because the electric bill delinquency rate is low. It includes residential, small commercial, and agricultural customers.

Municipal buildings were not included in the CCA, because they were already part of a 17-member school collaborative.

The aggregation plan filing was delayed because the Department of Public Utilities waited to hold Lunenberg’s public hearing at the same time as Ashland’s and Lanesborough’s hearings. The process took about 18 months from the point that Colonial Power Group’s RFP was accepted.

The town has received a lot of positive feedback from residents about the program. There were many questions initially, especially from seniors. Residents were proud that their second contract had the lowest supply rate in the Commonwealth. They were disappointed when the program was suspended in December 2012, but they are looking forward to finding a better rate.°
Case Study: Marlborough

Utility: National Grid
Population: 38,895
Aggregation Plan Approved: March 14, 2007
DPU Filing: 06-102
Contract Took Effect: June 1, 2007
Energy Broker: Colonial Power Group
Competitive Supplier: ConEdison Solutions

The City of Marlborough was the first individual municipality to successfully implement an aggregation. Its first competitive supply contract went into effect on June 1, 2007.

The city’s primary goal for the aggregation was to save money for residents. It does not have a higher renewable content than the Massachusetts RPS. It also does not collect funds to implement residential energy efficiency programs.

Colonial Power Group approached Marlborough about the topic of aggregation and subsequently handled almost every aspect of the process, including any legal expenses and filing fees, with very little time spent on the part of the city administration. Colonial Power Group educated customers about the transition and handled any feedback about it.

With only a part-time energy efficiency director, the director of public facilities felt that he lacked full understanding of the aggregation process and has had little time to address that issue.

Marlborough suspended its aggregation twice, from July to December 2008 and from November 2012 to the present. In November 2011 the city changed its contract length from six months to one year, and when National Grid changed its rates in May 2012, residents paid rates more than one cent per kilowatt hour higher than basic service.

Marlborough is a Green Community. Its main energy goals are efficiency (such as upgrading parking lot lights with LED bulbs, and retrofitting boilers and pumps) and solar photovoltaic projects. CCA is not a high priority in its list of environmental initiatives.

City-owned buildings are not included in the contract, since for budgeting reasons the city prefers the rate stability that a long-term contract entails. Its municipal contract is with a different broker than the CCA.

The research team performed an informal calculation of savings under CCA for the city of Marlborough, using residential rates compared with National Grid basic service rates from June 2007 to October 2012, and yearly residential consumption data from 2011. The total amount saved by Marlborough residents over this period was $333,286.38. Total savings were then divided by the number of non-basic service residential customers for 2011, resulting in total savings per household of $26.48, or less than $5/year.
<table>
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<th>CCA</th>
<th>Ashland</th>
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<th>Lancaster</th>
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<td>Colonial Power Group</td>
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<tr>
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<td>ConEdison Solutions</td>
<td>Constellation Energy Power Choice</td>
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<td>12/2012</td>
<td>7/2008–12/2008, 11/2012–Present</td>
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<td>No</td>
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</table>
Recommendations

A purpose of deregulation was to lower electricity rates through competition, but rates in deregulated states have increased more significantly than rates in regulated states. In Massachusetts, residents have been left behind by deregulation, not seeking out competitive suppliers at the same rate as large businesses. Community choice aggregation (CCA) is a way for cities and towns to pool residents’ electricity demand so they can participate in the competitive market. It is also a useful tool for communities that wish to take control of their own energy future.

Any savings reached through a CCA are unpredictable, but there can be other worthwhile benefits, depending on the structure a community chooses. As energy brokers turn their attention to the residential electricity market, residents may be confused about the terms they should be looking for. CCA provides an opportunity for municipalities to educate and protect their constituents by providing a choice that is vetted by government procurement procedures.

There are essentially two different models of CCA: a rate focus and an environmental focus. For a CCA that is rate focused, the contracted rate between the municipality and the competitive supplier would at least initially be lower than basic service, and the municipality would attempt to maintain this price differential. In this case, the term length is often structured to mirror the six-month timetable for setting supply rates, which means the rate changes often but is rarely higher than the utility’s for an extended period of time.

For a CCA with an environmental focus, opportunities for greenhouse gas emissions reductions include energy efficiency services for residents, higher renewable energy content in the supply, reserve funds for municipal efficiency and renewable energy projects, and access to energy use data for energy reduction and climate change planning purposes.

- **Energy efficiency services** - CCA provides municipalities with the opportunity to take control of the energy efficiency systems benefit charge currently paid by all ratepayers of investor-owned utilities (IOUs) and administered by MassSave. This use of funds for services within their own community may be of interest to some; however, economies of scale may make it difficult for smaller towns to implement such programs individually.

- **Renewable energy content** - Communities may also decide to increase the percentage of renewable energy content in their supply, higher than that required by the Massachusetts Renewable Portfolio Standard (RPS). In pursuing supply sources with higher renewable content, the aggregation also has the option to promote local renewable energy projects through the purchase of Renewable Energy Certificates (RECs) from nearby solar photovoltaic projects.

- **Reserve funds** - If a municipality chooses to pursue reserve funds as part of the aggregation plan, such funds could be dedicated to efficiency and renewable energy development projects - for example, LED street lighting or large-scale solar photovoltaic systems.

- **Data access** - By forming a CCA, communities are able to more easily access data on their residents’ aggregate energy use. This data, sometimes difficult to acquire from IOUs, can be extremely useful for energy reduction and climate change planning purposes.

Based upon the experience of other municipalities and input from state agencies, we suggest that those seeking a CCA streamline the process by following these procedural recommendations:

- **Talk with Department of Energy Resources (DOER) early and often.** Consultation with DOER is intended to ease the Department of Public Utilities (DPU) filing process.

- **Speak with the IOU prior to filing with the DPU.** This gives the municipality the opportunity to address any concerns the IOU may have about the aggregation plan. Identifying and addressing potential issues before the DPU’s discovery phase will speed up the process.
• Review the DPU filings for previously approved CCAs. Identifying questions that have previously been flagged by the Attorney General and DPU and addressing them in the aggregation plan may streamline the process.

• Be as transparent as possible. If pursuing fees, make sure to disclose them in the aggregation plan and contracts. Issue Requests for Proposals (RFPs) for the broker and competitive supplier. While this is not required by Massachusetts procurement laws, it is highly recommended.

Communities that are interested in aggregation should be cautious about how it is marketed and be careful not to pursue it just for the savings. Cost savings have proven to be more modest and unpredictable than they may have seemed at first. However, as described above, there can be significant consumer protection and environmental benefits to the municipality and its residents depending on the structure of the CCA. A considerable amount of time and expense is involved initially to set up the plan, but most of that cost is borne by the broker, rather than the municipality. Overall, CCA can be a valuable and relatively inexpensive tool that each municipality must independently assess in order to meet the needs of its residents.


15. Ibid.


21. Lusardi, “Interview with DOER.”


24. DPU Staff, “Department of Public Utilities Interview.”


29. Murphy, “Colonial Power Interview.”


31. Lusardi, Meg. 2013. Municipal Aggregation Prep Notes, email to Betsy McDonald.

32. Murphy, “Colonial Power Interview.”


34. Downey, Maggie. “Cape Light Compact Interview.”

35. Pacheco, “Town of Lancaster Interview”; Purple, “Town of Ashland Interview.”


41. Woolf, Green Power and Energy Efficiency Opportunities.

42. Downey, “Cape Light Compact Interview.”


44. Woolf, Green Power and Energy Efficiency Opportunities.


47. Ghiloni, John, and Beverly Sleeper. “City of Marlborough Interview.” Interview by author. February 27, 2013; Purple, “Town of Ashland Interview; Speidel, “Town of Lunenburg Interview.”


52. Purple, “Interview with Mark Purple.”


55. Downey, “Interview with Cape Light Compact.”

57. Downey, “Interview with Cape Light Compact.”


59. Pacheco, “Town of Lancaster Interview.”

60. Murphy, Brian. “RE: Community Choice Aggregation Report.” E-mail message to author. April 30, 2013.

61. Pacheco, “Town of Lancaster Interview.”


65. Speidel, “Town of Lunenburg Interview.”


67. Ghiloni and Sleeper. “City of Marlborough Interview.”

References


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Murphy, Brian. “RE: Community Choice Aggregation Report.” E-mail message to author. April 30, 2013.


NORTHEAST ENERGY PARTNERS, LLC vs. MAHAR REGIONAL SCHOOL DISTRICT; CONSTELLATION NEWENERGY, INC., third-party defendant., 462, 687 (Massachusetts 2012).


Appendix A: Deregulation

The Massachusetts electric market was deregulated in 1997 by An Act Relative to Restructuring the Electric Utility Industry in the Commonwealth, Regulating the Provision of Electricity and Other Services, and Promoting Consumer Protections Therein.

Prior to the restructuring act, investor-owned utilities (currently National Grid, NSTAR, Western Massachusetts Electric Company, and Unitil) were vertically integrated monopolies, owning both the supply and delivery of electricity: generation (power plants), transmission (high-voltage lines), and distribution (low-voltage lines).

The restructuring act required such utilities to sell the supply side of their business and buy power from independent suppliers on the open market. Purposes of the restructuring act included lowering electric retail prices through increased competition between suppliers and increasing consumer choice. In reality, rates in deregulated states have increased more significantly than rates in regulated states.

Electric customers who do not choose a competitive supplier remain on their utility’s basic service. Customers who choose other suppliers will still have the delivery of their electricity provided by the utility.

Source: Elizabeth Nicula
Appendix B: What Is Community Choice Aggregation?

Community choice aggregation (CCA) also known as municipal electric aggregation, is a way for one or a group of cities and towns to use bulk buying power to negotiate electric rates and sources on behalf of their residents and small businesses.

As of 2013, six states allow CCA:

- Massachusetts - 1997
- Ohio - 1999
- California - 2002
- Rhode Island - 2002
- New Jersey - 2003
- Illinois - 2009

What is the status of CCA in Massachusetts?

In Massachusetts, CCA was authorized in 1997 by the same restructuring act that deregulated the electric market.

While 90% of large businesses negotiated with competitive suppliers, a comparable percentage of residential customers are still on basic service. Residential customers are less desirable to suppliers because they prove less profitable than large businesses. Most of their demand comes during peak hours (such as early evening), and it is more complex to administer multiple smaller accounts than a single large account. CCA is a way for smaller customers to negotiate as larger customers by aggregating their load into a larger one.

Customers may opt out of the CCA at any point, and it may be suspended by the community if rates below basic service cannot be found or if it is not meeting other community goals.

In Massachusetts there are currently six CCAs, with increased interest in the past two years.

- Cape Light Compact (serving 21 towns on the Cape) - 2002
- City of Marlborough - 2007
- Town of Lanesborough - 2011
- Town of Lunenburg - 2011
- Town of Ashland - 2011
- Town of Lancaster - 2012
Appendix C: How Do I Develop a CCA in My Community?

Communities interested in CCA must file a plan with the Massachusetts Department of Public Utilities (DPU). This plan should be developed in consultation with the Department of Energy Resources (DOER) and the investor-owned utility.

A plan must provide for:

- Universal access
- Reliability
- Equitable treatment of all classes of customers

The process to develop the plan is as follows:

**Initial research**

Although not required, feasibility studies may outline potential savings, analyze power supply information, and provide engineering evaluations of the distribution network. This information may also be provided by an energy broker in its formal bid or in information sessions prior to the release of the broker RFP.

**Authorize development of aggregation plan in city council or town meeting**

Before a municipality can design an aggregation plan, it must adopt a resolution to do so. If two or more municipalities decide to pursue a joint aggregation, they must individually authorize it by majority vote.

**Issue RFP for energy broker (optional)**

A broker can handle most of the following steps and is paid by the supplier, generally $0.001 per kWh of electricity used. Broker contracts are exempt from standard procurement procedure, but using the competitive process outlined in M.G.L. c.30B is considered best practice by the Massachusetts Office of the Inspector General.

**Develop aggregation plan with DOER**

Each municipality is required to consult with the DOER prior to filing with the DPU. It is highly recommended that the municipality make contact with the DOER as early as possible, as well as with its IOU.

**Approve aggregation plan**

Once a plan has been developed in consultation with the DOER, a municipality must make it available for review by its citizens through a public posting or hearing. After approval by the board of selectmen or city council, the plan can be submitted to the DPU.

**Submit plan to DPU**

This is typically the longest part of the process – DPU staff recommend that municipalities budget six months. It includes comment periods in which other parties may intervene with questions or concerns, information request and discovery periods, and a public hearing.
Issue RFP for competitive supplier

The RFP should articulate the specific energy needs of the municipality identified in the CCA plan, including multiple supply and term options.

Execute contract with supplier

While the energy broker solicits bids and makes recommendations, the municipality will ultimately choose the supplier and execute the contract. A copy of the executed supply contract must be filed with the DPU.

Send opt-out postcards to customers

The CCA must inform basic service customers by mail at least 30 days prior to automatic enrollment that their electric supply will be switched to the chosen competitive supplier, the new rate, and their right to opt out. The customer may also opt out (or in) at any point by contacting the broker or supplier.

Ongoing market monitoring

The broker continues to monitor the electricity market and secures rates when they are favorable.
Appendix D: FAQ for Communities

If CCA has been allowed since 1997, why have more municipalities not taken advantage of it?

One reason is that in an attempt to buffer customers from the initial increase in market prices after deregulation, until March 2005 Massachusetts set a standard offer rate that was lower than the default rate and that most customers in the state were automatically enrolled in. The market could not compete with such artificially low rates. Only after 2005, when the standard offer rate was eliminated and most customers were moved to the default rate (basic service), were CCA rates able to be competitive.

How much does this process cost towns?

The process generally only costs towns the amount of time it takes staff to oversee the filing and maintenance of the CCA. Brokers generally put together a feasibility study at no cost in their bids to towns. Once selected, brokers are paid by the supplier a fraction of a cent (usually $0.001) for each kWh of electricity consumed by participants. The broker handles the creation and filing of the aggregation plan with the DPU (including the filing and legal fees) and the request for bids from competitive suppliers, making a final recommendation to the town (which ultimately chooses the supplier). If a municipality or group of municipalities wishes to pursue energy efficiency funds, there would likely be additional significant time and administrative costs.

What if the basic service rate drops below the contract rate?

The municipality must wait until the end of its current contract to renegotiate rates. If rates competitive to the basic service rate cannot be found, the CCA can be suspended until favorable rates are found, and customers will return to the utility’s basic service (for a minimum of six months in National Grid’s case, to minimize the impact on the utility of constant switching). This sort of suspension occurred in Marlborough in 2008 and December 2012 and in Ashland and Lunenburg in December 2012. While at any given point CCA rates may be higher than basic service, they are renegotiated regularly and the cumulative effect has generally been one of modest savings for customers.

What is the optimal length of a competitive supply contract?

CCAs that wish to have consistently lower rates than their utility’s basic service rates have six-month contracts that begin directly after their utility changes its basic service rate. Currently, the timetable is:

National Grid – May and November
NSTAR – January and July
Western Massachusetts Electric Company – January and July
Unitil – June and December

How do utilities set basic service rates?

Utilities set their rates by securing year-long contracts on the wholesale market for half the demand of each customer class, twice a year. The two rates are blended together to make the final basic service rate (for each six-month period). This mitigates the risk of locking in to a long-term contract just before rates drop.
Do municipalities need to conduct a feasibility study?

No. Brokers generally present the same information that would be in a feasibility study in their presentations to municipalities at no cost.

Can customers opt out?

Customers can opt out of the CCA within 180 days by mailing back the postage-paid response card they will receive before it goes into effect, or at any time after that by contacting their broker or utility. By law, there is no fee for opting out during this period, and the rate change should take effect within a month.

Are there fees/penalties for suspending the CCA?

There should not be. While fees or penalties are not prohibited, none of the current CCAs have suspension fees. Each municipality should check their contract to make sure that this is the case.
Appendix E: FAQ for Customers

Can customers opt out?

Customers can opt out of the CCA within 180 days by mailing back the postage-paid response card they receive before the CCA goes into effect, or at any time after that by contacting their broker or utility. By law, there is no fee for opting out during the initial period, and the basic service rate should take effect within a month.

Are customers included in the CCA if they already have another competitive supplier?

No. Only customers on basic service are enrolled in the CCA.

Do customers receive multiple bills?

No. Under CCA, investor-owned utilities still handle the delivery of electricity, including maintaining the lines, and customers still receive a single bill from the utility. This lists the delivery charges and the supply charges, and the utility passes the supply charges through to the supplier.

Is there an interruption in customers’ electricity?

No. The only change is in billing, not service delivery.

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<th>Next Read Date</th>
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**Service Provided To**

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**Account Summary**

- Previous Bill: 40.52
- Payment - Thank You: -40.52
- Total Cost Electricity: 35.53
- Amount Due: 35.53

**Cost of Electricity**

- Delivery Services (PRORATED) 6.87
- Customer Charge: .04775 X 129 KWH 6.16
- Transmission: .00216 X 129 KWH 0.35
- Renewable Energy: .0006 X 129 KWH 0.06
- Energy: .00248 X 129 KWH 0.32
- Delivery Services Total: 16.35
- Supplier Services
  - Generation Charge: NGVAP Green 100% .14868 X 129 KWH 19.18
- Total Cost of Electricity 35.53

THANK YOU FOR GOING PAPERLESS.
Appendix F: Advantages and Disadvantages

Potential Advantages

Benefits from CCAs could include rate stability, lower rates, consumer education, consumer protection, an increased renewable portfolio, a reserve fund paid to the town by the supplier, funds to run energy efficiency programs, or access to electric consumption data. Some of these characteristics may not be able to be realized at the same time, such as rates lower than basic service and higher renewable energy content.

• **Lower rates** – CCA rates can be lower than basic service rates depending on when rates are locked in and the bids received. When deregulation occurred, initial contracted rates had to be lower than the investor-owned utility’s standard offer. Since the standard offer expired in 2005, this restriction no longer applies.

• **Consumer education** – Public meetings, posted notices, press releases, newspaper articles and notifications enclosed in electric bills regarding the municipality’s choice to pursue CCA serve to inform consumers of their ability to opt out by choosing basic service or a competitive supplier, but can also lead to greater consumer awareness of where their electricity comes from and what other suppliers exist.

• **Consumer protection** – As more energy brokers enter the deregulated market, consumers are increasingly approached by brokers attempting to sell them energy contracts. CCAs offers municipalities a way to vet brokers and suppliers for residents through government procurement procedures.

• **Increased renewable portfolio** – CCAs give communities the opportunity to purchase energy with a higher renewable content than the Massachusetts Renewable Portfolio Standard.

• **Reserve fund** – A municipality can choose to receive a fee from the supplier that can be dedicated to funding energy efficiency or renewable projects, such as the purchase and installation of high-efficiency streetlights or solar photovoltaic panels. The town of Lanesborough is currently receiving reserve funds matching the broker fee, and the Cape Light Compact, which is acting as its own broker, is using part of the administrative fee for a reserve fund. The town of Lancaster is pursuing such funds.

• **Energy efficiency funds** – If a municipality chooses to collect the systems benefit charge for energy efficiency (0.25 cents/kWh), it will gain control of the funds to run its own energy efficiency programs. To date, only the Cape Light Compact has done so in Massachusetts – likely due to the economies of scale available to regional aggregation.

• **Electric consumption information** – By forming a CCA, communities are able to more easily obtain data on their residents’ aggregate energy use. This data, which is extremely useful for energy reduction and climate change planning purposes, can otherwise be difficult to acquire from IOUs.

• **Rate stability** – CCAs can choose longer-term contracts in order to buffer customers from the volatility of the electricity market.

Potential Disadvantages

• **Higher rates** – After the contract has been executed, the utility’s basic service rates could drop below the CCA rates.

• **Political fallout** – Some residents and small businesses may be upset that the program is opt-out rather than opt-in. Additionally, there could be backlash if basic service rates drop below the CCA rates or the program is suspended.

• **Administrative costs** – While brokers who are paid by the supplier rather than the municipality do much of the research and paperwork for the CCA, municipal employees must monitor the brokers and deal with public response.
Appendix G: Responsibilities of Key Players

**Municipality**

- Initial authorization to pursue CCA (town meeting or city council vote)
- Release RFP for broker
- Approve draft aggregation plan
- Select competitive supplier

**Broker**

- Prepare aggregation plan (with municipality and DOER)
- Finance upfront costs (legal and DPU filing fees)
- Issue RFP for and recommend competitive supplier (with municipality)
- Notify customers
- Provide ongoing customer support
- Monitor rates going forward
- Produce annual aggregation status report

**Department of Energy Resources (DOER)**

- Consult with broker and municipality to create the aggregation plan prior to DPU filing
- Review annual aggregation status report

**Department of Public Utilities (DPU)**

- Review and approve/reject aggregation plan

**Investor-Owned Utility (IOU)**

- Transfer basic service customers to competitive supplier (and vice versa if customer opts out)

**Competitive Supplier**

- Respond to RFP with competitive rates
- If chosen, provide power to aggregation per the terms outlined in the ESA

**Customer**

- Can opt out of CCA at any time and return to basic service or another competitive supplier
Appendix H: Definitions

The following have been identified as common terms applicable to community choice aggregation (CCA). The definitions elaborate on their role as applied to the CCA process.

**Basic Service**

If residents do not choose their own supplier, they are automatically enrolled in the default supply purchased by their utility. This is sometimes called default service.

**Broker Fee**

The energy broker typically charges the competitive supplier a fee equivalent to $0.001 (a mil adder) per kWh of electric load. The fee must be disclosed in the aggregation plans filed with the Department of Public Utilities, and has been approved in the aggregations that have successfully completed the DPU process.

**Cape Light Compact**

The Cape Light Compact is an inter-governmental organization made up of 21 municipalities on Cape Cod and Martha’s Vineyard and serves more than 200,000 electric customers across two counties (Barnstable and Dukes). It was formed in 1997 after the Massachusetts restructuring act enabled cities and towns to seek competitive supply for their electric consumers. The Cape Light Compact was the first successful CCA in Massachusetts and is unique in that it is the only aggregation to have taken control of the energy efficiency systems benefit charge from its investor-owned utility. The Compact independently administers the funds to all electric customers in its service territory.

**Competitive Suppliers**

Competitive suppliers can bid to supply electricity for CCAs. The DPU maintains a list of eligible competitive electric suppliers.

**City Council or Town Meeting**

The city council or town meeting initiates the aggregation process by affirmative vote. They must review the aggregation plan (after consultation with the DOER and vote to approve the plan prior to submitting it to the DPU.

**Delivery**

Delivery services include the transmission and distribution of electricity from the source of generation to the end user. The investor-owned utility is responsible for delivery.

**Department of Energy Resources (DOER)**

The DOER is an agency of the Executive Office of Energy and Environmental Affairs (EOEEA). Under Chapter 25A, Section 6, DOER is required to provide assistance to municipalities that wish to aggregate the electrical load of residential and commercial citizens. Municipalities and the selected energy broker develop an aggregation plan in consultation with the DOER. This consultation is intended to troubleshoot and preemptively address potential issues in the aggregation plan that may be identified in the plan proceedings at the DPU.
**Department of Public Utilities (DPU)**

The DPU oversees investor-owned electric utilities. After an aggregation plan has been developed in consultation with the DOER, the municipality must file a petition for approval of the aggregation plan to the DPU, pursuant to M.G.L. ch. 164, §134. Once the plan is approved by the DPU, the city can execute a contract with a competitive supplier and begin to implement the aggregation plan.

**Deregulation**

Since 1997, Massachusetts investor-owned utilities must buy power from independent suppliers on the competitive market rather than own power plants themselves. Consumers at any scale can now choose a supplier other than the ones chosen by their utilities. Utilities still handle delivery of the supply to consumers.

**Electric Supply Agreement (ESA)**

An energy supply contract negotiated between the municipality and the competitive supplier.

**Electric Utility Restructuring Act**

In Massachusetts, CCA was authorized in 1997 by An Act Relative to Restructuring the Electric Utility Industry in the Commonwealth, Regulating the Provision of Electricity and Other Services, and Promoting Consumer Protections Therein (Massachusetts General Law Chapter 164, Section 134). After the act, utilities had to sell off the supply side of their business and buy power on the open market.

**Energy Broker/Consultant**

The energy broker will advise and guide the municipality through the design, implementation, and monitoring of the CCA. While municipalities are not required by law to use a broker or go through a competitive RFP process to obtain one, all individual municipalities that have been successfully approved by the DPU have contracted with a broker that was selected through an RFP process. Once selected, an energy broker will act on behalf of a municipality to help identify the primary energy goals of aggregation, solicit bids via an RFP, and recommend a supplier to best fit the needs of the municipality. The broker is typically responsible for financing the regulatory approval process, prepare all related filings, manage the solicitation process, negotiate the terms of the electric supply agreement, and provide expertise and guidance throughout the process. Once the aggregation is formed and an ESA is executed, the broker monitors the market to compare the competitive supply rates with utility rates on an ongoing basis. The broker is also responsible for coordinating consumer education, handling the customer opt-out period, and providing ongoing customer support. The DPU maintains a list of electric brokers.

**Investor-Owned Utility (IOU)**

The four investor-owned utilities in Massachusetts (NSTAR, National Grid, Unitil, and Western Massachusetts Electric Company) provide electricity services to 310 cities and towns throughout Massachusetts. They are separate from the municipal light plants that serve 41 cities and towns.
Metropolitan Area Planning Council (MAPC)

The Metropolitan Area Planning Council is a regional agency that serves the 101 cities and towns of Metropolitan Boston, dedicated to promoting smart growth principles and regional collaboration.

Municipal Lighting Plant (muni)

Of the 351 cities and towns in Massachusetts, 41 are served by municipal lighting plants, or municipal electric utilities. An independent utility is owned and operated by the municipality to manage all services (supply, transmission, and distribution). Municipal lighting plant communities are exempt from the requirement to allow competitive choice of electricity supply and from collecting systems benefit charge for efficiency and renewable energy from ratepayers.

Office of the Attorney General (AGO)

The Office of the Attorney General may comment or intervene in CCA proceedings at the DPU on behalf of electricity customers to ensure that proposed plans and rates are just and reasonable.

Request for Proposals (RFP)

Municipalities may choose to issue a Request for Proposals to select an energy broker and supplier. The RFP process is not required by Massachusetts procurement law (MGL c. 30B), but provides a layer of transparency to the process that may be important to the municipality.

Renewable Energy Certificates (RECs)

When renewable energy is generated, two value streams are produced: the electrons that flow into the grid, and the positive environmental attributes associated with that generation. The second value stream is represented by RECs, which may be bought and sold on the open market. One REC is created for each megawatt hour of renewable energy produced.

Renewable Portfolio Standard (RPS)

A legislative requirement obligates electric suppliers to obtain a designated percentage of their energy content from renewable sources each year. Through 2013, the state RPS requires that eight percent of electricity sales to end-users come from new (built after December 31, 1997) renewable energy sources, increasing by one percent each year with no mandated expiration date. Suppliers bidding on CCA contracts must comply with the RPS.

Reserve Funds

A municipality can choose to receive a fee from the supplier that they can dedicate to funding energy efficiency or renewable projects, such as the purchase and installation of LED streetlights or solar photovoltaic panels.

Standard Offer Service

Standard offer service was a transitional electric supply rate that was made available from 1997 through February 2005 to subsidize the cost of electricity to consumers in Massachusetts for the first eight years of deregulation.
Appendix I: Additional Resources

For more information regarding the CCA process and stakeholders, consult the following resources.

CCA Legislation in MA

Read the full text of M.G.L. Chapter 164 Section 134.
http://www.malegislature.gov/Laws/GeneralLaws/PartI/TitleXXII/Chapter164/Section134

Competitive Electric Suppliers and Brokers

The EOEEA provides additional information on choosing competitive suppliers and brokers.
http://www.mass.gov/eea/energy-utilities-clean-tech/electric-power/electric-market-info/competitive-supplier.html

Department of Energy Resources (DOER)

The DOER provides guidance to municipalities pursuing municipal aggregation.
http://www.mass.gov/doer


This document written by the DOER remains the definitive guide for municipalities considering CCA. Note: much has changed since it was written, and any questions regarding its content should be addressed early on in the aggregation process.
http://www.mass.gov/eea/docs/doer/electric-deregulation/agg-guid.pdf

Department of Public Utilities (DPU)

The DPU’s mission is to provide oversight of investor-owned utilities selling electricity and natural gas to ensure that customers get reliable service at the lowest rates.
http://www.mass.gov/dpu

DPU Docket

The DPU has an online archive of all aggregation filings, sorted by filing number.
http://www.env.state.ma.us/DPU_FileRoom/frmDocketListSP.aspx

Green Communities

Municipalities with questions about CCA can contact their DOER Green Communities regional coordinator. A list of regional coordinators can be found on the Green Communities website.
http://www.mass.gov/eea/energy-utilities-clean-tech/green-communities/

Investor-Owned Utilities

National Grid: https://www1.nationalgridus.com/Massachusetts-MA-RES
NSTAR: http://www.nstar.com/
Western Massachusetts Electric Company: http://www.wmeco.com/
Unitil: http://www.unitil.com
**Local Energy Aggregation Network (LEAN)**

The Local Energy Aggregation Network (LEAN) is a non-profit organization whose mission is to facilitate CCAs across the US through education and the provision of resources that can benefit municipalities pursuing CCA. The LEAN website provides sample contract and RFP documents.

http://www.leanenergyus.org/

**LEAN (State by State Matrix)**

This matrix compares and contrasts features and characteristics of CCA policies across the six states that have CCA enabling legislation.


**Procurement Procedures**

The Massachusetts Chapter 30B Manual outlines procurements procedures for a variety of services.

http://www.mass.gov/ig/publications/manuals/30bmanl.pdf

**Renewable Portfolio Standard (RPS)**

The EOEEA explains the renewable portfolio standard.

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<td>Dave Daltorio</td>
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<td>Medford</td>
<td>Carey Duques and Alicia Hunt</td>
<td>Director of Energy and Environment and Energy Efficiency Coordinator</td>
<td>2/20/2013</td>
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<td>Medway</td>
<td>Susy Affleck-Childs</td>
<td>Planning and Economic Development Coordinator</td>
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<td>S. Peter Kane</td>
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<td>Mark Purple</td>
<td>Former Assistant Town Manager</td>
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<td>Maggie Downey</td>
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<td>Orlando Pacheco</td>
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<td>John Ghiloni and Beverly Sleeper</td>
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<td>Meg Lusardi</td>
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<td>Office of the Attorney General</td>
<td>Sandra Merrick and James Stetson</td>
<td>Assistant Attorneys General</td>
<td>4/2/2013</td>
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<td>Brian Murphy</td>
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<td>Michael Adler</td>
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<td>Global Partners</td>
<td>Leo Sullivan</td>
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<td>Paul Fenn</td>
<td>Founder and President</td>
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<td>Paul Gromer</td>
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<td>Jeffrey M. Bernstein</td>
<td>Attorney</td>
<td>4/10/2013</td>
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Appendix K: Rate Comparisons

Note: Ashland suspended its CCA in December 2012.

Note: Data prior to October 2009 was unavailable.
Lancaster

[Graph showing data for Lancaster and National Grid]

Lanesborough

[Graph showing data for Lanesborough and WMEO]

(No textual content is present in the image)
Note: Lunenburg suspended its CCA in December 2012.

Note: Marlborough suspended its CCA from July 2008 to December 2008 and in November 2012.
Appendix L: Sample Interview Questions

Questions for municipalities that adopted CCA (active or suspended programs):

How long have you been in your current position with the municipality? What is your role in the CCA?

Describe the CCA process from start to finish. What were the estimated timeframes for the following steps:
- getting municipal approval, creating the aggregation plan, obtaining DPU approval, releasing the RFP for competitive supplier, handling customer education, and initiating customer enrollment?
- Prior to initiating the CCA, what percentage of residents and businesses were working with their own competitive suppliers? How many households/customers is that? How many people opted out of the CCA?
- What percentage of the community load is part of the aggregation? (How many kWh?)
- Do you anticipate any significant future changes to your municipality’s electric load?
- Is the electric load of municipal-owned buildings included in the CCA contract or is electricity for that load separately procured? (How many kWh?)
- What are the contracted rates? Is it possible to get a copy of the contract?
- What were the municipality’s goals for CCA (lower rates, environmental benefits, energy efficiency)?
- What are the municipality’s larger energy goals (more renewables, energy efficiency/conservation)?
- Did you contract for a higher percentage of renewable content in your supply mix? Did you consider various available options? If so, was the decision to pursue more renewables discussed with the public (e.g., in a citizens’ forum)?
- One of the features of CCA is that you have the option to collect and administer the energy efficiency systems benefit charge that is typically collected by the investor-owned utility and administered by MassSave. Was your municipality interested in control of this efficiency funding? Was it incorporated in your CCA contract?
- How did the CCA process begin in your municipality? Who were some of the leaders in the process (consultants, city officials, residents, other)?
- Do Massachusetts procurement laws impact which consultants and suppliers you work with?
- What sort of feedback have you received from customers in the CCA (positive/negative/confusion)? Have you sought feedback? Do you intend to do so? At what intervals? Did you administer a survey of some sort?
- How did you educate customers about the transition to competitive supply? Can we have a copy of the materials?
- Do you know how much money, if any, customers have collectively saved through CCA? If so, how much?
- Other than rate savings, have you seen other benefits from CCA?
- If you suspended the program, when and why did you do so? Was there something written into the aggregation plan that automatically suspended the program at a certain point?
- At the time of suspension, how much higher were the utility’s basic service rates than your contract rates?
- Has there been political fallout from the CCA rates being higher the utility’s rates? Did customers even notice the price differential?
- What response have you received as a result of suspending the program?
- Are you planning on renegotiating a CCA contract when rates improve?
- What was the utility’s response to your sending customers back to basic service?
- Did you receive documentation from the supplier that verified the broker fee?
- Are there any take-away lessons from the process of CCA that you would like to share?
Questions for municipalities that are considering CCA:

How long have you been in your current position with the municipality? What is your role in the CCA process?
In what stage of the CCA process is your municipality (gathering background information, presenting CCA to city council or town meeting, issuing RFP for the broker, etc.)?
What challenges has the municipality faced while exploring CCA?
What is the municipality’s total electricity demand?
What percent of customers are on default service? What percentage of the municipality’s load is on default service?
What are the municipality’s goals for CCA (lower rates, environmental benefits, energy efficiency)?
What are the municipality’s larger energy goals (more renewables, energy efficiency)?
How did the CCA process begin in your municipality? Who were some of the leaders in the process (consultants, city officials, residents, other)?
Are there any take-away lessons that you would like to share?
What information would you like to know about CCA?

Questions for energy brokers:

How long has your company been involved with CCA, and what is your role in CCA projects?
Are you currently working with any municipalities or group of municipalities to explore CCA? If so, which?
How would you define the benefits of CCA? How would you define the risks of CCA?
How does a municipality select a broker or a supplier? What is the RFP process?
How do you market CCA to different municipalities? Do you emphasize dollar savings or renewables, or some other benefit? What has been successful? How does marketing change from municipality to municipality?
What are the key variables in how a marketing strategy is formulated or adapted?
What’s involved in a feasibility study (timeline, players, expense)? Are there necessary and are there simple rules of thumb? Have you completed feasibility studies for towns?
How much should a city or town budget for the whole CCA process? How may this vary across municipalities, particularly in terms of paying for a broker and managing the process? Besides broker fees, what other major transaction costs are there?
What type of capacity/time does a municipality have to invest in this type of project (how many hours)? How often do you meet with the towns/cities? Do you have to meet with their lawyers?
What are the timeframes for the following steps: getting municipal approval, creating the aggregation plan, obtaining DPU approval, releasing the RFP for competitive supplier, handling customer education, and initiating customer enrollment?
For municipalities you have worked with or are currently working with:
What percentage of renewables have customers contracted or will contract for in their electricity supply mix?
Is the load from municipally owned buildings included in the contract?”
What are the municipality’s goals for CCA (lower rates, environmental benefits, energy efficiency)?
What are the municipality’s larger energy goals (more renewables, energy efficiency/conservation)?
How did you or how do you plan to educate customers about the transition to a competitive supplier?
Are there any take-home lessons from the process of CCA you think we should know about?
Where do you see CCA going? What are the future potential benefits? What are the barriers? Have you proposed adding anything in particular to the programs to make them better?
In the long run, do you think that CCA will help protect the natural environment and public health?
MEMORANDUM OF UNDERSTANDING

BETWEEN

TUFTS UNIVERSITY FIELD PROJECTS TEAM NO. 7

EXPLORING THE POTENTIAL FOR MUNICIPAL ELECTRICITY AGGREGATION

IN MASSACHUSETTS CITIES AND TOWNS

AND

METROPOLITAN AREA PLANNING COUNCIL

I. Introduction

Project (i.e., team) number: 7
Project title: Exploring the Potential for Municipal Electricity Aggregation in Massachusetts Cities and Towns
Client: Metropolitan Area Planning Council

This Memorandum of Understanding (the “MOU”) summarizes the scope of work, work product(s) and deliverables, timeline, work processes and methods, and lines of authority, supervision and communication relating to the Field Project identified above (the “Project”), as agreed to between (i) the UEP graduate students enrolled in the Field Projects and Planning course (UEP-255) (the "Course") offered by the Tufts University Department of Urban and Environmental Policy and Planning (“UEP”) who are identified in Paragraph II(1) below (the “Field Projects Team”); (ii) Metropolitan Area Planning Council, further identified in Paragraph II(2) below (the “Client”); and (iii) UEP, as represented by a Tufts faculty member directly involved in teaching the Course during the spring 2013 semester.

II. Specific Provisions

(1) The Field Projects Team working on the Project consists of the following individuals:

1. Brenda Pike
2. Mengmeng Zhou
3. Betsy McDonald
4. Josh Lauffer

(2) The Client’s contact information is as follows:

Client name: Metropolitan Area Planning Council
Key contact/supervisor: Erin Brandt
Email address: [Redacted]
Telephone/cell number(s): [Redacted]
FAX number: 
Address: 60 Temple Place, 6th floor, Boston, MA 02111
Web site: www.mapc.org/clean-energy

Contact: Ani Krishnan
Email address: 
Telephone/cell number(s): 
FAX number: 
Address: 60 Temple Place, 6th floor, Boston, MA 02111
Web site: www.mapc.org/clean-energy

Secondary clients: City of Medford, Office of Energy and the Environment
Key contact/supervisor: Carey Duques
Email address: 
Telephone: 
Address: 85 George P. Hassett Drive, Medford, MA 02155
Website: http://www.medford.org/pages/medfordma_energy

Contact: Alicia Hunt
Email address: 
Telephone: 
Address: 85 George P. Hassett Drive, Medford, MA 02155
Website: http://www.medford.org/pages/medfordma_energy

GridSmart Energy
Contact: Michael Adler
Email address: 
Telephone: 
Address: 2 Oliver Street, 8th Floor, Boston, MA 02109
Website: http://gridsmart-energy.com/

(3) The goal/goals of the Project is/are:

Outline the potential costs and benefits of municipal aggregation in its various forms and for different types/sizes of communities, answering the questions:

1. What is municipal electric aggregation?
2. How can aggregation be explained easily to municipal energy stakeholders that include local leadership – e.g., mayors, town managers/administrators, selectmen, municipal staff, energy committee members, residents, businesses and so forth?
3. What kinds of benefits can a community hope to realize by establishing municipal aggregation, given that different communities and aggregation models will produce a range of opportunities?
4. What is the process for establishing a basic municipal aggregation system?
5. Can a municipality leverage aggregation to promote or even fund other city energy initiatives? What kinds of projects and how?
6. How can aggregation be used to raise energy awareness within a community or region, while promoting energy efficiency and renewable energy projects?

(4) The methods and processes – including the methodologies -- through which the Field Projects Team intends to achieve this goal/these goals is/are:

1. Interviews with city officials: Medford, Cape Light, Marlborough, Lancaster, Ashland, Swampscott, Salem, Medway, Lowell, Hampshire Council (possible others listed in Interview Contact Information shared Google Doc)
2. Research: Legislation (Chapter 164 of MA General Law), DOER Guide to Municipal Electric Aggregation, DPU Filings for recent Municipal Aggregations,
3. Analysis of electric data from other towns, if available or applicable: comparison of number of residents and size of loads included (or potentially included) in aggregation plans

(5) The work products and deliverables of the Project are (this includes any additional presentations for the client, and may list project elements in order of priority):

1. A formal report detailing the history of municipal aggregation in MA and its current context and potential for implementation in Massachusetts, with Medford as a case study.
2. An easy-to-understand brochure (or similar document) describing the municipal electric aggregation process, benefits, and potential issues for municipal stakeholders.
3. A presentation to complement the brochure that can be given to municipal stakeholders, either by the team or MAPC.

(6) The anticipated Project timeline (with dates anticipated for key deliverables) is:

1/23 - contact Micahelah for her research, set up meeting time
1/29 - Cambridge Environmental Committee meeting, MAPC open house
1/30 - meet with MAPC, Medford, and/or GridSmart Energy 9-11, send MOU to Erin, identify city officials to interview
2/6 - MOU signed by Erin and group, create interview questions, start interviews with city officials
2/13 - meet with MAPC, Medford, and/or GridSmart Energy 9-12
2/26 - initial project proposal
2/27 - meet with MAPC, Medford, and/or GridSmart Energy 9-12
3/6 - finished interviewing city officials
3/12 – meet with MAPC, Medford, and/or GridSmart Energy 4:30
3/13 - in-class presentations
3/27 – meet with MAPC, Medford, and/or GridSmart Energy 11-12
4/5 - first draft of deliverables
4/10 - meet with MAPC, Medford, and/or GridSmart Energy 9-12
4/17-30 - final presentations
5/3 - Final Deliverables sent to UEP and MAPC

(7) The lines of authority, supervision and communication between the Client and the Field Projects Team are (or will be determined as follows):

Erin is our primary contact at MAPC, and our liaison to GridSmart and the City of Medford. Brenda is the liaison between MAPC and the Field Project Team.

(8) The understanding with regard to payment/reimbursement by the client to the Field Projects Team of any Project-related expenses is:

We do not anticipate any project-related expenses. If a potential expense within the $100 limit occurs, the team shall save receipts and submit them to the UEP Department.

III. Additional Representations and Understandings

A. The Field Projects Team is undertaking the Course and the Project for academic credit and therefore compensation (other than reimbursement of Project-related expenses) may not be provided to team members.

B. Because the Course and the Project itself are part of an academic program, it is understood that the final work product and deliverables of the Project (the "Work Product") – either in whole or in part – may and most likely will be shared with others inside and beyond the Tufts community. This may include, without limitation, the distribution of the Work Product to other students, faculty and staff, release to community groups or public agencies, general publication, and posting on the Web. Tufts University and the Field Projects Team may seek and secure grant funds or similar payment to defray the cost of any such distribution or publication. It is expected that any issues involving Client confidentiality or proprietary information that may arise in connection with a Project will be narrow ones that can be resolved as early in the semester as possible by discussion among the Client, the Field Projects Team and a Tufts instructor directly responsible for the Course (or his or her designee).

C. Data and research materials used in drafting the report, and the report itself, shall be openly available to the client. The client is allowed to alter the text of the final report if necessary, as long as such changes are clearly delineated and not attributed to the field projects team. We do not anticipate dealing with confidential materials. If confidential materials are used in the report, this MOU should be revised to reflect that.

D. Because this Project does not involve "human subject research," it is likely exempt from Tufts University Institutional Review Board (IRB) review. Application for exemption is not expected to interfere with timely completion of the project.
IV. Signatures

For MAPC
By: Erin Brandt
Date: February 5, 2013

Josh Laufer
Representative of the Field Projects Team
By: Josh Laufer
Date: February 3rd, 2013

Tufts UEP Faculty Representative
By: Robert H. Russell
Date: February 16, 2013
Appendix N: IRB Exclusion

Title: Exploring the Potential for Municipal electricity Aggregation in Massachusetts Cities and Towns

February 6, 2013 | Notice of Action
IRB Study # 1302003 | Status: EXCLUDED

PI: Brenda Pike
Co-Investigator(s): Betsy McDonald, Joshua Laufer, Mengmeng Zhou
Faculty Advisor: Robert Russell
Reviewed: 2/6/2013

The above referenced study does not meet the definition of research under the Code of Federal Regulations Title 45 Part 46.102(f); therefore is not subject to review by the Institutional Review Board.

IRB Administrative Representative Initials

Tufts University
Office of the Vice Provost for Research
Social, Behavioral, and Educational Research
Institutional Review Board
FWA0000263

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