

Identifying and Removing Barriers to Expanding Municipal Aggregation in the Commonwealth

A thesis

submitted by

Micaelah Burke Morrill

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Advisor: Penn Loh

Reader: Ann Rappaport

Abstract

This thesis examines the process to become a municipal aggregator in Massachusetts and offers recommendations on improving the process.

In 1997, the Commonwealth of Massachusetts restructured its electricity market and allowed municipalities and those working jointly to purchase electricity for their constituents. Municipal aggregators provide additional competition in the electricity market, public control of electricity purchases, and are in a unique position to provide consumers additional options to promote specific types of electricity generation.

Since 1997, only six municipal aggregators have been approved in Massachusetts. In order to identify reasons why, this thesis includes interviews with people involved in the municipal aggregation process in Massachusetts and comparisons with other states that also have municipal aggregation programs. It also includes a historical look at electricity markets both on the federal level and in Massachusetts, and provides information on regulatory requirements municipal aggregators must meet.

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List of Abbreviations

AG: Attorney General	FERC: Federal Energy Regulatory Commission
BRPC: Berkshire Regional Planning Council	HCOG: Hampshire Council of Governments
CMR: Code of Massachusetts Regulations	IOU: Investor Owned Utility
Compact: Cape Light Compact	ISO-NE: Independent Systems Operator, New England
DOER: Department of Energy Resources	MGL: Massachusetts General Law
DPU: Department of Public Utilities	PA: Program Administrator
DSM: Demand Side Management	RGGI: Regional Greenhouse Gas Initiative
EEAC: Energy Efficiency Advisory Council	RPS: Renewable Portfolio Standard
EFSB: Energy Facilities Siting Board	SBC: Systems Benefit Charge

Glossary of Terms¹

Competitive Supplier: an entity licensed in Massachusetts by the Department of Public Utilities to sell electricity and related services to customers.

Default Service: the generation service that is provided by distribution companies to those customers not receiving competitive supply.

Demand: The amount of power consumers require at a particular time. System demand is measured in megawatts (MW). Same as load.

Distribution: The delivery of energy to retail customers.

Distributed Generation: Electrical generation that feeds into the distribution grid, rather than the bulk transmission grid, whether on the utility side of the meter, or on the customer side.

Electricity Broker: an entity licensed in Massachusetts by the Department of Public Utilities to facilitate or arrange for the purchase and sale of electricity and related services to customers, but is not licensed to sell electricity to customers.

Generation: the power plants that create the electricity that is ultimately transported to customers (homes and facilities) in Massachusetts.

Kilowatt (kW): A unit to measure the rate at which electric power is being consumed. 1 kw = 1000 watts.

Kilowatt Hour (kWh): The basic unit for pricing electric energy; equal to 1 kw of power supplied continuously for 1 hour. Or the amount of electricity needed to light 10 100-watt light bulbs for 1 hour.

Load: The amount of power demanded by consumers. Same as Demand.

Megawatt (MW): One megawatt equals 1 million watts or 1,000 kilowatts.

Municipal Aggregator: the method by which local and county governments can buy electric power on behalf of the consumers within their borders in Massachusetts.

Retail market: state markets; sale of power directly to customers.

Transmission: The process of transporting wholesale electric energy at high voltages from a supply source to utilities.

Wholesale market: state and federal markets; large interconnected systems of power lines and power plants owned by many companies.

¹ Sources: MA EEA – Desc; EIA – pg. “D”; Brown, Sedano. 2004, p.60-62, 66; Brown, 2003.2.

Chapter One: Introduction

The first International Exposition of Electricity was in Paris in 1881. It featured new inventions like Thomas Edison's light bulb and Alexander Graham Bell's telephone. Electricity was a luxury commodity, generated and harnessed by few and serving even fewer.

More than 130 years later in the United States, electricity is everywhere. Homes are now host to endless devices. According to the United States Energy Information Administration (USEIA), in the U.S. in 2011, residential homes consumed close to 1,428 billion kilowatt hours (kWh) of electricity² and commercial industry consumed close to 1,388 billion kWh, making residential electricity use the largest consumer of electricity in 2011. Electricity can be generated from a number of sources, which in turn have various effects on the environment. The residential sector not only consumed the most electricity in 2011, but has also been one of the largest producers of greenhouse gases in the U.S. according to the United States Environmental Protection Agency³ since 2010 when data was last available. Understanding where electricity comes from and who produces and purchases it, could help consumers concerned with reducing greenhouse gases make more environmentally informed decisions about how and where they buy electricity.

This thesis focuses on one way that consumers can purchase electricity through a municipal aggregator. Specifically, it details the role that municipal electricity aggregators (“municipal aggregators”) play in the electricity market and evaluates and offers suggestions on improving

² http://www.eia.gov/energyexplained/index.cfm?page=electricity_use Accessed Feb. 5, 2013 Total amount of electricity used was almost 3,856 Billion kWh with 37% of that used for residential electricity use and 34 % used for commercial.

³ <http://www.epa.gov/climatechange/ghgemissions/sources/electricity.html> Accessed March 14, 2013.

the process to become a municipal aggregator in Massachusetts. A municipal aggregator is a governmental entity that can buy electricity on behalf of the consumers within its borders. Municipal aggregators are completely public entities that answer to their customers and not shareholders like investor-owned utilities. Municipal aggregators also increase competition in the electricity market and are in a unique position to pass their own by-laws requiring the purchase of increased renewable energy. There are currently only six approved municipal aggregators in Massachusetts. This thesis focuses on improving the process to become a municipal aggregator in Massachusetts in the hopes that more of these options - public controlled electricity purchasing, increased competition in the electricity market and others - can be offered to more Massachusetts residents.

Report Methodology

To better understand how municipal aggregation works and why it matters, this report begins with a brief introduction on what a municipal aggregator is. In order to provide a primer to readers unfamiliar with electricity, it also provides background on why understanding how electricity moves through the grid is important, along with how it is bought and sold. From there, a more in depth analysis of historical federal policies governing electricity is presented along with a Massachusetts specific legislative review. Particular focus is made on policies enacted since the 1997 Electricity Restructuring Act, the law that created municipal aggregation.

To better understand the Massachusetts application process to become a Municipal Aggregator a case study is presented on the Cape Light Compact, the nation's first and only regional

municipal aggregation program of its kind. It includes an interview with Maggie Downey, the Compact's Administrator. Massachusetts' application process is outlined along with the five other states that currently allow for municipal aggregation: Rhode Island, California, Ohio, New Jersey and Illinois. Each state's application process is broken down and examined for best practices and is based on available educational material, public information, and interviews with people involved in the processes.

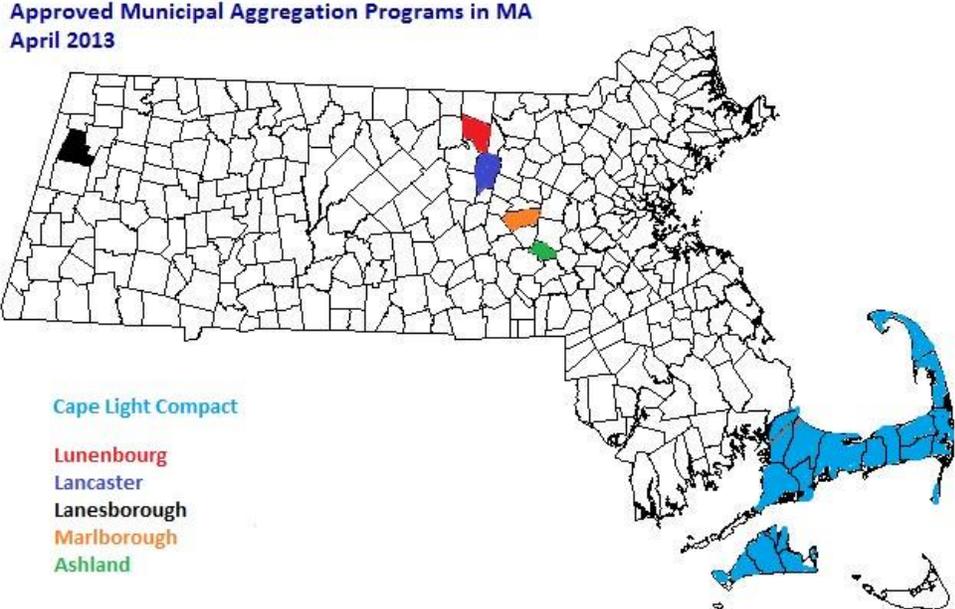
I conducted interviews with people involved in the municipal electric aggregation process in Massachusetts to try to identify reasons why more municipalities have not become municipal aggregators. I spoke with Nat Karns, the Executive Director of the Berkshire Regional Planning Commission (BRPC) because the BRPC explored applying as a regional municipal aggregator but ultimately decided not to. The BRPC is made up of 32 cities and towns, and one third of the member municipalities have populations of less than 1000 people. Mr. Karns is also a resident of Lanesborough, a small town in Berkshire County that is one of the most recently approved municipal aggregators in Massachusetts and offers his insights into the process as a ratepayer.

I also spoke with Ken Elstein, the Municipal Aggregation Specialist at the Hampshire Council of Governments (HCOG). The HCOG began forming a municipal aggregation program like the Compact's in 1998 and testified at Department of Public Utilities (DPU) hearings in favor of the Restructuring Act. They are now applying to serve 36 towns in Hampshire, Berkshire, Franklin, Hampden and Worcester counties. HCOG's plan is currently being reviewed by DPU and the Attorney General (AG).

Consultants and competitive suppliers advise municipalities on developing municipal aggregation plans and on choosing a supplier. Thus, I spoke with Brian Murphy from Colonial Power who talked about the challenges his company has faced in helping the five existing solo aggregators get approved. I also spoke with staff that works on municipal aggregation with and for the state, and their impressions of the process now. These included Courtney Feeley Karp, who at the time of the interview was counsel at DOER and Audrey Eidelman who is legal counsel to the Compact. They agreed to discuss their impressions of the municipal aggregation process and the regulatory landscape within which they operate. I also spoke with staff at the Attorney General's office, the DPU, legislative offices, and an employee from NSTAR.

Based on my findings from the application process in other states, information from interviews with current stakeholders in Massachusetts, and a review of pertinent Massachusetts statutes, I make recommendations on how the municipal aggregation application process can be improved. This includes policy suggestions, staff changes and increased educational options and materials for municipal officials and the public at large.

Figure 1. Map of Approved Municipal Aggregators in MA



Chapter Two: Background

An explanation of municipal aggregators is included below, along with a brief description of the electricity grid and electricity markets. This chapter is designed to help people unfamiliar with how electricity flows from generation to consumption understand how and where municipal aggregators fit in. This chapter is broken into specific questions and answers that often come up about municipal aggregators.

What is a Municipal Electric Aggregator?

In the United States, six states allow for some form of municipal aggregation in electricity purchasing. They are Massachusetts, Rhode Island, California, Ohio, Illinois and New Jersey. Municipal Electric Aggregation is defined by the Massachusetts Department of Energy Resources as, "the method by which local and county governments can buy electric power on behalf of the consumers within their borders," in its "Guide to Municipal Electric Aggregation in Massachusetts."⁴ Essentially, municipal aggregators play electricity supplier matchmaker between ratepayers within their borders and the competitive electricity suppliers who supply electricity. Municipal aggregators set up a contract between the consumers in their town and the electricity supplier, and then the municipal electric aggregator monitors and oversees the contract. Municipal aggregators may also be allowed to manage the energy efficiency funds for the consumers within its borders. These are funds that every consumer of electricity in Massachusetts pays to help run energy efficiency programs. The efficiency programs are generally run by the utilities that provide service in set areas in Massachusetts. The current state

⁴ "Guide to Municipal Aggregation in the Commonwealth" DOER - year unknown.

of electricity delivery for most customers, who are not served by a municipal aggregator, is below in **What is the alternative to Municipal Electric Aggregation?**

Municipal electric aggregation was created in Massachusetts in the 1997 Electricity Restructuring Act and since passage of that legislation; six municipal electric aggregation plans have been approved. They are the towns of Marlborough, Lancaster, Lunenburg, Lanesborough and Ashland which operate single municipality programs. The first municipal electric aggregator is a regional municipal aggregator made up of towns in Barnstable and Dukes counties called the Cape Light Compact.

Why become a Municipal Electric Aggregator?

There are many different reasons why municipalities choose to pursue a municipal electric aggregation program. Electricity load aggregation may offer consumers lower transaction costs by having the municipal aggregator bring competitive suppliers to consumers. Because of economies of scale, load aggregation may increase the purchasing power for individual consumers. This is because buying in bulk can save money, just like buying other goods in bulk. Municipal electric aggregation programs also add competition to the electricity market which may help drive down costs for everyone. Many municipal electric aggregation programs across the country encompass some form of investment in clean and renewable technologies as part of the program development. Municipalities are also able to include requirements for renewable and clean energy investments by town vote, if they choose to. Additionally, because customers of municipal electric aggregation programs have a choice of electricity providers, according to

one interviewee Brian Murphy, the simple act of providing a choice may lead to more informed and engaged consumers of electricity.

It is not the purpose of this report to prove that municipal electricity aggregation accomplishes any of the above mentioned potential benefits. It is however, a goal of this report to provide insight and recommendations on how to ease the process of becoming a municipal electric aggregator, should a community or group of communities choose to do so for the above reasons, or any others.

What is the alternative to Municipal Electric Aggregation?

Each state handles the delivery of electricity slightly differently. In Massachusetts, anyone not served by one of six municipal aggregators, one of the 41 existing municipal utilities, or a different alternative supplier,⁵ is served by one of four investor-owned utilities, depending on their location, under what is called "Default Service." Under this scenario, which is how the majority of Massachusetts residences get their electricity, the utility has a set service territory, and the utility buys the electricity, delivers the electricity and bills customers for the electricity within their territory. For customers of a municipal electric aggregator, the aggregator arranges for the purchase of the electricity, and the utility that serves the area delivers the electricity and handles billing the customer. In Massachusetts other competitive suppliers exist beyond just

⁵ Alternative Electricity Providers for residential customers operate as "Opt-in" programs in Massachusetts and are not associated with any governmental association. "Opt-in" programs require customers to decide to join a program, as opposed to being automatically enrolled, which is called an "Opt-out" program. The process to become an alternative "Affinity Group" as some alternative providers are referred to, will not be discussed in this report as it has no bearing on the municipal aggregation process.

municipal programs, but the vast majority of residential customers get their electricity through their utility's Default Service arrangement.

Why does consumer understanding of electricity production and purchasing matter?

As stated above, the residential sector not only consumed the most electricity in 2011, but has also been one of the largest producers of greenhouse gases in the United States according to the United States Environmental Protection Agency⁶ since 2010 when data was last available. Understanding where electricity comes from and who produces and purchases it, could help consumers concerned with reducing greenhouse gases make more environmentally informed decisions about how and where they buy electricity.

Electricity 101

Understanding how electricity production and consumption work can provide a better understanding where municipal aggregation fits in.

The location where the electricity is created, whether it is from wind, solar panels, coal or natural gas burning power plants, is referred to as the "generation" point or the "load serving entity (LSE)." Generation most commonly refers to large scale power plants that churn out thousands of megawatt-hours every day; however there is also "distributed generation" which usually refers to smaller scale electricity generation. These are often small scale renewable

⁶ <http://www.epa.gov/climatechange/ghgemissions/sources/electricity.html> Accessed March 14, 2013.

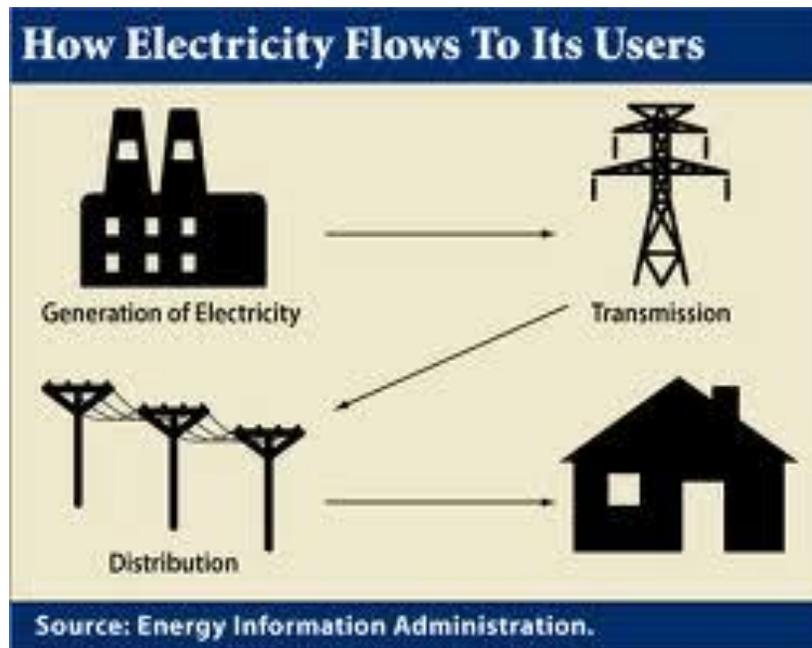
energy sources like small solar panels or wind turbines that feed directly into a distribution line or directly into a customer's meter.

Once electricity has been created, or generated, it has to get to the demand. To accomplish that, the transmission systems and distribution systems were developed. The distinctions between the two systems are important because different entities control each system, but more will be discussed on the control and ownership of each in Chapter Three. The transmission system refers to the transporting of wholesale electric energy at high voltages from a generation source to utilities⁷. The utilities then deliver the power to homes over distribution lines which results in monthly electricity bills. These distribution lines are the poles and wires which are traditionally owned by utilities and which are seen on streets. The wires feed into the meters in homes, which measure the amount of electricity that has been consumed for each pay period. See Figure 2 for a very basic outline of how electricity moves through the grid in Massachusetts today. It is important to note that Figure 2 explains the flow of electricity as a commodity; electricity does not actually stop and redirect itself over specific ownership lines.

How electricity moves from generation to consumption is important, and the flow of ownership of electricity is equally important to understand, especially when trying to get a firm grasp on municipal electricity aggregation. Appendix 1 represents how electricity flows through ownership once a municipal aggregator is involved.

⁷ Matthew Brown and Richard Sedano. *Electricity Transmission: A Primer* (National Council on Electricity Policy, 2004), 66.

Figure 2. ELECTRICITY 101: How Electricity Gets to You



The United States Energy Information Administration provides a very useful diagram on how electricity gets from power plants to your light bulb.

First electricity is **GENERATED**. This can take place at power plants, from solar panels, wind turbines and various other renewables.

Once electricity is generated, it travels over high voltage wires called **TRANSMISSION** lines. There are substations that exist along transmission lines to help ensure that electricity keeps moving.

When electricity gets through transmission and through substations, it is then sold and **DISTRIBUTED** over the poles and wires near homes. This is lower voltage power and holds the wires that connect to homes.

Each home is equipped with a meter that is read by utilities to measure how much electricity is **CONSUMED**. Electricity usage is generally measured per month.

Utilities in Massachusetts own distribution lines and transmission lines, unless someone is served by a municipal lighting plant. Utilities are not allowed to own generation.

Chapter Three: Restructuring the Electricity Industry & How Aggregation Came To Be

The United States Energy Information Administration (EIA) defines electricity industry restructuring as, "The process of replacing a monopolistic system of electric utility suppliers with competing sellers, allowing individual retail customers to choose their supplier but still receive delivery over the power lines of the local utility. It includes the reconfiguration of vertically-integrated electric utilities."⁸ This chapter provides background information about electricity market restructuring in the United States and the reasoning behind those changes. This is followed by the policy steps Massachusetts has taken to restructure and evolve its electricity market post restructuring, including the creation of municipal electrical aggregation programs. Also included is a brief section on recent policy changes in Massachusetts that highlight the connection between electricity production and environmental impacts.

The Electricity Marketplace: A History

Electricity first entered homes in the late 1880's and was installed in roughly half of all urban residences by the 1920's⁹. This first distribution system tied its customers to one company and one generator¹⁰ who were usually the same entity. As demand grew, a number of small electricity generation and distribution companies began popping up, mostly around cities and

⁸ US EIA - Glossary page "E". <http://www.eia.gov/tools/glossary/index.cfm?id=E> - September 23, 2012.

⁹ Ronald C. Tobey. *Technology as Freedom: The New Deal and the Electrical Modernization of the American Home*. (University of California Press. 1996) 2.

¹⁰ Matthew Brown and Richard Sedano. *Electricity Transmission: A Primer* (National Council on Electricity Policy, 2004), 10.

areas of industry¹¹ to serve need. As technologies improved, smaller companies were consolidated into growing electricity monopolies, known as "holding companies" to help with economies of scale to expand the use of electricity¹². Often, these holding companies owned, or were owned by non-utility companies who had nothing to do with the production or delivery of electricity¹³. According to Section 1 of the Public Utility Holding Act of 1935, these holding companies grew in a way that "bears no relation to economy of management and operation or the integration and coordination of related operating properties"¹⁴."

As utility holding monopolies grew, the companies began to cross states lines, making it impossible and illegal for individual states to regulate them because of the interstate commerce clause¹⁵. Without jurisdiction, the states could not regulate activities or services provided to their constituents from the holding companies and there was no clear role for the federal government. These companies were virtually free of any regulation, and without any regulation these companies "were characterized as having excessive consumer rates, high debt-to-equity ratios, self-dealing and increasingly unreliable service"¹⁶."

¹¹ Matthew Brown and Richard Sedano. *Electricity Transmission: A Primer* (National Council on Electricity Policy, 2004), 2.

¹² Ibid. 3.

¹³ Scott Hempling. *Electric Utility Holding Companies: The New Regulatory Challenges*. (Land Economics, 71 (3) August 1995): 343-53. (343).

¹⁴ Section 1, clause (5) Public Utility Holding Company Act of 1935.

¹⁵ Article 1, Section 8, Clause 3, of the Constitution empowers Congress "to regulate Commerce with foreign Nations, and among several States, and with the Indian Tribes." This is referred to as the interstate commerce clause. Intrastate commerce is subject to the exclusive control of the state where the trade is taking place. Interstate commerce is not confined to one state so no one state controls it, nor does it necessarily mean the federal government is able to control it either. <http://legal-dictionary.thefreedictionary.com/Interstate+commerce+clause> accessed January 21, 2013.

¹⁶ Amy Abel. *Electricity Restructuring Background: Public Utility Holding Company Act of 1935 (PUHCA)*. CRS Report for Congress: RS20015. January 1999.

In 1935, President Roosevelt signed into law a monumental piece of legislation that would help the federal government regulate electricity companies and limit their growing power: the Public Utility Act. Title I of the Public Utility Act of 1935 is known as the Public Utility Holding Company Act (PUHCA)¹⁷. According to the USEIA, PUHCA prohibits, "the acquisition of any wholesale or retail electric business through a holding company unless that business forms part of an integrated public utility system when combined with the utility's other electric business. The legislation also restricts ownership of an electric business by non-utility corporations."¹⁸

Prior to the passage of PUHCA, customers had few electricity provider options because there was no competition, and existing companies had little motivation to provide reliable electricity service. Customers were also left to bear much of the risk in the electricity market despite growing regulatory burdens on the utilities. PUHCA was an effort to shift the burden of risk back to the utilities by limiting, "the mixing of monopoly and competitive activities"¹⁹.

At its core, PUHCA was the first federal piece of legislation that governed the sale and distribution of electricity. States were given jurisdiction of siting generation and transmission and the responsibility to set distribution rates²⁰. The federal government regulated the make-up of the holding companies and the interstate transmission of electrical energy. It also had control

¹⁷ Amy Abel. *Electricity Restructuring Background: Public Utility Holding Company Act of 1935 (PUHCA)*. CRS Report for Congress: RS20015. January 1999.

¹⁸ USEIA "P" <http://www.eia.gov/tools/glossary/index.cfm?id=P> Accessed February 6, 2013.

¹⁹ Scott Hempling. *Electric Utility Holding Companies: The New Regulatory Challenges*. (Land Economics, 71 (3) August 1995): 343-53. (344).

²⁰ Matthew Brown and Richard Sedano. *Electricity Transmission: A Primer* (National Council on Electricity Policy, 2004), 3.

over rates for the sale of wholesale electricity in interstate commerce due in part to President Roosevelt expanding the Federal Powers Act of 1920. The Federal Energy Regulatory Commission (FERC) is now charged with the administration of this law (see text box for more information on FERC).

The utilities that existed after the passage of PUHCA were referred to as "vertically integrated utilities." Vertically integrated utilities are defined by the USEIA as "the historical arrangement whereby a utility owns its own generating plants, transmissions system, and distribution lines to provide all aspects of electric service²¹."

The "New" Market

The "structured market" existed on the federal level after the passage of PUHCA until 1992. During this time, investor owned utilities (IOU's) received pre-set rates of return on investments in established territories

FERC
The Federal Energy Regulatory Commission

The Federal Energy Regulatory Commission is, "an independent agency that regulates the interstate transmission of electricity, natural gas, and oil." FERC's precursor was the Federal Power Commission which was given jurisdiction over the transmission of electrical power under PUHCA. When FERC was formally established by President Carter in 1977, it was a combination of the Federal Energy Administration, Energy Research and Development Administration, and the Federal Power Commission, designed to integrate energy policy. The Department of Energy was created at the same time as FERC.

FERC's responsibilities over the electricity market:

- Regulates the transmission and wholesale sales of electricity in interstate commerce;
- Reviews certain mergers and acquisitions and corporate transactions by electricity companies;
- Reviews the siting application for electric transmission projects under limited circumstances;
- Licenses and inspects private, municipal, and state hydroelectric projects;
- Protects the reliability of high voltage interstate transmission system through reliability standards;
- Monitors and investigates energy markets;
- Enforces FERC regulatory requirements through imposition of civil penalties and other means;
- Oversees environmental matters related to hydroelectricity projects and other matters; and
- Administers accounting and financial reporting regulations and conduct of regulated companies.

Source: FERC, <http://www.ferc.gov/about/ferc-does.asp> Accessed Feb. 7, 2013.

²¹ USEIA - <http://www.eia.gov/tools/glossary/index.cfm?id=V> Accessed Feb. 5, 2013

and were provided the opportunity to recover pre-determined costs associated with providing service²². Within this model, the state acted as the regulator and set the prices that the IOU's could charge customers and the acceptable rate of return that the IOU's were allowed to earn. According to Brown, this was normally in the 10 to 12 per cent range²³.

It is important to note that the power the states held, and still to a degree hold, is power over the retail market, or when power is sold directly to customers. This is different than the wholesale market which is made up of large interconnected systems of power lines and power plants owned by many companies and usually administered in part by both federal and state regulators. Under the "structured market", consumers still bore much of the risk associated with the electricity market, including service failures²⁴ because IOU's had virtually no incentives to improve efficiencies (monetary and energy) in their systems or to innovate. This was because IOU's were monitored and controlled by state government.

Where IOU's could make more money was building new generation and new transmission lines. This is why the "structured market" led to more capital intense solutions to market demands as opposed to investing in efficiencies. Utilities were guaranteed a return on any new investments in capital projects²⁵, whereas their rates from service and delivery were pre-set by government regulators. In the late 1970's this meant that utilities invested in high capital projects such as

²² Matthew Brown and Richard Sedano. *A Comprehensive View of U.S. Electric Restructuring with Policy Options for the Future* (National Council on Electricity Policy, June 2003) 6.

²³ Ibid.

²⁴ Leonard Hyman, "Restructuring Electricity Policy and Financial Models," *Energy Economics*, (vol. 32. 2009): 751-757 (754).

²⁵ Ibid. (755).

building large power plants - including nuclear and oil plants, without regard to system improvements. For utilities, there was less money to be made in efficiencies²⁶.

Despite many capital intense generation projects developed by IOU's, the United States faced unprecedented electricity prices and a supply that could not meet demand in the 1970's. As a result of oil embargoes and expensive power plant construction by the IOU's, electricity prices rose as fuel shortages increased. In response, the federal government passed the Public Utilities Regulatory Policy Act (PURPA) in 1978. According to Brown & Sedano, "PURPA had the effect of creating an entirely new segment of the power industry that built and operated power plants exclusively to sell power to utilities²⁷." These new segments of power plants were called independent power producers (IPP) and were designed to sell power to utilities by forcing them into long term contracts at rates that were specified by regulators²⁸. Under PURPA, states regulated these contracts. The hope was that by requiring utilities to diversify who they purchased power from, it would encourage utility cost efficiencies and utility conservation programs. The long term contracts were intended to help increase domestic energy production by providing a ready demand for the new energy and avoiding another crisis brought on by foreign powers.

The structure created by PURPA worked well until natural gas prices dropped and the long term contracts with mostly oil fired plants seemed grossly overpriced compared to the cheap

²⁶ Matthew Brown and Richard Sedano. *A Comprehensive View of U.S. Electric Restructuring with Policy Options for the Future* (National Council on Electricity Policy, June 2003) 7.

²⁷ Ibid. 8.

²⁸ Ibid. 7.

electricity produced by natural gas²⁹. Many states and businesses (basically all large procurers of electricity) wanted better access to the cheapest possible electricity, which meant wholesale natural gas. In response, the federal government enacted the Energy Policy Act (EPA) of 1992. The EPA did two big things and instructed FERC to do two things. First, the EPA made it easier for states to break up the vertically integrated utilities by separating generation, transmission and local distribution³⁰. Second, the EPA created a new type of generator, exempt wholesale generators (EWG) who could use any fuel, at any size, and who were entitled to market based rates that allowed them to compete with other generators regardless of costs³¹.

FERC was directed to 1) give all energy providers equal access to the national transmission grid³²; and 2) require transmission-owning utilities to offer the same transmission rates to non-utility generators and other utilities that they would charge themselves³³. These four things were important because now, consumers were essentially free to choose their power source, and indirectly the generation, even with the rest of the system remaining regulated.

Heiman and Solomon sum up the EPA best,

"... electricity supply was not so much deregulated as it was restructured, with the formerly regulated vertical integrated monopoly service providers forced to unbundle generation, transmission, and distribution while now accepting, and participating in, power supply competition³⁴."

²⁹ Michael K. Heiman and Barry D. Solomon. *Power to the People: Electric Utility Restructuring and the Commitment to Renewable Energy* (Annals of the Assoc. of American Geographers, 94(1), 2004): 94-116 (97).

³⁰ Ibid.

³¹ Matthew Brown and Richard Sedano. *A Comprehensive View of U.S. Electric Restructuring with Policy Options for the Future* (National Council on Electricity Policy, June 2003) 9.

³² Michael K. Heiman and Barry D. Solomon. *Power to the People: Electric Utility Restructuring and the Commitment to Renewable Energy* (Annals of the Assoc. of American Geographers, 94(1), 2004): 94-116 (97).

³³ Ibid. (96)

³⁴ Ibid. (97).

With the passage of the EPA, it was now up to the states to determine how they would regulate the pieces of the electricity system that were now under their control. In the next section, the steps Massachusetts took to regulate electricity will be examined, along with how municipal aggregation came to be.

Massachusetts: Restructuring

On November 25, 1997, Massachusetts Governor Cellucci signed into law, "An Act Relative to Restructuring the Electric Utility Industry in the Commonwealth, Regulating the Provision of Electricity and Other Services, and Promoting Enhanced Consumer Protections Therein³⁵", or more commonly known as the "Restructuring Act." This was sweeping legislation that fully deregulated supply service from delivery, which translated into utilities no longer being able to own the generation component of electricity. Utilities still own the distribution and transmission, but vertical integration gone. Passage of the Restructuring Act also represented one of the first state laws in the country to allow for municipal aggregation.

According to the Commonwealth of Massachusetts, the statewide electricity restructuring policy discussions began formally in 1995. The Department of Telecommunications and Energy (DTE) and the Department of Public Utilities (DPU) issued a "Notice of Inquiry and Order Seeking Comments on Electric Industry Restructuring³⁶" in February of that year, marking the first formal exploration by the state into electricity market deregulation. This Notice laid out four major questions (see text box).

³⁵ MA St.1997. Ch. 164, <http://malegislature.gov/Laws/SessionLaws/Acts/1997/Chapter164> Accessed Feb. 11, 2013.

³⁶ DPU 95-30 <http://www.env.state.ma.us/dpu/docs/electric/95-30/9530noi.pdf> Accessed Feb. 17, 2013.

Six months later, based on the comments received, the DPU issued the following principles that

would set the stage for legislation.

These principles were:

“1) Provide the broadest possible customer choice; 2) Provide all customers with an opportunity to share in the benefits of increased competition; 3) Ensure full and fair competition in generation markets. 4) Functionally separate generation, transmission, and distribution service. 5) Provide universal service. 6) Support and further the goals of environmental regulation. 7) Rely on incentive regulation where a fully

**DPU 95-00 NOTICE OF INQUIRY AND ORDER
SEEKING COMMENTS ON
ELECTRIC INDUSTRY RESTRUCTURING**

"investigate and determine (1) how a restructuring of the electric industry in Massachusetts would promote competition and economic efficiency and expand opportunities that would benefit consumers, (2) whether and how to extend to some or all customers the option of choosing their own electricity supplier, (3) how such a restructuring could be implemented, and (4) the appropriate regulatory mechanisms to apply to a restructured electric industry."

Source: DPU 95-30 <http://www.env.state.ma.us/dpu/docs/electric/95-30/9530noi.pdf> Accessed Feb. 17, 2013.

*competitive market cannot exist, or does not yet exist.*³⁷”

In 1996, DPU issued another order, "Electric Industry Restructuring Plan: Model Rules and Legislative Proposal³⁸," that built upon testimony and comments from DPU 95-30 and included legislative and policy recommendations for the legislature on how to move to a restructured electricity market. *"Where competition is possible, as is clearly the case in generation markets, the regulatory framework should harness this force productively, and not thwart its operation*³⁹."

Section X, subsection B, of DPU 96-100 includes testimony outlining why the DPU recommended establishing municipal aggregation as an option for increased consumer choice.

³⁷ DPU 95-30 <http://www.env.state.ma.us/dpu/docs/electric/95-30/9530noi.pdf> p.iv Accessed Feb. 17, 2013.

³⁸ MA DPU 96-100, Electric Industry and Restructuring Plan: Model Rules and Legislative Proposal. 1996. <http://www.env.state.ma.us/dpu/docs/restruct/96-100/96-100p.pdf> Accessed Feb. 17, 2013.

³⁹ MA DPU 96-100: 1996. p.10

Arguments made in favor of municipal aggregation included: governmental bodies provide more transparency through public hearing requirements and open meeting and open bidding laws⁴⁰; municipalities are a natural entity to provide such a service because they already provide so many others⁴¹; and people are more comfortable with municipalities than other entities assumedly because they interact with them for so many other services⁴². These comments were made during testimony on DPU 95-30 and while DPU acknowledges the importance of these comments, they conclude the section on municipal load aggregation by saying,

"Our support for the concept of municipal load aggregation implies no preference but is merely reflective of our general support for load aggregation. There will be many types of aggregators: governmental, non-profit, and for-profit. In addition, aggregation may occur around different groups, such as trade associations, public interest organizations, or financial interests.

We believe that customers should be free to choose which aggregator is best for them. Therefore, in our Model Rules, we do not indicate a preference for any specific form of aggregation. We are confident that the free market will provide customers with a wide range of choices, that customers will make decisions based on their particular interests, and that the most efficient forms of aggregation will emerge through this competitive process⁴³."

All of this is important because the legislative suggestions and models put forth in DPU 96-100 helped inform the policy discussions that were ultimately part of the final restructuring law.

⁴⁰ MA DPU 96-100: 1996. p. 201

⁴¹ Ibid.

⁴² MA DPU 96-100: 1996. p. 204

⁴³ Ibid.

The "Restructuring Act"

As stated above, the Restructuring Act separated supply from delivery service and moved utilities away from a vertically integrated system. It also helped shift the risk away from ratepayers because they were no longer responsible for a utility's decision to build costly generation projects, which was a reason for high electricity costs prior to passage of the EPA. By breaking apart the vertically integrated electricity systems, the hope was that utilities would become more efficient. And with the entry of more competition to the wholesale market, market forces would help drive overall electricity costs down. It is important to remember that only the generation and sale of electricity was deregulated - transmission, distribution and customer service remain monopolized services provided by utilities and overseen by a combination of state and federal agencies. The Restructuring Act did include a study⁴⁴ to see if the remaining services - transmission, distribution and customer services should be provided through a competitive market. The study came back and advised they should not⁴⁵.

The first section of the Restructuring Act highlights the Legislatures' belief that the current state of the electricity structure had resulted in, "among the highest, residential and commercial electricity rates paid by customers throughout the United States,⁴⁶" and that moving to a framework where customers choose their electric power supplier will best serve ratepayers and

⁴⁴ MA St. 1997. Ch. 164 Sec 312.

⁴⁵ EEA, Description of the Restructured Electric Industry <http://www.mass.gov/eea/energy-utilities-clean-tech/electric-power/electric-market-info/electric-industry-restructuring/description-of-the-restructured-electric-industry.html> Accessed February 20, 2013.

⁴⁶ MA St. 1997. Ch. 164 Sec. 1 (d).

the Commonwealth⁴⁷. Clause (l) is worth highlighting because its principals will be revisited later in this paper.

"(l) the primary elements of a more competitive electricity market will be customer choice; preservation and augmentation of consumer protections, full and fair competition in generation, and enhanced environmental protection goals;"

To fully implement the charges in Section 1 of the bill, a number of regulatory changes had to be made; in state government, at the utilities and concerning new groups who would be joining the energy market.

Utilities were required to divest their generation holdings (except nuclear) but could still own transmission lines and deliver service⁴⁸. In order to help utilities recover the costs they had invested in generation facilities and to cover any outstanding power purchase agreements that could no longer be honored, new regulations for "Stranded Costs⁴⁹" were included in the Restructuring Act. Multiple categories of stranded costs were created to outline when utilities could pass along certain outstanding costs to ratepayers. Stranded costs are still recovered by many utilities despite the amount of time that has passed since the Restructuring Act.

The Restructuring Act also created a Ratepayer Parity Trust Fund⁵⁰ which collected the personal and corporate tax revenues from the sales of assets required by utilities. The monies in the fund were to be used to help achieve required rate reductions for consumers.

⁴⁷ MA St. 1997. Ch. 164 Sec. 1. (c)

⁴⁸ MA St. 1997. Ch. 164. Sec. 193

⁴⁹ MA St. 1997. Ch. 164 Sec. 193

⁵⁰ MA St. 1997. Ch. 164. Sec. 7

Utilities were still allowed to sell electricity to consumers, only now there was new competition in the wholesale market. To differentiate generation service providers, the utilities were known as Standard Offer Service which expired in 2001 and Default Service, which still exists. The remaining option is Competitive Generation Service, provided by Competitive Suppliers.

Default Service is the generation supply service that is provided by distribution companies to those customers not receiving Competitive Generation. Default Service means that the utility will buy the electricity, deliver it and bill for it, but utilities are not allowed to produce or generate it. Default Service rates are regulated by the DPU. Essentially if you move into National Grid's service territory, the electricity service you will automatically be provided with absent any Competitive Suppliers is the power purchased by National Grid because they are the Default Service provider. Utilities do not make a profit on default service, as they merely pass through the service. Where they still make money is the delivery of the service.

Section 193 of the Restructuring Act put DPU in charge of defining service territories⁵¹, and only one distribution company may operate in each service territory. A study was commissioned to determine whether or not to open up both bidding on service territories and also open distribution lines to competitive markets. According to the Executive Office of Energy and Environmental Affairs the study⁵² did not sway legislators to make any further changes to distribution service policies.

⁵¹ Definition of Service Territories is provided in MA St. 1997. Ch. 164 Sec.190.

⁵² EOEEA, Restructuring Act Summary, <http://www.mass.gov/eea/energy-utilities-clean-tech/electric-power/electric-market-info/electric-industry-restructuring/description-of-the-restructured-electric-industry.html> Accessed March 23, 2013.

Competitive Suppliers were also newly created entities in the Restructuring Act. They are dealers who sell electricity to retail customers, offering a choice to Default Service from the utilities⁵³. Competitive Suppliers often work with Electricity Brokers. Electricity Brokers⁵⁴ are licensed entities that facilitate the purchase and sale of electricity but cannot actually sell directly to customers⁵⁵. Electricity prices from Competitive Generation are not regulated by the DPU like Default Service is. Instead, Competitive Suppliers are regulated solely by market conditions.

Municipal Aggregators often hire Competitive Suppliers to help them fulfill their electricity needs. Section 247 of the Restructuring Act outlines the rules governing the creation and the oversight of Municipal Aggregators. A more in depth analysis of the Municipal Aggregator process is in Chapter Four of this paper, but for purposes of this chapter, a Municipal Aggregator is defined in the Restructuring Act as, "the method by which local and county governments can buy electric power on behalf of the consumers within their borders."⁵⁶ Municipal lighting plants cannot be municipal aggregators.

The passage of the Restructuring Act created many new programs and entities to help oversee the electricity market and grid, seemingly in an effort to help meet some of the goals set forth in

⁵³ MA 220 CMR 11.00 Rules Governing the Restructuring of the Electric Industry <http://www.mass.gov/eea/docs/dpu/cmr/220cmr1100.pdf> Accessed Feb. 20, 2013.

⁵⁴ Ibid.

⁵⁵ MA St. 1997. Ch. 164. Sec. 193.

⁵⁶ MA St. 1997. Ch. 164. Sec. 134.

DPU 96-100. For the state and its agencies there was a significant change over who would have authority where, and new agencies also had to be created.

Originally created by FERC in 1996 under Order 888⁵⁷, section 305 of the Restructuring Act instructed Massachusetts to join with neighboring New England states and create an "independent system operator" now known as ISO-NE. The purpose of ISO-NE is to manage the transmission grid and to oversee the wholesale electricity market sales⁵⁸.

The Restructuring Act also created statutory requirements for clean and renewable energies investments. The emphasis on more renewable energy resources is apparent in both DPU 96-100 and the final Restructuring Act. The final legislation contained the following requirements for all suppliers (including utilities) and competitive suppliers:

~ A certain percentage of power purchased every year must be from renewable energy resources⁵⁹. This is called the Renewable Energy Portfolio Standard, or the RPS. No matter who purchases power, whether a competitive supplier or a utility, the same percentage of power must come from renewable resources.

~ The Renewable Energy Trust Fund was created to help develop renewable energy projects⁶⁰. The Fund receives monies in the form of a surcharge on every customer's monthly bill.

~ The Systems Benefit Charge (SBC) was another new charge on customers' bill, but instead of supporting any new kind of energy generation, clean or otherwise, the SBC was designed to help with demand side management (DSM) and energy efficiency projects⁶¹.

⁵⁷ FERC Order 888, <http://www.ferc.gov/legal/maj-ord-reg/land-docs/rm95-8-00w.txt> Accessed Feb. 20, 2013.

⁵⁸ ISO NE – History, http://www.iso-ne.com/aboutiso/co_profile/history/index.html. Accessed Feb. 20, 2013.

⁵⁹ MA St. 1997. Ch. 164 Sec. 50.

⁶⁰ MA St. Ch. 164. Sec. 68.

⁶¹ MA St. Ch. 164. Sec. 37.

Part of the funds collected through the SBC are required to be spent to educate ratepayers on restructuring, and that is further complemented by more educational requirements in Section 50 of the Restructuring Act. Public education is important, and will receive more attention in Chapter Six, because many people today do not understand what happened during restructuring, or what their options are now. In fact, many people I spoke with over the course of writing this thesis, were unaware they had any options for electricity service at all.

Public education comes up again in the Restructuring Act in Section 68. This section highlights the prioritization of public education as part of the mission of the board that oversees the Renewable Energy Trust Fund. And Section 193 requires utilities to provide an "education and outreach program" to customers as part of the education they were also required to provide on the "unbundling" of bills. These education programs will be revisited throughout this report.

Any Competitive Supplier or Default Service Provider (with the exception of municipal light plants) must meet the requirements of each of the following programs also:

~ "Unbundling" is required in Section 193 and means that utilities must show customers each separate charge for generation, transmission and distribution services, along with the added charges from the above mentioned funds on their bills.

~ Another reflection of DPU 96-100 was the requirement of a Low Income Customer Tariff⁶² which allows low income residents to receive electricity regardless of ability to pay and puts the responsibility on the distribution company to ensure that a generator is paid for all the power delivered.

⁶² MA St. Ch. 164. Sec. 193.

Massachusetts: Post Restructuring

Since the passage of the Restructuring Act many laws have been passed that impact electricity markets; however few have had an impact equal to the Restructuring Act. In recent years, two pieces of legislation have been signed into law that have impacted how electricity is purchased and created more requirements for suppliers when purchasing electricity. These bills have also raised more conversations about the sources of electricity and the impacts of electricity production and consumption on the environment. The bills that will be reviewed are, "An Act Relative to Green Communities (GCA) (2008)⁶³," and "An Act Relative to Competitively Priced Electricity in the Commonwealth⁶⁴ (2012)."

Prior to the passage of the above bills, Governor Patrick did two important things relative to electricity and the environment - he created a new Secretary in his cabinet, and he signed Massachusetts up as a member of RGGI. RGGI is the Regional Greenhouse Gas Initiative and is a, "cooperative effort by Northeast and Mid-Atlantic states to reduce emissions of carbon dioxide, a greenhouse gas that contributes to global climate change (MADEP, RGGI)." RGGI established a market based cap-and-trade program designed to make electricity generators reduce their carbon dioxide output. The funds from the sale of cap-and-trade credits goes back to states and how Massachusetts uses those funds will be discussed throughout this report.

Governor Patrick also created the Secretariat office of Energy and Environmental Affairs, moving the DPU and the Department of Energy Resources (previously the Division) to sit under

⁶³ MA St. 2008. Ch. 169.

⁶⁴ MA St. 2012. Ch. 209.

the Secretary of Energy and Environmental Affairs through an executive order. According to the state, "Massachusetts is the first state in the nation to combine energy and environmental agencies under one Cabinet secretary."⁶⁵ This consolidation is important because it represents what would be an overall shift by the Patrick administration, and to an extent the legislature, to use energy and electricity management as a way to improve environmental conditions.

Green Communities Act

The Green Communities Act (GCA) was signed into law on July 2, 2008 by Governor Deval Patrick. At its core, the GCA created a new emphasis on energy efficiency and the benefits that both consumers and the environment could derive from additional investments in it. Section 11 of the GCA calls for "Efficiency First" which means the cheapest kilowatt-hour is the one that is never created, so if energy efficiencies can be created, then energy purchases must buy those power supplies with efficiencies first.

Section 11 also created the Energy Efficiency Advisory Council (EEAC) and spells out new reporting requirements for utilities and municipal aggregators who manage energy efficiency funds. The utilities and municipal aggregators who run energy efficiency programs are referred to as Program Administrators (PA's), and they are in charge of new three year energy efficiency (EE) plan development and implementation. The three year plans are approved by the EEAC and must: be statewide; address integration of electric and gas initiatives where applicable;

⁶⁵ Massachusetts Office of Energy and Environmental Affairs, "About Us". (EOEEA, About us). <http://www.mass.gov/eea/utility/about-us.html> Accessed February 20, 2013.

provide at least minimum percentages of programs and benefits for low income customers and otherwise equitably serve the various customer classes⁶⁶.

EE Plans must include: Assessment of estimated lifetime cost, reliability and magnitude of all available energy efficiency and demand reduction resources that are cost effective or less than the cost of supply; identification of the resources to be acquired under the plan; the estimated energy cost savings, including reductions in capacity and energy costs; description of programs which may include (but are not required or limited to) - efficiency and load management, public education in energy efficiency and demand reductions; budget; fully reconciling funding mechanism; peak load reductions and economic benefits to be generated by the programs⁶⁷.

These plans will be discussed in greater detail later in the paper as they pertain to municipal aggregators.

Section 11 of the GCA calls for 80 per cent of all RGGI auction revenues to go to PA run energy efficiency programs. The remaining proceeds are used to help municipalities own renewable energy projects and provide loans for energy efficiency projects⁶⁸.

Section 22 of the GCA created a new program called the "Green Communities Program." It was designed to help communities, *"reduce energy consumption and costs, reduce pollution, facilitate the development of renewable and alternative energy resources, and create local jobs*

⁶⁶ The information in this paragraph and the subsequent paragraph is provided by the EEAC's website and is based on their interpretation of the guidelines and requirements in Section 11 of MA St. 2007. ch. 169. Two rounds of three year plans have already been approved, and these guidelines are the most accurately available information on the plans. <http://www.ma-eeac.org/docs/081118-EEAC-Responsibilities.pdf> Accessed February 21, 2013.

⁶⁷ MA EEAC <http://www.ma-eeac.org/docs/081118-EEAC-Responsibilities.pdf> Accessed February 21, 2013.

⁶⁸ MA St. 2008, Ch. 169. Sec. 7.

related to the building of renewable and alternative energy facilities and the installation of energy-efficient equipment."

To support these programs, funding is available through RGGI proceeds, SBC funds and the Renewable Energy Trust Fund for up to \$10 million statewide annually. Community participation is based on a community meeting certain criteria and once met, the community is then eligible to receive grants, loans and assistance from the Green Communities Program. At the time of drafting this paper, 110 Green Communities exist in Massachusetts⁶⁹ out of 351 cities and towns. I mention this because the Green Communities program is another example of Massachusetts promoting municipal programs; much like the Legislature did when it created municipal aggregators.

The GCA did not represent serious market overhauls like the 1997 Restructuring Act but it did represent a new approach to electricity purchasing for suppliers. Most important to municipal aggregators was the move to efficiency first for energy procurement, increased RPS standards, long term contracts for renewable energy generation projects and a major emphasis on developing and purchasing renewable energies.

Green Communities Act 2

On August 3, 2012, "An Act Relative to Competitively Priced Electricity in the Commonwealth"⁷⁰ was signed into law by Governor Deval Patrick. This bill ended some

⁶⁹ MA Green Communities, <http://www.mass.gov/eea/docs/doer/green-communities/grant-program/map-summary-green-communities-110.pdf> Accessed February 22, 2013.

⁷⁰ MA St. 2012. Ch. 209.

programs started by the GCA like the current long-term contract program⁷¹ and required investor-owned utilities to competitively bid proposals from renewable energy suppliers for long-term renewable energy contracts⁷².

The bill increased the previous net metering cap set by the GCA and doubled the existing limits on municipal and privately-owned projects that generate their own renewable energy⁷³. The bill also established a voluntary energy efficiency pilot program for the five largest electric and five largest gas users in each utility's service territory⁷⁴. More will be discussed on this later in Chapter Six.

The next chapter will break down the process to become a municipal aggregator in Massachusetts, and includes one municipal aggregator's experience navigating the regulatory changes in Massachusetts since the Restructuring Act. Chapter Four also outlines steps other states have taken to regulate electricity within their borders since federal passage of the EPA.

⁷¹ MA St. 2012. Ch. 209. Sec. 35.

⁷² MA St. 2012. Ch. 209. Sec. 36.

⁷³ MA St. 2012. Ch. 209. Sec. 23-30, 49.

⁷⁴ MA St. 2012. Ch. 209. Sec. 5-6, 54, 57, 58.

Chapter Four: State Municipal Aggregation

Thanks to the Restructuring Act of 1997, Massachusetts electricity customers have the option of choosing their electricity supplier. Municipal aggregation allows municipalities to aggregate the electrical load of their constituents and solicit energy suppliers on their behalf, either as one municipality or as a group of municipalities working together. However, since the passage of the Restructuring Act only five single municipalities have become municipal aggregators, and only one regional municipal aggregator has formed.

This chapter examines the process to become a municipal aggregator in Massachusetts. It uses the Guide created by the Department of Energy Resources and information from the Cape Light Compact, the first regional municipal aggregator in the country to complete the process. A brief history of the Cape Light Compact is also included. To see how Massachusetts' application process compares with other states that allow municipal electricity aggregation, brief summaries and descriptions of municipal aggregation programs in Rhode Island, California, Ohio, Illinois and New Jersey are also included.

Massachusetts Municipal Aggregation Process

The following information is based on interviews with successful applicants, competitive suppliers, staff at DPU, and DOER's "Guide to Municipal Electric Aggregation in Massachusetts (Guide)" which was put out between 2007 and 2008. There is no published date given, however if the 2007-2008 timeframe is correct, that would put the Guide's publication roughly 10 years after the passage of the Restructuring Act and before additional changes to the electricity markets and requirements for municipal aggregators.

To become a single municipal aggregator in Massachusetts a municipality must take the following steps:

Step 1: A vote must be taken at town meeting or by town council to begin the aggregation process⁷⁵. To pass the vote, it is helpful for people to have an idea what municipal aggregation is, why it should be considered, and possibly results from other municipal aggregators. This can be done through a feasibility study; however the study is not a requirement of the process despite receiving quite a bit of attention in the Guide.

Step 2: Once a vote is approved, then the town must develop an aggregation plan. This is often done in consultation with competitive suppliers or electricity brokers and with the Department of Energy Resources (DOER)⁷⁶.

Step 3: When the plan is finished, it must be reviewed by the citizens of the municipality, usually at a town meeting. The law, however, is silent on requiring any actual approval by the town or residents.

Step 4: After public review, the plan then goes to the Department of Public Utilities (DPU) where DPU can hold a hearing on the plan and where DPU ultimately approves it. Based on the final plan, the municipality puts out an RFP for a competitive supplier. Once contracts are

⁷⁵ There are some differences in the makeup of local governments and in the case of a city, the city council, mayor or city manager may approve the initial aggregation process to proceed.

⁷⁶ M.G.L. Chapter 25A, Section 6 (11).

negotiated, the head of the municipality signs the contract. At this time, the AG is able to weigh in on the plan and submit comments and questions to the municipality. This is because the AG represents ratepayers in utility contracts⁷⁷. Although neither the municipality nor the competitive supplier is classified as a utility, the AG can weigh in because a contract is being negotiated that affects ratepayers.

Step 5: Residents are made aware of the changes in the form of a letter, they are enrolled in the program and service with the competitive supplier begins. All residents are enrolled, including commercial and industrial accounts (C&I). C&I accounts generally receive different electricity rates than residential accounts, which is also the practice by utilities. Depending on the size of the C&I account, they may already have an alternative supply contract. If that is the case, the onus rests on the company to opt-out of the municipal aggregation program should they want to. Residents are also allowed to opt-out of the program at this time if they do not wish to have municipal service.

The Aggregation plan must meet the following requirements based on M.G.L. Chapter 164, Section 134 (a). Structurally the plan shall include, "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 the responsibilities of program participants; and termination of the program."⁷⁸

⁷⁷ M.G.L. Ch. 12, Sec. 11E.

⁷⁸ M.G.L. Ch. 164, Sec. 134 section (a).

Within the plan, the following criteria must also be met⁷⁹:

- Provide universal access, reliability and equitable treatment for all customers - namely low income customers.
- Be compliant with all laws and regulations
- Offer electricity at a price that is either no higher than the electricity offered by the default service provider (the utilities) or is higher in price because of the purchase of renewable energy.
- Create an "opt-out" program for customers, where everyone is enrolled as soon as the plan is put in place, but allows customers the option to choose alternative service without penalty within 180 days⁸⁰.
- Create appropriate communication channels with customers so they understand that their electricity provider will change; that they can opt-out of the program, the fees & charges associated with the program; and the rates from the default service provider (utility).

All of these steps also apply to any municipalities that wish to join together to form a regional aggregator. In a joint application, each town that would be served by the aggregator would have to vote to join the regional aggregation plan individually, and each municipality would have to review the final plan. All other requirements in the plan and the plan structure remain the same.

Energy Efficiency Programs

In addition to developing and executing the aggregation plan, municipal aggregators are also allowed to provide energy efficiency programs under Chapter 164, Section 134. The plans are funded by the Systems Benefit Charge (SBC) which every ratepayer in Massachusetts pays.

Approved municipal aggregation energy plans bring the money ratepayers pay into the SBC,

⁷⁹ M.G.L. Ch. 164 Sec. 134 section (a).

⁸⁰ The current statute still references Standard Offer service, which no longer exists, as the fall back service if someone opts-out of a municipal aggregation program. If a person decides to leave a municipal aggregation program, the account reverts back to utility's Default Service.

back to the municipality(ies). The funds are managed by the municipal aggregator and covers projects within their service territory. This is instead of the SBC funds being managed by the utility (the Default Service provider) who can spend it anywhere in its service territory.

The process to get an approved energy management plan involves developing a plan separate from the purchase of electricity; however it too gets filed with DPU, who can hold hearings on it and who will ultimately approve the plan. The plan must cover how the municipality(ies) will implement demand side management programs and the management of renewable energy programs based on the SBC funds. The energy efficiency plans must also meet requirements of the Energy Efficiency Advisory Council (EEAC) including filing three year plans on how the programs will be run, annual updates on plan targets, and meet all other requirements of Program Administrators.

This is the municipal aggregation program as it is spelled out in law, and in the Guide put together by DOER. The way this process actually works in practice will be discussed in more detail in Chapter Five.

Cape Light Compact: The First Municipal Aggregator

Massachusetts was one of the first states to allow for municipal aggregation and is now home to the longest running municipal aggregator, the Cape Light Compact (“Compact”). Below is a brief outline of how the Cape Light Compact came to be and a summary of where it is now.

Cape Light Compact FACTS

The Cape Light Compact ("Compact") is the nation's first regional municipal aggregator. Made up of 21 towns in Barnstable & Dukes Counties and the county entities, the Compact currently serves over 200,000 customers in the towns of: Aquinnah, Barnstable, Bourne, Brewster, Chatham, Chilmark, Dennis, Eastham, Edgartown, Falmouth, Harwich, Mashpee, Oak Bluffs, Orleans, Provincetown, Sandwich, Tisbury, Truro, Wellfleet, West Tisbury, and Yarmouth. The Compact provides residential, commercial and industrial service and Barnstable County acts as its fiscal agent.

The Compact has provides Basic service and a green power option called Cape Light Compact Green which matches 50% or 100% of electricity used each month with renewable energy sources. According to the Compact, "25% of the renewable energy sources in our green program are "new" (built after 1997)." with local projects from across Massachusetts supplying the power.

The Compact operates the only municipal aggregation energy efficiency plan in Massachusetts. The Compact is the Program Administrator (PA) and collects SBC funds paid by their customers' on their monthly electricity bills. These funds are used to support local energy efficiency projects. According to the Compact, since July 2001, they have invested "over \$50 million in energy efficiency programs", including:

- Conducting over 15,500 FREE energy assessments for residential, business and government customers;
- Saved approximately 18MW of peak electric generation;
- Saved over 103,600 megawatt hours (MWh) of energy use – the equivalent CO2 emissions from 8,396,152 gallons of gasoline consumed;
- Saved customers \$20.7+ million annually on their electric bills;
- In 2008, the Compact's Energy Efficiency Programs saved enough electricity to power 1,600 homes and remove the greenhouse gas emissions from the equivalent of about 1,000 cars.

Cape Light Compact estimates that their energy efficiency programs will result in an annual net-benefit reduction of approximately \$218 million dollars in electricity costs for their customers over the three-year period 2010-2012.

Source: www.capelightcompact.org. "Green Programs", "Energy Efficiency Programs," "Power Supply FAQ," "About" Accessed Feb. 1, 2013.

Speaking with Maggie Downey, the Administrator of the Compact, she explained that the reason the Compact began in the first place was because of the desire to manage the energy efficiency program to ensure that the funds paid by the people on Cape Cod stayed in the community. By bringing the SBC money back to Cape Cod and Martha's Vineyard, the Compact gained "a seat at the table" and "better representation for the towns⁸¹." Since the

⁸¹ Interview, Maggie Downey. March 30, 2012.

Compact was made up of local towns, they believed they knew better how the efficiency money could be spent than a utility with little local knowledge. Also, by becoming a municipal aggregator the Compact could intervene on behalf of ratepayers.

Originally formed in 1997, the Compact participated in DPU rule makings to advocate for county management for the procurement of electricity. After successful passage of the Restructuring Act, the Compact submitted its first plan to the Department of Telecommunications and Energy in 1999. In 2001 prior to plan approval, the Compact participated in a pilot program as the first municipal aggregator. The final plan was approved in 2004⁸² and electric service for all customers started soon after.

All the municipal members of the Compact fall within NSTAR's service territory, and it is NSTAR who reads the meters and bills Compact customers. The Compact did not enter into competitive supply contracts until 2005 because the Restructuring Act called for set prices in default service while the market adjusted to a restructuring. During that time, electricity prices were not allowed to be over Standard Offer resulting in no competition in the market.

⁸² <http://www.mass.gov/eea/energy-utilities-clean-tech/electric-power/electric-market-info/electric-industry-restructuring/restructuring-issues/municipal-aggregation.html> Accessed March 1, 2013.

Municipal aggregation also provides a unique opportunity for a municipality to directly invest in renewable energy if they so choose. Municipalities can vote at town meeting to purchase a certain amount of power from renewable energy generation, on top of state requirements. So becoming a municipal aggregator can provide another avenue to promote renewable energy which could lead to savings for ratepayers.

For example, if a municipality wanted to make investing in renewable energy, or reducing their carbon footprint a priority, and they were a municipal aggregator, a ballot initiative could be adopted that called for ten per cent of all electricity purchased to come from renewable energy.

This in turn increases the demand for renewable energy production and also improves the market for renewable technologies

Ms. Downey also noted that as a municipal aggregator, the Compact starts off at a slight competitive disadvantage compared to the distribution utilities. The competitive disadvantage is the risk taken by the municipal aggregators that the load could change. This is because it is an “opt-out” program and people could choose to leave. According to Brian Murphy of Colonial Power, the electric broker that serves the Compact, about 2-3.5 per cent of customers have opted-out of the Compact since its inception. Some of those people have come back, but there was no hard data available for exactly how many.

One reason migration can happen is that electricity prices change for the Compact (and every other municipal aggregator) every 6 months, and sometimes competitive supply may not be cheaper than Default Service. The potential for people to leave is called "migration risk" and must be built into the overall price for electricity by the Compact. The utilities also have to deal with the risk of absorbing any customers that may leave an aggregation program. Utilities can adjust the additional “migration risk” costs through default service adjustments.

Current rates for the Compact's basic service are 7.62 cents per kWh for residential customers⁸³ for January 1 to June 30, 2013. NSTAR's residential rates for the same time period are 7.031 cents per kWh⁸⁴. NSTAR lists monthly prices starting at 7.9 cents per kWh in January 2013 with a gradual monthly decrease to 6.5 cents per kWh in June 2013⁸⁵. The average rate appears to be a combination of different service territories over the same time period⁸⁶. The Compact does not always offer the cheapest electricity. One key reason is because the timing of electricity purchases fluctuates and can explain why the Compact's price may be higher or lower than other offers available in the market⁸⁷.

Unlike NSTAR, which is an investor owned utility and answers to its shareholders, the Compact represents regional interests as energy advocates for consumers and is a public entity whose mission is to serve the public interest. The Compact also provides educational opportunities to Cape and Vineyard students, along with activities and programs that support regional energy efficiency and renewable power development. NSTAR also provides energy efficiency programs for its customers, but they must be spread over their entire service territory which serves more than half the state.

⁸³ Cape Light Compact, "Basic Electric Rates," <http://www.capelightcompact.org/power-supply/electricrates/> Accessed March 24, 2013.

⁸⁴ NSTAR "Rates & Tariffs," http://NSTAR.com/residential/rates_tariffs/basic_service.asp Accessed March 24, 2013.

⁸⁵ DPU, "Variable Monthly Default Service Rates - Year 2013" <http://www.mass.gov/eea/energy-utilities-clean-tech/electric-power/electric-market-info/basic-default-service/default-rates-2013.html> Accessed March 24, 2013.

⁸⁶ NSTAR has multiple service territories and rates displayed on NSTAR's webpage may be the average of the 6month total price over all service territories, although it is hard to know and further inquiry was beyond the scope of this report.

⁸⁷ Cape Light Compact, "Power Supply FAQ," <http://www.capelightcompact.org/resources/faq/power-supply-fa/> Accessed March 24, 2013.

More attention will be paid to the Compact later in this paper when the focus shifts to what hurdles municipal aggregators face, and based on the Compact's experience, what recommendations they could offer.

Massachusetts was the first state to have a successful municipal aggregator but as many states shifted to a restructured electricity market, the concept of municipal aggregation, or as it more frequently referred to, Community Choice Aggregation (or just Community Choice) was also adopted. In the following pages, brief summaries are provided on the Community Choice programs in Rhode Island, California, Ohio, New Jersey and Illinois.

Other States with Municipal Aggregation Programs

Rhode Island:

In 1996 Rhode Island deregulated its electricity market with the passage of the Rhode Island Utility Restructuring Act (H-8124)⁸⁸. This law allowed for competitive supply for ratepayers much like Massachusetts' subsequent Restructuring Act would the following year. However, it was not until legislation was passed in 2002⁸⁹ that municipal aggregation was allowed in Rhode Island. According to some news articles this was because few ratepayers had taken advantage of competitive supply. Municipal aggregators are not viewed as a public utility and are overseen by the Rhode Island Public Utilities Commission (RIPUC).

⁸⁸ State of Rhode Island, Public Utilities Commission, H8124 Summary, <http://www.ripuc.org/utilityinfo/electric/ura1996summ.html> Accessed September 5, 2012.

⁸⁹ RI St. 2002 Ch. 144.

Much like Massachusetts' law, Rhode Island allows for more than one municipality to join together to form an aggregation program, excludes customers of municipal light plants and allows customers to opt-out of the program should they decide to change suppliers. However unlike Massachusetts, Rhode Island only allows customers to opt-out every two years.

The process to become a municipal aggregator in Rhode Island is also similar to Massachusetts. First, a majority vote is needed by the municipality to begin planning; and in the case of more than one municipality - each municipality must get votes before the process can continue. Second, the municipality or municipalities must develop a plan. Once the plan is developed, at least two public hearings on the plan must take place, with appropriate notice. Third, the municipality(ies) must file the plan with the RIPUC. Once the RIPUC approves the plan, then the municipality or municipalities can go out to bid for a power supplier. The RIPUC can veto any bid that is approved by the municipality or municipalities if within the first year of the contract, the cost for electricity exceeds the standard offer price; unless the supplier can show that costs will be lower than standard offer in subsequent years.

Currently, Rhode Island's most successful municipal aggregation program is called Rhode Island Energy Aggregation Program, or REAP. It is run by the Rhode Island League of Cities and Towns and is a municipal aggregation program that consists of 36 of Rhode Island's cities and town. REAP was started in 1999, and according to the Rhode Island League of Cities and Towns, the aggregation program has saved its members over \$18 million⁹⁰. This program is

⁹⁰ Rhode Island League Cities and Towns, "REAP" <http://www.rileague.org/index.aspx?nid=163> Accessed September 5, 2012.

most similar to the MunEnergy program in Massachusetts operated by the Massachusetts Municipal Association (MMA). This program is designed to help municipalities navigate the competitive supply market with the help of MMA. Neither Rhode Island's REAP program nor Massachusetts' MunEnergy program offers competitive supply to residential consumers and both are specifically designed to help municipalities better manage their own electrical loads.

California:

California first attempted restructuring their electricity market in 1996 after the passage of AB 1890, the Electric Utility Industry Restructuring Act⁹¹. This bill allowed for residential customers to "opt-in" to service with competitive suppliers. However, this program was suspended in 2000 and 2001 as a direct reaction to the serious energy crisis that California experienced. As part of the recovery after California's energy crisis, AB 117, the Community Choice Aggregation legislation was passed in 2002⁹². This legislation differed from AB 1890 by allowing for an "opt-out"

program for municipal electrical aggregation, more like the programs in Massachusetts and Rhode Island.

Community choice aggregators (CCA's), are overseen by the

"Opt-in" means customers have to choose to join a program. Under this option, the responsibility falls on the municipality to encourage people to join.

"Opt-out" means that customers will be automatically signed up for a program but they have the option to choose not to be a part of it. Under this option, the responsibility falls on the customer to make a choice to stay with their provided service (municipal aggregator) or choose another provider. Under the "opt-out" model, municipalities still must receive some sort of approval from voters (in all of the state programs mentioned in this paper) but they do not need each individual customer to approve the program in order to sign them up.

⁹¹ CA St. 1996, Ch. 854.

⁹² CA St. 2002, Ch. 838.

California Public Utilities Commission (CPUC) and the process by which they are created is similar to the processes in Rhode Island and Massachusetts. CCA's are required to get municipal votes by any municipal entities wishing to join, develop a plan that is then approved by the CPUC, and CCA's must notify ratepayers of the change in service. The CPUC also issues regulations on billing standards and RPS standards.

At the time of writing this paper, the Marin Energy Authority (MEA) administers the first and only operating CCA in California called Marin Clean Energy (MCE)⁹³. It is made up of the City of Belvedere, Town of Corte Madera, Town of Fairfax, City of Larkspur, City of Mill Valley, City of Novato, City of Richmond, Town of Ross, Town of San Anselmo, City of San Rafael, City of Sausalito, Town of Tiburon, and the County of Marin. MEA was created in 2008 and started serving customers in 2010. MCE procures 50-100 per cent renewable electricity⁹⁴ on behalf of its customers.

In a conversation with Jamie Tuckey, the Communications Director at MEA, the way the process worked for MEA was a Joint Powers Authority was created, much like the Compact's Inter-municipal Agreement and which all participating towns had to sign off on. If a "No" vote was received by any town then no entity within that municipality could choose to receive service from MCE, not even commercial accounts. Once towns approved a Joint Powers Authority and appointed board members, then an implementation plan was created. The plan

⁹³ Email, Patrick Stoner, "RE: Research Question on Community Choice Aggregation Program" July 3, 2012.

⁹⁴ Marin Clean Energy, "FAQ" <https://marincleanenergy.info/faq> Accessed September 5, 2012.

was approved by the CPUC and once it was approved, MEA put out an RFP for suppliers for a five year power supply contract. This contract does not require approval from the CPUC.

In California, CCA's are allowed to charge customers to opt-out of the program outside of certain timeframes. MEA charges residential customers \$5 to opt-out and commercial/industrial customers \$25 if the request is made after the first 60 days of service with the CCA⁹⁵.

MEA continues to slowly phase in commercial and residential customers. According to the Local Government Commission of California, San Francisco may be next in line to fully form a CCA⁹⁶, though the timeframe for completion is unavailable.

Ohio:

The State of Ohio simultaneously deregulated its electricity market and allowed for electricity aggregation with the passage of Assembly Bill 3 in 1999⁹⁷, which took effect in 2001. The Northeast Ohio Public Energy Council (NOPEC) is the largest energy council/aggregator of its kind in the country representing over 120 member communities (600,000 customers). NOPEC includes municipalities, residential customers and small commercial customers⁹⁸. According to NOPEC, it has brought its customers a 5 per cent savings over 2006-2008⁹⁹.

⁹⁵ Marin Clean Energy, "FAQ" <https://marincleanenergy.info/faq> Accessed September 5, 2012.

⁹⁶ Email, Patrick Stoner, "RE: Research Ques. on Community Choice Aggregation Program" July 3, 2012.

⁹⁷ OH Senate Bill 3, http://www.legislature.state.oh.us/BillText123/123_SB_3_ENR.html Accessed Sept. 18, 2012.

⁹⁸ NOPEC, "Electricity" <http://www.nopecinfo.org/electricity.html> Accessed September 17, 2012.

⁹⁹ Ibid.

There are two different ways to become a municipal aggregator in Ohio, through an "opt-in" model and through an "opt-out" model. First the local government must approve an ordinance or resolution that endorses the "opt-in" or "opt-out" approach (see text box above). Any municipality choosing the "opt-in" method must first negotiate rates and terms with a supplier or decide to purchase energy themselves. This method does not require voter approval. The law also allows for "affinity groups" which are interest groups like churches, or membership-based organizations that can aggregate energy for the entire group according to "Energy Aggregation For our Organization" from the OCC.

Municipalities choosing the "opt-out" method have significantly more steps than the "opt-in" method, but the "opt-in" method puts the onus on the customer to decide to join. After a municipality decides to endorse the "opt-out" method, then the issue must be approved at a local election by the voters. If approved by voters, the municipality must then develop a plan to implement the program. The plan must then have two public hearings. As part of the plan, municipalities must decide whether to select a supplier or provide energy service directly. Once the plan is formed, notices must be sent to customers notifying them of the plan and the procedure in place for them to opt-out of service if they so choose. If customers choose to opt-out before a contract is up with the municipal aggregator, the customer can be subject to a fee.

All successful aggregators are overseen by the Public Utilities Commission of Ohio (PUCO) and monitored by the Office of the Ohio Consumer Council (OCC). Each organization provides Ohioans with different information about aggregation programs, projected cost comparisons between CCA's and IOU prices in their service territory, and other information. PUCO provides

electric supplier rates and service comparisons by service territory in a section of their website called the "Apples to Apples Chart."¹⁰⁰ No other state mentioned in this paper provides information in one place that is as comprehensive as this.

New Jersey:

New Jersey deregulated its electricity market in 1999 under the Electric Discount and Energy Competition Act¹⁰¹. As part of this law, municipal aggregation was allowed under a "wet signature" program wherein counties and municipalities were allowed to aggregate with the endorsement of every customer within the territory, but a signature from every customer was required. This process very much resembles the "opt-in" programs available in other states.

In 2003, after the "wet signature" requirement was cited as a major hurdle to the development of successful aggregation programs (NJ Community Clean Energy Aggregation), the Government Energy Aggregation (GEA) act¹⁰² was passed. This law allowed for residential "opt-out" GEA programs and "opt-in" programs for municipalities. It also allows for more than one municipality to join together to form a program. Despite the law being passed in 2003, final regulations were not promulgated by the New Jersey Board of Public Utilities until 2008¹⁰³. Under the regulations, New Jersey does not require voter approval for GEAs; a city or county need only pass a resolution stating their desire to aggregate the electrical load of member customers, and then send a letter informing residents of the change in supplier.

¹⁰⁰ "Apples to Apples Chart" <http://www.puco.ohio.gov/puco/index.cfm/apples-to-apples/>. Accessed Sept. 22, 2012.

¹⁰¹ NJ P.L. 1999, Ch. 23.

¹⁰² NJ P.L. 2003, Ch. 24.

¹⁰³ N.J.A.C 14:4-6.

New Jersey GEA programs are unique in their responsibilities compared to other state programs. GEA's have no liability under the 2003 law and can request their energy suppliers to reimburse them for all the costs to set up the GEA. IOU's in New Jersey still read customers meters, deliver the electricity (the same in every other state) and directly bill customers. Additionally, a customer of a GEA faces no financial penalty to "opt-out."

The State of New Jersey provides no materials or guide to municipalities or customers beyond a letter template of what GEA's need to inform customers about regarding new programs. The regulations are, however, quite detailed and specific as to how aggregation programs need to be established. The Board of Public Utilities approves all contract documents involved between the municipality and the utility, as well as between the municipality and the third party supplier¹⁰⁴.

A group called CALL (Cooling America through Local Leadership) provides education, outreach and assistance to municipalities who are considering forming a GEA. To date, Plumsted Township is the first GEA to develop an aggregation plan and enter into a supply contract. Approved by the Township Committee in the summer of 2012, the Plumsted Municipal Utilities Authority will offer one year of service to approximately 3,150 residents, but no commercial or municipal accounts.¹⁰⁵ Since beginning research on this paper, several

¹⁰⁴ Email, Jonathan Cloud. "FWD: Research Question on your GEA Program" September 10, 2012.

¹⁰⁵ Ylvasiker, Peter. *Press Release, "Plumsted Township Awards Power Supply Contract That Will Save Township Residents \$400,000 in First Government Energy Aggregation Program in New Jersey"* October 12, 2012.

other townships, including Toms River, Montgomery, and Parsippany, are pursuing aggregation programs as well¹⁰⁶.

Illinois:

Illinois deregulated its electricity market in 1997 with the Illinois Electric Service Customer Choice and Rate Relief Law¹⁰⁷. This led to the creation of alternative retail electric suppliers (ARES) to help promote the competitive market created under the law. In 2009, the Illinois Power Agency Act 96-0176¹⁰⁸ was passed which allowed for "opt-out" programs for residential and small commercial customers who are not served by a municipal lighting plant. This created "opt-out" and "opt-in" aggregation plans in Illinois, similar to Ohio's. Illinois also passed "An Act concerning State government,¹⁰⁹" which specifically dealt with municipal aggregation programs.

The process to become a municipal aggregator requires each municipality wishing to join (or solo) to issue a referendum asking voters if the municipality should pursue an opt-out program.

The language is provided in section (a) of "An Act Concerning State Government." This

question is posed at a town election and voted on by the voters. If the question is approved, the municipality can move forward with an "opt-out" program. If the question does not pass, the

"Shall the municipality (or county) in which the question is being voted upon, have the authority to arrange for the supply of electricity for its residential and small commercial retail customers who have not opted out of the program?"

¹⁰⁶ Email, Jonathan Cloud. "FWD: Research Question on your GEA Program" September 10, 2012.

¹⁰⁷ 220 ILCS 5, Article XVI.

¹⁰⁸ 20 ILCS 3855/1-92.

¹⁰⁹ IL Public Act 097-0338 .

municipality may but is not required to move forward with an "opt-in" program. A municipality can also offer an opt-in program with passage of an ordinance but not requiring passage of a referendum.¹¹⁰

Once it is established which kind of program has been approved, the municipality issues a call for suppliers and develops the plan for aggregation in consultation with the Illinois Power Agency¹¹¹. The plan is then subject to two required public hearings and then once the plan is approved by the municipalities governing board, an RFP is issued by the municipality to choose a supplier. When the supplier is chosen then customers are required to receive a letter notifying them of their opportunity to opt-out of the program from the municipality. If more than one municipality chose's to form a municipal aggregation program, than each municipality must sign off on the plan.

PlugIn Illinois is a website which provides a status update on the communities and counties that either have or are currently pursuing a CCA program. According to the list¹¹², as of February 22, 2013 there are 471 municipal entities that have either started the process of becoming an ARES or who have already begun service. PlugIn Illinois also offers a list of comparison prices for every Retail Electric Supplier per service territory¹¹³.

¹¹⁰ Email, Christell Pound. "RE:ICC Website Contact Us Comment from Micaelah Morrill" Feb. 26, 2013.

¹¹¹ IL Public Act 097-0338 Section (b).

¹¹² <http://www.pluginillinois.org/MunicipalAggregationList.aspx>. Accessed Feb. 22, 2013.

¹¹³ PlugIn Illinois, "Retail Electric Supplier" <http://www.pluginillinois.org/offers.aspx?said=2>. Accessed Feb. 22, 2013.

In addition to the PlugIn Illinois information provided by the State, The Illinois Community Choice Aggregation Network (ICCAN) was created to help municipalities in Illinois to become CCA's. It is a private, academic & non-profit partnership made up of the Galvin Center at the Illinois Institute of Technology; LEAN Energy US a national non-profit focused on expanding CCA's into more states and communities; and the Perfect Power Institute.

Table 1. Comparing States Municipal Aggregation Programs

Comparing States Electric Municipal Aggregation Programs				
<u>States</u>	<u>Legalized</u>	<u>Opt-in vs. Opt-out</u>	<u>Regional Application</u>	<u>Approved Programs</u>
Massachusetts	1997	Opt-out	yes	6
Rhode Island	2002	Opt-out	yes	0
California	1997/2002	Opt-out	yes	1
Ohio	1999	Both	yes	120+
New Jersey	1999/2003	Opt-out	yes	1
Illinois	1997	Both	yes	0*

*at the time of this report's publication, Illinois had hundreds of applications with the state.

Chapter Five: Identifying the Challenges to Become a Municipal Aggregator in Massachusetts

In the sixteen years since passage of the Restructuring Act, only six municipal aggregators have been approved by DPU. However, many more municipalities have considered it and a few are still trying. With potential benefits at stake, why have so few municipal aggregators been created in Massachusetts?

To try to identify reasons why more municipalities have not become municipal aggregators, interviews were conducted with Maggie Downey, the Compact Administrator at the Cape Light Compact, and her counsel Audrey Eidelman. I also spoke with potential aggregators - Nat Karns from the Berkshire Regional Planning Agency (BRPA), which ultimately decided not to aggregate and Ken Elstein from the Hampshire Council of Governments (HCOG) which is actively pursuing an aggregation plan. Mr. Karns is also a resident of Lanesborough, a town in Berkshire County that is one of the most recently approved municipal aggregators in Massachusetts and offers his insights into the process as a ratepayer. Each offered insights into the hurdles they faced, or thought they would face as they pursued aggregation. Brian Murphy of Colonial Power, an electricity broker and consultant who has helped Lanesborough, Marlborough, Ashland, Lancaster and Lunenburg become municipal aggregators also provided feedback on his experiences. I also spoke to staff at various state agencies who wished to remain anonymous including, DPU, the office of the AG, legislative offices, and Courtney Feeley Karp, a DOER employee at the time of the interview. I also spoke with an NSTAR employee to provide the utility's perspective dealing with municipal aggregators.

Each of the people interviewed plays a slightly different role in municipal aggregation, and everyone had slightly different takeaways from their experience working on municipal aggregation. The takeaways are presented in the order in which they happen to try to highlight where in the process people interviewed saw issues or problems.

Step 1: *A vote must be taken at town meeting or by town council to begin the aggregation process.* Almost everyone interviewed listed the lack of knowledge about municipal aggregation by municipal officials and the public at large as a major hurdle to its expansion. This included the lack of information about municipal aggregation, and also about how electricity is bought and sold, and the potential risks and savings for municipalities.

Mr. Elstein and Mr. Karns pointed out that what towns needed is dedicated staff to work on municipal aggregation issues - educating residents and town board members, and developing a plan that would work best for the members, in addition to navigating the state application process. They stated that most municipalities do not have the extra staff or resources to help address these issues and neither felt that there were local technical resources available to them from the state. Mr. Karns pointed out that many of the towns in the BRPC are very small and the local boards of selectmen have little to no resources to take on looking into a municipal aggregation program, despite the Berkshire's high electricity rates.

Ms. Feeley Karp and Ms. Eidelman both reiterated that residents and municipal officials need more education on what exactly municipal aggregation is and how it is different and separate

from running energy efficiency programs and from being an energy co-operative or municipal light plant.

Mr. Murphy also pointed out that in his experience, municipalities get involved and interested in municipal aggregation for different reasons. One of the reasons that Lunenburg wanted to establish a municipal aggregation program was because it suffered heavy damages from the 2008 ice storm and wanted to cut as many ties with their utility as possible¹¹⁴. In Ashland, the Town Manager lived in Marlborough and liked what Marlborough was doing so suggested Ashland look into it¹¹⁵. These reasons differ from looking to create an energy efficiency program like the Compact. And according to the HCOG's website on municipal aggregation, the reasons they are looking to establish a municipal aggregator is, "Residential and small business customers will benefit from lower electricity prices and an optional green energy program when their municipalities join our bundled electricity program¹¹⁶."

Providing a better summary of what exactly municipal aggregation is and does could help more municipalities make better informed decisions about how it could help their municipality or serve as a tool to meet other goals.

¹¹⁴ On January 10, 2013 the Town of Lunenburg suspended their municipal aggregation program due to "market conditions" and reverted the entire load back to Unitil for at least 6 months.

<http://www.lunenburgma.gov/controls/NewsFeed.aspx?FeedID=103> Accessed March 3, 2013.

¹¹⁵ According to Colonial Power, Ashland has suspended its municipal aggregation program as of December 2012 and Marlborough has suspended its municipal aggregation program as of November 2012.

Electricity contracts are purchased in 6 month intervals. When a competitive supplier notices that default service will be cheaper than electricity available on competitive supply, they can recommend that a municipality revert back to default service for 6 months to take advantage of cheaper priced residential electricity. Changes in electricity prices can be due to many causes.

¹¹⁶ Hampshire Council of Governments, "Municipal Aggregation" <http://www.hampshirecog.org/programs-and-services/electricity-services/municipal-aggregation> Accessed March 24, 2013.

The interviewees were also asked about their experiences with regional program applications versus solo municipal applications under Step 1.

It was mentioned that people seem to trust their local government to respond quickly to a locally controlled problem, more than they trust state or other governmental officials to act in kind. Trust in local government could be useful for municipalities trying to form single municipal aggregation programs, versus applying with other municipalities that people may be unfamiliar with.

Ms. Feeley Karp and Ms. Eidelman also acknowledged that no regional applications have been approved or really even attempted with the exception of the HCOG since the Compact. They pointed out too that the Compact benefitted from a board made up of retired scientists and engineers who were able to fill in a knowledge gap about pieces of the electricity market that most municipalities do not have access to. This is due in large part to the Cape being a popular place to retire.

It was pointed out that any regional application would be easier to sell to cities and towns in areas where there already was a regional identification, like "Cape Cod" as opposed to just Sandwich; or "The Berkshires" versus just Pittsfield. When the BRPC started exploring the idea of a Berkshire wide municipal aggregation program they ran into two problems - one was that DOER would not lend their support to a regional application which will be discussed more in Steps 2 and 4; and two that the Berkshires' actually identify more in terms of North County,

South County and Central County and less as the whole "Berkshires." Many municipalities in the Berkshires despite having very small populations, want complete local control and home rule, regardless of whether that will help create more marketable electricity loads or not. Mr. Karns remarked that providing a mechanism so larger communities are willing to work with small communities could help improve everyone's chances for a better electricity deal.

In HCOG's case, simply keeping track of everyone for the intergovernmental agreement was an added burden. The HCOG started signing up towns in 1998 with fourteen municipalities who passed individual warrants approving the development of a regional municipal aggregation plan. Most of the work being done at the time was by local municipal staff and oftentimes volunteers, and unfortunately some local warrants were lost at the beginning. By 2000 there were 22 towns that had passed warrants, but there was no uniform warrant language and some of the actual warrants were still unaccounted for or out of date by the time the actual plan was filed. In April of 2013, 36 municipalities were signed up with the HCOG municipal aggregation plan and it now spanned five counties.

Step 2: *Once a vote is approved, then the town must move forward with developing an aggregation plan.* This is the step where the municipality develops the Plan in consultation with DOER and usually with outside help. The Plan development proved to be an easier task for some and an immensely difficult one for others. What was clear from my conversations was that the ease with which an aggregation Plan was developed, even with DOER's assistance, was very much determined case by case.

In Mr. Murphy's experience, municipalities always hire a consultant to do the work of developing the municipal energy aggregation plan. This could be done by the municipality if they hired an energy manager, but to his knowledge, this has never been done. In most cases, the municipality retains the services of a consultant, like Mr. Murphy to develop the Plan - and this is done through a public RFP process. It is then the responsibility of the hired consultant to work with DOER. According to Mr. Murphy, the plan development process should take about a year. Unfortunately, in the case of Lanesborough it actually took much longer and in the case of the HCOG, it remains to be seen.

There was also a perception felt by Mr. Karns and Mr. Elstein that DOER was not as supportive of regional applications and that there was a very long wait time with DPU (Step 4) for approval. While the BRPC was considering regional aggregation, Lanesborough, where Mr. Karns is a resident, was pursuing a municipal aggregation program, and it took them three years to complete.

Mr. Murphy also added that most municipal leaders think in terms of the municipal needs. They do not readily approach municipal aggregation thinking in terms of tailoring programs for residential, commercial and industrial customers which more accurately reflects how electricity is sold. Trying to create a more mixed load, meaning not just residential which can be pretty small, may help drive the cost down for everyone. In the Compact's experience, suppliers are always looking for package deals and blocks of customers, which is exactly what municipal aggregation is designed to offer. Especially in areas where there can be a diversified load of

both commercial (larger) and residential (smaller) customers can make a municipal aggregation account containing both more attractive.

Determining what a municipalities load make-up is can be difficult without information on electricity users and load make-up. DOER used to provide annual reviews of restructuring so that anyone who wanted to could go online and look up historical electricity information.

However, DOER has not posted any information on the effects of restructuring, including the effects on different customer sectors in almost six years. According to the last summary from 2007,

"From 2002 through 2007 the market continued to develop and at differing speeds for various customer groups... Clearly larger customers are buying more electricity from competitive suppliers. Residential customers are trailing well behind. The pace of development for these consumers can be attributed to the more extensive supplier resources to enroll, service, and supply electricity to smaller customers. There is also less room for suppliers to make money and for the customers to save money."¹¹⁷

This lack of available public information seems to be doing a disservice to not just municipalities who might be considering aggregating or who might be developing a plan, but also policy makers who might want an update on how well restructuring is working 15, 20 or 45 years down the road. And Section 134 of Chapter 164 of the General Laws state that, *"The division of energy resources shall furnish, without charge, to any citizen a list of all other supply options available to them in a meaningful format that shall enable comparison of price and product."*

¹¹⁷ MA DOER, "Summary of Competitive Market 2007," <http://www.mass.gov/eea/energy-utilities-clean-tech/electric-power/summary-of-competitive-market-2007.html> Accessed March 3, 2013.

DOER currently posts a monthly average of the utilities default service prices dating back to 2001. This is only helpful if a municipality wants to be able to compare their default service rates with those of other utilities or to historical rates. Information on competitive supply rates is not readily available. There appears to be an absence of easily accessible data for municipalities.

This feeling was reiterated by municipalities trying to get information like load or residence numbers involved because the information is either hard to find or not available. It requires interacting with the utility that is currently providing the service. When I spoke with someone at NSTAR, I was informed that they had not been involved in the development of any municipal aggregation plans despite having the Cape Light Compact and Ashland in their service territory. I was not able to speak to anyone from National Grid, WMECO, or Unitil who service the other current aggregators.

The ability to access data also brings up working with the utility. There is no written requirement in statute that says that any specific information has to be shared with the municipality by a utility.

Step 3: *When the plan is finished, then it must be reviewed by the citizens of the municipality.*

This step did not raise many concerns with people when brought up. Mr. Karns mentioned that during the town meeting he attended for the public review of the Lanesborough plan, no one objected.

Step 4: *After public review, the plan then goes to the Department of Public Utilities (DPU)*

where DPU can hold a hearing on the plan and where DPU ultimately approves the plan. This step seemed to mimic what some people experienced when dealing with DOER in Step 2, only more frustration was expressed with the length of time that DPU takes to review the final plans.

The DPU process for review took much longer than expected for Lanesborough and one of the reasons given for the time was that the DPU staff member assigned to review Lanesborough's plan left the DPU. Mr. Karns expressed his concern (and sympathy) that DPU simply was not prepared to deal with numerous municipal aggregation applications. Mr. Karns and Mr. Elstein commented on how dealing with two different state agencies and the various formalities associated with each felt like overkill for many small towns. In some cases, the process of having to deal with both agencies and the different steps required for each ended up scaring some towns off. Additionally, Mr. Elstein pointed out that for each interaction with DOER or DPU that meant another trip to Boston, because typically DOER and DPU do not go to towns to answer Plan development questions.

Once the plan is approved by the DPU, then the town solicits bids for competitive suppliers, and the mayor or town manager signs the contract.

Step 5: The town then develops the required opt-out letter that must go out to all residents, which is paid for by the supplier. After a certain number of days, the aggregation program goes into effect. No one interviewed commented much on these final stages of the aggregation process.

Energy Efficiency Programs

Despite the Compact being the only aggregation program actively operating an approved energy efficiency program, the discussion of them came up quite a bit in my conversations.

Ms. Downey talked about the many hurdles to being an energy efficiency program administrator. Many of her concerns centered on changes in reporting since passage of the Green Communities Act (GCA). The GCA required all energy efficiency (EE) program administrators (PA's) to submit three year energy efficiency plans to the Energy Efficiency Advisory Council (EEAC) and DPU on how SBC and other funds are spent. Passage of the GCA also impacted the reporting structure that municipal aggregators have. For the Compact, who is overseen by their board, this creates a situation where adhering to statewide goals and requirements from the EEAC have been different than the goals and desires of their board. One example from the Compact is their board wants to be fuel blind (meaning all forms of fuel, gas, electricity, etc.) when it meets certain EE goals, and the EEAC wants the focus of efficiency targets to be kWh from electricity. This complication is compounded because municipal aggregators have to build budgets starting from zero and the board has to approve the budget, not the EEAC.

The DPU and EEAC also require an annual report on how the plan is going. The Compact has been approached about providing EE programs for other municipal aggregators because single aggregation programs do not provide the scale for effective programs. Additionally, and especially with all the new reporting requirements, no one municipality has the capacity to

manage the paperwork required let alone the planning and work involved to run an EE program. The Compact struggles to meet the requirements as is, and they will manage \$83 million in EE funds over 2013-2015.

Managing the DPU and EEAC reporting requirements is a different experience for utilities that have entire departments to do the work. For the Compact, they have a staff of approximately 15 people, and the strain on resources is immediately felt and takes away from other EE work that could be done.

Ms. Feeley Karp and Ms. Eidelman highlighted that the Compact had been built from the ground up and served a very specific area. The EEAC was created to provide standards, goals, timelines, and to ensure that piecemeal EE approaches were not taken statewide. However they acknowledged that it was extremely difficult for municipal aggregators to keep up with all the reporting and all the paperwork required by the three year plans.

Like the Compact, the HCOG is offering a green energy option that will allow residents to contribute to a local fund to promote conservation and renewable energy. The HCOG may complement this program by developing an energy efficiency program in the future. However, Mr. Elstein did add that to create an energy efficiency program would require "a huge amount of staff time" and resources.

It was repeated by many that single municipalities looking to run their own energy efficiency programs face burdensome reporting requirements and human resource hurdles. Single

municipalities do not generally have the staff resources or the economies of scale to have a successful long term program individually. Mr. Murphy explained that despite a number of towns being interested in municipal aggregation and developing an energy efficiency program, across the state there is a serious problem with scaling the programs. Echoing the concerns heard by Ms. Downey and Mr. Elstein, Mr. Murphy reiterated that any new energy efficiency programs would need to be done on a larger scale.

Other Issues Facing Municipal Aggregators

Many of the questions I asked interviewees focused on the actual process municipalities had gone through to become a municipal aggregator (or not), and how that process related to DOER's Guide. During our conversations, other issues came up that went beyond the scope of the application process but are still relevant to municipal aggregators and can help inform and improve the process.

Ms. Downey highlighted that as a municipal aggregator, the Compact starts off at a competitive disadvantage compared to the distribution utilities because of migration risk & bad debt. The utilities have the power to reconcile costs and make themselves whole thanks to the Restructuring Act. It allows them to make up for costs from investments they had already made in transmission and distribution projects. There have been suggestions that certain costs, like transmission tariffs, that are incurred by all energy suppliers can be blended into the utilities distribution rates, which every ratepayer in a utility service territory pays. Thus, a customer of a municipal aggregator could pay the tariff twice. An example could be an imposed tariff, an “up-charge” by FERC to buy power from a certain generator to maintain grid reliability. Every

energy supplier would have to pay the tariff so customers of a municipal aggregator pay the tariff in the supply portion of their electricity bill. The utility would also have to pay the tariff, but it has been suggested that the utility could shift the “up-charge” to the distribution portion of service, to keep their service rates lower. If that is the case, then customers of municipal aggregators pay the “up-charge” in the service portion of their bill, and in distribution.

“For electric restructuring to lead to a successful competitive marketplace, municipal aggregators should not have to compete with the utility, which is supposed to be providing the service of last resort (default service).”~Audrey Eidelman

Currently the state does not take a prominent role in expanding the competitive supply market. The state also has no policies encouraging utilities to get out of the default service business. Ms. Feeley Karp and Ms. Eidelman stressed that there is not enough competitive supply, and it is very hard for municipal aggregators to try to compete with basic service rates - in fact, they suggested that municipal aggregators should not be trying to beat utilities on rates. As Ms. Eidelman said, *“For electric restructuring to lead to a successful competitive marketplace, municipal aggregators should not have to compete with the utility, which is supposed to be providing the service of last resort (default service)”¹¹⁸.*

It is worth noting that in a conversation I had with an NSTAR employee, it was stated that IOU's do not mark up the costs for customers in default service; meaning IOU's aren't making money providing default service. The utilities can purchase power in the wholesale market

¹¹⁸ Email. Audrey Eidelman. "RE: Ch.4 - identifying problems". March 14, 2013.

while municipal aggregators must enter into contracts with competitive suppliers to access the wholesale market.

The employee from NSTAR also highlighted the “migration risk” issue presented by municipal aggregators because of Massachusetts’ “opt-out” program from a utility’s point of view. At any point customers of a municipal aggregator could choose to opt-out of the municipal program and come back to the IOU. This means the IOU serving a municipal aggregator must build the risk (potential load) of returning customers into their wholesale contracts. To date, residential customers of the Compact make up about five per cent of NSTAR’s residential load in the SEMA¹¹⁹ zone. NSTAR, as stated before, has not been directly involved in the development of any municipal aggregation plans nor are they required to be by statute or the process, but they have been able to participate in the DPU proceedings to approve the plans. However, NSTAR worked with the Compact and DPU to develop an operating agreement to govern implementation of the EE program.

The BRPC and the HCOG both face potential service territory issues with regional municipal aggregation proposals. Each utility has a set service territory and in the case of BRPC and HCOG, the combined member towns span more than one utility’s service territory. Whereas the Compact is solely in NSTAR’s territory, BRPC and HCOG each have member towns in Western Mass Electric (WMECO) and National Grid’s service territory. This could result in two separate supply contracts because technically there are two separate loads - one per distribution

¹¹⁹ SEMA is NSTAR’s Southeastern Massachusetts service territory

service territory. There is nothing to prevent DPU from approving a plan solely because of this issue, but it was raised as a concern by both Mr. Karns and Mr. Elstein.

Mr. Murphy also offered a few suggestions on how to make the process easier. He mentioned that eliminating state oversight of the power supply program could help the process, despite that being very unlikely. He also suggested that removing the requirement that DOER consult on the plan development could help. That would require removing it from statute and would leave only DPU to provide state oversight on the Plan and the application. Mr. Murphy echoed other's points that the state does not make any strong efforts to get utilities out of default service or help support the competitive market. Mr. Murphy also suggested allowing any competitive supplier serving a municipal aggregator the ability to lock into a longer term contract instead of the six month contracts that are currently required. This was reiterated by Ms. Downey and Mr. Karns as a way to better compete with default service prices since utilities can, under certain circumstances, enter into longer term contracts than competitive suppliers.

In his experience, Mr. Murphy has found that customers of municipal aggregators are more informed and engaged consumers of electricity than people who have no choices presented to them.

No one who was asked listed the current DOER Guide as helpful, and most commented that it was outdated. The Feasibility Study mentioned in the Guide was highlighted as being rarely done and an unnecessary step. The role of DOER and DPU and when to use each agency was also not completely clear.

Another critique of the process was that it was hard to predict how the process would go. Part of this was because there have been so few approved municipal aggregation plans, but it also appeared that there has been an inconsistency with approved plans, or at least that is the perception.

Finding Massachusetts Electricity Data

In my own research, just finding information on municipal aggregation in Massachusetts is difficult. Currently if someone types in, "municipal aggregation" on the state's www.mass.gov website the first thing that comes up is the Guide and the second is the Compact's filing with DPU. The Guide is out of date, and starting with a DPU filing is overwhelming if someone does not know what they are looking for.

It is equally difficult to find information on competitive supply rates. In Massachusetts, information about active competitive suppliers is available by distribution territory on the state website under, "Active Licensed Competitive Suppliers and Electricity Brokers". A person must click on their distribution company, which takes them to the distribution company's website. Here contact information for the competitive suppliers is made available, but nothing else. NSTAR lists competitive supplier contact information and its own current prices, but no one else's. Western Mass Electric Company (WMECO) requires people to go to two additional pages in order to find a list of active competitive suppliers in their area. WMECO and National Grid provide no rate information for any company including themselves, although National Grid provides contact information. The company Unitil, as it is generally known, is not even

listed, instead appearing as Fitchburg Gas & Electric; and the link to the "competitive supplier" list appears to be faulty as it links to the Unitil home page with no connection to competitive suppliers.

DPU does provide a list of all competitive suppliers in Massachusetts; unfortunately, their own disclaimer states that it is the list of everyone ever approved, not necessarily who is active. To find out who is active, it is better to check with the distribution company.

Currently, someone in Massachusetts would have to go to the "Active Competitive Supplier" page, then to their distribution company's page, contact each Competitive Supplier for rates, and then go back to the main "Electric Supply" page. Then visit the "Default Service Rates" page and compare prices from the Competitive Suppliers with their Default Service rates, except in the case of NSTAR. This is arduous and time consuming and not consistent with the language from the Restructuring Act in section 134 of Chapter 164, "The division of energy resources shall furnish, without charge, to any citizen a list of all other supply options available to them in a meaningful format that shall enable a comparison of price and product."

The next chapter will attempt to address some of the issues brought up here and offer recommendations on ways to improve the municipal aggregation application process based on comments in this chapter, practices from other states in Chapter Four and from information in Chapter Three.

Chapter Six: Final Recommendations

Based on the previous chapters, there appears to be room for improvement in the municipal aggregation application process, and the tools that are used to educate consumers and develop the programs. This paper does not attempt to prove that municipal aggregation is the best form of procuring electricity. Municipal aggregators do provide the public with a way to invest in a locally controlled public entity - not a company answering to private shareholders. They also can increase competition in the electricity market and provide another avenue to support renewable energy.

The issues that were brought up the most in the interviews were: lack of education for and awareness by municipal officials and the public at large on what municipal aggregation is; challenges in the application process dealing with state agencies; lack of updated data available to municipalities and the public; and difficulties of managing energy efficiency programs for single municipal programs. The recommendations below are designed to address some of these issues with the application process. I developed these recommendations based on my interviews, review of policies in other states where municipal aggregation programs are expanding, and evaluation of existing Massachusetts policies and statutes.

Information & Education

The task of educating people on aggregation does not have one simple solution. Nor is any one actor in the process of becoming a municipal aggregator solely responsible for educating people. I believe many actors can and should help better inform the public. This includes more available information from the state, utilities and from people currently engaged in municipal aggregation.

There should be many options for presenting and receiving more data and information. Below are a few options that are designed to increase education. Each was chosen because of the likelihood of being used, and because in some cases the information was specifically mentioned by interviewees as missing and potentially useful.

Information & Education: History & Market Trends

The "Summary of the Competitive Market" which DOER produces should be updated annually and made available by the state and utilities' on their respective websites. People should have access to information about what is happening and has happened in the electricity market. The information has not been updated since 2007, does not take into account any municipal aggregators that were formed since the Compact, and does not reflect changes in the electricity market since passage of important legislation. Information that lets people know that municipal aggregation is growing and being adopted more places is useful and can provide more resources to communities considering forming a municipal aggregation program.

Information & Education: Municipal Aggregation Webpage

The creation of a webpage dedicated to municipal aggregation would be extremely useful. Currently if someone types in, "municipal aggregation" on the state's www.mass.gov website, the first thing that comes up is the Guide and the second is the Compact's filing with DPU. A more comprehensive site dedicated to municipal aggregation with all of the necessary information to start a program would provide a "one stop shop" for information. It would streamline more complete information all in one spot. A good model is the already successful "Green

Communities Program" webpage which has links to information, statutes, the application process, benefits, loans, and how to get assistance. Essentially, I envision all information requested or created in this chapter to be included on the webpage.

Additionally, some information that would be useful for a municipal aggregation website already exists - including the "Description of the Restructured Electric Industry," although an update on the electricity purchasing requirements since Restructuring would be helpful. The website should also include the default service rates broken down by year and month by provider. This page would also need to include updated tools, a glossary, and competitive supplier comparison information.

The website should be found under the Executive Office of Energy and Environmental Affairs. A more detailed outline of how the webpage could be developed and managed is detailed below in Application Process: Staff & Money.

Information & Education: Pricing & Data

Information about pricing is also needed. In conducting research on other states, Ohio had by far the most comprehensive information format for consumers. In its "Apples to Apples" chart, Ohio's public utility commission (PUCO) lists the rates of all competitive suppliers along with the length of contract term to obtain said price, contact information (including website and telephone number) and offer details. Each service territory has its own page and the rates are updated weekly.

In Massachusetts there is no uniformity for providing information on competitive suppliers or alternative electricity prices, and the state plays little to no role in providing this information to consumers. Having to check multiple websites simply to find the names of potential competitive suppliers is onerous. It is also not transparent and ultimately incomplete information because only the name is obtained, not necessarily contact information, active status or current rates. No real comparisons to Default Service can be made.

If DPU were to create pages like Ohio's, where the state managed information on competitive suppliers by service territory, that would greatly improve access to information. It would provide a more uniform presentation of the information in a more accessible and meaningful way. Additionally, streamlined information is more in keeping with language in Section 134 of Chapter 164, "The division on energy resources shall furnish, without charge, to any citizen a list of all other supply options available to them in a meaningful format that shall enable a comparison of price and product." Ohio's "Apples to Apples" charts could serve as a very useful template. A copy is provided in Appendix 2.

Information & Education: New Municipal Aggregation Tools

The current Guide provided by DOER is out of date and not easy to use. It is 42 pages long and references agencies that no longer exist. Based on examples from other states, the guide should be broken down into shorter, more accessible pieces and reformatted for different audiences. The audiences should be the general public and municipal leaders. With information from this report, along with existing information from DOER and DPU, I drafted new "Guide" materials. These new "Guides" should be made available on the "Municipal Aggregation" webpage. They should

be available as a pdf so that people can download and print them off as well. Examples of new "Guides" are found in Appendix 3.

These shorter "Guides" break down the process into the actual steps required and should be less likely to overwhelm people. Additionally, breaking down the Guide allows information to be presented to targeted groups. Not everyone interested in municipal aggregation needs every single piece of information about the entire process spelled out. These new "Guides" provide education on what municipal aggregation is, and why it is an option.

Application Process

After reviewing other states municipal aggregation processes, I found that Massachusetts is unique by requiring two state agencies in development and approval of a plan. Interviewees mentioned difficulties getting information from and navigating both DOER and DPU during the application process. Currently DOER and DPU do not and often cannot consult with each other due to legal reasons.

It seems more communication is needed between the agencies and with agencies and applicants. One option could be to consolidate the plan development and approval into a "one-stop shop" process for applicants. This one-stop process would need strong coordination between DPU, DOER, and the AG and the staffing capacity to ensure consistent implementation and adequate support for applicants.

In an attempt to streamline and improve communication during the application process, the below suggestions seek to work within and around existing state practices while still maintaining the legal integrity required to protect ratepayers.

Application Process: Interaction with state agencies

To develop a consistent, streamlined process with coordination among all the relevant agencies, DPU should convene an internal review of its municipal aggregation application procedures with input from a multi-stakeholder working group that includes the DOER, AG, and current and potential aggregators. This review should result in adoption of a new set of guidelines for the aggregation process.

Application Process: Staff & Money

One way to achieve improved communication and information sharing could be to create a new staff position dedicated to managing municipal aggregation inquiries and information. The position would be responsible for managing the municipal aggregation website, updating tools and information as necessary and being the first contact for municipalities interested in aggregation.

I suggest putting the position at DPU because they have final approval over the plan. However, there could be reasons to also have the staffer at DOER. No matter which agency the position is located, I suggest they work in an inter-agency capacity between DPU, DOER and possibly the AG. There is precedence in the current administration of hiring staff to work between agencies and that is what this person could do. It is also assumed that this staff person could continue to be

a contact for municipalities in dealing with DPU throughout the entire application process.

To fund the staffer's position and the subsequent work that they will do, I propose the following: Redirect .005 per cent of each Regional Greenhouse Gas Initiative (RGGI) to fund electricity educational programs that are already outlined in section 11D of chapter 25A. Based on the 2012 RGGI auction this would result in an annual contribution to the Fund of \$133,653. I recommend offering a salary between \$55-60,000/year to take into account fluctuations in the RGGI market. The funds should also support work done by the staffer, including management of the new website, training tools maintenance and the ability to cover travel to go to towns interested in starting a municipal aggregation program. They could also assist DPU with its internal review of communications and municipal aggregation plan approval process.

Table 2: Massachusetts RGGI Auction - 2012 & Staff Funding

Auction Dates	Results	2012	RGGI Auction	Staff Funding %
<u>DATE</u>	<u>ALLOWANCES</u>	<u>CLEARING PRICE</u>	<u>AUCTION PROCEEDS</u>	<u>0.005%</u>
December 2012	3,286,308	\$1.93	\$6,342,574.44	\$31,712.87
September 2012	4,044,912	\$1.93	\$7,806,680.16	\$30,033.40
June 2012	3,588,895	\$1.93	\$6,926,567.35	\$34,632.84
March 2012	3,862,579	\$1.93	\$7,454,777.47	\$37,273.89
			Total:	\$133,653
Source: DOER				

To establish the funding, the following legislation would need to be filed.

"SECTION 1. Section 22 of Chapter 21A of the General Laws, as appearing in the 2012 Official Edition, is hereby amended by inserting after subsection (c) clause (2) the following: -

(3) Notwithstanding this section, the department, in consultation with the department of energy resources and the department of public utilities shall set aside .005 per cent of each auction allowance to be used to fund consumer education programs as outlined in section 11d of Chapter 25A of the general laws.

(i) the department of public utilities in consultation with the department of energy resources and shall oversee said educational programs."

This language allows DPU to consult with DOER and use the RGGI funds to fulfill consumer education requirements through the staffer. Energy Efficiency Program Administrator's may take issue with using RGGI funds to pay for this position but starting with a request of .005% allows for negotiating room. Additionally, the RGGI funds are a stable funding source which won't require additional ratepayer charges, which present different political hurdles. Any money leftover would likely revert back to the General Fund unless a more specific Fund could be created within DPU. This Fund would be able to not only hold remaining funds from the RGGI surcharge, but also receive donations and additional appropriations. Creating a dedicated funding stream for this program as opposed to ad hoc monies or relying on legislative appropriations is important to ensure success.

Energy Efficiency Programs

Many interviewees brought up municipal energy efficiency (EE) programs. For the Compact, controlling the EE money was one reason they wanted to pursue municipal aggregation, and other towns have expressed similar interest. The Compact brings back millions of dollars to their communities for EE projects which they locally control. Unfortunately, no other aggregators have pursued an EE program. People identified two major reasons: lack of economy of scale in

providing the program and the burden of the state's reporting requirements.

The Compact is the only municipal aggregator that runs its own EE programs. With more data from the state and utilities on usage and cost, a clearer picture could emerge on what it actually takes to start a solo municipal EE program. Increasing access to data for EE programs should be explored but it may require the state to force utilities to share information and develop ways to share it constructively with the public. However, some ideas were suggested on how to address economies of scale and reporting during my interviews and reviews. They are detailed below.

Energy Efficiency Programs: Creating Economies of Scale

People identified lack of economies of scale as a major factor in deciding not to pursue solo municipal EE programs. A statewide EE program serving solo municipal aggregators could help with the scale problem. One way to do this would be to create a clearinghouse for EE funds at the state – possibly at a new agency (although this comes with its own set of hurdles) or at an existing agency – possibly the Mass Clean Energy Center. While this new EE entity may solve the EE scale problem for municipal aggregators, it should be noted that Massachusetts has already been named the top state in the country for energy efficiency since 2011.

Statewide EE Program

Vermont has the nation's first statewide energy efficiency utility called Efficiency Vermont¹²⁰. DOER or DPU could conduct a study on the feasibility of creating a similar program in

¹²⁰ Efficiency Vermont, "About Us" http://www.efficiencyvermont.com/about_us/information_reports/how_we_work.aspx. Accessed April 25, 2013.

Massachusetts. In such a study, it would be important to define if Massachusetts should operate an efficiency utility exactly like Vermont's, or simply explore the idea of centralized statewide EE program. Efficiency Vermont's services are paid out per person. Massachusetts may want to consider a central collection agency – but pay out EE funds to participating towns and/or municipal aggregators and let the towns run the programs. This is an important distinction because towns in Massachusetts have expressed interest in retaining their own EE funds, and if a program were created that mirrored Efficiency Vermont's exactly, that would not be an option. Additionally, Vermont had to pass legislation to establish Efficiency Vermont, and I believe Massachusetts would also. Municipalities may offer more support for an option where they have more control over EE funds.

Joint Pilot Program

Another way to address the economies of scale could be to allow existing solo municipal aggregators to combine their EE funds and operate their own joint aggregation EE program. It could act like the Cape Light Compact's but with separate aggregators. This would help with the economy of scale by creating a larger pot of money to work with; however it does raise some questions. How would the money be allocated? Would economies of scale be achieved if municipalities were too far apart? How would success be measured since different municipalities have different needs? To address these and other issues the program should start out as a pilot, and guidelines should developed by EEAC, DPU and the AG. I suggest using the Cape Light Compact's Intergovernmental Agreement as a guide in developing regulations.

Energy Efficiency Programs: Reporting Requirements

Currently Program Administrators (PA's) who run energy efficiency programs must file three year efficiency plans that are approved by the EEAC and annual reports to the DPU. Reports are required to ensure that statewide efficiency goals are being met, despite the state exempting municipal lighting plants from the same reporting requirements. Meeting EE goals is very important, but without additional state resources, it is difficult for municipalities to do the reporting paperwork. Municipal aggregators do not generally have large staffs or money to hire people to handle the extra paperwork. One way to ensure standards are met while easing the burden on municipalities is to provide resources to municipalities to help with reporting.

The mechanism I proposed to fund the state aggregator staff position could also be used to establish a streamlined reporting system. It is however beyond the scope of this thesis to determine the actual needs of the reporting or the costs associated with providing a uniform reporting data system.

If a staff person is hired by the state, then their responsibilities could include overseeing an adjustment in reporting requirements for all municipal aggregators. A task force should be put together to determine if there are ways to ease the reporting burden on municipal aggregators while still maintaining transparency and meeting EE goals.

These recommendations were designed to help improve different parts of the municipal aggregation process as it exists today. The final recommendations are based on information previously outlined in this report, while attempting real world applications where possible.

Chapter Seven: Conclusion

For my thesis, I reviewed the current process to become a municipal aggregator in Massachusetts. Municipal aggregators spur additional competition in the electricity market, increase public control of electricity purchases, and are in a unique position to provide consumers additional options to promote specific types of electricity generation, including renewables. Municipal aggregation can provide all of these things, yet there have only been six approved programs in Massachusetts since they were first allowed in 1997. To ascertain why so few existed, I conducted research on the process to become a municipal aggregator in Massachusetts.

I began by providing a quick overview of the electricity grid and the flow of electricity ownership when municipal aggregators are involved. I then provided a historical review at both the federal and state level of electricity market organization and how municipal aggregators came to be in Massachusetts. From there I conducted a review of the application process in Massachusetts, as it is spelled out according to the Department of Energy Resources "Guide" and based on information from interviews. I also researched the longest running municipal electricity aggregator in the country, the Cape Light Compact. I then reviewed the applications processes in the five other states that allow for municipal aggregation: Rhode Island, California, Ohio, New Jersey and Illinois to see how they compared to Massachusetts'.

Based on state regulations, best practices from other states, and feedback from interviews, recommendations were developed to help improve the application process in Massachusetts. What appears to be needed most is more access to information, more education, and better

communication about municipal aggregation. I created new education tools and offered suggestions on how to improve communication and information availability. I learned a lot about the municipal aggregation process in Massachusetts and hope that state and municipal officials find some of the materials presented and created in this report useful. At the very least I hope that this report can serve as a tool to educate people about electricity and municipal aggregation and the positive impacts it can have for everyone.

Appendix 1. **MUNICIPAL AGGREGATORS IN THE ELECTRICITY MARKET**

Step 1: There is an approved municipal aggregator (ex. Marlborough) with an electricity load of 100,000 kWh for 23 hours a day made up of residential and commercial customers.



Step 2: The municipal aggregator signs a contract with a consultant or a licensed electricity broker, (Consultants can be electricity brokers but are not necessarily.) The consultants' job is to provide the municipal aggregator with information on electricity competitive suppliers, ideally the lowest priced supplier. Essentially, these electricity consultants/brokers play matchmaker between residents of the town through the municipal aggregator and electricity suppliers.
(ex. of electricity consultant is Colonial Power)



w/Electricity
Broker

Step 3: The electricity broker solicits bids for the municipal aggregator's 100,000 kWh load from competitive suppliers. (ex. of competitive supplier is ConEdison Solutions)



Step 4: The competitive suppliers buy electricity at the wholesale market based on the size of the load and sell it to the customers of the municipal aggregator. The municipal aggregator makes sure that the contract is adhered to and everything goes smoothly. Because the price of electricity is constantly changing, electricity may be purchased at different times, which affects the overall price.

Competitive suppliers buy most of the electricity at wholesale because it is cheaper than at retail. To be a competitive supplier in Massachusetts approval must be obtained by the DPU. If the competitive supplier needs to buy more electricity, then they go to the retail market which is run by ISO-NE. Electricity sold at retail is competitively bid and tends to be more expensive than electricity sold at wholesale.

Duke Energy Electric Apples to Apples Chart

Current Supplier Offers

Publication Date: April 22, 2013

The chart below reflects the current supplier rate offers provided by the suppliers to residential customers in the Duke Energy service area.

Please refer to your most recent bill for your current price to compare.

Price to Compare

In order for you to save money, the new supplier's rate needs to be lower than the Price to Compare rate shown on your bill. The Price to Compare is calculated based on the total amount you would no longer pay your utility company for the generation portion of your electric supply if you choose another supplier, divided by the kilowatt hours used.

The calculation determining the Price to Compare varies by utility company. As always, you will still be responsible for the utility company distribution charges and any related riders on your utility bill. Please consult the utility's web site for specific information. As with any contract, read and understand all terms and conditions before signing up with a supplier.

Please be advised that if you are currently enrolled in the Percentage of Income Payment Plan (PIPP PLUS), you are not eligible to enroll with or switch to an alternate supplier.

If you are currently enrolled with an alternate supplier, and want to enroll with a different supplier prior to the expiration of your current contract, you may be subject to an Early Termination Fee.

Electric Apples to Apples Charts

Published offers are subject to change without prior notice. Consumers should verify offers with the supplier before signing a contract. As with all contracts, consumers should carefully read and understand all terms and conditions before signing any forms or agreeing to enroll with a supplier for electric service.

Note: The electric apples to apples charts reflect the most recent available offers from marketers in each service territory, and are updated on a weekly basis.

Before choosing a supplier, please review the information on the Choosing an Electric Supplier page.

The PUCO is not responsible for selections you make based on the information contained herein.

Step 1: Compare the supplier offers contained in the chart with the "Price to Compare" shown on your electric bill.

Note: The "Tariff" code referenced in some of the Offer Details can be found on your monthly electric bill, under the charges from the utility.

Step 2: In order for you to save money, the new supplier's rate needs to be lower than the Price to Compare rate shown on your bill.

Duke Energy Service Area Offers

<u>Supplier Name</u>	<u>Current Offer</u>	<u>Contract Term</u>	<u>Offer Details</u>
AEP Energy PO Box 3489 Chicago, IL 60654 1-855-285-9013 www.aepretailenergy.com	Price of \$0.0535 per kWh	12 months	This offer is for residential RS customers of Duke Energy only. Enroll online at http://www.aepretailenergy.com/lowprice12 Early Termination Fee: \$10 per remaining months
AEP Energy PO Box 3489 Chicago, IL 60654 1-855-285-9013 www.aepretailenergy.com	100% Wind Product. Price of \$0.0579 per kWh	12 Months	This offer is for residential RS customers of Duke Energy only. Enroll online at http://www.aepretailenergy.com/dukegreen Early Termination Fee: \$10 per remaining months
AP Gas & Electric 6161 Savoy Drive, Suite 500 Houston, TX 77036 877-544-4857 http://www.apge.com	\$0.0665 per kwh	12 Months	To Enroll call 888-797-4537 Early Termination Fee: None
Border Energy Electric Services, Inc. 888-901-8461 http://www.borderenergyelectric.com/	Fixed rate of \$0.0564 per kWh through December 31, 2014	Through December 31, 2014	Enroll online at: http://signup.borderenergyinc.com/DUKE_ex.aspx Early Termination Fee: \$125 This offer is for residential RS customers of Duke Energy only.

Municipal Aggregation



MUNICIPAL AGGREGATION FACT SHEET

Office of MA Public
Utilities

Boston, MA
website:

www.massmuniagg.org

email:

info@massmuniagg.org

A Guide for Municipalities

In Massachusetts, municipalities are allowed to combine their citizens into a larger group to buy electricity. This is called "Municipal Electricity Aggregation." Buying electricity in larger amounts may allow for better prices for everyone.

WHO CAN AGGREGATE?

In Massachusetts, any municipality can create a municipal electric aggregation program unless they are served by a municipal lighting plant.

WHY AGGREGATE?

Buying electricity in bulk may help aggregated groups to reduce marketing and administrative costs which gives the aggregated group greater buying power. The reduced costs may then be passed on to individual customers in reduced electricity prices.

HOW TO BECOME A MUNICIPAL AGGREGATOR

STEP 1: Get a vote at town meeting approving the development of a municipal aggregation plan. If a regional plan is being developed, each town must get a vote in favor of aggregation.

STEP 2: Work with the DPU to create an aggregation plan. The plan must include an outline of it's structure, operations, funding, rate setting

and other costs to participants. It must also detail how the aggregator will handle agreements with other entities; rights and the responsibilities of program participants; and how the program will terminate. This is often done with the help of a hired consultant. Call DPU to get more information on approved consultants or visit, www.massmuniagg.org.

Municipal Aggregation



MUNICIPAL AGGREGATION FACT SHEET

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Utilities

Boston, MA
website:

www.massmuniagg.org

email:

info@massmuniagg.org

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STEP 3: Once the plan is developed, then it must go before the public.

At this time the municipality should start looking for suppliers to find the best available rates on electricity.

STEP 4: After the public views the plan, then DPU can hold hearings on the plan.

STEP 5: Once the plan is approved, the Municipality enters into a contract with a competitive supplier, and before service can start, the supplier must send customers in the municipality a letter explaining the changes in electricity service.

In Massachusetts, municipal electricity aggregators operate what are called, "**Opt-Out**" programs. This means that once a municipal aggregation plan is in effect, it is up to the customers to choose not to join. That is why a letter must be sent.

Once the letter is sent and customers have been informed, the aggregation can begin!

Billing will still be done by the utility.

WHAT SHOULD MUNICIPALITIES CONSIDER:

Before considering aggregating electricity, think about:

- ~ What are the potential savings for customers?
- ~ What are the best ways to keep residents educated and informed about the program?
- ~ Determine what resources are needed for a successful program.
- ~ Review the municipality's electricity data.
- ~ Weigh the pro's and con's of creating a single municipality versus trying to join up with other municipalities.

Call the DPU or email them at info@massmuniagg.org for free advice and educational tools.

Municipal Aggregation



MUNICIPAL AGGREGATION ABBREVIATIONS

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ABBREVIATION

AG: Attorney General

CMR: Code of Massachusetts
Regulations

DSM: Demand Side
Management

DPU: Department of Public
Utilities

DOER: Department of Energy
Resources

EE: Energy Efficiency

EEAC: Energy Efficiency
Advisory Council

IOU: Investor Owned Utility

ISO-NE: Independent Systems
Operator, New England

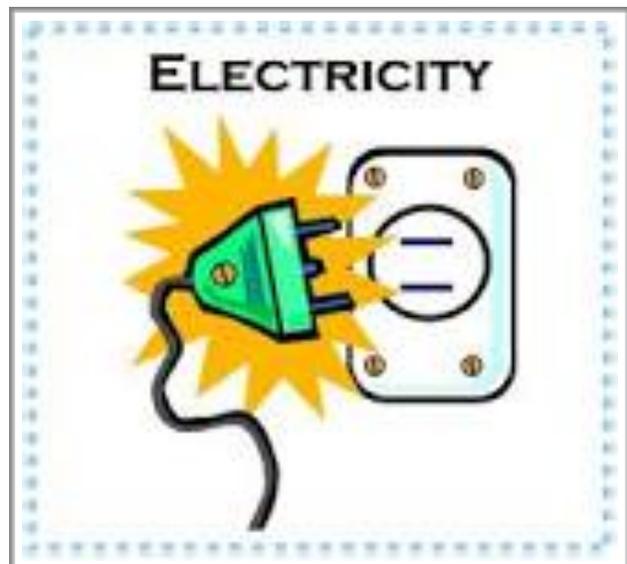
FERC: Federal Energy
Regulatory Commission

MGL: Massachusetts General
Law

PA: Program Administrator

SBC: Systems Benefit Charge

RPS: Renewable Portfolio
Standard



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MUNICIPAL AGGREGATION GLOSSARY

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GLOSSARY

Competitive Supplier: an entity licensed in Massachusetts by the Department of Public Utilities to sell electricity and related services to customers.

Default Service: the generation service that is provided by distribution companies to those customers not receiving competitive generation.

Demand: The amount of power consumers require at a particular time. System demand is measured in megawatts (MW). Same as load.

Distribution: The delivery of energy to retail customers

Distributed Generation: Electrical generation that feeds into the distribution grid, rather than the bulk transmission grid, whether on the utility side of the meter, or on the customer side.

Electricity Broker: an entity licensed in Massachusetts by the Department of Public Utilities to facilitate or arrange for the purchase and sale of electricity and related services to customers but is not licensed to sell electricity to customers.

Generation: the power plants that create the electricity that is ultimately transported to customers (homes and facilities) in Massachusetts.

Kilowatt (kW): A unit to measure the rate at which electric power is being consumed. 1 kw = 1000 watts.

Kilowatt Hour (kWh): The basic unit for pricing electric energy; equal to 1 kw of power supplied continuously for 1 hour. Or the amount of electricity needed to light 10 100-watt light bulbs for 1 hour.

Load: The amount of power demanded by consumers. Same as Demand.

Load serving entity: Any entity providing service to the load.

Megawatt (MW): One megawatt equals 1 million watts or 1,000 kilowatts.

Municipal Aggregator: the method by which local and county governments can buy electric power on behalf of the consumers within their borders in Massachusetts.

Municipal Aggregation



MUNICIPAL AGGREGATION GLOSSARY

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GLOSSARY

Renewable Energy Portfolio Standard (RPS): A state policy that requires a certain percentage of the state's electricity to come from renewable energy. In Massachusetts, it is a statutory obligation that suppliers (both regulated distribution utilities and competitive suppliers) obtain a percentage of electricity from qualifying Units for their retail customers. Suppliers meet their annual RPS obligations by acquiring a sufficient quantity of RPS-qualified renewable energy certificates (RECs).

Retail market: state markets; sale of power directly to customers.

Transmission: The process of transporting wholesale electric energy at high voltages from a supply source to utilities.

Wholesale market: state and federal markets; large interconnected systems of power lines and power plants owned by many companies.

Municipal Aggregation

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WHAT IS MUNICIPAL AGGREGATION?

Municipal aggregation is the process in which customers join together to buy energy, in this case electricity. The contract is negotiated through the municipal government, instead of a utility.

A town vote is required to move forward with developing a municipal aggregation plan.

WHAT DOES A MUNICIPAL AGGREGATOR DO?

A municipal aggregator acts as an agent for residents by reviewing electricity supplier options, negotiating offers and making decisions about purchasing reliable energy services on behalf of the residents. The municipal aggregator enters into a contract that is between individual customers and the supplier at the price negotiated by the aggregator.

WHO CURRENTLY BUYS MY POWER?

Unless you have chosen a competitive supplier, the utility in your area purchases your electricity, delivers it to your meter and sends your bills. Under a municipal aggregation program, the utility will still deliver your electricity and send you a bill, but the municipal aggregator will purchase your electricity, which will be reflected on your bill.

WHY DO COMMUNITIES AGGREGATE?

Buying electricity in bulk may help aggregated groups to reduce marketing and administrative costs which gives the aggregated group greater buying power. The reduced costs may then be passed on to individual customers in reduced electricity prices.

WHO CAN START A MUNICIPAL AGGREGATION PROGRAM?

Massachusetts' 1997 Restructuring Act allowed for either a single municipality or municipalities joining together to form a municipal aggregation program.

Residents served by a municipal lighting plant are not eligible to participate in a municipal aggregation program.



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HOW DOES MY CITY OR TOWN BECOME A MUNICIPAL AGGREGATOR?

First, a municipality must get an affirmative vote at town meeting to proceed with developing a municipal aggregation plan. Once the vote is confirmed, then the municipality can start creating a plan that will outline the municipal aggregation program, and include the operations and governance of the plan. Municipalities can hire consultants to help, and this is done in consultation with the Department of Public Utilities (DPU).

While the plan is being developed, the municipality issues requests for bids from electricity suppliers so they can select the most qualified supplier.

Once the plan is complete, then the municipality presents it to the public. From there, the final plan, with any changes suggested by the public, is subject to approval from the DPU, who also holds a public hearing on the plan.

After the plan is approved by the DPU, then municipal aggregator enters in a contract with an electricity supplier, residents will receive a letter in the mail informing them that their power supplier is changing and that they have the option to "opt-out" of the program at any time, and municipal aggregation begins.



WHAT DOES "OPT-OUT" MEAN?

Massachusetts' law allows for "opt-out" aggregation programs, which means that when a municipal aggregation program is approved by a town vote, the final contract will automatically enroll every resident into the program. If a resident decides they do not wish to participate in the aggregation program, they must choose to "opt-out." This can be done by contacting the municipal aggregator.

HOW CAN I GET MORE INFORMATION ON MUNICIPAL AGGREGATION?

Go online to www.massmuniagg.org or email the DPU at: info@massmuniagg.org for additional information and tools to help start the municipal aggregation process in your community.

Office of the MA Department of Public Utilities
Boston, MA



email: info@massmuniagg.org
website: www.massmuniagg.org

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