Attachment A

Cambridge Community Choice Aggregation

Exploring the Concept

January 29, 2013

Cambridge City Council - Environment Committee -
Prepared by Chair, Councillor Minka vanBeuzekom

What is the Community Aggregation of Electricity?

- Combines the purchasing power of residential and small business electricity customer
- 1997 state legislation allows municipalities to aggregate utility customers from their city
- The aggregation will affect only the energy supply portion of bill
- Massachusetts has an customer choice opt-out program

Understanding your utility bill

- **Usage measured in kilowatt-hours (kWh)**
  1 kilowatt is equal to 1,000 watts &
  1 kWh is equal to ten 100-watt light bulbs on for an hour
  average urban residential consumer uses ~8,000 kWh/year

- **Current cost per kilowatt-hour**
  NStar Basic: $0.0679/kWh
  20% Renewable: $0.07351/kWh
  100% Green: $0.13410/kWh

- **Three parts of an electricity bill**
  Supply of energy portion (~50% of bill)
  Transmission of energy (NStar) from source
  Distribution of energy (NStar) within local area

What happens currently?

- NStar buys electricity on your behalf on the open market
  - Fluctuates based on market conditions
  - Passes the cost of energy directly to customers
  - Mix of fossil-fuel and renewable sources

- 1997 Massachusetts Deregulation Legislation
  - allows customer choice
  - most people are unaware of option & view as cumbersome
  - Cape Cod Compact first municipal aggregation in late 1990's
  - Ashland, Lunenburg, Lanesborough, Marlborough recent

What else is happening in MA?

- Towns currently exploring the possibilities
  - Massachusetts Municipal Association promoting benefits
  - Cities & towns want to take advantage of lower price

- Towns currently exploring the possibilities

  Natick, Greenfield, Framingham, Holliston, Springfield, Haverhill, Lexington, North Andover, Methuen & Chelmsford

- What about Cambridge? Wave of Community Aggregations coming

What steps to create Aggregation?

✓ **Authorize Independent feasibility study**

- Analyze load data from customers
- Assess city-wide cost savings
- Assess city-wide impact of higher percentage of renewable energy in the supply mix
- Three state approved vendors available (Peregrine, Cadmus & IEC)

✓ **Prepare an Energy Aggregation Plan**

- Outline price & renewable mix triggers
- Commonwealth provides technical assistance
- Public hearing to explain Plan
- Submit to Mass Department of Public Utilities

✓ **Prepare RFP for competitive Energy Suppliers**

What steps to create Aggregation?

- ✓ **Execute Contract with Energy Supplier**
- ✓ **Educate customers about change**
  - Opt-out program

Benefits

- Collective city-wide reduction in utility costs
  - Estimated at $2.27 to $4 million per year
  - Minimal savings per customer: Estimated average ~$50/year

- Collective city-wide increase in renewable energy
  - Currently ~12% renewable for Basic Service
  - Increasing renewable portion to ~ 15% city-wide – a positive shift
  - No additional cost to customer for greater renewable percentage

More Benefits

- Customer contact required
  - Great education & awareness opportunities for current customers
  - Each new NStar customer receives education
- City can decide to retain control of efficiency incentives currently collected from customers
- Customer still receives one NStar bill
- City can choose to return to NStar as energy supplier if price is competitive

Drawbacks

- Intricate process with DPU oversight & Commonwealth technical assistance
- If NStar rates become competitive during *Alternative Energy Supplier* contract term, customers may complain
- Educational component critical and require mail/website follow-up
- City incurs expense for feasibility study and oversight of legal contracts

Policy order

- Ordered that the City Manager is hereby requested to engage an independent Energy Consultant to complete a study for a *Cambridge Community Electricity Aggregation* under MGL c. 164 §134; and to then provide this study to the City Council for continued discussion.

The End.

Attachment B

Municipal Electricity Aggregation

City of Cambridge

Overview

What is Municipal Electricity Aggregation?

- Municipal aggregation is a form of group purchasing in which a city buys electricity on behalf of all its residents and businesses that receive Basic Service electricity.

- There are currently at least six (6) Massachusetts communities who participate in Aggregation and two pending cities, including Lowell.

Aggregation	Launch	Customers	Supplier
Cape Light Compact	2005	200,000	ConEdSolutions
Marlborough	2007	17,000	ConEdSolutions
Ashland	2011	8,000	ConEdSolutions
Lunenburg	2011	4,000	ConEdSolutions
Lanesborough	2011	1,000	Dominion
Lancaster	2012	2,000	Constellation
Hampshire Council of Governments	Pending		
Lowell	Pending		

What are the Benefits?

- Could provide residents and businesses with electricity that is less expensive.
- Could provide electricity that is includes more renewable energy.
  - NSTAR's renewable content 8% in 2013.
- 90% of Cambridge's electricity accounts would be eligible for aggregation
  - 49,458 Cambridge electricity accounts in total.
  - 44,784 are Basic Service accounts.

Benefits of Community Choice

Do You Have A Choice?	NStar	Community Choice
Supplier	No	Yes
Green Power	Yes	Yes
Contract Term	No	Yes
Savings Share	No	Yes
Cost to City	No	No
Energy Efficiency	No	Yes

How does Aggregation Work? Municipality Role

- Adopts a policy of municipal aggregation.
  - Decides what type and how much renewable content is required.
  - Decides the emissions profile of the electricity supply.
- Releases an RFP to acquire an Aggregation Vendor.
  - There is no cost to the town.
  - The Aggregation Vendor is paid through a small admin fee through the electricity supplier.
    - In other aggregations this fee has been 1/10th of one cent per kWh.
- Approves the electricity supply contract secured by the Aggregation Vendor.

Municipality	Consultant	Supplier	Utility
- Authorize aggregation - Approve plan - Approve and execute supply contract - Oversee consulting team	- Develop aggregation plan - Secure DOER and DPU approval - Manage supply procurement and negotiate supply contract - Develop and implement customer education - Monitor performance of supplier - Provide customer support	- Send opt-out notice - Enroll customers - Supply electricity	- Bill customers - Provide delivery service

How does Aggregation Work? Aggregation Vendor Role

- Manages the DPU approval process.
  - Secures the electricity supply.
  - Supply contracts have terms of 6 months to three (3) years.
- Manages public education and customer relations.
- Community can suspend the Aggregation at anytime if price or other requirements for electricity supply are not available in the market.
  - There is no disruption in service and customers see no difference.

Municipality	Consultant	Supplier	Utility
- Authorize aggregation - Approve plan - Approve and execute supply contract - Oversee consulting team	- Develop aggregation plan - Secure DOER and DPU approval - Manage supply procurement and negotiate supply contract - Develop and implement customer education - Monitor performance of supplier - Provide customer support	- Send opt-out notice - Enroll customers - Supply electricity	- Bill customers - Provide delivery service

How does Aggregation Work? Electricity Supplier Role

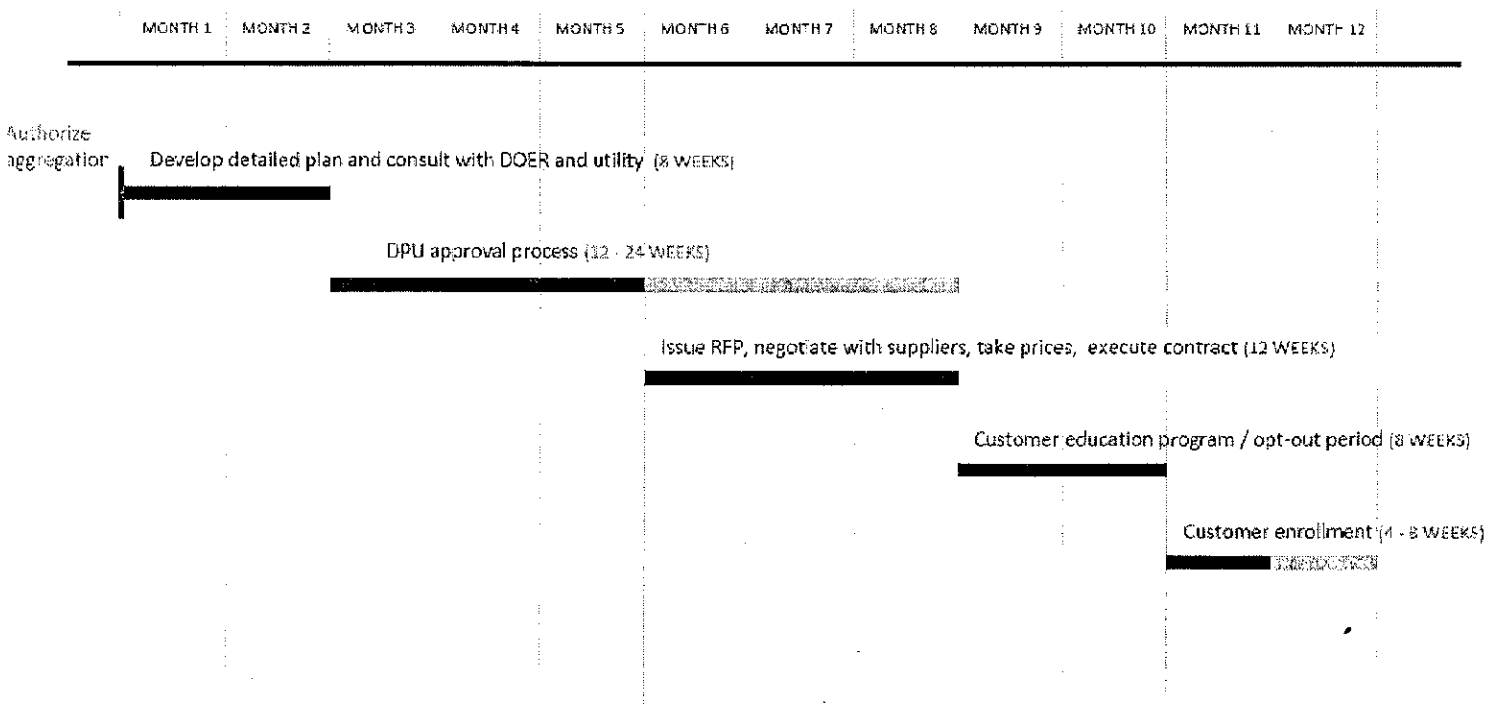
- Manages enrolling customers and customer opt-outs.
  - Customers can opt out at any time, though usually less than 5% of customers opt out.
- Supplies electricity that satisfies ISO NE requirements, including electricity content disclosure label.
  - Aggregation covers only electricity supply. The NSTAR is still responsible for electricity delivery, including billing and maintaining the poles and wires.

Municipality	Consultant	Supplier	Utility
- Authorize aggregation - Approve plan - Approve and execute supply contract - Oversee consulting team	- Develop aggregation plan - Secure DOER and DPU approval - Manage supply procurement and negotiate supply contract - Develop and implement customer education - Monitor performance of supplier - Provide customer support	- Send opt-out notice - Enroll customers - Supply electricity	- Bill customers - Provide delivery service

How does Aggregation Work?
NSTAR Role

- NSTAR
  - Bills customers and collect payments.

Municipality	Consultant	Supplier	Utility
- Authorize aggregation - Approve plan - Approve and execute supply contract - Oversee consulting team	- Develop aggregation plan - Secure DOER and DPU approval - Manage supply procurement and negotiate supply contract - Develop and implement customer education - Monitor performance of supplier - Provide customer support	- Send opt-out notice - Enroll customers - Supply electricity	- Bill customers - Provide delivery service

Aggregation Time Line

Aggregation process