



cape light compact

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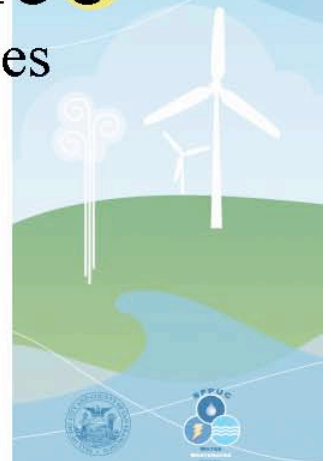
Lessons Learned & Best Practices

A Report Prepared for the
San Francisco Public Utilities Commission

by Local Power Inc.
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August 15, 2009



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I. Lessons Learned and Best Practices— Executive Summary Conclusions

Major Technical Conclusions

- Meeting utility rates with greener power is more important than beating utility rates for customer retention.
- Energy efficiency administration is critical to retaining customers.
- Transmission reliability charge minimization is critical to CCA economics.
- Minimizing the role of fossil fuel in the energy supply is critical to CCA economics.
- Rapid, community-scale development of local renewable resources and demand reduction is the key to low carbon electricity.
- CCA government program administrative cost containment is critical to competitiveness.
- Active and constant CCA advocacy before state regulators and legislature is essential to CCA program success and utility cooperation.

Major Marketing Conclusions

- Investment in interactive Web marketing, customer participation and program information is key to customer loyalty.
- Opt-out notification is a major low-cost marketing and messaging channel.
- Counter negative utility marketing using facts about rates, carbon emissions reduction and local job creation.
- Emphasize the benefit of increased local control over energy efficiency dollars.

II. Task A. CCA Technical Report

A. Introduction and Findings¹

Community Choice Aggregation (CCA) is a ten-year old policy design serving 1.5 million Americans in four regions of two states. In a single decade CCA has produced a rich record of success and encountered a broad array of challenges. Despite hurdles, CCAs have survived and prospered, evolving in unique retail electricity markets while facing increasing pressures to reduce emissions, power plant fuel price volatility, and distortions of the marketplace based on hybrids of cost-based and competitive market structures. With CCA laws in five major states and a record of producing benefits for both consumers and the environment, CCA is poised to play a major role in the future of America's electricity industry as well as its climate protection efforts.

CCA program attributes are largely defined by state laws, which are distinct from one jurisdiction to another. CCAs can benefit from the wide experience that has been gained; policy and laws can be improved as the concept and approach develop. The lessons learned through implementation and operations of the Cape Light Compact in Massachusetts and the Northeast Ohio Public Energy Council in Ohio during their initial operating years can be applied to California.

Massachusetts initiated CCA with legislation sponsored in 1995 by Senator Mark Montigny (D-New Bedford), then chair of the Senate Energy Committee. Senate Bill 447 was championed by Cape Cod elected officials and incorporated into Massachusetts' electric industry restructuring act in 1997. It was signed as Section 247 of Chapter 164, a year after California led the nation in deregulating the power sector with AB1890 in 1996.

Events resulting from deregulation, first in California and followed by two dozen U.S. states, set the stage for further changes in CCA strategy: artificially induced transmission congestion, power plant fuel-based market manipulation, anti-competitive behavior by incumbent utilities, and increasing natural gas fuel price volatility. These factors strongly influenced drafting of legislation that became AB117, California's Community Choice Law, in 2002. These events also affected the approach taken by the City of San Francisco in design of its key governance documents, and H Bond authority, Charter Section 1.907.8 (2001), Ordinance 86-04 (2004), as well as Ordinances 146-07 and 147-07.

California's CCA law was sponsored in 2001 by then-Assemblywoman Carole Migden (D-San Francisco) in the midst of the worst electricity crisis in California history. Looking to the Cape Light Compact, the challenges and subsequent success of the Northeast

¹ Staff contributing to the preparation of this report include David Erickson, Paul Fenn, Robert Freehling, Rusty Klassen, and Holli Their (LBE). Advisors and main Interviewees include Representative Matthew Patrick, Leigh Herington, Maggie Downey, David Orth, Cristel Tufjenkjian, Brian Murphy, Joe Soares, Kevin Gallagin, as well as staff and elected officials and CCA advocates in Marin, Oakland, Berkeley, Sonoma, Chula Vista as well as Massachusetts, Ohio, New Jersey and Rhode Island.

Ohio Public Energy Council's power contract with Green Mountain Energy, and California's massive market collapse, its proponents refined CCA into a more flexible and comprehensive approach to local energy procurement. A long-term goal replaced the short-term savings criteria of the first CCAs. An emphasis on financing and building renewable energy and efficiency replaced the earlier emphasis on buying power. Rate stabilization, scaled renewable energy development, energy efficiency program administration, and carbon reduction have replaced the discount-oriented CCAs of the 1990s.

Much of this change has been constrained by the original laws, requiring corrective legislation. The simple procurement structure of CCA in Massachusetts with year round-opt-out, and Ohio's three year opt-out, has limited this effort; nevertheless, the major CCAs in Massachusetts and Ohio have found themselves—like California CCAs—focused on greening the power supply and focusing on public benefits like energy efficiency rather than short-term commodity price discounts. By taking advantage of the lessons learned over the past ten years of CCA, San Francisco will be able not only to deliver a higher level of sustainability and local energy independence, and design greening programs, but can lower its energy costs, solving the peak demand and reliability costs of an increasingly unstable, short-term oriented wholesale power market. By taking advantage of the unique opportunity to reinvent power from the bottom up, which CCA affords, San Francisco and other U.S. cities can assure both greener and cheaper power for local residents and businesses.

The general trajectory of CCA lessons learned coincides with the conclusions of this report:

- The goals of CCA are gradually moving away from price discounts and toward renewable resource and energy efficiency deployment.
- Ownership of generation assets is driving CCAs toward longer-term contract commitments where possible, a new possibility that AB117 has created in California.
- CCAs are increasingly recognizing the importance of photovoltaics and demand technologies not merely as greening power, but physically reducing import dependency in response to the hard lessons from local and regional fossil fuel peaker power plant charges imposed on customers.

The overdependence of competitive wholesale power suppliers on natural gas-fired power imposes short-term procurement horizons that expose ratepayers and retail sellers to open-ended market risk, and this can sometimes take a devastating turn. For these reasons, the Cape Light Compact has come to appreciate the need for working on the demand side of the electricity market. In addition to their initial role of only providing the energy supply commodity, they have adopted a very ambitious but achievable 3% target of load reduction per year from its demand-side energy programs. If successful, this will achieve a substantial enhancement of the Cape's load shape and could even reduce the need for an old oil-fired peaker that pollutes and imposes heavy cost penalties on CCA ratepayers.

CCA policy has evolved within the various CCAs in the nation. They have managed to adapt to local conditions in order to be more successful in providing prices at or below

standard utility rates (though not always), in improving service quality through technological innovation, in setting higher demand reduction targets, and the like. This ability to learn from, and adapt to, changing conditions in dynamic energy markets is one of the key lessons learned from CCAs across the nation. CCAs have defined their focus and strategic decisions through the challenges they have faced. While legislation in Massachusetts and Ohio initially defined CCAs narrowly as entities designed to procure electrical energy and capacity from wholesale suppliers or brokers, Cape Light Compact and NOPEC are now moving to implement renewable energy programs. The Compact is seeking to employ tax-exempt public financing to build solar photovoltaic installations and wind turbines on Cape Cod.

The CCA structure as embodied by Ohio (1999) and Massachusetts (1997) state laws continues to limit the options of the Cape Light Compact and Marlborough CCAs in Massachusetts, and NOPEC and the Northwest Ohio Aggregation Coalition (NOAC) in Ohio. NOAC secured a supply agreement with FirstEnergy in early June after being unable to find a supplier interested in serving it for several years. Marlborough discontinued service in 2007 when the price of gas rose disadvantageously, then resumed service when gas prices dropped, also in recent months.

Massachusetts. In Massachusetts, a key blockage to success results from a provision in Chapter 164 that requires CCAs to offer customers the ability to opt out of the CCA at any time. The unintended consequences of this component of a 1998 bill was increased supplier risks associated with the so-called “churn” factor of Massachusetts CCAs like Cape Light Compact and Marlborough. One of the unique opportunities of CCA is, through aggregation, to make small customers (most customers) more profitable for retail sellers to serve. Massachusetts’ year-round opt-out provision made these small customers more costly to serve because their length of stay as reliable ratepayers would remain perpetually uncertain despite the aggregation. The lack of guaranteed stability in the ratepayer base also undermines the certainty that a supplier’s pre-purchased procured power will be consumed. This, in turn, makes financing for renewable energy far too uncertain to support the long-term paybacks required by such investments. However, given the state’s participation in the Regional Greenhouse Gas Initiative (RGGI), and its Renewables Portfolio Standard (RPS), all the state’s suppliers will need to pursue renewable development more aggressively.

Ohio. Ohio’s subsequent 1999 law² was drafted during the early implementation years of Chapter 164 in Massachusetts, specifically drawing on the lessons learned by the Cape Light Compact in its early years of operation. Drafted to extend the-opt-out period to every two years, this provided better supplier certainty in a CCA’s load. Even a two year duration of load stability has limited the options for Ohio’s (nevertheless successful) CCAs. NOPEC continues to lobby to remove the two year rule, and won an increase to three years in the state legislature. Because even three years is inadequate to assure a stable consumer base for renewable resources financed under the H Bond authority proposed for San Francisco, NOPEC continues to be limited to purchasing power from the grid, but is investigating a longer-term approach and views renewable energy as a part of its future strategy. The shift to renewables has taken on increased importance with the passage of a state renewable portfolio standard in 2007.

² Passed as SB 3, Chaptered as Section 4928 of Ohio Revised Code

California. In 1999, California law was initially drafted to require a one-time opt-out period that CCAs must offer ratepayers, consisting of four consecutive monthly opt-out notifications, after which the CCA shall enjoy local control over how to handle this question (PG&E has recently submitted California statewide ballot initiative language that would require a 2/3 majority of voters approving a CCA implementation). Over three years of negotiating the provisions of the CCA bill, California's legislature consistently approved this new opt-out approach, as reflected in AB117, and also inserted provisions for CCAs to take over energy efficiency programs, and provided CCAs with full access to utility data in order to design their energy efficiency and renewable energy programs.

Even though churn rates from building sales and rentals are high in San Francisco, California CCAs enjoy local control over planning to support renewable energy financing and development with substantially improved revenue security. This key component of AB117 was written to enable California CCAs to plan long-term procurement, and to provide the financial security needed to develop renewable energy technologies. This expands opportunities to offer customers ownership of local generation such as solar power facilities, tied to the CCA multi-year power purchase agreement (PPA) structure—something that the Cape Light Compact is now trying to do, and NOPEC is discussing with local advocates. The long-term contract structure allows for reliable debt service, in a manner comparable to the capital flows provided by European-style feed-in tariffs. Massachusetts law has restricted the use of public finance for the private sector, limiting investment potential. However, last year Massachusetts adopted provisions of the Green Communities Act³ authorizing municipalities to issue bonds to finance power generation facilities. Even in constrained environments, CCAs are finding ways to evolve toward integrated resource planning and the long-term nature of the electricity business.

Another important lesson is that size matters. Small aggregations work, but have the hardest time attracting suppliers ready to work to get their business; this limits the program benefits and the duration of commitment that the CCA can command from suppliers. Despite this challenge, Marlborough, Massachusetts recently attracted the Cape Light Compact's supplier, ConEdison Solutions, to serve its small municipality of 36,000 residential and business customers.

Local load characteristics or "load factor"⁴ also matter. If local conditions and load shape increase exposure to volatility in the cost of power, that may be even more important to the economics of a CCA than the size of the aggregation. Communities like Cape Light Compact have high costs due to constrained transmission systems and dirty old power plants that provide expensive peak power. As local entities, CCAs in transmission-congested areas can have a higher cost of service than other less constrained areas of a utility's service territory. As the utility also serves less constrained areas, its rates to customers in high-congestion areas may be subsidized by other customers to a certain extent. And while utilities have not aggressively reduced the need for old fossil peaker plants, local governments implementing CCA serving a congested part of the grid (like San Francisco) have an economic incentive to reduce the need for local peaker plants, as Massachusetts' story illustrates. Reducing peak demand during the summer is valuable for reducing exposure to the highest power costs, in addition to eliminating ecological and public health impacts.

³ Chapter 169 of the Acts of 2008, Massachusetts; <http://www.mass.gov/legis/laws/seslaw08/sl080169.htm>

⁴ The ratio of average to peak load. The lower the load factor, the more "peaky" the load, and the more peaking generation required to serve the load.

This *Lessons Learned and Best Practices Report* reflects a mature understanding of the lessons produced by the CCA experiment over a period of more than a decade. This report recognizes specific threats, and opportunities for success, for CCAs across America. It also underscores the importance of some of San Francisco's adopted CCA policies, such as eliminating peak loads in order to close its in-city fossil-fired peaker power plants. This policy is outlined in Ordinance 86-04 and is the purpose of the CCA solar bond authority, Proposition H, placed on the ballot by the City and approved by voters in November, 2001.

With this experiential intelligence in hand, CCAs can develop a suite of business and technical responses to meet the challenges of the electricity industry in an innovative way. Key to these innovations is the realization that CCAs are strategically positioned, owing to mature program design, to reduce exposure to fuel markets, distorted wholesale power markets, and a punitive environment of volumetric surcharges. CCAs can also enhance local physical grid resilience. Insights into how to achieve the vision of re-localization of electric power supply and accelerated demand reduction, as opposed to imitating utility procurement practices, is the primary lesson of CCA.

Other Lessons

Energy Efficiency programs, the need for good data, CCA administrative cost controls, need for legal, legislative and regulatory participation to protect ratepayer interests, the importance of public goods charge funds and carbon credit rights, and the like, are critical. These elements must be included in San Francisco's CCA to maximize consumer value and progress toward meaningful greenhouse gas reduction. An integrated program of both demand side and supply side approaches is required for the electricity supplier to provide secure, low cost, low carbon electricity service.

B. Massachusetts

Massachusetts adopted its Community Choice Aggregation (CCA) law in 1997⁵ as Section 247 of its Electric Industry Restructuring Law, Chapter 164. The first such law in the United States, it provided for opt-out municipal aggregation of all customers in its jurisdiction.

Massachusetts law defines load aggregation as the formation of a group of consumers into a single buying pool for the direct purchase of electricity supply. The Restructuring Act of 1997 created a process under which a municipality, or group of municipalities, may aggregate the entire electric load within the boundaries of the participating communities and solicit contracts to serve that load. The first successful example is the Cape Light Compact Pilot, serving the towns of Cape Cod. This is referred to as a municipal aggregation, or public aggregation.

Massachusetts' law recognizes load aggregation, including municipal aggregation, as a purchasing arrangement undertaken by or on behalf of a group of retail customers. As such, the Act defines load aggregation as:

“A municipality or group of municipalities which aggregates its electrical load and operates pursuant to the provisions of this section shall not be considered a utility engaging in the wholesale purchase and resale of electric power. Providing electric power or energy services to aggregated customers within a municipality or group of municipalities shall not be considered a wholesale utility transaction. The provision of aggregated electric power and energy services as authorized by this section shall be regulated by any applicable laws or regulations which govern aggregated electric power and energy services in competitive markets.”

Municipalities wanting to implement a public aggregation plan must file the plan and receive approval from the Massachusetts Department of Public Utilities (DPU).

Before seeking DPU approval, municipalities must, in consultation with the Division of Energy Resources, develop a plan, which must comply with the mandatory policy objectives of universal access, reliability, and equitable treatment of all customers.

Massachusetts law allows aggregators to access the energy efficiency system benefit charge funds generated by the participants, and paid for by all Massachusetts electricity customers. If the CCA chooses to access the funding, they must design and carry out an approved energy efficiency plan, in the same way the Distribution Company does.

A public aggregation is “opt-out”; all customers within the municipality are participants automatically, unless they request not to be. Public aggregators must also secure contract prices that are less than the standard offer price.

In load aggregations, each participant ultimately enters a service agreement directly with the supplier chosen by the aggregator. The reason for this is that each customer is still a Direct Access⁶ customer, and may switch suppliers at any time. The aggregator serves

⁵ Timeline of electricity restructuring in Massachusetts:
<http://www.eia.doe.gov/cneaf/electricity/page/restructuring/massachusetts.html>

⁶ In a deregulated market, Direct Access refers to the ability of ratepayers to choose their own generator.

as an intermediary that uses the bargaining power of the aggregation to achieve a better deal for the individual participants.

Massachusetts law outlines a number of steps local governments must take to become a municipal aggregator. (See Figure 1 on the following page.)⁷ A town may initiate a process to aggregate electrical load upon authorization by a majority vote of town meeting or town council. A city may initiate a process to authorize aggregation by a majority vote of the city council, with the approval of the mayor, or the city manager in cities with a City Manager form of government.

As in California, two or more municipalities may initiate, as a group, a process jointly to authorize aggregation by a majority vote of the governing body of each municipality, but organizations formed by multiple municipalities to facilitate CCA, such as the Cape Light Compact, do not have a formal standing under the law comparable to a Joint Powers Authority pursuant to AB117 in California. Local governments need an affirmative vote by each governing body to start the aggregation process. After confirmation of an affirmative vote, a municipality or group of municipalities wanting to create an aggregation develops a plan in consultation with the Division of Energy Resources (DOER), which provides assistance to municipalities seeking aggregation of their citizens' demand for electricity.

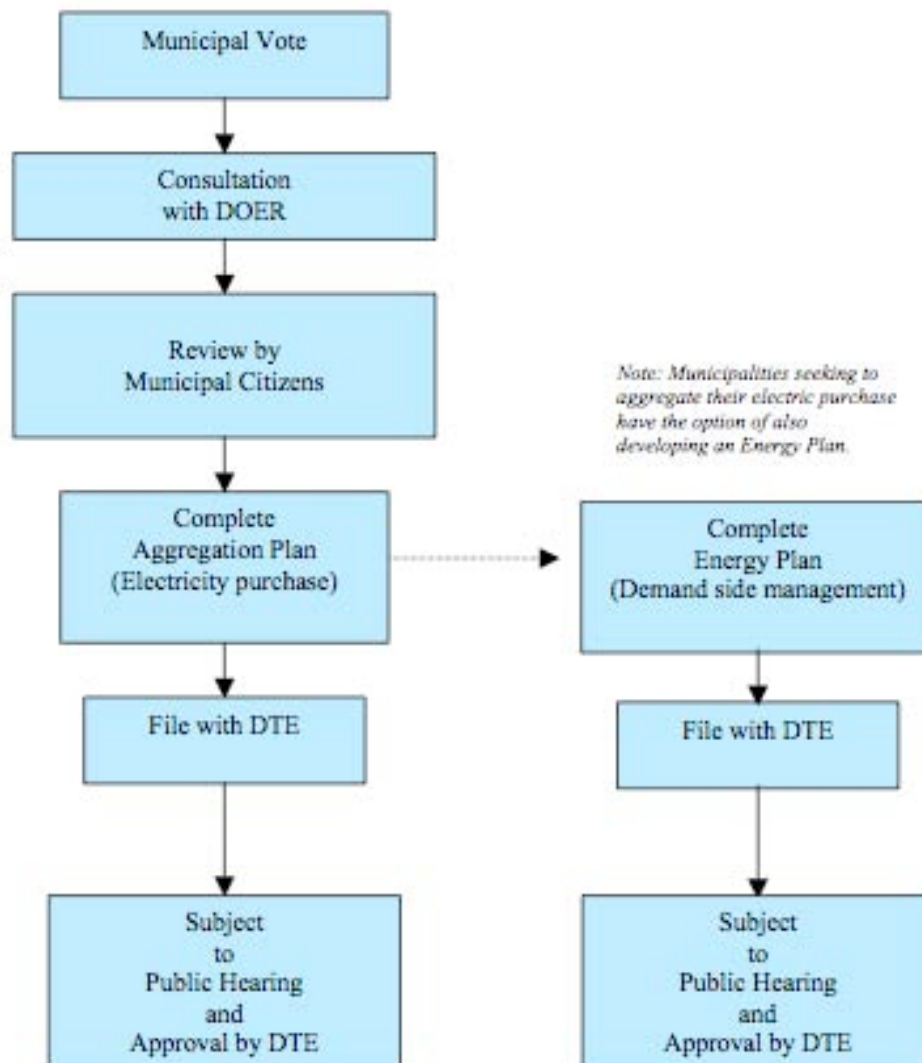
If municipalities become "aggregators", the Restructuring Act establishes purchasing processes and requirements. Citizens review and approve the completed plan. Once voters accept the Municipal Aggregation Plan, the Municipal Aggregator submits the plan to the Department of Public Utilities (DPU). As with the CPUC in California, the DPU certifies the Plan. Prior to its decision of whether or not to approve the Aggregation Plan, the DPU conducts a public hearing.

As also in California, Massachusetts CCA law allows Municipal Aggregators access to energy efficiency funds collected by distribution companies, and establishes the processes and requirements needed to expend these funds. Municipal Aggregators may seek voter approval to develop and submit for certification an Energy Efficiency Plan to the DPU. Similarly, prior to its decision of whether or not to approve the Energy Efficiency Plan, the DPU (formerly known as "DTE" or Dept. of Telecommunications and Energy) conducts a public hearing.

⁷ "Guide to Municipal Aggregation in Massachusetts," Division of Energy Resources, 2003, p. 10

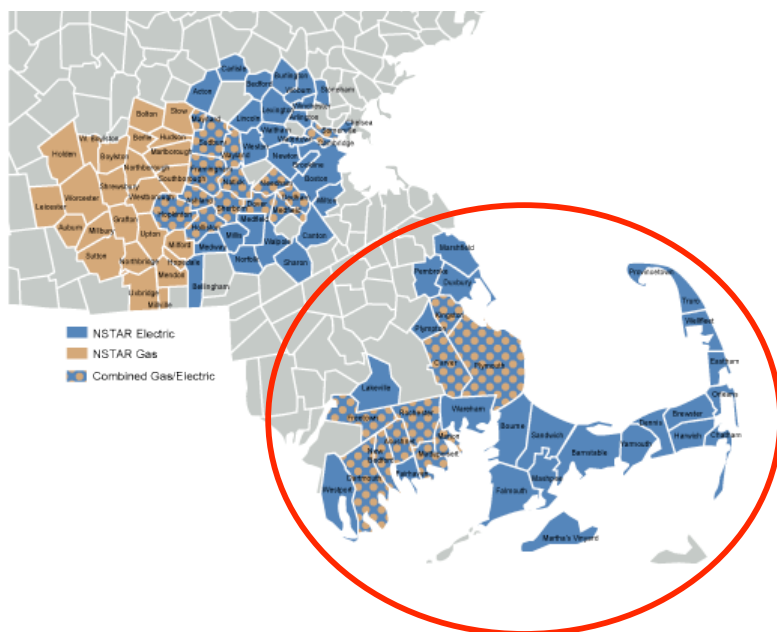
Massachusetts Community Choice

Municipal Aggregation Process



1. Cape Light Compact⁸, Cape Cod

The Compact has 23 cities and three counties, constituting all of Cape Cod, Nantucket and Martha's Vineyard. The Compact formed in 1997 through an intergovernmental agreement of twenty-one towns and two counties for establishing competitive power supply, energy efficiency, and consumer advocacy. From its inception, the Compact has provided an option for purchase of retail electricity service and, through access to the Massachusetts system benefits charge funds, an option for energy efficiency and conservation services. The member towns are: Aquinnah, Barnstable, Bourne, Brewster, Chatham, Chilmark, Dennis, Eastham, Edgartown, Falmouth, Harwich, Mashpee, Oak Bluffs, Orleans, Provincetown, Sandwich, Tisbury, Truro, Wellfleet, West Tisbury, Yarmouth, Barnstable County and Dukes County. The Cape Light Compact represents 200,000 potential consumers and approximately 300MW of average demand. Cape Light is in the territory of NSTAR⁹ for distribution company services. The map below shows area served by NSTAR distribution. NSTAR is also the standard offer supplier.



After establishment in 2002 the Cape Light Compact (service territory shown circled in red) was servicing approximately 45,000 default service customers under the Community Choice Pilot Program with a twenty-month supplier contract that started on May 1, 2002. Projected to bring electricity consumers nearly \$2 million in savings in 2002, the program was the first of its kind in Massachusetts or the United States.

In addition to saving money for consumers, the 2002 contract also included an important commitment to renewable energy or "green power". It provided an option for consumers who wanted to purchase 50 percent or 100 percent renewable energy. Additionally, the Cape Compact administered the energy efficiency system benefits and programs for all residential, commercial and industrial electric customers in member towns.

⁸ <http://www.capelightcompact.com/>

⁹ http://www.nstaronline.com/about_nstar/

The Compact offers a variety of programs to help consumers with their energy needs, and represents consumers at the state, regional, and national level on energy matters so that the voices of those on Cape Cod and Martha's Vineyard can be heard.

On one or more occasions, Local Power interviewed the following Cape Light Compact leaders:

- Maggie Downey, Compact Administrator
- Joe Soares, Compact Procurement Officer
- Kevin Gallagin, Compact Energy Efficiency
- Representative Matthew Patrick (D-Cape Cod), Compact Founder

Compact Rates and Opt-Out

From 1998 when the market opened, the Massachusetts electricity market suffered under the “standard offer” system that suppressed competition until 2005. Beginning on the legislature-set date of March 1, 1998, as start of the deregulation process, customers of an existing distribution company prior to March 1, 1998 were designated “Standard Offer” customers. These customers continued receiving a discount rate until March 2005 under a legislative mandate to fix the rates for seven years. The rate was set 15% below the market price to protect small customers. In March 2005 Massachusetts went to full competition for the first time, when the Standard Offer ended.

Knowing that March 1, 2005 would bring open deregulation, during the Fall of 2003 the Compact invited in ten suppliers. The RFP presented the Compact policies and load types. This process resulted in three bidders:

- FPL Energy
- Strategic Energy
- ConEdison Solutions

In May 2004 the Compact submitted to DPU (then DTE) three forms of contract all acceptable to the Compact, with all details of the deal disclosed in them except for the price—because a price was only good for the day. Accepted in May 2004, the Compact went out for pricing, receiving unacceptably high bids the first time, then issued a second Request for Proposals and received acceptable price proposals.

The second time the Compact went out to the market for bids was July 2004, and they got a good price from ConEdison Solutions. This price was, in effect, fixed for residential and small commercial and industrial (C&I) and medium and large C&I. The Compact bid out a price for one year. At the end of 2005 the Compact went out to bid for pricing again. According to staff, “we got caught with Hurricanes Rita and Katrina,” which had caused a sharp increase in natural gas prices, such that the Compact suffered its first setback with prices higher than NSTAR¹⁰ in 2006:

¹⁰ NSTAR is Massachusetts’ largest Massachusetts-based investor-owned-utility. Reference website above

- 11.207 cents/kwh residential
- 12.919 cents/kwh (see rate comparison chart below)¹¹

Cape Light Compact paid a premium above-NSTAR rates for this period specifically because of overexposure to natural gas fuel price volatility in its procured power portfolio. “It was awful,” said staff, “with customers calling and complaining,” but the premium had almost no impact on the Compact’s customer base, even though state law requires year-round opt-out rights for customers. “We had very little attrition. The Compact signed contracts with ConEdison Solutions on the last day of 2004, and on January 1, 2005 rolled over 57,000 customers from default service with Mirant to ConEdison.”

More standard offer customers returned in March 2005 for a total 185,000 customers on CCA power supply after March 1, 2005. The following table shows the bundled price history under NSTAR Basic Service, and the corresponding CLC bundled rate. The table below shows the current unbundled delivery charge for customers served by a competitive supplier.

Fixed Basic Service Rates Commonwealth Electric Company and Cape Light Compact

start date	end date	Com Electric (NSTAR) Residential	ComElectric (NSTAR) Commercial	ComElectric (NSTAR) Industrial	Cape Light Compact Residential	Cape Light Compact Commercial	Cape Light Compact Industrial
4/1/2009	6/30/2009	12.707	12.790	8.134	12.700	13.280	8.000
1/1/2009	3/31/2009	12.707	12.790	11.963	12.700	13.280	12.000
10/1/2008	12/31/2008	12.547	12.846	11.793	12.706	13.976	11.643
7/1/2008	9/30/2008	12.547	12.846	14.570	12.706	13.976	14.776
4/1/2008	6/30/2008	11.172	11.393	11.116	11.100	11.450	11.343
1/1/2008	3/31/2008	11.172	11.393	11.285	11.100	11.450	11.685
10/1/2007	12/31/2007	10.838	11.097	9.638	10.990	11.469	9.530
7/1/2007	9/30/2007	10.838	11.097	10.804	10.990	11.469	11.491
4/1/2007	6/30/2007	11.858	11.878	10.119	11.652	11.671	10.099
1/1/2007	3/31/2007	11.858	11.878	13.054	11.652	11.671	12.871
10/1/2006	12/31/2006	10.454	10.461	10.921	11.919	12.369	13.377
7/1/2006	9/30/2006	10.454	10.461	10.544	11.919	12.369	13.377
4/1/2006	6/30/2006	11.205	11.011	8.422	12.919	13.369	14.377
1/1/2006	3/31/2006	11.205	11.011	16.251	12.919	13.369	14.377
10/1/2005	12/31/2005	7.171	7.271	8.563	7.132	7.132	7.169
7/1/2005	9/30/2005	7.171	7.271	7.303	7.132	7.132	7.169
4/1/2005	6/30/2005	7.133	7.049	6.579	7.132	7.132	7.169
1/1/2005	3/31/2005	7.133	7.049	8.443	7.132	7.132	7.169

¹¹ <http://www.capelightcompact.com/documents/CopyofCLCHistoricalPricingandNSTAR.pdf>

Delivery Service Charges

Customer (per month) \$3.73	Distribution (per kWh) \$0.05005	Transition (per kWh) \$0.02010
Transmission (per kWh) \$0.01272	Energy Conservation (per kWh) \$0.00250	Renewable Energy (per kWh) \$0.00050

The chart above shows rates for delivery service to residential accounts. Full rate and tariff information for all customer classes can be obtained on the NSTAR website.¹²

Opt-Out Factors

Today— four years later— the Cape Light Compact has 165,000 customers. According to staff, 20,000 customers were lost in 3 ways:

- Larger customers with central procurement opted-out. For example the Coast Guard had an energy analyst for all New England Coast Guard that managed procurement. Other examples were chains such as food establishments and malls with corporate energy management. For instance, Cape Cod Mall (Simon Property) manages their energy procurement out of Illinois. Staff say these types of customers are particularly prone to opt-out.
- Opt-out by retirees on Cape Cod, many on fixed income. They were frightened by NSTAR misinformation regarding low-income “budget bills” such as \$100/month, in which \$50 is (Compact) supply, and \$50 the regulated charge component. When fixed-income customers rolled over to CLC (meaning \$50 to the Compact), NSTAR told these customers they must still pay NSTAR, implying that the charge would increase to \$150. This frightened a block of customers out of the Compact.
- Customers with bad debt. ConEdison carries them for a period, as they must because of consumer protection laws, after which they get dumped back to the distribution company as bad debt.

¹² http://www.nstaronline.com/ss3/residential/account_services/rates_tariffs/rates/rates.asp#RE32

Retail sales at meter per year¹³

2005	1.40 Billion kwh
2006	1.44 Billion kwh
2007	1.30 Billion kwh
2008	1.26 Billion kwh

Another factor in play in Massachusetts is that Direct Access continues to be fully open under Massachusetts law. This is in contrast to California, where only grandfathered Direct Access customers have a right to remain in Direct Access service. For this reason, the only direct competition to California CCAs is the incumbent utility. In San Francisco's case, the incumbent is Pacific Gas & Electric (PG&E).

In Massachusetts, Dominion Energy markets periodically to residential customers enrolled in Cape Light whenever the price of natural gas allows them to offer a favorable rate. While some policymakers might consider this a threat, in fact, Cape Light Compact officials are proud of this problem. They credit themselves for attracting suppliers and enhancing competitive choices for Cape Cod residents not available to the vast majority of Massachusetts residents. In spite of the Cape Light overall retention, Dominion has some success that directly results in some incremental load migrations from CLC service. In Massachusetts, the Cape has more people on competitive supply than any other part of Massachusetts. According to the Division of Energy Resources' (DOER) migration table, by comparison, in National Grid's service territory (where Marlborough CCA provides service), the number of customers on basic service is 1.1M with only 52,000 on competitive service.

Administrative Costs and Program Cost Recovery

The Cape Light Compact (CLC) community choice program covers its own operating costs by adding a charge of one mil (tenth of a cent) per kilowatt-hour to customers' bills, making it a self-funding entity that does not require any tax revenues. These funds are set up for the sole purposes of the CLC as an "enterprise fund." None of the Compact's member towns pay for costs, and the Compact controls the funds for energy-related purposes only, through a process approved in its intergovernmental agreements.

The mil per kilowatt-hour charge collects between \$1 and \$1.2 million per year. Sometimes CLC has not taken that mil because their prices have been too high and would have made CLC bills higher than NSTAR. The Compact also receives the state-mandated Energy Efficiency surcharge funds (similar to the Public Goods Charge in California), which is \$5 million/yr.

Revenues from the mil/kwh charge exceed the Compact's operating expense by \$350,000 to \$500,000/year. According to staff, CLC has worked to maintain its rates at one mil/kwh *higher or lower* than the utility, sometimes choosing not to charge the mil/kwh charge in order to keep its rates below NSTAR's rates. By collecting more than it

¹³ All detailed pricing information from interviews with Joe Soares, chief procurement officer Cape Light Compact.

needs from the mil/kwh charge, the Compact has the flexibility to respond to market conditions and remain reasonably price competitive.

The main administrative expenses for the Compact are from its legal bills. Most recently these include:

- regulatory engagement with NSTAR
- participation in state proceedings with the Green Communities Act
- several DPU proceedings that impact CCAs

This activity requires the Compact to maintain constant legal representation for matters such as rules for Default Service and net metering, and participation in Renewable Energy Credits market. “Unless we are active, no one represents our position.” According to staff, the Compact’s actual power supply agreement administrative costs are minimal: “once you complete a multi-year power contract, the contract administers itself. The administrative burden of Community Aggregation is front-loaded: the RFP, the negotiation of contracts, and set up take work, but once you are under service, that is it.” The Compact’s senior power supply planner spends less than 25% on managing the Compact’s existing power supply contract.

Constrained Area Peaker Charge Issue

Like San Francisco, Cape Cod is a transmission-constrained area, and this factor has exposed the Compact’s suppliers to grid reliability-related charges. The Canal Station has two 550 MW power generation units. Unit 1 burns residual oil, Unit 2 residual oil and natural gas. With oil at \$147 per barrel in 2008, the Canal plant was not being economically dispatched because its price was too high; but because of reliability issues in the Southeastern Massachusetts Load Zone, the New England Independent System Operator (ISO) called Canal to run for voltage support and reliability during the Summer peaking months. This action has translated into damaging charges for the Compact’s supplier that put it at a competitive disadvantage to the incumbent utility NSTAR.

Reliability Charge Issue

Apart from overexposure to natural gas and petroleum prices, the Compact suffers substantially from costs related to the state’s grid reliability rules and processes that distort the market. According to staff, the New England Power Pool established a system under which the costs of reliability problems should be borne by all retail electricity providers through a mechanism called “Local Second Contingency Protection Net Commitment Period Compensation Charges (NCPC),” also known as “Uplift Costs.”

Under the ISO tariff, all retail suppliers pay a volumetric charge for grid reliability costs in each transmission zone. Thus, only retail load-serving entities (LSE) in the Southeastern Massachusetts Zone pay for the Canal plant’s operation. This cost allocation is based on the amount of retail load each LSE serves in the Southeastern Massachusetts Load Zone. ConEdison’s 1.2B kWh in annual sales also receives a percentage-based charge.

This situation has resulted in significant costs for the Compact’s supplier. According to Compact staff, at one point Canal was running every day of year. ISO New England, NSTAR and National Grid are attempting “short-term fixes” to alleviate the problem by September of this year. If successful, the Canal plant will only be needed. 42-55 days

per year, mostly in summer. The Canal Plant's capacity factor is low: about 20% - the plant is needed for only 200-250 MWH to maintain regional grid reliability. As shut down and restart of these generators takes three or four days, operation is inflexible, disproportionately increasing the cost impacts on suppliers compared to the capacity that is actually required to maintain grid stability.

Perhaps more importantly, the Uplift Cost rules force competitive suppliers such as CCA Electric Service Providers to choose between looking more expensive than utilities, or assuming risks that the utilities are not required to assume. Understanding this situation presents a major lesson learned regarding *the need for CCAs to focus their resources on reducing the need for peaking plants for grid reliability purposes—a major focus of San Francisco's CCA Program.*

When NSTAR, the local incumbent utility in the Cape Light Compact jurisdiction, solicits bids from suppliers for basic default service, prospective suppliers have a choice: either a) include "uplift costs" in their bid and take the risks of being charged for the error later, or b) they can exclude the uplift costs from their bid, and ask NSTAR to pay whatever the actual cost turns out to be based on weather and system load conditions. In this latter case, NSTAR creates a proxy for forecasted uplift, and uses a "Default Service Adjustment Factor" as a reconciling mechanism for volumetric changes in uplift based on the ISO's decisions. When the ISO dispatches plants under normal conditions according to economic performance of plants, then the Canal station is normally kept idle because its power is extremely expensive or "non-economic," but when ISO must call on the Canal power plant to run because of Southeastern Massachusetts Zone reliability issues, its owner, Mirant, receives full payment for its cost of service from all Southeast Massachusetts Zone retail providers.

Like NSTAR, the Compact must include those costs in their rates, but unlike NSTAR, the Compact's supplier, now ConEdison Solutions, has no recourse to go back to state regulators to win approval of an adjustment for unexpected uplift. The supplier must accept these charges as a component of the risk of serving Compact customers. While this is clearly a benefit to Compact customers, ConEdison Solutions ("ConEd") must predict the uplift charges its contract with the Compact must include in its negotiated rates. With no Reconciling Mechanism, the Compact must contractually establish a factor with ConEd— such as \$10-\$11 per Mwh. "ConEd lives and dies by 8 bucks. If it (the cost of power) comes out higher because the plant is running a lot (from ISO dispatch), CLC's supplier must 'eat it'; if less then they benefit," according to staff.

In contrast, NSTAR gets bids from suppliers that will collect the uplift according to the agreement and charge customers the cost of the uplift directly. They develop a proxy rate, like \$5 per MWH. ConEd must put in a higher proxy such as \$8/MWH to cover it. "In contrast," say staff, "NSTAR is free to put in a low proxy at say \$5, and if it comes out higher at year's end they can adjust it higher and when the DPU approves the increase, NSTAR can collect this adjustment charge from all its distribution customers— including us competitive supply customers at the Compact (NSTAR is distribution company for the Compact). So the ConEd customer has already paid ConEd as part of the price for their uplift, NSTAR can add a new higher charge from distribution customers (non-bypassable¹⁴ charge added as part of distribution charges)." This means that CLC customers *pay double* for any uplift charges.

¹⁴ Charge that "distribution only" customers are required to pay. Theoretically a cost not related to supply.

Impacts on CCA Prices

According to staff, the impact of uplift charges can be a few mills per kilowatt hour on the CLC Cost. “While this sounds miniscule if reconciled over all NSTAR customers (not just SE Mass but NE Mass as well), if you look at it in any one six-month pricing period, a few mills can make the difference between being lower or higher than NSTAR’s rates, and we are always within a few mills of NSTAR. We work hard to remain competitive with NSTAR, and this makes them look lower even when they are not.”

In addition to imposing actual costs on CCA customers, the impacts of the reliability charge system run even deeper by presenting bad pricing data to customers. Whereas NSTAR can lowball the proxy cost at zero risk to itself and collect later, CCA Suppliers—having no such recourse—tend to set a higher price to cover their risk, making their prices appear to be higher than the utility.

Compact Actions to Mitigate Uplift Issue

CLC mitigates this problem by establishing a “bucket.” CLC and ConEd established an assumed uplift cost of 7\$/MWh— if it turns out lower the savings go in the bucket, and if higher we use accumulated savings to pay the difference.

The Compact attempted to get state redress of the issue but has been unsuccessful. Senator Rob O’Leary, another Compact founder, won language in the Green Communities Act ordering a hearing of the uplift issue at the DPU and a requiring a report to the legislature on the subject. However, the resulting report, released report June 1, expressed understanding of the problem for CCA suppliers but took no action.

Local Generation¹⁵

While the Compact was examining distributed generation options in 2002 as part of an integrated distributed resources approach that would include premium power, peak shaving, and improvements in reliability, this approach was not taken after the Compact’s governing board voted to pursue a short-term lowest-cost approach. Since then, the Compact has also declined to consider an informal offer of substantial power supply from the developer of the Cape Wind Project. According to staff, the Cape Wind project, if built, will impact the need for the Canal Power Plant power plant for grid reliability purposes, and will therefore reduce the impacts of uplift costs for the Compact’s supplier— “It won’t put (the Canal Plant) out of business, but will move it up the stack. It will probably run less; Mirant may decide to shut it.” If physical load on the Canal Grid can be removed by peak local renewable capacity, reliability contracts would no longer be necessary.

Financing Renewables

Among the distinguishing traits of San Francisco’s CCA program is its use of municipal revenue bonds, pursuant to 9.107.8 of the Charter, to finance development of its

¹⁵ Quotes on generation-related issues from interviews with Joe Soares, CLC procurement officer.

renewable portfolio. Among the lessons learned from Massachusetts was the need for the CCA to move quickly beyond power procurement. If the CCA develops local renewable capacity, it can offer its customers a superior value proposition, reduce pollution, and encourage development of load-reducing technologies that improve the load profile of the region served by the CCA.

Unlike California's CCA law, Massachusetts law *does not* provide recognition of regional organizations of municipalities as governments. Thus, the Compact itself does not have the kind of formal legal authority that a Joint Powers Authority, like Marin Energy Authority, enjoys in California. The formal legal standing of a JPA in California includes a revenue bond authority. The Compact has been forced to develop an innovative path to financing renewable energy that remains limited to municipal loads, though staff have discussed ways of expanding their renewable financing to the private sector.

In recent years, the Compact has developed new programs to introduce renewable energy financing to local government customers among its program offerings, as well as ways for residential and business customers buying green pricing products to contribute to local government solar and wind projects.

Prior to adoption of the Green Communities Act, the Cape Light Compact and Vineyard Electric Cooperative formed a cooperative over two years, based on language in the 1997 Electric Industry Restructuring Act that allows for formation of electric cooperatives. There are currently three members in the financing cooperative: Barnstable County, the Town of Barnstable, and the Cape Light Compact. Staff expect five members in the near future, with two additional member towns expected in June or July.

Federal Tax Exempt Status for Renewables Development

According to staff, the US Internal Revenue Service would not provide a letter ruling on the tax-exempt status of the Compact unless they formed the cooperative and purchased Renewable Energy Certificates (RECs). The Cooperative submitted its request in 2007, and has received a letter ruling confirming its tax-exempt status, as well as a Massachusetts Department of Revenue private letter ruling reaffirming its tax-exempt status at the state level, clearing it to finance local renewable energy projects.

New State-Level Opportunity for Municipal Finance

Prospects for CCA financed renewables were recently enhanced. The State of Massachusetts authorized broader municipal financing authorities for renewable power generation through adoption of the Green Communities Act in 2008. Prior to this Act, municipal finance of renewables was restricted to municipal utilities, according to staff.

The Cooperative will develop wind turbines and solar photovoltaic arrays on its municipal accounts, and use net metering as the basis for repayment. The Compact has signed a 15-year power purchase agreement (PPA) with ConEd Solutions as the framework for offering:

- Thirty to Forty 1.5 MW size wind turbines long-term (10 year) goal. Looking at 6 to 8 turbines right now.
- 5-7 MW capacity PV on municipal buildings, looking to rollout ConEd \$5M investment into 700KW this year through ConEd on public buildings, and have RFP out due June 22 for other parties. Staff say they want to develop 100

kilowatt systems to qualify for the highest rebates.

The Compact has no current plans to develop solar photovoltaics for residential or business customers. There is a plan to solarize public facilities that would typically involve a 1.2 KW system on schools or public buildings. The Massachusetts Technology Collaborative (www.masstech.org) provides rebates for residential solar PV.

According to staff, the Green Communities Act leans toward municipalities, with a classing system that limits sizes per customer category. A Class 3 system is capped at 2 MW, but for a municipality it may be scaled up to 10 MW. The law also allows for “neighborhood net metering” under which ten (10) or more customers may pay for a turbine.

The co-op can benefit private customers through its member organizations— Cape Light Compact is one member of the co-op. If CLC installs a wind turbine, 90% of the output of the turbine is used to serve load of the municipality it is located in. Other co-op members get the other 10%. CLC can also sell its share of the wind power to ConEd Solutions to resell. CLC staff believes they could develop more turbines and take more power which would be sold to the Compact to resell to the retail supplier.

Laws

Massachusetts Chapter 164, Section 134 (1997, attached)

Regulations

Massachusetts DPU did not adopt regulations for CCA, which is defined by statute.

Billing

A consolidated bill is issued by NSTAR, which continues to be responsible for Transmission, Distribution, Meter Reading and Billing. NSTAR reads the meter and sends the bill.

- First part of the bill is for the regulated utility charges.
- Second part of the bill is the CCA energy supply charges.

Green Power Products

Cape Light offers a 50% or 100% green power option, using a renewable energy certificate (REC) program. Residential customers wanting 50% renewable energy pay a rate that is 9/10ths of a cent higher than regular residential rate. Customers purchasing the 100% renewable product pay 1.6 cents/kwh higher. Residential rate is 12.7 cents/kwh, so the rate goes to 13.6 or 14.3 cents/kwh for 50% and 100% renewables.

Cape Light Compact Green Pricing¹⁶

January 2009 - July 2009 (in cents/kWh)	50%	100%
Residential	13.6	14.3
Small Commercial and Industrial	14.18	14.88
Large Commercial and Industrial	8.9	9.6

Since May 2005 there were three benefits of Cape Light Compact Green:

- Renewable Energy Credits

The Compact buys RECs in a 10-year contract, but there is only a 3-year contract with the supplier. The Compact has established a matching funds agreement with the Energy Trust under which Compact customers may contribute to their town's account to enable the town to do renewable energy projects. The customers may contribute another dollar for low income communities.

If a town wants a solar panel on town hall they can get funding from the Massachusetts Technology Consortium, set up to administer statewide funding for renewable energy and energy efficiency programs, because customers in their town have been participating in the Cape Light program.

- Solar PV installation on Public Buildings and Schools

Through green money and money from the Compact, a 200 KW system was installed on schools. The system is used by students for a science class, Science of Energy. Instrumentation that shows how much electricity is produced by the panels is provided by Fat Spaniel.

Two kilowatt photovoltaic systems have been installed in each of 21 towns in Cape Cod and Martha's Vineyard for a total of 42 KW.

CLC buys Renewable Energy Certificates through its REC supply contract. NEISO mints certificates, and money from the green power subscribers is used to buy certificates.

Green power projects to date:

- low-impact hydro
- Couple of small wind projects
- Aggregated 100 PV arrays
- Amaresco landfill gas from Chicopee, MA

- Green Pricing Enrollment and Associated Green Power Sales

Out of 160,000 customers, the Compact has approximately sixteen hundred (1600) Green Product customers. The Green Product is 50% or 100% renewable

¹⁶ http://www.capelightcompact.com/green_pricing.html

energy. 90% of customers that signed up for Green Pricing took the 100% product. The program sells 10.2 million KWh, and purchases 11.4 million KWh of green power.

Risk Allocation for Compact Electricity Supply

Risks are all on the supplier. If customers opt out, CONED is on the hook. They take three risks:

- Customer bad-debt risk
- Customer migration risk
- Customer opt-out risk

According to Compact Staff, ConEd puts the costs of these risks into their fixed price. ConEd gives the Compact a guarantee from the corporate parent (Consolidated Edison). If they leave the contract, there is a time period that they will continue to supply, either 3 or 6 months. This allows time to get another supplier. Under Massachusetts law, the Compact can't legally indemnify a private entity; that is why some suppliers will not bid in response to Compact CCA Requests for Proposals.

Bill Surcharges¹⁷

CLC is still paying competitive market transition charges on the bill. These charges are currently \$0.0200 – \$0.0201 per KWh, and decline every year. The average bundled retail rate is 21 cents/KWh.

	Residential	Small Commercial	Large Commercial & Industrial	Government
Energy Rate	\$0.1270	\$0.1328	\$0.0799 (1)	
Total Rate	\$0.2100	(2)	(2)	\$0.10999 (3)
Distribution	69%	23%	1%	5%-7%

(1) Changes every three months

(2) Higher than residential (actual total rate unavailable at this time)

(3) Reduced to \$0.0967 Jan 2010 - July 2011

Opt-out rates

After initial loss of commercial chain customers, as mentioned above, bad debt, budget billing, and opt-out has remained low. Residential customers are very “sticky”, i.e., they tend not to switch very much or very often.

¹⁷ From interview with Joe Soares, CLC procurement officer

Loss of jurisdictions

The Compact has not lost any jurisdictions

21 towns and two counties meet once a month

Summary of Load Profile

Baseload:

- 200 MW

All time peak:

- 8/2/06 6pm (not seen since) 450 MW

Most recent customer base numbers, by class and percentage of total load:

- 160,000 Cape and Vineyard out of 200,000
- 69% Residential
- 23% Commercial
- 7% Muni – Separate contract 86,000,000 kWh, \$0.0967 vs.\$0.127 Residential

Procurement Details

The CCA procured 25% of its power supply in April of '08. The remainder was procured in late fall through December. These were procured in 7-8 megawatt “strips” after the gas price spike in the first six months of 2009.

The incumbent utility price for the energy component only during this time was \$0.9219 per kilowatt-hour. NSTAR was able to get this price because they happened to buy in the first part of the year. It was fortunate timing, nothing more, according to CLC procurement staff.

CLC Basic Power Content Label¹⁸

Power Source	Known Resource	Residual Power	Total
<i>Biomass</i>	0.0%	0.2%	0.2%
<i>Coal</i>	0.0%	12.2%	12.2%
<i>Diesel</i>	0.0%	2.3%	2.3%
<i>Large Hydro</i>	0.0%	0.7%	1.2%
<i>Jet</i>	0.0%	2.0%	2.7%
<i>Landfill gas</i>	3.5%	0.0%	3.5%
<i>Municipal solid waste</i>	0.0%	0.0%	0.0%
<i>Natural Gas</i>	0.0%	33.6%	33.2%
<i>Nuclear</i>	0.0%	30.4%	28.0%
<i>Oil</i>	0.0%	4.4%	4.7%
<i>Other Renewable</i>	0.0%	0.6%	0.5%
<i>System Mix</i>	0.0%	10.2%	10.2%
<i>GRAND TOTAL</i>	3.5%	96.5%	100.0%

Cape Light Compact 100% Green Power Content Label

Power Source	Known Resources	System Power	Total
Hydro: Run of River	75%	0%	75%
Gas	0%	0%	0%
Landfill Gas/Wind¹	23%	0%	23%
Nuclear	0%	0%	0%
Coal	0%	0%	0%
Oil/Gas	0%	0%	0%
Oil	0%	0%	0%
Wood/Refuse	0%	0%	0%
Hydro: Pump Storage	0%	0%	0%
Other: System Mix	0%	0%	0%
Solar	2%	0%	2%
Hydro: Pondage	0%	0%	0%
Coal/Oil	0%	0%	0%
Refuse	0%	0%	0%
Small Generation	0%	0%	0%
TOTAL	100%	0%	100%

¹⁸ <http://optimizer.conedsolutions.com/marketing/content/cape/capedisclosure.htm>

Procurement schedule parallels but doesn't match NSTAR

The most disappointing performance of the Compact was related to the impact of the permanent opt-out rights, and the decision of the Compact's governing board not to pursue a "long game" approach. According to State Representative Matt Patrick (D-Cape Cod), this decision was the greatest disappointment with the Compact, which he believes has undermined its performance in the gas price volatility crisis gripping the U.S.

Patrick thinks the peaker issue has been particularly damaging because "the utility managed to sneak charges into the kilowatt-hours costs for members of the Cape Light Compact that they ended up paying twice for"—and hid it in the transmission charge by charging the CCA Supplier that contracts with the Compact, imposing this fee on the Compact while also charging all their distribution customers, which includes the Compact customers. This is possible due to the split structure of the bill described above.

But the questions of planning long-term and reducing exposure to grid reliability costs are related. "These issues of gas prices and peaker charges sound small, but they have chipped away at the Compact's safety zone. Avoiding these problems would have been the difference between having a lower price and a higher one."

Patrick says the Compact should have adopted a vision of going long and changing the economics through renewables, but a conservative governing board took over and preferred a short-term environment, perceiving it as "less risky." But the results, say Patrick, were quite the contrary; "The short game, it turns out, is the problem, the cause of instability, price volatility. With the opt-out provisions in state law, the suppliers wanted contracts as short term as one year for their best prices, which is ridiculous." What we had anticipated didn't pan out." The Compact's short-term approach meant it would be "more expensive to be able to get more green electricity." It was a self-defeating process to prevent one policy, green power, with another that was falsely perceived as "lower risk" in the short game.

The whole issue is fuel. "Because people who sell electricity don't want to commit to more than one year, they cannot get a guarantee on the fuel costs. Because CCA's in Massachusetts cannot act as wholesale power providers and are limited to a retail transaction." Patrick remains hopeful that CCA member towns will choose to use their municipal financing powers. "It is just fiscal limitations because they must get permissions from the towns." Under a new statewide municipal bonding authority, towns on the Cape may issue bonds for investments, provided that they sell the power to the Compact's customers.

Even though Massachusetts' electric restructuring law established CCA rights to administer Public Goods Charge (PGC) funds paid by all Cape Cod customers, Patrick said that at first the governing board did not want to pursue the PGC Energy Efficiency moneys, but staff managed to get hold of it. Today the Compact administers \$5 million per year in Energy Efficiency Funds, expects to grow to \$10 million per year with another \$5M per year in revenue expected from the value of carbon credits the Compact expects to receive from the impacts of these efficiency measures. "Today, energy efficiency is the main thing the Compact does," he said.

Green Pricing Dilutes Green Buying Power

Key to the failure of the Compact to “go long” and invest in renewables was its “buying into” the Green Pricing model of renewable energy marketing. Instead of setting a baseline bidding requirement for green energy supply for the entire CCA, the Compact made green power an optional “premium product” under which the customer must pay extra to receive greener power. Patrick says he and other colleagues who founded the Compact were pushing the notion that towns make a minimum renewable energy requirement higher than state law for all power sold to the Compact, “so you put a huge demand in the market for green power— but they (the governing board) didn’t want to bother with that—and it ended up hurting the Compact. “

Patrick said that supporters persuaded Compact leaders to negotiate with Cape Wind on this basis. Patrick says that Compact leaders felt Cape Wind was asking too high a price, but he disagrees. “The Compact board was comparing one year prices for gas-fired power and comparing it to Cape Wind’s 20 year price, slightly higher. Just think how well they would be doing today had they signed it. How do you compare that? The price was about what they were paying at the time per kWh for 20 years with only the consumer price index as an inflator? How do you beat that?”

Over the years, the Compact has been reduced to a 6-month period time horizon, in line with NSTAR’s procurement schedule, and in a sense mimicking their movements on the wholesale power markets, with CCA and utility competing to buy power from power plant owners:

- NSTAR buys a 50% block in May for July 1 to June 30 the following year
- Then in the Fall they buy a 50% block for January 1 through December 31

According to staff, NSTAR always blends the two prices in their rounds so they have an overlap— “if they have a 50% block from July 1 to June 30, then in Oct you buy another 50% block and blend the costs from two components.”

The Compact extended its contract with ConEd through the January, 2010 meter-read dates. Then the Compact started to purchase “on a more cooperative basis,” with conference calls, and the supplier working on a more “open-book” basis as more of a partnership than just arms-length bidding. “ConEdison and the Compact work hard together to keep price as competitive as possible.”

Unlike NSTAR, which buys power in May and October, the Compact has 260 days it can be buying. Staff says that that can work “against you or for you.” Cape Light Compact energy price has always been competitive with NSTAR. Staff says, “We have issues. When NSTAR blended Cambridge Electric, Boston Electric and Commonwealth Electric, they operate two load zones— one has high congestion and reliability issues; the Northeast Load zone doesn’t have that. So when NSTAR has different prices, they blend the congested zone with the non-congested zone. CLC and ConEd is all in SEMA (Southeast Massachusetts Congestion Zone), so we have higher congestion, and thus no ability to blend. If we did everything the same (as NSTAR), purchased the same (energy supply), our price would be 1.3 cents higher.” (Joe Soares)

Gas-Based Cherry Picker Competition

When CLC buys energy, they do it under contracts lasting 6 months or a year. On January 1 of each year, the Compact must have energy in place for January and February peak pricing months, then for March through June.

The Cape Light Procurement Officer describes the process in this way: “Dominion¹⁹ (a competitive supplier) comes in March or April for September and October. They don’t have customers so they put out an offer, and say here is our price in April for the year. They pick their entry point. The Compact has to have it purchased, in place, in advance. So if someone doesn’t have a customer, they can pick an entry date for the customer that is good for them to come in. They don’t come in July because they know they will cost more than us.”

CLC has used these strategies:

1. In order to address the outlined premium costs from the “Uplift”, the Compact established an “Uplift Bucket”—it sets a proxy for what it thinks the ISO must-run orders will be and what it estimates power prices will be. The Uplift Bucket works like San Francisco’s Rainy Day Fund established in 2007 to set aside surplus revenues to have in reserve to soften the impacts of future budget deficits; if the Canal Plant charges come in below the proxy level, the Compact and its supplier (now ConEdison Solutions) share the savings and also lower customer rates.

2. The financial crisis bifurcates the aggregation. Municipalities have gone through financial strains under the Wall Street collapse, so CLC pulled municipal load out. The municipal load represented \$186 million per year, and will be placed in a separate RFP for January 1, 2010 through June 30, 2011 (18 months) for competitive bids. According to staff, “We got big name players involved as bidders and at the end of the day the winner was ConEd Solutions. It wasn’t even close. So municipal accounts are now served on a very attractive rate,” the difference of 12.6 cents/kWh versus 12.999 cents/kWh, starting in April.

Staff say there is no load shape diminution as ConEdison also has the municipal load. However, uncertainty over future load shape, future solicitation decisions and commitments will change the load shape of residents and businesses, and could reduce the levelized cost value²⁰ of the contract, weakening the bidding pool.

According to staff, under the auctioned municipal accounts, bidders were not allowed to pick and choose among the agencies, with 49 entities including the Town Halls in each small town of Barnstable County, with the same rate for all accounts, whether large and small. This means that the remaining residential and business customers will be served as a smaller load. Similarly, the separation of the Hetch Hetchy system from the CCA in San Francisco makes the CCA load smaller than the City actually is in terms of energy and annual capacity requirements

¹⁹ Under Massachusetts deregulation rules, any customer in an aggregation may opt-out and pick another competitive supplier at any time.

²⁰ Levelized cost is the total cost of the contract over time, divided by the total number of kilowatt hours delivered.

New Procurement Model in Next 6 Months

Going out to bid later this year, the Compact is seeking another supplier after five years. 2005-06 multi-year extensions on a two year contract will take them through January 2011. They will take bids and select a supplier in early 2010. NSTAR is the competition. They purchased their power this spring. They bought 50% of the power supply for second half of calendar year 2009, and for the second year 2010. This means that CLC wants a supplier identified by March 2010 so they can work the market. CLC also wants to allow the supplier as much time as necessary to lock up load. They expect the supplier to compete to procure power. CLC plans not to ask for prices initially, but will do terms and conditions.

A New Theme for CLC procurement staff is “Don’t ask for prices in this market. Instead we now ask: who can give us the best terms?” In terms of pricing or procurement model, the Compact will likely will use an NSTAR price bandwidth around basic service. This bandwidth price is confidential. But Mr. Soares of CLC says they are still deliberating on the structure of the next RFP. To compete against the distribution company you must compete against them. *“We know suppliers need time— multi-year contracts to leverage their buying power.”*

In terms of procurement schedule and behavior, CLC staff say the Compact is following NSTAR’s procurement process to an extent. “We are trying to maximize our ability to buy periodically,” he said. Utility distribution companies have to buy power at certain times, if we know when they need to buy, we need to buy in relation to their timing. The choices are with bandwidth; you can buy when the utility does, or else buy throughout the year. So far Compact staff have done both. Staff say the Compact is facing a bad position relative to the discount rate, another indication that the increasing volatility of the price of natural gas is a major challenge of CCAs. ConEdison made a decision in the fall to hedge 2009 load before the markets crashed. The utility had 50% of position open for the calendar year. They filled the position in spring and prices were low. CLC and NSTAR are buying from the same supply pool—at the same fuel price base.

Development of Renewables

The Compact’s efforts to develop renewable energy, in a manner comparable to San Francisco’s CCA Program, has been limited by the absence of a renewable energy bond authority for local governments in Massachusetts. While Compact member towns can now issue H Bond-style revenue bonds to finance local renewable energy and conservation technologies, the Compact itself has pursued a separate course using an electrical cooperative between Barnstable County and two local municipalities.

Prior to passage of the Green Communities Act in July, 2008, cities and towns were not authorized to bond or borrow for electric generating plants unless they were municipal electric utilities. After San Francisco voters approved the H Bond authority in 2001, cities and towns in Massachusetts were interested in the solar bond idea, but learned that they had limited authority to issue bonds to finance solar on homes and businesses. “They said were cannot pursue renewable generation, couldn’t issue bonds, or that it could take up to three years to get it approved through a Home Rule Petition for a strictly local project.”

Massachusetts Chapter 164 (1997) allows establishment of Cooperatives that own generation and use borrowing and financing directly as governments. Under state law, you must be a cooperative to issue these bonds. Cooperative members are cities and

towns on the Cape and Vineyard.

The development of the Rural Cooperative (RUS) was undertaken prior to the Green Communities Act, so cities and towns have the power to issue debt to finance generation. It found its own funding source. The co-op will go to RUS (US DOA), which will finance electric generation project for rural coops. This is another lesson of CCA—that they are flexible to partner with other local or federal government partners in order to improve their position in energy markets.

The Compact is also eligible for federal Clean Renewable Energy Bonds (CREBS). CREBS dollars are set aside “for Co-ops, so we have a priority allocation.”

RPS Compliance

The Compact has negotiated with supplier directly for RPS compliance, and folded it into the CCA program, such that the Compact’s supplier takes the power within the committed rate schedule bandwidth. The Compact has a contract with the entity from whom it buys renewable energy certificates (RECs), and transfers the credits to its supplier for the ISO/DOER, which together track RPS compliance statewide.

Renewable Components of the Procured Energy

The Compact has negotiated for RECs from the Washington Electric Cooperative landfill gas facility in Vermont, based on a large regional landfill there. The Compact purchases 36,000 RECs from the Washington Electric Cooperative.

How Renewable Energy Credits (RECs) are retained, bought, or sold

The Compact enters into a long-term contract (5 or 6 years) to purchase credits at a set price, traded quarterly, Washington Electric Cooperative invoices the Compact, then the Compact invoices its supplier (ConEd), then transfers the money electronically.

Wind Turbine Development

One major question is: how can the Compact integrate Co-op owned green power with its CCA power purchase agreement? Staff say they will sell municipal bonds to finance twenty to thirty (20-30) one and a half (1.5) MW turbine to serve municipal load.

The Compact’s contract with the supplier contains language that the supplier must manage the portfolio for the Compact. The Compact will accept power from the Co-operative-owned asset and include this power in the CCA-based service. The Compact will take up to a certain amount of capacity developed in this arrangement. This potentially allows power generated by a Cooperative asset to be resold to Compact Customers through an inter-municipal agreement, comparable to the “Split Delivery Mechanism” proposed by Local Power’s consulting team at the San Francisco Local Agency Formation Commission hearings in December, 2009.

The Compact has provided a copy of its agreement with ConEd. Some components are

redacted for pricing information.²¹

Photovoltaics Development

Supplier ConEdison has also partnered with the Compact on photovoltaic installation development. Under the agreement ConEdison will install 750 KW on seven sites. The seven 100 KW systems will be transacted in a long-term PPA with ConEdison, in a conventional PPA under which the economics pencil out or work out economically without the federal tax credit. The first photovoltaic project will begin in late 2009 or 2010. The RUS makes power purchase agreements with towns (credit-worthy entities), and RUS will finance the projects.

The PPA will be written between the Compact and the Cooperative. This is due to a facet of Massachusetts law, different from California. There is no Joint Powers Authority (JPA) for local governments to combine for services such as garbage collection, equipment supplies, food procurement and the like. This is an authority specifically provided for under California's CCA Law, AB117. Unlike JPAs, which can be formed to govern regional California CCAs and have their own financing authority, Massachusetts' regional associations like the Compact have no legal existence. They are not included in the Green Communities Act among organizations that can finance renewables. Only the local governments that are members individually have this authority. Hence, the Cooperative is an important example of how CCAs can find creative ways to partner and finance or co-finance renewable local power investments.

One major constraint on the Compact's renewable development was created by an IRS private letter ruling for the Co-op saying it cannot partner with private entities in a manner that would allow the private partner to benefit from the Compact's tax-exempt debt authority. There appears to be some flexibility about the sale of power from the Co-op to the Compact in terms of the ability of the Compact to resell the power to both municipal and residential customers. Because the Cooperative and Compact are separate entities, the Co-op will serve municipal load— 15 MW of baseload for municipal account customers in Compact member municipalities. Staff indicate that if the Cooperative develops capacity in excess of member municipality power needs, then the Compact would potentially sell excess energy to Cape Light Compact residential customers.

The Internal Revenue Service Ruling on Tax Exemption

The IRS has indicated that it is cracking down on "double dipping" such that the ownership structure of CCAs must be clear from the beginning to avoid trouble with tax exemptions. On the solar or wind PPAs, staff say that the Compact may enter into "contractual relationships" but not have "token" joint ownership agreements. "We can't have public/private partnerships where the Compact owns 20% and they own 80%."

²¹ Actual contract. Go to DPU website to find contracts, if cannot find call Maggie, counsel will charge for them. Email me and I will cover cost.

Cape Wind

Cape Wind is the only commercial entity that has approached Cape Light Compact with an innovative local renewable energy proposal. The outcome was tragic. Ken Gorden (whom LPI attempted to interview, but was unsuccessful) approached Compact officials formally and offered them a twenty year power purchase agreement from Cape Wind, but according to staff, the power was expensive.

The Cape Wind project is also controversial, with a number of Compact member towns strongly opposed to the project. This made the possibility of division between Compact members a sensitive policy decision to approve.

According to staff, the municipal members of the Compact “might do it for themselves” but definitely not as “a program of the aggregation program narrowly defined.”

Types of Compact Energy Sources

Purchased power is all system power, primarily natural gas. Compact staff say, “This is our only option unless we buy from Pilgrim”, but say that even here, Pilgrim is making too much money selling into the market to be interested in long-term contracts. When asked the same question about innovations in supply, Marlborough’s consultant also mentioned Pilgrim as an idea he had brewing.

Rates

The challenge regarding pricing is the basic chicken /egg problem of failed markets. In order to finance a power asset a developer needs a long-term contract commitment, usually in the form of a captive ratepayer locked into repaying utility investments. But as those developers become power plant owners, because of the price volatility of the fuel they burn in the plant that the CCA helped them finance, they will still usually offer only short-term price commitments. They will also charge a hefty natural gas price premium in exchange for managing the risk that gas prices will rise. In effect, they are also acting as an insurance/hedging service.

These economics are not universal, but apply especially to gas and oil-fired capacity. This is due to the price behavior of the commodity fuel. The paradigmatic challenge in retail power markets in Ohio and Massachusetts is that in fossil fuel-powered electricity markets, the wholesale price of power is a couple of pennies above market. In deregulated markets, the further out in time you go, the higher the prices.

It is the Catch 22 of deregulation that the supplier who requires a large long-term power purchase agreement in order to finance its new power plant, will not in return offer a long-term commitment to the price of its power output. Since they receive the secured revenue of those customers, the long term commitment to supply power is implied.

Limiting themselves to a narrow, procurement-only approach to CCA, the founding CCAs have all suffered repeatedly from the impacts of gas-fired power. As California system power is also largely gas-based, San Francisco’s fuel strategy, in addition to its transmission constraints, is comparable to the Compact in this respect. The same is true with NOPEC, Marlborough, NOAC and San Joaquin.

In conclusion, wholesale markets for energy, such as natural gas fuel price hedging, make a long-term power commitment appear more expensive than a short-term

commitment. This major market distortion is mitigated by the fact that changing cost factors such as natural gas prices, or peaking and reliability-must-run power costs, produce opportunities for economic benefits that CCAs can capture and share with customers.

The energy cost formula separating decision-making at the wholesale market level (e.g., what to do about an old peaker plant) from the retail decision-making (e.g., where to target energy efficiency, or other new investments to replace the peaker) is perhaps the major vulnerability of CCAs today in the United States, and one of the major Lessons Learned about CCA in Massachusetts and Ohio.

Negative Impacts of Short-Term Rates: Volatility, Cyclical Rate “Shocklets”

The Compact has survived a period of six months when their rates were higher than NSTAR’s. They managed to retain the great majority of their customers, but did lose some. For the second time, the Compact is about to enter a difficult period. The price of natural gas has suddenly dropped in recent months, just in time for NSTAR’s next round of gas procurement.

Full retail rates for the CCA are 19-20 cents per kilowatt-hour. The Compact is a tenth of one cent (one mil) below NSTAR’s rates for each ratepayer class in general, and during some short periods of time a mil above NSTAR’s rate.

The Compact is about to enter a significant pricing differential with NSTAR for a six-month period because of natural gas price volatility. Compact staff believe that if customers are intolerant, commercial and industrial customers may opt-out of the program. However, staff are generally confident that they will retain their customers as they have in previous periods of natural gas price fluctuations, or when excessive Canal peaker plant power is ordered each summer. In those cases, most customers remained with the Compact through thick and thin.

Another of the important lessons learned is that CCAs enjoy superior customer retention in volatile markets. While many retail power providers prefer large commercial and industrial customers to residential customers, CCA makes the latter more reliable, perhaps, than commercial and industrial customers. This “stickiness” of CCAs is an important advantage that has enabled NOPEC and the Cape Light Compact to continue to exist, despite distorted wholesale markets from gas price overexposure. Whether interpreted as passivity or loyalty, NOPEC and Compact customers have largely stuck it out with their community energy program.

Utility Advantages

According to Compact staff, NSTAR has several advantages that are challenging to overcome. NSTAR, being a huge regional utility of which the Cape and Islands are merely a part, has some transmission constrained areas, like Southeastern Massachusetts and Cape Cod, and other areas that have robust transmission infrastructure crossing them, like the Northeastern Massachusetts zone. According to Compact staff, NSTAR blends their rates between the Southeastern (SEMA) and Northeastern (NEMA) zones. “If we do everything the same, we lose. SEMA is congested so prices are higher than in the other zone. They don’t do that for large commercial and industrial customers, but do for small. If you track our industrial rate to theirs the difference is a penny.”

Program Cost and Rate Recovery

The Compact doesn't set rates. Instead, power supply contracts have a bandwidth price. The Compact has the same rate structure as NSTAR— a residential rate, a small commercial & industrial rate, and a large industrial rate.

Mechanisms for Maintaining Rate Stability

The Compact uses the uplift bucket method mentioned above to reduce the impacts of grid reliability related power costs.

2. Marlborough Aggregation Program²²

Until recently the newest CCA to form in the United States, Marlborough Massachusetts formed in 2008 and took advantage of dropping natural gas prices to achieve lower rates for its residents and businesses. Spearheaded by a consulting group that took on operational and brokering responsibility for the program, Marlborough offers a number of lessons learned based on its strategy, policy goals, and experience during its formation.

Chronology of CCA Program

An energy service provider, Colonial, approached Marlborough in September, 2002, presenting a proposal to pursue CCA at a city council meeting, but the item was tabled until 2005 when the City Council picked up the question in earnest. In November 2005 the City issued a Request for Proposals for consulting services to design and manage the program, and Colonial was hired to run the program.

In June, 2006 the City Council and mayor approved an aggregation plan— not detailed, but outlining the basic structure of the program. In 2006 Marlborough submitted its CCA plan to the Massachusetts Department of Public Utilities (then the DTE), and its program was approved in March, 2007.

In April, 2007 the City's RFP resulted in approval of a contract for power supply signed with ConEdison Solutions. Customers were enrolled in June, 2007. The contract lasted one year, consisting of two six-month price periods.

In June 2008, when the ConEdison Solutions contract with Marlborough expired, the City had received no satisfactory offer from any supplier due to the impacts of increasing natural gas prices on the cost of System Mix power. "We had been watching (prices) for most of the winter and spring," said Murphy. "National Grid bought its power in March. Between March and late May, prices continued to increase."

The Mayor and City Council of Marlborough voted to put the CCA Program in hiatus for six months, returning customers to National Grid.

In December, 2008 Marlborough's RFP resulted in a successful contract negotiation with ConEdison Solutions, based on lower System Power costs resulting from a dramatic drop in the cost of natural gas.

Municipal CCA Governance Process

- Vote of City Council/Town Council and approval of Mayor/Manager to authorize approval of Mayor/Manager to authorize aggregation (non-binding)
- Release RFP for Consulting Services/Choose Consultant
- Development of Aggregation Plan
- Input from the Massachusetts Division of Energy Resources (DOER)

²² Marlborough Research: 1) Collected Available Documentation; 2) Two Interviews with Brian Murphy, President, Colonial Power Group

- Public Meetings
- Input from Suppliers
- Negotiation of Electric Service Agreement with each interested supplier
- Filing of Aggregation Plan with the Massachusetts Department of Public Utilities (DPU)
- Release of RFP and selection of winning supplier
- Opt-out mailing to every Basic Service Customer
- Competitive power flows after opt-out period is over

CCA Policy Goals

- Choice: Aggregation created consumer choice in Marlborough
- Stability: Fix rates for all participating consumers based on community goals
- Control: Program is one plank of platform for local control of energy issues for local control of energy issues

Key Features of the Marlborough Aggregation

- Universal Access
- Opt-out anytime
- NO FEES to individual customers
- NO TAX DOLLARS used
- Program is ultimately overseen by Mayor and City Council. Voters, therefore, have the ultimate authority over the Program.
- Bulk-buying allows Marlborough to negotiate terms and conditions.

Key People Involved in the Marlborough Program

- Mayor Nancy E. Stevens—Ultimate Authority Over the Program
- City Council—Active in every phase of development process
- Colonial Power Group, Inc.
 - Design and Implementation of Program—Daily Management of Program
- National Grid—Strong support of Program
 - Customer transfer billing metering
- ConEdison Solutions
 - Experience with aggregation
 - Smooth transition of customers

Marlborough CCA Customer Profile

- 36,000+ residents
- Diverse mix of residents and businesses
- 18,000 electricity ratepayers in jurisdiction
- 620,000 MWh of electricity consumed annually

Opt-Out Rate and Resulting Load Size

- 2007-08, 3% of customers opt-out rate— no sense of load size. No published opt-out rate per class

- 200,000 MWh/year
- peak load is approximately 50 MW
- 1800 small commercial customers
- 15,000 residential customers
- 50 commercial & industrial customers

Successes

- Moved 16,000 customers using 260,000 MWh to competitive supply
- Marlborough's customers saved \$700,000 compared to National Grid's Basic Service Rate
- Operational Status
 - 3% opt-out rate
 - Biggest Challenge: Overexposure to Natural Gas Prices
 - Biggest Benefits: Choice, Control, and Savings

Lack of Suppliers

One of the key challenges of Marlborough's CCA program was a lack of competitive suppliers interested in serving this small, low-income community.

Apart from ConEdison Solutions, Hess Corporation, which is a large vertically integrated energy company, refinery owner and gasoline retailer on the East Coast with a fairly new deregulated electricity arm in New England and New Jersey, put in competitive bids in response to Marlborough's RFP. According to Murphy, the City decided in favor of ConEdison Solutions because of its successful experience serving the Cape Light Compact.

According to staff, the principal challenge of attracting suppliers was the undesirable nature of Marlborough's customer and load profile. In Massachusetts, according to staff, some 85% of industrial customers are on competitive supply. Meanwhile, 85% of residential customers remain in Default Service receiving power from their distribution company.

According to staff, Marlborough contacted all suppliers, and several cited the low-income, largely residential customer base as a key challenge. "Many suppliers who generally serve industrial customers in Massachusetts do not have existing operational capability of serving thousands of residential customers. There is a lot of hand holding that can go on with residential customers." Main issues were:

1. The risk in serving large numbers of residential customers—the ability of customers to migrate over time, and consumers may opt out whenever they want.
2. Bad debt— another major issue was the risk of carrying a lot of receivables. According to staff, suppliers consider Marlborough's residential customers undesirable, consisting of substantial mixed housing, transients, and "lots of people who neglect to pay their electric bill here."

Gas Price Exposure

The single greatest problem for the Marlborough CCA is its overexposure to natural gas prices. “The marginal fuel here is gas— and it sets price for System Mix electricity. Prices shot through the roof in spring, 2008, driving us out of the market as far as meeting or beating the (National Grid) utility rate.”

National Grid had procured their power the previous fall, and so escaped the commodity bubble. When the bubble burst Marlborough went back to the market.

The latest agreement involves a single supplier who will serve all rate classes. The agreement borrowed heavily from CLC. They are using the same supplier as CLC, ConEd Solutions. Staff say, “If they can meet our price requirements, adding (our) 15,000 customers to the CLC customers is not much.”

Rate Structure

Contractually, ConEd Solutions has committed to be lower than the utility. Under the current agreement, ConEd Solutions pledged to beat the utility rate by 1/10th of a cent in each of three successive 6-month pricing periods, December 2008 to May 2010. Marlborough’s pricing periods are concurrent with the local utility’s pricing periods, so price movements come at the same time.

The local utility was also caught in the “gas bubble.” From September through October, 2008 ConEd bought at such a low rate it could beat utility rates. However, it allowed a margin so great that they could pocket a profit. Even if they paid the same price as the utility in the future, they could apply it to ensure savings, due to the sudden drop in price of natural gas.

The power supply agreement can be terminated by either party. If ConEd defaults, they owe the City a token penalty.

There is no Massachusetts state requirement for the aggregator to pay the utility for marginal or incremental costs. The utility can assign the aggregator the current default service price. There is no penalty to switch if you are part of an aggregation. With industrial consumers there are other rules. They are not allowed to bounce back and forth every three months or so. There are some disincentives there.

There is an 18 month limit on contract length. This limit is due to the preference of the elected officials, not the supplier.

Green Products

There are no Green Products. The supplier was willing but city leaders didn’t express much interest in it. Leaders were strictly focused on saving people money. Green power options are available through the utility or other third-party providers. However, there is no way to green up the power mix without adding substantially to the cost.

Energy Efficiency (EE) programs are still controlled by the utility. Marlborough chose not to pursue access to the PGC Funds deposited by ratepayers with the utility:

1. Marlborough worked well with National Grid in designing rules regarding opt-out aggregation applying to them specifically
2. When Marlborough raised EE funds questions, National Grid did not like that idea—“they said they would fight us on it. We would have to prove we could do better than National Grid, and Marlborough staff think they are doing a good job.” NSTAR was never happy about CLC EE funds, but CLC has innovative programs. There is a unique culture on the Cape. But they must demonstrate to DPU every year that they are doing a great job and deserve continued access to that money.

According to a Marlborough official, “The marketing process is harder than I thought. There are active, exploratory programs, but no one has gone as far as Marlborough yet. It is so complicated that if a town doesn’t already have a savvy energy manager on staff to carry workload, they will not do it. It is a consultant driven process—I have to knock on the mayor’s office door, and explain CCA. It is a hard sell, complicated process, but we are trying.”

The official continued, “I would like to have Marlborough marry a supplier for a 5 to 10 year agreement. You cannot predict cost, but you can commit to do certain things, (such as) go long on supply, develop renewables and demand resources.

Gas aggregation is allowed but people say it has not been done here because of high capacity fees that you must pay to the pipelines. You must buy capacity and if you don’t use it due to shrinking demand you must pay for it, and the gas distribution utility has better recovery ability.

Marlborough is not transmission capacity constrained. There is a ‘sweet spot’ in Massachusetts, outside of Boston Metro area, with good transmission. The price we get is a couple mills better because of this.”

Contract Terms and Rates

The longest duration for a contract to supply power to a CCA has been 3 years. The rate beats the utility rate for residential and small commercial classes. There is a third rate for medium and large commercial customers that the supplier does not need to beat. This rate changes every three months and has a large swing. The supplier cannot offer a guarantee there, and many have direct access contracts.

Large users on default service get the aggregation deal. The aggregation has 50 medium and large commercial and industrial customers out of a total of hundreds of them.

Government accounts have a long-term power deal exempting them through the aggregation. With Constellation New Energy/MMA, there is a 10-year deal from September 2005 to 2015.

The City of Marlborough went out in 2002, and did a deal with TransCanada from 2002 to 2006. The city used Bay State Consultants, which is a broker in Massachusetts. When

the aggregation concept started picking up participants, the mayor did not support it. After the hurricanes, the mayor did arrange a long term deal.

The supplier factors capacity charges in with an estimate. With residents it is straightforward; the utility assigned capacity factor for all customers no matter where they are in the service territory. Commercial and Industrial customers have individual tags but the supplier factors that in, so the aggregation industrial rates are high.

Utility Charges

Colonial staff agree that the current system is inadequately innovative. ConEdison is buying and reselling system power for retail sale. "They could do something more complex," such as procuring from specific sources, though staff are not yet considering innovative services such as marketing local power sources, photovoltaics or energy efficiency like the Compact.

C. Ohio

In 1999, SB 3 (Chaptered as 4928 of the Ohio Revised Code)²³ established a competitive electricity market in the State of Ohio. This same law includes Community Choice, which is called "governmental (municipal) aggregation" in the code. The electricity industry restructuring accomplished by this law separates the generation and distribution of electricity, and allows consumers to select the source of their electric supply from competitive suppliers.

Stephen Littlechild²⁴ has written an extensive analysis of governmental aggregation in the state of Ohio, along with background on deregulation. Quoting from his study:

In 1999 Ohio decided to deregulate its electricity market, effective 2001. The utilities were required to file Electric Transition Plans covering the five years 2001 – 2005 to facilitate this deregulation. Within three months of market opening, over 150,000 residential customers had switched supplier. The Northeast Ohio Public Energy Council (NOPEC) was formed in 2000 to represent nearly 400,000 customers from 94 communities, "the largest community buying group of its kind in the nation."

*Residential switching (from the incumbent) did not occur in some territories but was active in others. By December 2002 it had reached 60 percent in Cleveland area and 41 per cent in Toledo. In total over 750,000 residential customers were with competitive service providers. In May 2003 the Public Utilities Commission of Ohio (PUCO) declared that "of the twenty four states in the US that have adopted electric choice, Ohio's experience has been among the best". Moreover, "aggregation is the success story in Ohio, accounting for nearly 93 per cent of residential switching in Ohio."*²⁵

*For a few years, retail competition and municipal aggregation continued to flourish. By December 2004 residential switching was 69 per cent in Cleveland and 48 per cent in Toledo, a total of over 900,000 customers. Nearly 170 cities, counties and townships had formed government aggregations to purchase discounted power on behalf of their citizens. Such programs accounted for nearly 95 per cent of residential switches. The Ohio Consumers' Counsel (OCC) declared that "Ohio has the most successful aggregation program in the nation and serves as the model for other states."*²⁶

*In August 2005 the PUCO declared that Ohio was now "second only to Texas when it comes to the level of residential customer participation."*²⁷

²³ <http://codes.ohio.gov/orc/4928>

²⁴ Emeritus Professor, University of Birmingham, and Senior Research Associate, Judge Business School, University of Cambridge. Email address sclittlechild@tanworth.mercianet.co.uk

²⁵ The Ohio Retail Electric Choice Programs, Report of Market Activity, 2001-2002, Public Utilities Commission of Ohio (PUCO), May 2003, covering statement, page 20 and Appendix B. The phrase "Electric aggregation – Ohio's success story" is echoed on the website of the Ohio Consumers' Counsel www.pickocc.org, which affirms that "Ohio's aggregation record is impressive."

²⁶ Biennial Report of the Office of the Ohio Consumers' Counsel to the Ohio General Assembly on the State of Electric Restructuring, Janine L Migden-Ostrander, Consumers' Counsel, December 30, 2004, p. 4.

²⁷ The Ohio Retail Electric Choice Programs, Report of Market Activity, January 2003 – July 2005, PUCO, August 2005, covering statement and Appendices B and C.

Meanwhile, as the Electric Transition Plans came to an end, new Rate Stabilization Plans were put in place for the major utilities, covering the three years 2006 – 2008, to provide a more gradual transition to market-based rates. NOPEC warned that these could be “fatal to NOPEC and other governmental aggregators and suppliers”, and their collapse would be “a disaster of epic proportions for the PUCO to deal with.”⁴

There is a widespread view that the future of municipal aggregation will depend critically on the evolution of electricity regulation after the Rate Stabilization Plans terminate in December 2008. (SB 221 was passed in 2007, which addressed the problems with the Standard Offer prices).

The same applies to retail competition generally, since “electricity shopping in Ohio has been dramatically reduced over recent years, and several suppliers have left the state.”

⁶ By December 2006, including with the reclassification following the change of NOPEC supplier, residential switching had fallen to 8 per cent in Cleveland and 11 per cent in Toledo. Only 266,000 residential customers, some 6 per cent of the Ohio total, remained with competing suppliers.⁷ The OCC website says that “the competitive market has struggled to develop” in Ohio. The PUCO website says bleakly that “No Competitive Retail Electricity Suppliers are currently enrolling customers in Ohio.”

In April 2007 the Consumers’ Counsel argued that “Ohio has yet to embark on a true competitive path. ... Due to a combination of factors, aggregation – which was the jewel of deregulation – has also dissipated.”⁸ On 1 May 2007, Ohio Governor Strickland acknowledged that “electricity deregulation has had a more than checkered past and maintains an uncertain future. Competitive markets simply have not developed.” This speech was reported under the headline “Ohio governor says deregulation of electric industry not working.”^{9, 28}

In 2008, landmark legislation was passed to reform some of the more serious problems with deregulation. This legislation, SB 221, mandated an auction of 100 tranches formed from the total electricity load of Ohio, exclusive of the rural electric co-ops and governmental aggregations. Each tranche, representing one percent of the total load was awarded to the lowest bidder. The winning bid for the load set the Standard Service Offer²⁹ price.

SB 221 also set the following renewable portfolio and energy efficiency standards:³⁰

By end of year	Renewable Energy Resources	Solar Energy Resources
2009	0.25%	0.004%
2014	2.5%	0.12%
2019	7.5%	0.30%
2024	12.5%	0.50%

²⁸ Littlechild, Stephen: Municipal Aggregation and Retail Competition in the Ohio Energy Sector, August 2007

²⁹ The Standard Service Offer (SSO) is the price that is set by the regulator that must be offered by the “default provider” to customers who choose not to switch providers.

³⁰ <http://codes.ohio.gov/orc/4928.64>

Effect of Recent Legislation (SB 221)

Highlights of the legislation (from Leigh Herington)

- Customers participating in governmental aggregation programs established under 4928.20, Revised Code, will not be required to pay any surcharge resulting from the phase-in of a standard service offer (SSO) plan, either a market-based offer (MBO) or electric security plan (ESP), that is not proportionate to the benefits received by such customers, as a group, receive. This means that aggregation customers that have not participated in a phased-in SSO offering will not be required to pay for the costs deferred as a result of that phase-in when such deferrals are collected in later years.
- Customers participating in governmental aggregation programs will not be required to pay the utility for standby generation service where the aggregation program elects not to take such service. This means that customers participating in an aggregation program will not be required to pay for needless and duplicative “insurance” that provides no material benefit to those customers.
- The PUCO is directed to adopt rules that encourage and promote large-scale governmental aggregation. To this end, the PUCO is required to conduct an immediate review of its existing rules. This requirement gives governmental aggregators such as NOPEC a meaningful opportunity to persuade the PUCO to address some of the hurdles faced by aggregation programs, such as switching fees and to adopt rules that will ease the administrative burdens that can interfere with the success of aggregation programs.
- The PUCO is also directed to consider the effect on large-scale governmental aggregation of any non-by-passable generation charge that is newly approved in the context of an ESP.
- Each of these additions to SB 221 will contribute to a more favorable environment in which an aggregation programs will have a greater chance to succeed in bringing the benefits of electric competition to tens of thousands of small Ohio customers that may not otherwise be able to enjoy the benefits that a competitive marketplace can offer.

The principal objective of SB 221 was to preserve customer choice. It was necessary to “true up” SB3 (original 1999 restructuring legislation). Truing up was required because after the stranded costs were paid off over certain period of time, the “Electricity Transition Plans” set up by the state caused electricity prices to go up significantly. This made it impossible for aggregations to compete.

Other features of the relationship with the supplier that are specified by SB 221

- Deliver efficiency programs
- Renewable portfolio standard
- Low income subsidies

Ohio Law Allows for Different Forms of Aggregation

The 1999 restructuring law allows for opt-in aggregation or opt-out aggregation.

Opt-in Aggregation

Opt-in aggregation is a program that permits each customer to sign up individually to participate in the program. If the local government chooses Opt-in aggregation, it can proceed to develop a plan and start signing up customers. The plan must include all rates and terms for customers to consider when deciding to join.

Three Year Opt-out Aggregation

If a community chooses to pursue this form of aggregation, a number of steps are required. A majority of voters must authorize opt-out aggregation in an election. The issue appears on a primary or general election ballot for voter consideration.

Like California, Ohio's opt-out process enrolls all local residents, unless they individually opt-out of the program (choose not to be included). As in Massachusetts, Ohio's original CCA legislation provided for opt-out rights, but rather than leaving it open at any time, it limited opt-out rights to once every two years. Realizing that even this was too restrictive, Ohio CCA leaders lobbied to remove the requirement, and in Senate Bill 221 the opt-out was scaled back to every three years.

If opt-out aggregation is authorized by a majority of the voters, the local government must form a plan of operation and management. They must also hold at least two public hearings to allow customers to voice any concerns over the proposed plan. Once the local government has adopted the plan, each customer to be aggregated must be notified that they will be automatically enrolled in the program unless they specifically elect not to participate. This notification must also state the rates, charges, and other terms and conditions of enrollment in the program. The opt-out notice is usually a letter accompanied by a post card to be mailed back if you do not want to participate or sometimes, a phone number to call or web site to visit to opt-out.

The local government must allow anyone enrolled in the program an opportunity to opt-out every three years without paying a switching fee.

Summary of Current FirstEnergy Standard Service Offer (SSO) Generation and Distribution Charges as a result of the SSO Auction

The Auction mandated by SB 221 was recently concluded in May of 2009. This Auction set the Standard Service Offer price. The Standard Service Offer generation price is the cost of generation for customers that choose not to switch suppliers. These are the prices that are available in the service territory of the aggregation to customers that opt-out from the aggregation. In conjunction with the Electric Security Plan required of each of the electric companies operating in Ohio, the rates and rate caps are now set for the next two years in Ohio.

The Cleveland Electric Illuminating Company is the Electric Distribution Utility in the NOPEC service territory. It is the default provider for customers that opt-out of the aggregation.

Cleveland Electric Illuminating Company (CEI) is owned by FirstEnergy. The default generation service for the CEI service territory is provided by the FE generation fleet. From the FE corporate website³¹:

FirstEnergy is a diversified energy company headquartered in Akron, Ohio. Its subsidiaries and affiliates are involved in the generation, transmission and distribution of electricity, as well as energy management and other energy-related services. Its seven electric utility operating companies comprise the nation's fifth largest investor-owned electric system, serving 4.5 million customers within 36,100 square miles of Ohio, Pennsylvania and New Jersey; and its generation subsidiaries control more than 14,000 megawatts of capacity.

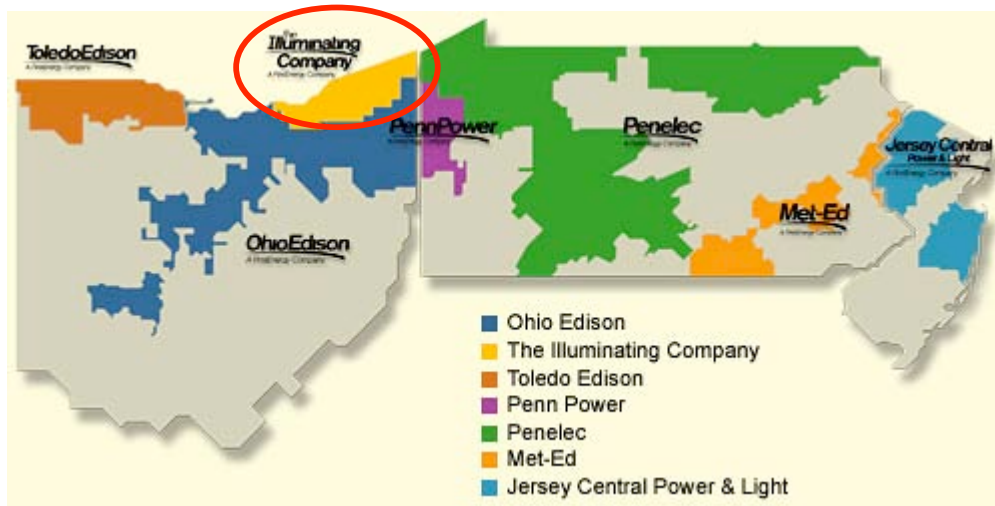
FirstEnergy's subsidiaries operate 18 power plants with a total system capacity of more than 14,200 megawatts. Of the total generation capacity,

- 56% (7,932 megawatts) is produced using coal
- 28% (3,945 megawatts) comes from nuclear plants
- 11% (1,599 megawatts) is fueled by natural gas or oil
- 5% (796 megawatts) comes from pumped-storage/hydroelectric/wind facilities*

*Long-term contracts with third-party wind suppliers.

FirstEnergy Electric Companies

NOPEC is in the CEI service territory (circled in red)



Current Unbundled Rates for the Standard Offer

The distribution charges apply to the Cleveland Electric Illuminating Company service territory. The monthly service and energy charges are listed. Generation charges are offered by FirstEnergy as the default supplier.

³¹ <http://www.firstenergycorp.com/index.html>

<u>Distribution Charges</u>	
Service Charge:	\$4.00
Energy Charges	
All kWh, per kWh:	\$0.02951

RIDER GEN
Generation Service Rider

APPLICABILITY:

For customers taking the Standard Service Offer electric generation service ("SSO Generation Service") from the Company, the following Standard Service Offer Generation Charges (SSOGC) by rate schedule, will apply, effective for service rendered beginning June 1, 2009, for all kWhs per kWh, unless otherwise noted:

<u>RATE:</u>	<u>Summer</u>	<u>Winter</u>
RS		
First 500 kWhs, per kWh	6.8818¢	6.3047¢
All excess kWhs, per kWh	7.8818¢	6.3047¢
GS	7.3568¢	6.3047¢
GP	7.1014¢	6.0859¢
GSU	6.9017¢	5.9148¢
GT	6.8948¢	5.9089¢
STL	7.3568¢	6.3047¢
TRF	7.3568¢	6.3047¢
POL	7.3568¢	6.3047¢

Rate Class Definitions

RS	Residential
GS	General Service Secondary (120/208/480)
GP	General Service Primary (other voltages)
GSU	General Service Subtransmission (11K/36K)
GT	General Service Transmission (69K)
STL	Streetlighting
TRF	Traffic Lighting
POL	Private Outdoor Lighting

The Public Utilities Commission of Ohio (PUCO) lists competitive offers for customers in the various service territories of the Electric Distribution Utilities. Currently, First Energy is offering a competitive rate for customers who are in the NOPEC service territory. This is clearly an attempt to compete with the offer negotiated by NOPEC with its current supplier, Gexa.

Supplier Name	Current Offer	Contract Term	Offer Details
FirstEnergy Solutions (877) 524-7283 www.fes.com	10 percent off generation price for remainder of 2009 and 5 percent off generation price through 2010	Up to 17 months with an end date of December 2010	This offer is for customers of Ohio Edison and Cleveland Electric Illuminating only .

1. Northeast Ohio Public Energy Council (NOPEC)

31320 Solon Road, Suite 20
Solon, OH 44139
1-888-848-7914
www.nopecinfo.org

Leigh Herington, Executive Director
Judy Goslin, Administrative Assistant

Activity to date

Northeast Ohio Public Energy Council (NOPEC)³² was formed in 2000 under the "Council of Governments" provisions of Ohio law (similar to a JPA in California). It was formed by 128 communities who had declared themselves as governmental (municipal) aggregators under Ohio restructuring law. It is the largest electricity and natural gas aggregation in the United States.

As mentioned above, under Ohio law an aggregation can be constituted as either an "opt-in" or an "opt-out" aggregation. If a community wishes to constitute itself as an opt-out aggregation, a ballot measure must be passed by the voters of the community. All 128 communities that are part of NOPEC passed such a measure and are opt-out aggregations.

In February 2001 NOPEC negotiated a five-year contract with Green Mountain Energy Co. (GMEC) to provide lower prices and cleaner energy. The GMEC contract switched NOPEC customers from coal and nuclear power to a blend of natural gas and renewable energy sources. The portfolio offered by Green Mountain Energy, reportedly a 75% pollution reduction and a 33% greenhouse gas reduction in their electricity, also guaranteed a 6% savings in the energy portion of NOPEC customers' electric bills.

Green Mountain CEO Dennis Kelly was quoted the press saying that Green Mountain intended to build a wind turbine facility somewhere in Ohio, possibly on Lake Erie, and would install photovoltaics on at least one school building in each of the eight NOPEC counties, which include Cuyahoga, Geauga, Lake, Portage, Summit, Lorain, Ashtabula, and Medina counties. Under the agreement Green Mountain would serve these communities from September, 2001 through December, 2006.

The Cleveland area Community Choice contract alone increased Green Mountain's national customer base from 100,000 to 550,000. "This decision not only means continued business momentum for Green Mountain Energy, but it also validates the emerging viability of, and mainstream demand for, green power on a mass scale," said Kelly at the time. "Considering that Green Mountain is the largest clean power company in America, it is significant that a single contract for a group of unknown municipalities in Ohio would quintuple its customer base," said Shari Weir of Citizen Action, which organized political support for Community Choice during the state legislature's electric deregulation proceedings. "It shows that Community Choice is much more effective at delivering clean power than the isolated "Consumer Choice model that passed in California and

³² www.nopecinfo.org

subsequent states. When the NOPEC board selected Green Mountain for its constituents, they not only chose cost-effective electricity featuring renewable sources, but the promise of cleaner air, too."

The NOPEC deal appeared to break the price barrier for green power, delivering much cleaner portfolio but with a guaranteed price discount. Green Mountain defeated its competing bidder, American Electric Power, by proposing both clean energy and a commitment to save consumers \$12 million to \$436 million over six years. Under the deal, individual consumers would receive a six to eight percent decrease in the energy portion of their electric bills, including the five percent increase required by the deregulation law. In addition to supplying electric service, Green Mountain also agreed to work with NOPEC to provide its residents with natural gas at discounted prices.

The understanding also called for Green Mountain Energy to pay any fees charged to consumers for initially switching to Green Mountain Energy. Former monopoly utility FirstEnergy planned to charge a \$5 per customer switching fee – one of Ohio's many barriers to choice.

GMEC renewed its contract with NOPEC in March 2005, for a further three years through 2008. Suddenly, in October 2005, Green Mountain Energy Co pulled out of the new contract with NOPEC. This was "an unanticipated crisis that threatened the continued existence of our signature discounted electricity program".

Eventually, NOPEC was able to reach a new agreement with FirstEnergy, the local distribution utility, which enabled the chairman (of NOPEC) to claim that "NOPEC has emerged stronger than ever".⁵ In fact, however, NOPEC customers were returned to the standard service offer of the regulated utility, albeit with a small generation discount as a quid pro quo for supporting the utility's Rate Stabilization Plan.

From 2006 through 2008, NOPEC customers received a five percent saving on the electric generation portion of their electric bill. The electricity program was temporarily discontinued until SB 221 passed.

NOPEC successfully positioned itself this year to once again bring reduced electric rates to its 600,000 customers.

NOPEC completed successful negotiations with First Energy this year that removed non-competitive barriers. This new agreement will allow NOPEC to more competitively offer low-cost electricity for northeast Ohio residents and businesses.

NOPEC could be offering reduced rates for electric customers as early as August 2009, when new electric generation rates are scheduled to be established in northeast Ohio.

Current status

From a NOPEC press release³³ dated June 10, 2009:

Residents served by NOPEC can expect a reduction (*below the standard offer*) in the electric generation part of their bills of 12% in 2009 and 8% in the first 6 months of 2010.

³³ <http://www.nopecinfo.org/news.html>

Small business customers can expect a reduction of 9% in 2009 and 5.5% in the first 6 months of 2010.

Background on Current Supply Contract

From a NOPEC press release obtained from Leigh Herington:

On April 6, 2009, NOPEC signed a contract with Gexa Energy Ohio LLC ("Gexa Energy") that is expected to result in significant savings for about 600,000 NOPEC customers.

Gexa Energy is a subsidiary of NextEra Energy Resources LLC., North America's leading generator of solar and wind power and part of FPL Group Inc., Juno Beach, Florida. Based on current projections, the contract could save customers in its 126-community, northeast Ohio footprint up to \$50 million over a two-year period. The agreement and total savings will be finalized after FirstEnergy puts its electric generation rates to auction in mid-May.

"The auction (SB 221-mandated standard service offer auction) will establish the price for NOPEC to beat. We will then work with our new supplier to get the electricity rate down to a competitive point," said Leigh Herington, NOPEC executive director. NOPEC has historically saved its customers about five percent off the generation portion of bills.

NOPEC expects its new electric rates to take effect as soon as August 1. The contract would extend up to 22 months and through May 2011. In addition to the renewable supplies required by the new Ohio renewable energy portfolio standards for utilities and competitive suppliers, Gexa Energy³⁴ has agreed to supply additional "Green-e" certified renewable energy credits from NextEra's renewable generation fleet. These additional renewable energy credits will make GEXA's renewable content 50 percent higher than will be offered by FirstEnergy's auction supply.

NOPEC first announced that it signed a letter of intent with FPL Energy (now called NextEra Energy Resources) last September. FPL Group Inc. is the parent company of Gexa Energy and NextEra Energy Resources, and is the nation's leading clean energy provider (they include nuclear in their "clean" portfolio). This announcement follows successful negotiations and discussions with FirstEnergy, the PUCO and other stakeholders that have paved the way for the Gexa agreement.

(Chart derived from data on NextEra website.³⁵)

"We look forward to FirstEnergy's cooperation in the months ahead as we resume our signature electricity program to our consumers," Herington said.

With the new agreement, NOPEC expects to increase its customer base from about 400,000 to as many as 600,000, with the addition of new residents and business that have moved into and around NOPEC communities since eligibility

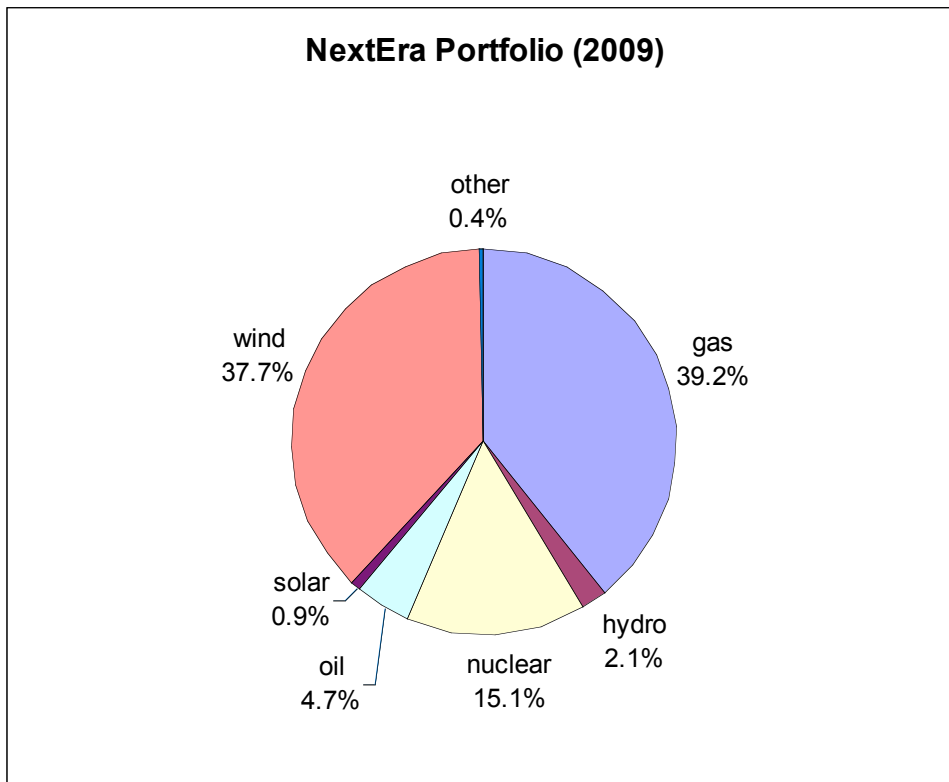
³⁴ <http://www.gexaenergy.com/>

³⁵ http://www.nexteraenergyresources.com/pdf/One_page_factsheet.pdf

was last reviewed in 2005. GEXA will conduct regular mover mailings to enroll all eligible customers in the program area to receive the discounted electric rates.

Joseph Migliorini, NOPEC chairman, said the signing of the contract with GEXA Energy came at the end of a huge, hard-fought battle with local utility interests that will yield electric savings at a time when people and businesses need it most.

"Northeast Ohio is blessed to have NOPEC," said Migliorini, whose position is unpaid. "We are a non-profit utility watchdog. No taxpayer dollars are used, and we have a very lean staff dedicated to making northeast Ohio more economically viable by making energy available at reduced rates.



Policy³⁶

From NOPEC website:

- *By joining a large buying group, individual customers gain leverage in the deregulated marketplace.*
- *Bulk-buying allows NOPEC to negotiate lower energy rates.*
- *NOPEC provides professional expertise for both individual customers and member communities in the confusing utility market.*
- *NOPEC is an active, pro-consumer lobbying force, meeting frequently with state lawmakers and regulators to ensure fairness for all Ohioans in the deregulated market.*

³⁶ <http://www.nopecinfo.org/benefits.html>

- *NOPEC is governed by a General Assembly and a Board of Directors, which are comprised of public officials from each community. The voters, therefore, have the ultimate authority in NOPEC.*
- *NOPEC receives no tax funds and charges no fees to member communities or individual customers. Officers and Directors serve without compensation. All savings are passed on to the customers.*
- *Bulk-buying offers the potential to save money on everything from cable television to online Internet service. NOPEC is committed to exploring these and other possibilities.*

Public Benefits Program Information

Ohio law and regulations do not specifically require aggregations to provide support for low income customers. Low income customers are excluded from participation in the aggregation and are placed on a subsidized rate with the “provider of last resort”, in this case, the incumbent utility (Cleveland Electric Illuminating Company).

Risk Allocation

Green Mountain (GMEC) pulled out of the original contract leaving them without a program. NOPEC ultimately had to settle with GMEC for \$5 million. Joint and several liability of the Council of Governments has never come up as an issue. There is no liability of the local governments. The Competitive Retail Electricity Supplier (CRES) is a retailer of electricity, simply buying from a wholesale supplier.

Previously, a standby charge to cover return to the utility was assessed to each ratepayer at the beginning of the contract period. This was eliminated in SB 221

Instead, people who return to the utility after being in the aggregation will be charged at market instead of the Standard Service Offer (SSO)

In the context of liability, if NOPEC is not able to supply, the liability goes back to supplier (CRES). Risk is not an issue.

For governance, Board meets every other month. The Board is composed of representatives of each county with members of NOPEC. There is also an Assembly, representing each member. The Assembly meets once a year. All Assembly members and Board members serve without compensation. See attached Bylaws for description of Board. See also attached Council of Governments agreement

The Auction of load mandated by SB 221 has saved 15% over the previous Standard Service Offer.

Service Territory

128 communities in 9 counties in Northeast Ohio.

Total Annual Consumption and Load

Exact figure is not known, but is estimated to be in the 7,000-8,000 GWh range, with an average load of approximately 850 MW.

Billing Arrangement

Billing would be conducted by GEXA Energy Ohio, under a third party contract. See attached contract.

Retail Supplier Services

GEXA Energy has committed to providing “firm full requirements electricity supply” at the specified rate for the term of the contract. GEXA obtains the supply through generation services provided by its parent company (NEXTERA) or through purchases on the wholesale market. In addition, the state RPS can be fulfilled by purchase of Renewable Energy Credits. The supplier is obligated as part of the agreement to exceed statutory requirements for efficiency and renewables. Low income participants (Percentage of Income Payment) are excluded from participation in the aggregation and are subsidized by rates by the default provider

Cost Factors Affecting Rates

So far the “exit fees” to reimburse the utilities for stranded costs have been the primary additional cost factors. Prior to AB 221, the utilities attempted to place switching fees and non-bypassable generation charges on the aggregation’s customers. However, these were prohibited by legislative language in AB 221.

Opt-out

Opt-out rates were initially 10-20 percent when aggregation was first started in Ohio in 2000. Rates are now running at 8-10 percent as customers have become more familiar with the concept.

Loss of jurisdictions

One jurisdiction has left since the inception of NOPEC, but reportedly wants to rejoin.

NOPEC successes

Governmental Aggregation is the only real opportunity for residential and small business customers to exercise a “check and balance” on utility generation rates, as the existence of that buying power serves to moderate the monopoly level prices that may otherwise be charged. It is very important, especially when utilities eventually go to market for generation, for governmental units in the State to assist their residents in seeking control over electric rate increases.³⁷

³⁷ Leigh Herington testimony to Ohio House, April 14, 2008

NOPEC Challenges

The aggregation customers have been subject to non-bypassable generation-related charges imposed on the wires in the rate stabilization plans. These charges have prevented Governmental Aggregation in Ohio since 2006. NOAC³⁸ is not currently serving over 115,000 residential customers with electricity because it could not find a supplier willing to bid below First Energy in 2006. The School Pool Coalition, that once had 150 school districts, is now down to 50 members. If NOPEC had not secured a continuing generation discount from First Energy when Green Mountain left Ohio, there would be no Governmental Aggregation program for over 400,000 residential customers in Northeast Ohio.

Opt-out Governmental Aggregators have been charged switching fees by the EDU's³⁹ when consumers chose to participate in the opt-out Governmental Aggregation program. Other groups or consumers did not pay these fees.⁴⁰

Program Cost and Rate Recovery

The overall revenue requirement (broken out by administration and procurement)

Administrative budget is paid by the supplier and is rolled into the electric rate. Startup costs were also paid by the supplier. Total annual revenue is estimated at approximately \$500 million. Administrative budget is less than \$1 million (2 person staff and office, legal and professional fees). In addition, there is a requirement to fund a grandfathered "all electric" discount.

Rate design employed to capture the revenue requirement

Tiered residential and commercial rate structure.

Mechanisms for maintaining rate stability.

Prior to 2006, the Competition Transition Period of restructuring was in effect, wherein rates were frozen, including for aggregations. However, after the end of 2005, Rate Stabilization Plans were put into effect for the Standard Service Offer suppliers. The Rate Stabilization Plans locked in rates that made aggregations uncompetitive. This put electricity aggregations on hold until the passage of SB 221 last year, which removed some of the more egregious provisions of the Standard Service Offer provider (for the NOPEC service territory, this is FirstEnergy). The current contract with Gexa Energy Ohio contains a rate cap, but the amount of this cap is not public at this time.

³⁸ Northwest Ohio Aggregation Coalition

³⁹ Electric Distribution Utility

⁴⁰ Op. cit.

Renewable Features

(From Gexa Supply agreement) *“Supplier agrees that it shall comply with the renewable portfolio standard requirements of Ohio law and PUCO rules applicable to the Distribution Companies (hereinafter "RPS") in each calendar year of the term of this Agreement through procuring compliant renewable energy credits or paying the alternative compliance amount and such cost shall be included as part of the Contract Price.”*

Further, in each year of the Term of this Agreement or part thereof, Supplier shall obtain sufficient Additional RECs in a volume equal to 50% of the RPS volumes required as of the Pricing Letter Date for the applicable year or part thereof at no cost to the Participating Consumers and the cost for Additional RECs shall be included as part of the Contract Price.

Transmission and Distribution (T&D)

Relationship to EDU (Electric Distribution Utility) is handled by the CRES (Competitive Retail Electricity Supplier). Transmission and Distribution charges are added to the bill. Generation is about 60 percent of the bill. The Standard Service Offer for Cleveland Electric Illuminating Company customers is about 12 cents per kWh, so T&D charges for aggregation customers run about five cents per kWh.

Public Purpose/Benefit Programs

Efficiency programs are statutorily required and are handled by the supplier. Low income customers are excluded from the aggregations and programs for low income customers are handled by the default service provider.

2. Northwest Ohio Aggregation Coalition (NOAC)

Toledo and surrounding cities have taken many years to implement a Community Choice Aggregation. Efforts go back as far, nearly, as San Francisco's. After a 1989 community referendum approved a municipalization of electricity in Toledo, Ohio and the City's franchise agreement expired, the City of Toledo granted a short-term franchise and studied local options, eventually leading it to investigate CCA. Seeking ways to escape Toledo Edison's (TE) high electric rates, the city created a \$100,000 budget and hired consultants to study the option of establishing a municipal utility to compete with the investor-owned utility. The city signed a short-term five year interim franchise agreement with TE, approved by voters in 1993.

The city attempted unsuccessfully to negotiate for rate relief, and following another community-led referendum created a \$400,000 budget to study a wider array of options. A final report was completed in 1997, and the committee made recommendations to the city council. The report estimated the cost and savings to be expected from a variety of strategies, including full municipalization, CCA, and creation of a Special Improvement District and a California Irrigation District-style wholesale operation through acquisition of a substation. The Special Improvement District model would entail operating as a municipal utility in a business subsection of the city, and was focused on bringing low-cost power to businesses. Under the Irrigation District model, the city would acquire a substation for wheeling power to businesses and perhaps also residents.

Ohio has strong Home Rule powers, giving cities and towns constitutional authority to municipalize locally under home rule.

In 2009, the effects of collapsing natural gas market prices and the legislature's adoption of Senate Bill 221 the previous year helped NOAC successfully sign a deal with the competitive affiliate of its local monopoly.

The agreement runs through May 2011 and offers a fixed generation and transmission price for most residential customers and, for small commercial customers, a 4% discount off the generation and transmission portions of their bills.

Coalition member communities besides Toledo include the cities of Maumee, Northwood, Oregon, Perrysburg and Sylvania, the village of Holland, the unincorporated townships of Lucas County and Lake and Perrysburg townships in Wood County.

Member communities of the coalition still must approve individual contracts.

NOAC's contract represents about 200,000 residential and small business customers. With the agreement, FirstEnergy Solutions will serve about 600,000 residential and commercial customers in nearly 50 government aggregation communities and groups in Ohio.

NOAC's success story took years of perseverance. NOAC jurisdictions supplied both gas and electricity through an alternative supplier until the end of 2005. At that time, the Rate Stabilization Plans of the incumbent utilities kicked in, and the electricity supplier was unable to offer a competitive rate. The electricity aggregation for NOAC has been on hold since then.

The unique aspect of NOAC is that it is a “coalition of the willing”, i.e., there is no formal council of governments organization. A consultant was hired to conduct negotiations with the supplier, but each local government will have a separate contract with the supplier. Each of the local jurisdictions voters passed an “opt-out” aggregation ballot measure.

After the passage of Ohio SB 221, the Standard Service Offer was reset through an auction of load by the state Public Utilities Commission as described above. This auction allowed NOAC to sign a competitive bid with FirstEnergy, and will start up operations again.

The biggest challenge in getting aggregation working in Ohio was the incumbent utilities ongoing attempts to marginalize aggregators. This was done through manipulation of rates. One such manipulation was to apply for approval of non-bypassable generation charges that were passed on to the aggregations, but did not directly benefit aggregation customers.

Another strategy was to add a \$5 service charge to all bills when an aggregation switched to an alternative supplier.

Careful rate design was key to attracting and retaining customers, but the ability of aggregations to offer a competitive rate is paramount.

Service Area⁴¹

Geographically, the Northwest Ohio Aggregation Coalition covers the vast majority of Lucas and Northern Wood Counties in Ohio.

Total Load of Aggregation

This is an opt-out aggregation that, presuming everyone remains in the aggregation, comprises approximately 191,000 homes and 23,000 businesses. Total annual consumption (residential & small commercial) is 2,400 GWh.

Billing Arrangement

3rd party supplies are billed through the utilities. As they collect the payments, they send the \$ to the suppliers.

Retail Supplier Services

Bids are received in response to an RFP (attached). Various potential suppliers have the opportunity to supply firm full requirements supplies. The best offer wins.

⁴¹ Mark Frye, Energy Consultant for NOAC, (Palmer Energy, 2455 North Reynolds Road, Toledo, OH 43615, 419.539.9180 ext. 201, mfrye@palmerenergy.com) was interviewed via email and provided the information in this section.

Risk Allocation

Risk of consumption and demand risk resides with the 3rd party supplier. The only risk absorbed by the consumer is if the pricing for supplies may place some in a loss position while others are saving money. We generally avoid that by either going with a “percentage off” (standard offer) deal or excluding those who will lose money on a fixed price transaction.

The standard service offer (SSO) is the price/cost the consumers could avoid by shopping with a third party supplier. With this premise the utilities recently held a declining price auction for 100 tranches of their supplies. Each tranche represented 1% of the requirements. The resulting auction arrived at a wholesale price of \$61.50 per MWH. The suppliers to the auction have the risk of customers shopping, returning, all consumption and demand risk.

Process to Establish Aggregation

This is a coalition of cities and towns that have individually established themselves as opt-out aggregations through a local ballot. The coalition is negotiating a contract with a competitive retail electric supplier (CRES).

Cost Factors Impacting Rates

The price is primarily driven by the cost of power supplies on the wholesale market plus profit and risk factors the suppliers perceive.

Rate Classes Served

See above for residential and commercial customer numbers. No industrials participate in the aggregation.

Opt-out rates

The opt out rates for the new program have yet to be announced here so I will not divulge them at this time. Next week it should be public.

Loss of jurisdictions

Each community in NOAC makes its own decision regarding participation and policy. Generally, they all participants move in the same direction but NOAC only has 9 or 10 communities. If there were more communities, the process could easily become cumbersome. In that case Ohio law provides for a “council of governments” structure that can be formed to streamline that process.

NOAC successes

Communities are cooperating together seeking the same goal...lower utility rates. The success has created an enhanced level of trust among the communities.

NOAC challenges

Creating savings has been challenging as the utility has generally attempted to create impediments to competition. These roadblocks have minimized the potential savings over the past 6 or 7 years.

Procurement and Energy Mix

Coal & nuclear comprise 90 to 95%. Natural gas, hydro, wind make up the rest.

Contract Term

Current term on the working proposal is two years beginning June 1st.

Price of Energy

Four percent average discount on generation below wholesale auction price above.

D. California

Laws

These generally fall under the jurisdiction of the state of California. See state law AB 117 (Migden). Special programs regarding renewable energy, energy efficiency, emissions of carbon and pollutants are established under various state laws. CCAs are bound by the state law that prevents long-term (5 year or longer) contracts with coal power plants. CCAs are required to meet the state's renewable energy target of 20% by 2010. They are also permitted under state law to apply to the California Public Utilities Commission (CPUC) to be administrators of their fair share of funds collected by the CPUC for energy efficiency.

Regulations

Regulation of CCAs in California is primarily through the California Public Utilities Commission. The CPUC has several roles. It first established the framework of rules in the Community Choice proceedings, phase 1 and phase 2.

Phase 1 proceedings resulted in Decision 04-12-046, December 16, 2004, which adopted the following:

- Department of Water Resources' (DWR) methodology for estimating the cost recovery surcharge (CRS), which will allow the utilities to recover from CCAs the costs of DWR bonds and contracts, utility power procurement contracts and other items in a way that remaining bundled utility customers are indifferent to the CCA program;
- A temporary CRS in the amount of \$.020/kWh, which will be trued up in 18 months or sooner, if final utility estimates of CRS are 30% lower or higher than \$.020/kWh, and thereafter will be trued up annually;
- Principles for setting prices for utility services offered to CCAs;
- Ratemaking and cost allocation principles for utility services offered to CCAs, implementation costs and the CRS;
- A method to allocate amounts related to the subsidy for baseline customers;
- An exception from the CRS for certain load attributable to Norton Air Force Base in the event that customers at Norton are served by a CCA;
- Requirements for and conditions under which CCAs can acquire customer information from utilities needed to manage energy procurement by CCAs;
- Application of AB 117 as it relates to CCA program phase-ins, boundary metering and the use of CCA-specific load profiles.

Phase 2 proceedings resulted in further CPUC decisions in 2005 on the following broad issues (quoted from the decision)⁴²:

Commission jurisdiction over CCAs and CCA programs. "Vintaging" the Cost Responsibility Surcharge (CRS). We establish a way to calculate the CRS for each generation of CCA in a way that recovers costs incurred on behalf

⁴² CPUC, Community Choice Phase 2 Proceeding, Decision, Nov. 2, 2005.

of the CCA's customers but not more, also known as "vintaging". We adopt a calculation for each vintage of the CRS that is not controversial and do not permit the utilities to restrict a CCA's option to phase-in service to customer groups ;

The CCA's notification to the utility of its intent to serve customers. We adopt an "open season" and discuss other ways of notifying the utility of the CCA's intent to purchase power for local customers and committing to relieving the utility and its remaining ratepayers of liability for power costs. Generally, we find that CCAs must make a binding commitment to be assured that the utility will stop purchasing power on behalf of its customers, that the utility may not transfer its liability for load forecasting to the CCA and that we expect the utilities to work cooperatively with CCAs to minimize stranded power purchase liabilities. We also establish a collaborative process for refining departing load forecasts;

The regulatory process for considering CCA implementation plans and registration. Generally, we find that AB 117 does not provide us with authority to approve or reject a CCA's implementation plan or to decertify a CCA but to assure that the CCA's plans and program elements are consistent with utility tariffs and consistent with Commission rules designed to protect customers. We adopt a simple procedure for the filing of an implementation plan and a method of facilitating disputes between the utility and a CCA;

Customer protections. We adopt various customer protections, including how to treat service termination, partial payments and deposits, and customer notifications;

Implementation rules and utility services to CCAs. We adopt policies and rules for customer enrollment, scheduling coordination, call center operations, boundary meters, and customer switching,

Service fees for utility services to CCAs. We adopt utility charges and fees for such activities as opt-out processing, customer transfers of service, billing services, customer contacts, data processing and management, and confirmation letters to customers. Consistent with our order in Phase 1 of this proceeding, we adopt cost-based rates for services that impose costs on utilities that would not otherwise occur and which are not otherwise being recovered;

Ratemaking for the CARE program. We find that CCA customers should continue to receive the benefits of the CARE program and establish accounting for these subsidies;

Application of Renewable Portfolio Standard (RPS). We find that the Commission should decide in R.04-04-026 how to apply the RPS to CCAs.

Role of the CPUC

The CPUC determines the Cost Responsibility Surcharge (CRS), otherwise known as the "Exit Fee", for CCAs. This surcharge is set at a rate per kilowatt-hour to recover a few specific costs, including the "above market" price of energy contracts signed by the state after the "Energy Crisis", as well as bonds issued by the DWR. These surcharges

expire over time, with nearly all DWR contracts ending by 2012. After that time, the only surviving surcharge will be the half cent per kilowatt-hour cost of the bonds, ending in the mid-2020s. The same bond surcharge is paid by all customers, whether they receive service from the community choice program or from the utility company (in this case PG&E). In fact, most of the charges included in the CRS are being paid by all electricity customers as previously stated. The only exception would be costs incurred for power contracts signed by the utility that have to be modified as a result of the exit of the CCA customers. This allows the existing utility customers to be “indifferent” to the departure of the CCA load. Presently, there are no such costs.

The other principal role of the CPUC is certification of the Implementation Plan. From the Phase II decision above, “Generally, we find that AB 117 does not provide us with authority to approve or reject a CCA's implementation plan or to decertify a CCA but to assure that the CCA's plans and program elements are consistent with utility tariffs and consistent with Commission rules designed to protect customers.” The CPUC has adopted a “simple procedure for filing an implementation plan” and a mechanism for resolving disputes between the CCA and the utility.

After the plan is certified, the CCA's are largely self-governing. The CPUC has ruled that elected local jurisdictions are accountable to local customers, and thus can serve the role of protecting the interests of consumers at least as well as the CPUC itself.

Decisions regarding construction of thermal power plants over 50 megawatts in size are made through regulatory proceedings at the California Energy Commission. Electric Service Providers are also required to be registered with the state.

Special programs for energy efficiency, renewable energy, and others are established under rules created by the CPUC and CEC.

1. San Joaquin Valley Power Authority

San Joaquin Valley Power Authority/Kings River Conservation District

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Activity to date

The San Joaquin Valley CCA effort began as an initiative of staff from the Kern River Conservation District (KRCD). KRCD is a public water and power agency that was created by state legislation in 1951. After California's "Energy Crisis" in 2000 to 2001, KRCD began exploring options for local energy initiatives. Concerns centered on electricity prices, reliability, and the potential for local control over these—including the potential to develop local power generation.

KRCD looked at the possibility of developing a municipal utility, but settled on CCA. However, according to staff, KRCD cannot itself do a CCA and never intended to be out in front of the initiative. The governance structure for the community choice program was created in November 2006 as the San Joaquin Valley Power Authority (SJVPA), a Joint Powers Authority with representatives from each of the participating jurisdictions.

SJVPA was the first CCA in California to develop a complete implementation plan. This plan was submitted to the California Public Utilities Commission (CPUC) and certified by that agency in 2007 as required under the state's community choice law.

In 2007, KRCD also filed an application for approval to construct a 565 megawatt baseload natural gas fired power plant near Selma, with the intention of delivering power to the Community Choice program and the ability to sell excess power on wholesale market.

SJVPA currently has 12 participating jurisdictions, down from a peak of 14. The CCA effort has faced significant difficulties and roadblocks from PG&E, the investor-owned utility that currently provided electric service in the region. Two jurisdictions, including Fresno—the largest city—left the CCA. The CCA was concerned about PG&E's conduct, and secured a binding settlement agreement filed with the CPUC. The settlement agreement governs public statements by the utility company.

The following chronology shows the progress of the SJVPA Community Choice program:

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⁴³ http://www.communitychoice.info/status_timeline/

Sep. 2002	California legislature passed Assembly Bill 117 (Migden)
Jan. 2004	California Public Utilities Commission (CPUC) began rulemaking
Jan. 2004 to Apr. 2004	KRCD received letters of interest from cities and county to investigate a regional Community Choice program
Apr. 2004 to Sep. 2004	KRCD conducted Community Choice workshops with cities and county
Sep. 2004 to Mar. 2005	Developed Memorandum of Understanding (MOU) between KRCD and cities and county
Mar. 2005	Formed MOU Management Committee
Mar. 2005 to Aug. 2005	Performed feasibility assessment and developed financial model
Sep. 2005	Conducted independent peer review of financial model
Oct. 2005 to Aug. 2006	Prepared Community Choice business plan and implementation plan
Sep. 2006	Conducted regional workshops with MOU governing boards on Business Plan
Nov. 2006	Formed San Joaquin Valley Power Authority
Jan. 2007	Submitted implementation plan to CPUC KRCD selected Citigroup as energy provider
Apr. 2007	CPUC certified plan KRCD issued Request for Proposals for Eligible Renewable Electric Power Supply
May 2007	Cities of Hanford and Kerman and Kings County elected to implement Community Choice Tulare County joined San Joaquin Valley Power Authority
Jun. 2007	Cities of Corcoran, Kingsburg, Clovis, Dinuba, Selma, Lemoore, Parlier, Sanger and Reedley and Tulare County elected to implement Community Choice
July 2007	KRCD announced long range, zero emission solar power plan Fresno City Council voted against joining Community Choice
October 2007	Executed power service agreement Tulare County Board of Supervisors voted to leave the San Joaquin Valley Power Authority

Current Status

The CCA completed a revised implementation plan in February, 2009 that updates the 2007 plan. The CCA is seeking a new supplier since the withdrawal of Citigroup, and is exploring alternatives. If a supplier can be found, the plan is to focus initially only on Phase I service that covers municipal load. If this is successful it would be followed several months later with Phase 2 service for large commercial and industrial customers.

The largest current challenge is the economic situation and the instability in energy and credit markets. A decision has been set for the June 25 meeting of the Authority, with the General Manager due to deliver a report by that time on whether a supplier has been found and on the status of the contract. At that point the Authority may decide to proceed with a contract, on whether this is the appropriate time to do so, or whether to revisit the issue at a later date. Other options for action may also be explored, such as applying for grants, engaging in the CPUC, and increasing local power reliability. Update: As of the June 25 meeting, SJVPA suspended implementation activities. See attached press release.

The power plant application has been suspended in the last few months at the Energy Commission, though this application can be reopened in the future if KRCD chooses.

As of June 26, 2009, SJVPA has temporarily suspended operations.⁴⁴ According to David Orth, General Manager of SJVPA, the electricity and credit market conditions are being monitored, and the Authority will resume efforts to obtain electricity supply when conditions are “more favorable.”

Policy

Policy guidance is provided by several documents, including the Joint Powers Authority Agreement, the Program Agreement, and the Implementation Plan. There is a specific agreement between SJVPC with KRCD to act as the agent for the CCA. The guiding ideas have been to develop local power generation to improve reliability, and to secure lower cost of electricity with the aim to get a 5% discount on the power generation portion of the bill.

Financing, Revenue, and Contract structure data

Tax exempt municipal bonds were considered by SJVPA for their historical ability to lower finance costs relative to utility financed projects. SJVPA modeled the cost savings for a baseload natural gas plant using public financing, but found that, at the current time, this would be minimal. Given that there will probably be a return to an advantageous point for tax exempt municipal bonds, the prospect of using bonds to finance local energy projects is good. The current plan is first to get experience “under their belt” and then see if there is sufficient market support for the CCA to build generation facilities. KRCD has not looked at bond financing for energy efficiency, only power plant equipment.

The current plan for a contract is to have a 36 month term under which power services are supplied by the Electric Service Provider under contract with the KRCD. The CCA seeks to obtain a guarantee of 5% savings on the energy portion of the bill. There has been consideration of how to “swap out” the power purchases of the ESP for local

⁴⁴ <http://www.communitychoice.info/news/news2009-06-26.php>

facilities built or financed by KRCD. Under the former structure that was planned with Citigroup, the ESP would have to be compensated for any shortfall on contracted power sales so that the ESP would neither make nor lose money on the change in supply. Construction of such projects is not automatic. The power authority would take a vote on any alteration of power supply, for each project.

SJVPA also has a Power Services Agreement with KRCD, under which KRCD provides all staffing for the CCA, and agrees to secure under contract or develop all power supplies and make day to day decisions.

There is a separate contract with Sempra Energy Solutions to provide customer service for a call center and management of customer accounts. This includes enrollment, billing and notices. KRCD will handle general marketing and special large customer accounts.

The San Joaquin Valley Power Authority is a Joint Powers Authority is responsible for decisions regarding the Community Choice program. The Joint Powers Agreement defines the powers of the authority. Representatives from each of the 12 participating jurisdictions serve on the Authority board. The board makes policies for the CCA program, sets rates, and provides policy direction to KRCD. The board has an Executive Committee as well as other committees and subcommittees. The board makes decisions based upon a two-tiered process that provides both for majority and pro-rata voting. Pro-rata voting is based on the size of the load represented by the board member.

Portfolio and Financial reports

The ESP contracts with different sources of energy, and is required to meet the RPS. Citigroup was to present the sources and pricing, and the board would set the rates. At this point the only financial reports are the planning documents.

Public Benefits program information

The Implementation Plan identifies general objectives, including energy efficiency and using public goods funding. Once the contract is in place then the other components relating to these special programs would be “fleshed out”. The staff stated that this is perhaps “backwards” relative to some other programs.

Interviews with CCA leaders in these markets

Information on San Joaquin Valley CCA was obtained through public documents as well as interviews with Dave Orth, General Manager of KRCD, and Cristel Tufenkjian, Manager of Community and Public Relations.

Service Areas

Twelve jurisdictions in the San Joaquin Valley are currently in the community choice Power Authority:

- City of Clovis
- City of Corcoran
- City of Dinuba
- City of Hanford
- City of Kerman
- City of Kingsburg
- City of Lemoore
- City of Parlier
- City of Reedley
- City of Sanger
- City of Selma
- County of Kings

Total Electricity Use

The CCA would be implemented in phases, with phase 1 (municipal loads) representing only about 3% of the total energy for the jurisdictions. By 2013, total generation needs would be about 2500 gigawatt-hours per year, with expected annual growth of approximately 80 gigawatt-hours.

Billing Arrangement

Billing would be conducted by Sempra Energy Solutions, under a third party contract.

Power Purchasing Arrangement

KRCD is ultimately responsible for power supply, either by building power generation facilities or through a third party contract with an electric service provider. Responsibility under a contract would be transferred to the ESP by KRCD.

Risk Allocation

The Agreement between KRCD and SJVPA assigns responsibility to procure power to KRCD. Price risk is assigned to the ESP under the contract. Load forecasts are performed by KRCD, with ESP assuming risk within a certain band. If the load falls outside that band, then the risk falls on KRCD. Credit risk of the ESP is addressed by considering the credit rating of the ESP; if it drops below 'A', then a letter of credit would be required.

Process to Establish Aggregation

This is described in the section above "activities to date".

Cost factors impacting rates

The Cost Responsibility Surcharge has been a factor that has influenced the CCA in a negative way. It is projected to be 1.2 cents per kilowatt-hour in the new year, but a current proceeding in the CPUC involving the City of Victorville is expected to affect the CRS methodology going forward. PG&E has also suggested in a letter that rates will be

going down due to lower fuel costs. However, CCA staff feels that this is an artificially depressed figure.

Number of Customers by Class

Phase 1 implements the municipal load, with 1600 accounts and a load of 90 gigawatt-hour annually. There are 220 large industrial/commercial accounts that will be added under phase 2, followed by 1200 medium sized commercial accounts, and then 130,000 small commercial and residential accounts.

Opt-out rates

This is projected to be 10% based upon opt-out in Ohio and Massachusetts.

Loss of jurisdictions

Two jurisdictions have left, Fresno and Tulare County.

SJVPA Successes

SJVPA was the first CCA in the state to have its implementation plan certified by the CPUC. There have been at least two market opportunities in the past couple of years that would have been “perfect” for starting the CCA service. In addition, the CCA put out a request for proposals to provide 400 megawatts of renewable energy, and got 1400 megawatts of responses.

SJVPA Challenges

The CCA effort has been challenged by a change in PG&E’s initial position of neutrality to one open and aggressive opposition. There have also been significant regulatory hurdles that PG&E has threatened that have been essentially responsible for preventing the CCA from starting service over the past two years.

Procurement and Energy Mix

- Energy mix :The contract notes regulatory changes, and requires 20% renewables by 2010. The CCA cannot purchase coal, and must be compliance with state requirements for greenhouse gas reductions.
- Contract terms : With Citigroup, all power supply contracts were to have been longer than 5 years, but the new contracts will need to be for 3 years.
- Price of energy: A 5% discount is to be guaranteed. The ESP carries responsibility for the generation rates, and the board must say if the proposal meets their objective.

Program Cost and Rate Recovery

The overall rate structure of PG&E will be followed. However, the Power Authority has the right to set the level of for each rate class and adjust them as long as the total revenue requirement of KRCD is met.

Mechanisms for maintaining rate stability.

The automatic discount established in the contract is followed by a cap of 2% per year in power costs.

Renewable Features

The requirement is to meet the state RPS initially by contract, and later to build local infrastructure.

The third party supplier must meet the obligation, but the specific supply is open. KRCD has talked to providers and identified projects, and the district is only interested in basic and proven technology. There is potential to develop a 2 to 5 megawatt expansion of existing small hydro, as well as local biomethane and biomass. There is also a proposal by Cleantech America to build an 80 megawatt solar power plant. There has been little interest in wind.

Renewable Energy Credits (RECs) will not be used at this time, and will only be considered once the CPUC rules on what the credit for RECs will be.

CCA Program Scope & Size Data

[See Appendix]

Transmission and Distribution (T&D)

There have been problems with PG&E to get reliable power in the cities. However, the CCA will not be directly involved with transmission and distribution lines or with grid issues related to reliability. The CCA will monitor grid reliability issues and costs from the standpoint of reducing the need for imported peak energy.

Public Purpose/Benefit Programs

There are no programs currently defined by the CCA. There is an interest in participating in these programs long-term, and eventually developing locally-based efficiency programs.

2. Marin Energy Authority

Activity to Date

Marin County took the lead in 2004 to investigate Community Choice, and participated in a feasibility study. This was followed by other reports, culminating a business plan, the final version of which was completed in April 2008. The county then initiated a process whereby the cities and towns voted to join a proposed Joint Powers Authority (JPA) which was completed by the end of 2008. In 2009, the Marin Energy Authority formally began meeting and approved moving forward with the next steps of forming a Community Choice Aggregation program, called Marin Clean Energy⁴⁵.

Sep. 2002	California legislature passed Assembly Bill 117 (Migden)
Jan. 2004	California Public Utilities Commission (CPUC) began rulemaking
Jan. 2004 - Apr. 2004	County of Marin and the two water districts within the county initiated a process to investigate offering retail electric services to customers located within the County through a program known as Community Choice Aggregation (CCA)
Mar. 2005	Released CCA feasibility study
Aug. 2005	Released peer review of feasibility study
Mar. 2006 - May 2006	Conducted CCA risk analysis
Jun. 2006	Formed Local Government Task Force to allow the cities and County to jointly participate in the investigation of CCA for Marin communities and customers
Nov. 2007	Released Marin Local Renewables Analysis
Dec. 2007	Released draft CCA business plan
Mar. 2008	Peer review of draft CCA business plan
Apr. 2008 - Oct. 2008	Launched public input and outreach phase for Marin Clean Energy to organize meetings and presentations with community groups throughout the County, cities, and towns
Apr. 2008	Released final business plan: Marin - California Community Choice Aggregation Plan for Marin Clean Energy
Oct. 2008	Independent review of final business plan
Oct. 2008	Released Joint Powers Authority (JPA) Agreement and Ordinance to form Marin Energy Authority
Nov. 2008 - Jan. 2008	Each city and town votes on whether to join Marin Energy Authority
Nov. 18, 2008	The County of Marin passes ordinance to join Marin Energy Authority

⁴⁵ Timeline obtained from Marin Energy Authority website:
<http://marincleanenergy.info/newMCE/timeline.cfm>

Nov. 19, 2008	The Towns of Fairfax and Tiburon approve ordinance to join Marin Energy Authority
Nov. 25, 2008	The City of Sausalito approves ordinance to join Marin Energy Authority
Dec. 1, 2008	The City of Mill Valley approves ordinance to join Marin Energy Authority
Dec. 8, 2008	The City of Belvedere approves ordinance to join Marin Energy Authority
Dec. 9, 2008	The Town of San Anselmo approves ordinance to join Marin Energy Authority
Dec. 11, 2008	The Town of Ross approves ordinance
Nov. 2008 - Jan. 2008	JPA Formation

Current status

The Marin Energy Authority issued its RFP for a supplier in May 2009, and is currently waiting for responses that are due by July 20th. Jurisdictions will be given a 90 day period to evaluate the proposals and decide whether to sign onto the program. If enough jurisdictions approve, then a contract is expected to be signed in January 2010, a few months ahead of the original schedule.

Policy

The “Business Plan” is the primary document that describes the policy guidance for the MCE community choice program. The prime goal is to increase the share of renewable energy. Initially there would be a choice for customers of “light green” with 25% renewable energy, and “dark green” with 100% renewables. The program intends to transition to 100% renewable energy. This is intended to support efforts in the county and cities to reduce greenhouse gas emissions, although the authority itself has not yet adopted formal greenhouse gas reduction targets.

Financing, Revenue, and Contract structure data

MEA would contract with an electric service provider to supply all electric energy to the participating customers. The contract would assure a rate structure, with guaranteed rates for the first five years of the contract. The RFP is open to proposals from providers regarding length of contract, energy supplied, and cost. The prime requirement is to meet the renewable energy targets and insure that the program structure of light green and dark green service options is available to all customers in the CCA. There is an expectation that bond financing for renewable energy facilities would be made available to supply electricity to Marin; however, this has not yet been defined. The authority has invited proposals from the potential providers.

Interviews with CCA leaders in this market

Dawn Weisz.

Governance

Marin Clean Energy is a Joint Powers Authority, with participating communities each having representation on the board. MCE is responsible for the community choice program which is called Marin Clean Energy. The board makes decisions through a vote of the members. The governance is established under the Joint Powers Agreement which was authorized by ordinance of each of the jurisdictions. Approval of the community choice program would be through a “program agreement”.

Policy

The primary policy document is the business plan⁴⁶. However, the Joint Powers Agreement also provides policy goals of reducing greenhouse gas emissions, increasing renewable energy and energy efficiency, achieving price stability, and creating local economic benefits.

Portfolio and financial reports

The business plan at this point contains the primary source of information regarding the portfolio and pro forma financial projections for the community choice program.

Public Benefits program information

The business plan states an intent to pursue energy efficiency and fulfill the local target representing the CCA’s share of the California Solar Initiative.

Enabling legislation

At the state level, community choice law set the stage for the local program. This was supplemented by ordinances from each of the participating jurisdictions to enter into the joint powers authority and to approve of joining a community choice program.

Service areas covered

The community choice program, called Marin Clean Energy, covers most of the jurisdictions inside of Marin County and includes:

- City of Belvedere
- Town of Fairfax
- County of Marin
- City of Mill Valley

⁴⁶ http://marincleanenergy.info/pdf/FINALBUSINESSPLANA-MARINCLEANENERGYApr12008_v4_3_.pdf

- Town of Ross
- Town of San Anselmo
- City of San Rafael

- City of Sausalito
- Town of Tiburon

Electricity Use

The jurisdictions are projected to consume a combined 1300 gigawatt-hours per year.

Billing Arrangement

Revenue is to be collected by PG&E as part of its billing service, in accordance with AB 117. The payments for the energy portion of the bill would be forwarded to MEA, which would then be responsible to reimburse the electric service provider. The billing and revenue process would be governed by a contract between MEA and PG&E.

Power purchasing

Power purchasing is the responsibility of the electric service provider.

Risk allocation

Procurement and price risks would belong to the electric service provider, and a price structure would be guaranteed according to contract with the CCA.

Major utility and other cost factors

Initially, DWR power purchases would be significant. However these largely disappear after 2012. Rates are expected to be influenced by the level of renewables in the portfolio. The light green option is expected not to exceed PG&E's rates initially, and then possible drop below the utility rates over time. The deep green option is expected to cost up to 10% more than standard utility service, with a gradually decreasing premium over time.

Customers by types (Res., Comm., Ind.)

The CCA expects to have about 97,000 residential, 12,700 small and medium commercial, and 170 large industrial and commercial customers.

Opt-out rates

While the program has not yet begun, the business plan anticipates 10% opt out rate.

Loss of jurisdictions

Novato, Larkspur and Corte Madera have not yet elected to join Marin Clean Energy.

Price of energy

At this point there is no actual cost, since the program is not yet online. However, the forecasts show Marin having lower energy costs than the utility. The cost advantage increases over time due to procurement of publicly financed, locally generated power and load reduction. Ultimately, whether the bid is accepted by MEA and a contract executed with the supplier will depend on the rates being competitive with the incumbent utility.

Program Cost and Rate Recovery

The ESP contract is the primary means for establishing rate stability, and the MCE board has authority over rates.

3. Sonoma County

Activity to date

Sonoma County opted not to participate in the CEC and Local Government Commission-sponsored CCA pilot project that was launched in 2004. As a result, Sonoma County did not benefit from the feasibility study produced by Navigant Consulting, or any of the other activities associated with the CCA pilot. There were ad hoc and independent contacts made with staff in Sonoma County governments in the 2004 time frame, but these proved unproductive. PG&E has a very strong presence in both government and the business community, and has consistently voiced opposition to consideration of CCA in both the government arena and various business fora, such as the Chamber of Commerce.

The impression that was left upon staff members and elected officials as a result of the ad hoc contacts was not positive. The primary objection was that CCA formation would require the Cities of Sonoma County to form a Joint Powers Authority (JPA) in order to be viable. Sonoma County Cities had experienced a failed attempt to participate in an energy JPA that was organized around natural gas procurement. This experience biased local officials against efforts they perceived to be similar.

Although local government has not actively pursued CCA, climate protection and greenhouse gas mitigation planning has been quite active in Sonoma County. The recently released Community Climate Action Plan, prepared by Climate Protection Campaign (www.coolplan.org) specifies CCA as one of the primary tools for GHG reduction in the electricity and natural gas sectors. This has raised the visibility of CCA as a vehicle for GHG emissions reduction public works projects in the energy and transportation sectors.

Current status

Currently, CCA is not being discussed officially. However, the Climate Protection Campaign has been organizing discussions among local elected officials of all aspects of the Community Climate Action Plan, including CCA.

Policy

No Policies to date.

Financing, Revenue, and Contract structure data

Not Applicable

Interviews with CCA leaders in these markets

Ann Hancock, Executive Director, Climate Protection Campaign

“Since 2005 the Climate Protection Campaign has been investigating Community Choice Aggregation (CCA) to determine if and how it could be used in Sonoma County to help achieve our greenhouse gas emission reduction goal. CCA promises to be one of the most powerful tools available at the local level in California. PG&E’s

opposition to CCA has created fear, negative perceptions, and significant caution in local policy makers and business leaders here. Before we are able to discuss facts about CCA with policy makers and leaders we must first address these fears and negative impressions. PG&E's opposition has slowed down the process of investigating CCA in Sonoma County and probably has slowed down the ability of this community to pursue one of the strongest solutions under its authority for reducing greenhouse gas emissions."

Documents and Information, as available:

Energy Element of the Community Climate Action Plan.⁴⁷

Service Territory

Sonoma County, population 488,000. Approximately 210,000 residential accounts and 20,000 commercial/industrial accounts.

Total Electricity Use

Sonoma County uses about 2,900 GWh/yr for all sectors. Average demand is approximately 330 MW. It is estimated that peak demand is about 700 MW.

4. East Bay Cities

Activity to date

Emeryville, Oakland and Berkeley were involved in the CEC/Local Government Commission/Navigant pilot project that was begun in 2004. The primary objectives of the Cities were to "reduce carbon emissions, promote greater use of renewable energy and exercise local control over energy policy, and to offer rates that are competitive to PG&E, while insulating taxpayers from any financial liabilities."

Feasibility studies were completed for the three cities during 2004-2005. The peer reviewed feasibility studies found that "the Cities could, over the medium to long term, increase use of renewable energy, stabilize electric rates and offer rates that would be competitive with PG&E (+/- 5%). The ability for public agencies to obtain low cost capital financing for generation projects was identified as a key factor in being able to achieve these objectives."

A business plan was then completed and released in September of 2008. The business plan proposed that the three cities join together, "to form a regional CCA program (through Joint Powers Authority formation) serving a large portion of the East Bay to accelerate the shift away from natural gas for new electric power generation toward greater use of wind, solar, geothermal, biomass and other renewable resources." Among other features relating to rates and efficiency, the plan proposes the development of 125 MW of wind or other qualifying renewable and 25 MW of distributed solar photovoltaic

⁴⁷ <http://www.coolplan.org/ccap-report/source-material/1%20Energy.pdf>

systems within seven years. These facilities would be financed with tax-exempt revenue bonds.

Current Status

In November, 2008, a staff report was released that was a combined response to the Navigant business plan by the three cities. The staff report was released in the three cities under separate cover, but used the same language in each case, indicating a common source. The conclusion of the staff report was the same in each case. Quoting from the Berkeley report, "Due to the risks, costs and uncertainties associated with establishing a Community Choice Aggregation (CCA) enterprise for the purchase of electricity for Berkeley residents, including the known and unknown financial and legal risks to the City associated with creating and operating an enterprise with a \$230 million annual budget, staff recommends that the Berkeley Energy Commission recommend that Council accept the CCA Business Plan but not move forward with efforts to implement CCA, and that Council authorize the City Manager to reallocate \$70,000 (earmarked earlier for CCA) to Climate Action Plan implementation."

Emeryville

The response in the City of Emeryville is summarized in the City Manager's report for November 2008: "In November the City Council voted to accept the Community Choice Aggregation of Electrical Power (CCA) Phase II Report and Business Plan and to terminate any further CCA activities due to the high cost of the next phase (and lack of city funds to pay for it), and the likelihood that CCA generated power would cost more than PG&E and therefore not be competitive to attract customers. The Council directed staff to work with P.G.&E. to promote alternative sources of power generation and promote energy conservation as an alternative to CCA. Given that PG&E has a new requirement to generate 20% of its power from renewable resources, we anticipate an active joint program in cooperation with Berkeley and Oakland."

Oakland

In the City of Oakland, recommendation was made by staff to transfer \$390,000 from CCA investigation to further development of the city's Climate and Energy Action Plan.

The release of this staff report in Oakland provoked a quick response from both the California Public Utilities Commission, and City Councilmember Nancy Nadel. In a letter dated December 22, 2008 from Stephen C. Roscow of the CPUC, five critical errors in the staff report were identified and corrected. In response to the Roscow letter, Councilmember Nancy Nadel wrote a letter to the Council in which she pointed out the need to continue working on CCA. She cited the inaccuracies in the staff report, and the compelling advantages of a CCA as presented in the Navigant feasibility study and the business plan.

The key errors in the staff report, as outlined in the Nadel letter are as follows:

- Oakland's General Fund would not be at risk from potential failure of the JPA, contrary to what the staff report had indicated. The financial insulation of the jurisdictions was specifically decided upon by the CPUC, and is contained in the government code (sec. 6508.1).

- The staff report indicated that the CPUC has authority over rates set by the CCA. This is false. The CPUC only sets the distribution rates charged to a CCA. The CCA is a sovereign rate-making authority for generation.
- The effects of AB 32 are uncertain, in terms of the eventual cost of carbon, but the Roscow letter stated that the emissions regulations will affect deliverers (i.e., generators) of electricity, not the load serving entities (LSE). Therefore, LSE's providing electricity with a high renewable content will have less ratepayer exposure to carbon costs. Projected cost of carbon used in the staff report was nearly double (\$55/MT vs \$30/MT) the cost used by the CPUC in its analysis.
- Efficiency programs provided by PG&E are funded through the Public Goods Charge placed on the electricity bill⁴⁸. Staff incorrectly asserted that the efficiency programs might not be available under a CCA. There are two serious errors in this assertion: 1) there is no relationship between energy efficiency funding and a local government's decision to form a CCA, according to the CPUC; 2) Public Goods Charge funds can be used by the CCA, rather than being funneled through PG&E. This could very likely bring a much greater local benefit than the way the funds are currently used. PG&E is required to have its programs approved by the CPUC, and whether a jurisdiction has decided to implement a CCA has nothing to do with the CPUC's decisions on funding proposals. Further, rates set by the CCA can and should provide efficiency funding for local programs. There is no guarantee that a locality is receiving its fair share of efficiency funding through PG&E.
- The proposed renewable content of electricity provided by the CCA is significantly higher than the Renewable Portfolio Standard requirement that the utilities must comply with. This enables local jurisdictions to act more aggressively than the IOU's on local climate protection and energy security goals.

Councilmember Nadel's letter concludes:

"I continue to support a workshop, after the City's budget proceedings, where City Council can receive information from Marin, San Francisco, and San Joaquin Valley, and other public power purchasers, where relevant. Representatives from the California Public Utilities Commission have also agreed to participate in such a workshop and can provide information regarding the regulatory framework. I suggest that Public Works staff provide a more fact-based and balanced assessment of the Business Plan and other information at their disposal."

The Oakland City Council determined to continue the investigation and development of CCA and did not follow staff recommendation to reallocate the \$390,000 that had been allocated for that purpose. The workshop suggested by Councilmember Nadel is scheduled to be held sometime this year, according to activists in Oakland.

⁴⁸ Not all efficiency funding comes from PGC funds. A portion of the funding for efficiency comes from revenues from electricity rates paid by ratepayers (M. Campbell communications).

Berkeley

The same staff report was presented in Berkeley on October 22, 2008. The report was presented by Neal De Snoo, Secretary of the Berkeley Energy Commission. Mr. De Snoo was interviewed on June 9, 2009. He stated that Berkeley was “actively monitoring” progress of the San Joaquin Power Authority (SJVPA) and the Marin Energy Authority.

Mr. De Snoo said that in his view, the risks and uncertainties, primarily in funding the startup of the CCA, outweighed the ultimate benefit. He was also concerned with the safety to investors of bonds used for construction of resources by the CCA. He asserted that, in order to maintain tax exempt status, electricity sold by public entities from publicly owned generation would have to be sold to other public entities. If not, the bonds used for financing would have to be private activity bonds. He also said that it might be more difficult to obtain investments for new generation without a “locked-in customer base”, referring to the ability of ratepayers to opt-out.

Mr. De Snoo also repeated the finding of the staff report that there was a risk to the city’s general fund. He believed that this was due to the need for the city’s support during startup.

Mr. De Snoo said that the original plan called for all renewables to be owned and operated by the city. However, this was problematic in that bond holders need security, which would be in the form of exit fees charged by the CCA. He said that Navigant found that if the equity stake of the city was reduced to 20 percent in the new facilities, that the asset value of the facilities would cover that 20 percent.

E. CCA States without CCAs

1. Rhode Island

Rhode Island passed electricity market restructuring in '96 and '97. Deregulation is chaptered in state law Chapter 39. Municipal aggregation is a part of the original deregulation law and authorizes the municipal legislative authority to determine whether the aggregation is opt-in or opt-out. The Rhode Island League of Cities and Towns has established the only aggregation program in Rhode Island, at present. The program is called the Rhode Island Energy Aggregation Program, or REAP. It supplies electricity to cities and towns for use by their municipal facilities only.

Rhode Island has only one utility, originally known as Narragansett Electric. It is now a part of National Grid, and serves as the Electric Distribution Company (EDC) for Rhode Island. Rhode Island is part of the ISO New England. 99.5 percent of the electricity sold in Rhode Island is generated by natural gas. It represents 7 percent of the load on the ISO New England grid.

Rhode Island Energy Aggregation Program

Interview with Dan Beardsley, Executive Director

REAP aggregates municipal electricity purchases for all the cities and towns of Rhode Island. REAP secured an amendment to the state law establishing aggregation which exempted the purchase of electricity by municipal aggregations from the state purchase and bid law. The purchase and bid law requires municipal governments to purchase through competitive sealed bid. Before the aggregation was formed, REAP hired a company to do an energy audit of 39 cities and towns.

Two Rhode Island cities are non-members: One is an island community that generates its own power. The other is a host community for a small power plant: National Grid is the EDC, used to be Narragansett. The company was acquired by National Grid during restructuring.

Consumer aggregation does not exist in Rhode Island. REAP did not want to expand the program because of the problem with opt-out. They feared losing customers over time because of marketing scams by utilities. The municipal association customer base is more stable than the residential/small commercial customer base.

Last fall REAP entered into its third contract with GEXA Energy. The first contract was a fixed price from 1999-2004, the second was from 2004-2008, and the most recent runs from 2009-2011. Gexa has reduced the contract terms because of the volatility of the natural gas market.

The negotiated rate was 9.4 cents per kilowatt hour, as of last fall, when prices were very volatile. The most recent Standard Service Offer rate was 9.97. The Standard Service Offer must be provided by the "last resort" supplier under restructuring.

Relationships with the utility (National Grid) have been characterized by foot dragging, when the competitive supplier needed billing information

Consultants were used to get all data. A total of 3900 accounts are serviced plus streetlights. Municipal load has good load factor because of the streetlights.

GEXA (current supplier) was selected because their quoted price was lowest of seven companies bidding.

What has not worked for REAP is that there used to be a "lead time" to ensure that all contracts were signed. Now the supplier needs a 100% guarantee that members would join aggregation before the supplier will sign. This guarantee it has to be in place very quickly due to market volatility. This gives little time to educate each municipality on the contract terms.

Restructuring has generally been successful for the REAP, but not anyone else. REAP has been successful because members were all committed to the aggregation, in terms the recognition of the need for stability and reliability. REAP has a very stable committed membership, with both smaller communities with a very small load to larger communities. The aggregate buying power has helped smaller communities get a lower rate than they would have been able to get on their own. The larger communities might be able to do better without the smaller communities, but are willing to take a smaller discount to benefit all members of the aggregation.

REAP staff observed that this is usually not acceptable within the private sector. That is, larger customers will "go it alone" if they can get a better rate, rather than participate in an aggregation.

During startup, and first contract negotiation, the REAP ED (Beardsley) invested a great deal of effort educating the membership on every step of the process. REAP sent out 30 different communications to let the cities know about the issues. Initial cost to REAP was \$65,000 in legal and \$110,000 in consulting, which was paid by membership.

On the second and third bid solicitations, contract negotiation was paid via an administrative fee added on to energy price.

On the first contract, the membership was saved \$5.5 million over the Standard Service Offer. During the second contract period, the Standard Service Offer was 6.3 cents per kilowatt hour and the aggregation negotiated 5.9 cents per kilowatt hour. \$28 million has been saved over the entire aggregation period.

For REAP members, the prime benefit of aggregation has been the availability of a cheaper rates than those offered by the Standard Service Offer.

Rhode Island has a Renewable Portfolio Standard. It is currently 5%, increasing 0.5 per year, up to 15% by 2020. The specific sources providing the renewable content of the REAP energy are unknown.

REAP is unable to issue bonds. Rhode Island has a Council of Governments provision in state law, but the League is a non-profit association, not a COG. They also are unable to buy wholesale electricity directly.

Total load served by REAP is 185,000,000 kilowatt hours per year.

2. New Jersey

While New Jersey adopted its CCA law in 2003, there is no record of any official efforts to implement a CCA to date. Chapter 24, an Act concerning government energy aggregation, amending and supplementing P.L.1999, c.23, and repealing section 44 of P.L.1999, c.23. No state regulations have been adopted under this statute.

Local CCA advocates are approaching various majors and investigating the potential for CCA in New Jersey, but there are no official CCA efforts to include in this report at this time.

F. Conclusions

The core benefits of California CCAs

California CCAs can deliver two core values:

1. A physically transformed electrical supply
2. A new economic risk profile

Elements of a transformed energy supply—moving toward zero carbon electricity

- The removal of peak load through strategic deployment of renewable technologies; acceleration of overall load reduction, both peak and base, through aggressive demand response and energy efficiency investments. This means profitable marketing of “nega-wattage”⁴⁹.
- Physical re-localization of electric power supply. This reduces exposure to fuel price fluctuations, transmission congestion, and system efficiency losses encountered by resource-centric, transmission-dependent grid architecture.
- The San Francisco CCA is anchored in a 51% replacement portfolio of power resource that is rapidly developed and locally-owned. Exposure to market volatility is avoided because the asset has fixed cost, is on the ground locally, and reliable (due to high percentage of renewables) over the infrastructure's lifetime.
- Integration of localized supply and demand resources, including storage.
- Emphasis on long-term contracts to guarantee stable rates and to secure capacity investments. To the extent possible, these values and capacities are built into a public-private partnership that minimizes CCA operational exposure.
- In addition to attracting customer ownership, we add municipal engagement through bond finance mechanisms. This build-not-buy strategy looks ahead to the actual delivery of energy independence. Energy costs become a reflection of capital costs— e.g., upfront investment and interest rates— rather than variable fuel costs.

Vulnerabilities of first-generation CCAs

- short term contracts and pricing windows
- overexposure to fuel price volatility using procurement only (“buying co-op”) model due to reliance on (largely fossil fuel-based) system mix
- overexposure to grid reliability costs from peaking plant operation
- narrow value proposition for the consumer which is entirely based on discounts (The CCA has no reason to exist if the negotiated power is not cheaper than the incumbent).
- inability to survive competitive pricing advantages enjoyed by utilities. i.e., rate stabilization (rate freezes during transition to competition)

⁴⁹ Avoided energy use and cost

- As demonstrated in Ohio and Massachusetts, the “procurement only” CCA is precariously weak in obtaining price advantages because they are on the same procurement schedule and in the same wholesale market as the utility.
- neglect of key advantages of CCA, which are the elimination of exposure to fuel market and the built-in ability to adapt to demand
- The tendency to imitate a utility’s procurement strategy; this is dangerous, because utilities just buy and pass along the cost to consumers through the rate base or surcharge mechanisms.
- Incurring risk by not mitigating suppliers risk subjects CCA to a recurring crisis of instability and recurring RFP’s.
- Opt-out exposure through customer churn rate, encouraged by “cherry picking” of industrial customers, leads to the relative neglect of residential customers.
- Ignoring demand-side approach exposes customers to the risk of volumetric surcharges becoming a substantial part of the electricity cost.

CCA experience in Massachusetts and Ohio has demonstrated the weakness in a fragmented approach to program implementation. CCA management teams have been “breaking up” program elements and placing them in isolated silos, i.e., “the efficiency program”, the “demand response program”, “the renewables program” and the like. These programs are then given individual targets, and measured according to the ability to meet these targets cost-effectively. Supply is treated entirely independently from demand, as well as the effects of load on the grid.

Recommendations for Program Development & Framework for Risk Profile:

- Develop a new understanding of economic risk profile.
- Apply an integrated approach to all elements of demand side management and supply side design. A locally opportunistic and profile-driven deployment of resources and demand side measures can minimize the need for supply. This is the unique strength of a CCA: it does not have to fragment its various supply side and demand side programs. It can apply an integrated approach to development of all program elements.
- Apply a finite program—based solution meant to drive outcomes toward the understanding of risk mitigation derived from the risk analysis. Customer ownership is key to the building the real foundation under this new risk profile.
- Offering customers the opportunity to invest in direct ownership is critical to success. This model of capacity building is in direct opposition to the present rent, not own, model. By building capacity installed by customer investment value accrues to localized power supply. It actually adds money to the mix rather than sending it out, thus enriching the revenue cycle of power supply.
- Modeling to achieve minimal to lowest peak fuel price exposure. Wholesale markets are largely natural gas-based. Diversified capacity is commonplace to most IOU’s.
- Since CCA’s aren’t tied to existing infrastructure they are able to diversify their portfolios into a demand reduction technology.
- Efficiency is, to speak bluntly, today’s coal. A management technology based on harvesting latent efficiency is lowest cost energy opportunity. This is exhibit A in the supply side risk vision versus demand-side risk.
- Existing supply side thinking identifies burning fuel inventory as the key to success. On the CCA/ demand side model, risk aversion is key and that translates as no fuel inventory.

- Fuel will continue to be a major risk exposure even for the Lessons Learned here, but the economy of acquisition and use is implemented using vastly different models. If wind has become cheap, demand automation or load shedding, virtual peaking contracts while presently largely fictional are the leading edge of the rapidly emerging future of energy trading
- Demand side model bypasses surcharge risk. Negawatts bypass non bypassable charges.

There are some notable conclusions that can be drawn about governmental energy aggregation.

- In deregulated electricity markets, aggregation is commonly cited as the single factor that has made competition work for the benefit of the consumer. In California, the competitive market benefits to the consumer are still available through wholesale contracts with ESPs. Since retail Direct Access was shut down in 2001, Community Choice offers the only available method for consumers to access the benefits of the market.
- At all phases of market restructuring and the formation of aggregation, the response of the incumbent monopoly utilities and entrenched energy suppliers has been to attempt to undermine or destroy aggregations, either through regulations or through manipulation of the basic rate setting mechanism. This was seen in the Ohio experience through attempts by the utilities to force non-bypassable charges on aggregation customers that did not directly benefit from those charges. It was also seen in the assessment of switching fees. Both of these abuses had to be addressed by further legislation (SB 221).

There are several important elements that contribute to the success of community choice programs:

1. *The need for a champion.*

This particular aspect of aggregation is probably the least quantifiable, yet the most obviously demonstrable in all areas where aggregation has been successful. This is usually one individual, but can be a group of people, who are, first and foremost, advocates and supporters of the aggregation concept. This individual can be a representative of the aggregation, such as an executive director (Leigh Herington, NOPEC; David Orth, SJVPA). The individual can be an elected official of a legislative body (Matt Patrick, MA). The individual must be a consumer advocate either in their official capacity (Jeanine Migden-Ostrander, OH), or as the top priority of their position (Joseph Migliorini, Chairman, NOPEC board).

The champion must deeply understand the logic of aggregation and energy markets, as well as the role of the incumbent utilities. The champion must be willing to go to bat for the aggregation in legislative and regulatory action. The champion must be willing to do unpaid work if necessary, and go above and beyond the call of duty. The more closely an individual fits this profile, the less likely an aggregation is to run into legal or financial minefields and traps, usually set by the incumbent utilities.

2. *The importance of being a tough negotiator to obtain competitive rates.*

Ultimately, the importance of aggregation to date has been that the combined buying power of the aggregation, in a deregulated market, has given the members of the aggregation an advantage in generation rates over the “standard service offer customers.” (In California, this would be the customers served by the incumbent utility). Aggregations can work to command rates on the wholesale market that are superior to rates offered by utilities operating on a cost-of-service basis. This is due to two factors: a) the ability of retail electric service providers to “hedge” electricity rates based on tranches of contracts of varying lengths (risk managed rates) and b) the ability of the aggregation to bid out its load to the lowest bidder. Rates for aggregation customers can be more stable in volatile energy markets, and, if the regulatory environment changes, aggregations can negotiate terms that take advantage of the perceived need for competition. However, being able to take advantage of this perceived need is nearly entirely dependent on the existence of champions and consumer advocates who will go to the plate in regulatory and legislative actions.

3. *The aggregation must work for the benefit of the public, economically and otherwise.*

The organizers and leaders of the aggregation must recognize that their role is, first and foremost, to protect the interests of the ratepayers, i.e., to get the cheapest, greenest, most stable electric supply possible. Today that includes also minimizing the carbon footprint of the generation. Achieving this requires effort both in contract negotiation and on the regulatory front to make competition and free enterprise work for the consumer. Competition in electricity markets is complex. It is very easy for the IOUs to conflate the interests of their shareholders with those of the ratepayers, either through greenwashing, or support for a business model that results in greater profits, but not necessarily the most favorable rates or lowest carbon intensity. In fact, the electric ratepayers have their own set of interests that ultimately, especially in a carbon constrained world, will need to be translated into access to the lowest carbon energy, at the lowest possible cost. This objective is not necessarily compatible with the corporate objectives of the incumbents, which are primarily focused on creating and growing shareholder value.

4. *Focus on the contract, maximize risk assumption and operational responsibilities of supplier, minimize government involvement*

In California, the involvement of the incumbents in the local political process has, to a certain extent, obfuscated the clear consumer advantages of aggregation. The political process has become complex and contentious. In fact, the objective of aggregation is simple: get the lowest rates. However in California there is further value in forming a CCA: use the power of aggregation and public financing to obtain the cheapest, lowest carbon electricity supply possible. In both California and elsewhere, the focus of the aggregation is on the execution of a contract with a supplier. All the issues of risk, liability, portfolio and regulatory compliance can and must be answered in the contract. The successful contract constructs a clear demarcation between the parties, such that the supplier assumes responsibility for all technical, operational and financial issues associated with retail electricity supply. The relationship between the electricity

supplier and the governmental body of the aggregation has been tested and is well understood. It works for the benefit of the consumer in the states where aggregation has, and continues to be, a success.

III. Task B: Review of Marketing & Outreach Strategies— Lessons Learned

A. Massachusetts

1. Cape Light Compact, Cape Cod

Massachusetts CCA differs in environment, message and strategy from California's CCA movement, but has evolved into something closer to San Francisco's green power-defined strategy, and offers important Lessons Learned and Best Practices. The nation's first CCA, the Cape Light Compact was formed in the context of Massachusetts' 1997 electric industry deregulation law, which authorized CCA as a form of customer choice alongside individual consumer choice. Whereas California CCA was authorized following suspension of Direct Access as a solution to the state's (deregulation-based) Energy Crisis, such that Bay Area CCAs have been primarily concerned with greening their power supply and achieving less volatile power pricing associated with overdependence on gas-fired generation, Cape Light Compact leaders were originally divided on environmental policy back in the late 1990's, but ultimately voted to define CCA primarily as a means of benefiting consumers during the early years. However, as survival has led the Compact to evolve and to redefine itself primarily as energy efficiency, green power and consumer advocacy in the past half-decade, the Compact has become more involved in marketing its programs, and offers the important best practices:

- Co-marketing with Supplier and Commercial Developers and Vendors
- Maximize Web-based marketing
- Maximize Free Media such as low-cost with staff productions for local public radio

Moreover, as Massachusetts CCA was coincident with the legislature's customer choice deregulation process as a small customer-oriented retail electricity competition option, the Compact suffered from minimal hostile marketing or political opposition compared to California CCAs. However, as the Compact has evolved into its current orientation towards the public purposes of green power, efficiency and public advocacy and education, its leaders have begun to focus on aggressive but low-cost marketing strategy and public outreach—a guerilla strategy to encourage participation by customers.

The Cape Light Compact was initially rolled out to customers who were vulnerable to market prices, and decided to define itself as a small ratepayer protection agency. The Compact could offer much cheaper prices than the utility, and focused all the benefits of aggregation on lowering those rates, so they did not have to actively sell the concept to the public—the product spoke for itself on the bottom line. Some of the original proponents among Compact founders were seeking to use the Compact as a long-term oriented, renewable energy developing authority. However back in the late nineties, before the energy crisis had yet occurred, energy policy was being driven by proponents of deregulation promising lower power rates as the social benefit, rather than climate protection or energy security, the governing board's group of leaders pursued the cheapest power possible.

Due to the fact that the Compact could offer less expensive energy than the utility, the staff at the Compact did not create a highly developed marketing campaign. The Compact did undertake informational outreach meetings prior to formation, meetings with the local Boards of Selectmen (the local equivalent of city councils, but with Town Meetings), and a mailing to all eligible customers living in Cape Cod and the Islands, known in both Massachusetts and California as the Opt-Out notifications, that required, notice to potential customers prior to customer transfer and following transfer, during which they may opt-out without penalty according to both state laws.

This opt-out mailing is also an opportunity to describe the CCA Program and present its benefits to customers. Unlike California law, Massachusetts' CCA law does not require any rate comparison of the CCA to the default service rate. With minimal outreach or message campaigning, other than the opt-out mailing the Compact did not attempt a large direct mail campaign. Believing that spending lots of money on marketing translates into higher rates,⁵⁰ the Compact has developed and increasingly emphasizes an increasingly website-based low-budget outreach campaign⁵¹ that carried the simple message they still use today—"we are part of your community and we live here and work here on your behalf."

During its formative years, CLC staff visited all of the Boards of Selectmen, senior centers, chambers of commerce, women's clubs, library associations, religious organizations and other community and civic organizations in order to persuade customers to participate in the program. During these years, the Cape's large senior population did not use the internet widely, though this has changed in recent years. The Cape Light Compact recently rolled out an e-newsletter, which is emailed only to customers who sign up to receive it on the Compact's web form— just 500 so far.

More recently, the Compact is undertaking a fresh new approach to marketing, starting with the newsletter, and including a weekly radio show on public radio. "You need people to know who you are first," said staff.⁵² "People on the street don't know who CLC is. When you start out you need a strong ... branding campaign. You need to let people know who you are and what you stand for, then tell them what you do." Today the Compact's marketing materials emphasize the following messages:

- a public entity
- serves all Energy Efficiency needs of customers in Cape Cod
- your advocate on energy issues:
 - power supply at best rate
 - the biggest renewable mix is better than saying you will be cheapest price
 - offer a renewable resource in there

Staff emphasize that the central message to customers is that the Compact administers Energy Efficiency programs for Cape Cod "and that we keep the money local— rather than going back to the utility and entire service area all over state, we keep that money

⁵⁰ Interview with Maggie Downey, July 15, 2009

⁵¹ capelightcompact.org

⁵² Interview with Amy Woll, July 10, 2009

local to benefit citizens of our service region.” Staff repeatedly emphasize that the most effective message that by the Compact is investing that money “in our own economy, money for green jobs.”⁵³ The Compact also offers trainings and seminars for local residents and businesspeople such as architects and engineers to teach about energy planning, emerging technology that impacts building design – serving as a kind of Community Energy Center for local residents.

Finally, the Compact has learned to co-brand with its Supplier, Vendors and Developers, authorizing Honeywell and other suppliers to use Compact logos on their marketing materials, and promoting these businesses with active links on the capelightcompact.org website.

The CLC website has become the chief mechanism used to disseminate information not only to the public, but also internally. Within their 2009 Proposed Energy Efficiency Plan, there is a section regarding marketing, which is linked below. It gives a good overview of the marketing strategies currently employed by the Cape Light Compact for its energy efficiency programs. Community engagement venues included:

- schools
- thirteen local energy fairs
- interaction with the public at community events a high priority
- customer satisfaction evaluations
- focus group

The CLC program is opt-out, and typically a very small percentage chooses to leave the program and return to default service. CLC did the minimum amount of outreach required by the State, i.e., they published notices with prices in the local papers. For the most part, residents wanted to join the Compact in order to take advantage of lower energy prices. At the time the Compact was starting up (late 1990's) online marketing strategies that would be very useful in San Francisco were not common.

The local utility (NSTAR) has never done any negative marketing opposing the Cape Light Compact. The lack of an aggressive negative marketing campaign has lead to a has worked in the Compact's favor, especially during times when the Compact's price has been higher than NSTAR's price. Under Massachusetts law, the aggregation is not required to notify consumers of rate increases.

Due in part to the lack of marketing by the utility, the public does not necessarily differentiate the Cape Light Compact from other suppliers. This situation may have encouraged other power suppliers to come into the Cape and offer customers cheaper power. Some customers have left the Cape Light Compact, but they have gone to companies other than NSTAR. For example, Dominion, a competitive supplier, sent out mailings and marketing materials advertising cheaper prices than the Compact. The marketing was effective to get some customers to leave the Compact, but the number is small (less than 1000 at any time).

What has worked best for the Compact, in terms of customer recognition of the program benefits, are its popular energy efficiency programs. As provided in AB117 for California

⁵³ *Ibid.*

CCAs, under Massachusetts's CCA law,⁵⁴ the Compact gained control of the public benefit funds collected by the utility relating to energy efficiency – the equivalent to California's Public Goods Charge (PGC) funds for energy efficiency collected as a non—bypassable volumetric surcharge on customer electric bills. Prior to formation of the Cape Light Compact, the incumbent electric utility collected surcharges from the Cape communities, but, as in California, there was no guarantee that the local energy efficiency dollars would be spent on programs within the local community. From the very beginning, the Compact successfully applied to administer these funds with that fundamental message,⁵⁵ and the Cape Light Compact has successfully propagated the message that it will ensure that dollars collected for energy efficiency programs in the Cape are spent locally with multiplier effects improving the local economy.

Early on, the Cape Light Compact decided to be innovative about showing its customers how its funds are being spent, and the Compact now publicizes how the energy efficiency dollars collected are spent on its website at www.capelightcompact.org with the results for each community displayed clearly. Staff believe this aspect of the program is a valuable marketing tool for any CCA. The logic appeals to customers who want their energy efficiency dollars spent locally, in addition to those who support energy efficiency *per se*.

Staff suggest that a chart showing the amount of energy efficiency dollars spent per capita under a CCA, compared to the amount of efficiency program dollars currently spent by the utilities in other communities statewide would be a highly effective promotional device. Staff at the Cape Light Compact who run the Energy Efficiency Programs note that customers actively look at the chart on the website documenting where energy efficiency dollars are spent and find the feedback to be a valuable part of the Compact's public benefit.

Compact staff advised that early marketing efforts publicizing decisions about what type of power will be purchased and what programs will be offered have the greatest impact. Community outreach is essential, emphasizing for the public that their aggregation is specific to their community and not just a state or utility program. Staff say the Compact did not do this during its early formation and has had to work harder to get this message out.

Lessons learned:

- It is best to give customers as much information as possible and enable them feel a part of the program in order to have a more active public involvement in the aggregation.
- The importance of early differentiation of the CCA from the utility. It must be clear to customers that the aggregation has specific benefits, such as local expenditures of energy efficiency dollars, which the utility does not have.

Some other suggestions from CLC staff were:

- Elected rather than appointed decision makers should govern the aggregation.

⁵⁴ Chapter 164, 1997.

⁵⁵ Interview with Representative Matthew Patrick, July 11, 2009

- Focus on representation of user classes (municipal, residential, large corporate or other) to ensure they have a voice in the aggregation.
- Keep the campaign grassroots, and build a network from the ground up.
- Build support from political leaders.

During its formation, the Cape Light Compact had the political support of the State Senator for the district who lived in Barnstable County. Compact staff recommended that San Francisco reach out to regulatory and state energy policy office for support. The Cape Light Compact has found it very helpful to have the support of the State Energy Policy and Public Utilities Offices, and with them, the utilities.⁵⁶

2. Marlborough Community Choice Power

The Marlborough, Massachusetts CCA represents 35,000 residents. The municipal aggregation was formed as a public-private partnership with Colonial Power, an energy consultant that brokers power and manages the program for the local government.⁵⁷

Marlborough's message is narrowly defined as a result of utility pressure. Marlborough's program was marketed as "Community Choice Power Supply." During the formation of the CCA, the incumbent utility (National Grid Massachusetts, a subsidiary of the Britain-based multinational) offered modest political support. According to Colonial staff, the incumbent utility, acquired by National Grid for \$3.2 billion⁵⁸ in 2009 under the state's deregulation period, evidently was not actively opposed, and did not expend resources to lobby against it.

According to staff, National Grid's consent with a legally sanctioned CCA program came at a substantial price, which was its condition to Colonial that Marlborough's CCA program will never pursue administration of the Energy Efficiency funds—which has become the cornerstone of the Cape Light Compact's CCA program just miles to the east—in whose shadow Marlborough's program was formed.

Colonial staff say this explains the absence of energy efficiency as part of its marketing message and as part of its service to the community. Thus, the City in effect dropped the very Energy Efficiency program component that has proved so critical to the Cape Light Compact's CCA Program in return for National Grid's cooperation. Staff described the program as essentially joining the Cape Light Compact's retail commodity electricity service without any of the other services that the Compact has developed for its program.

With the program scaled back substantially, once local approval of the appeared certain and the City scheduled a press conference, National Grid sent a letter of support from their Vice-President indicating that they wanted people to be able to choose competitive suppliers. The utility did not have much to lose, since it would still make money from

⁵⁶ Cape Light Compact 2009 Proposed Energy Efficiency Plan, pp. 61-63.

⁵⁷ Several Interview with Brian Murphy of Colonial Power in July, 2009.

⁵⁸ Including Massachusetts Electric Company, Granite State Electric Company (NH), Narragansett Electric Company (RI), and Nantucket Electric Company

transmission and distribution.

Regarding cooperation from the utility, Marlborough consultant Colonial Power asserted that a good relationship was critical from both an operational and practical standpoint, so that they felt unable to “go to the wall” with National Grid and actively pursue the statutorily legal opportunity to implement energy efficiency as a key component of its CCA Program. Staff described the problem as an impossible situation in which sacrifices had to be made. Staff said they were worried that customers calling the old utility for CCA-related service questions might not be treated well by the utility if they were opposing the program as PG&E has actively opposed all CCAs throughout its service territory. While regretting the loss, Staff stand by their decision to start off with a narrowed approach to make the program implementable now, hoping that Energy Efficiency and even renewable energy development might be added at some future date, when Marlborough leaders become as interested in green power as they are in California.

Prior to formation, the consultant engaged in specific marketing activities:

- Held a series of local neighborhood forums to explain the concept of a municipal aggregation program. Although the forums were not well attended by the general public, interested persons such as energy managers and local elected officials did attend. Thus City staff believe these community meetings were high value activities
- One of the primary targets of these forums was the City Council and the Mayor. They are responsible to the ratepayers and had the power to decide whether or not the program would move forward.
- The local media and press covered the implementation process from start to finish.

On this last point, it is significant that the City of Marlborough successfully won media attention by issuing frequent press releases throughout every phase of the CCA Program implementation preparation, opt-out and switchover process in order to get the press interested enough to cover the stories. Staff say that winning media interest was important for their success, and that frequent press releases over prolonged periods of time are one effective and low-cost method of developing needed media presence and gradually delivering media interest in parallel with a slow, long lasting government process.

In its initial CCA Program Plan, Colonial said National Grid reserved the right to include bill messages pertaining to the Community Choice Power Supply Program. This contrasts with California’s CCA regulations, which exclude the utility from inserting or controlling the contents of opt-out notifications, and more importantly, require utilities to cooperate “fully” with CCAs whether extant or formative,” and even require utilities to insert CCA contents (subject to CPUC guidelines) into the utility bill envelope. Massachusetts CCAs have more exposure to utility opposition as the result of cooperation requirements in AB117 and CPUC regulations against utility opposition.

Eligible Marlborough customers received an opt-out notice in the mail describing the program, comparing the program rate versus the utility rate, detailing opt-out procedures, and information about system reliability. In May of 2007, the opt-out rate was 3%, and in December of 2008, after the second mailing, the opt-out rate went down to 2%. The mailing went to all potential customers rather than just current customers.

Thus, the opt-out rate actually decreased by one percent after the second mailing; there was a return. Staff believes the drop in opt-out rate was a function of the gradual education of consumers in the deregulated electricity market, and the function of the aggregation to benefit them. Staff hypothesizes that fear among potential customers after the startup contributed to the initial opt-out rate.

The utility was silent on formation of the aggregation. On the municipal side, a website was created and linked to the City of Marlborough, which gave the CCA Program added credibility. The consultant also appeared on a local cable show with representatives of the utility, which improved visibility of the program among politically active people.

The Marlborough partnership did not do any major advertising campaign such as media commercials or billboards. Initially, the partnership distributed posters and fliers with program information, rates, and opt-out procedures in the town hall, senior centers, and high traffic areas. The aggregation does not keep any customer satisfaction data.

Some challenges to formation of the “Community Choice Power Supply” program involved convincing the Marlborough political leadership to continue to move forward. Elected officials needed to be convinced that they were not putting a burden on the ratepayer or homeowner/taxpayer, and that aggregation was not a dangerous concept. Colonial Power (the program management consultant) sees that as one of the challenges that still exist today.

Under the enabling ordinance, the Mayor of Marlborough executes the power purchase on behalf of everyone in the town, so maintaining political support is key to the aggregation’s future. In Marlborough the Mayor and the City Council are most sensitive to price rather than whether the energy is green or renewable.

Public education must also be conducted, because the public is not entirely aware of what is happening with respect to energy. This presents a challenge to the City as it does not have the resources to conduct in depth education on issues related to restructuring generally or legislation that would impact the aggregation.

Marlborough aggregation staff advised San Francisco to maintain strong support from political leadership for aggregation and the procurement approach. They also recommended holding a series of public forums and other outreach activities close to the contract approval time. Since CCA success is impacted by opt-out based participation, minimizing opt-out primarily depends upon successfully proving the superiority of the CCA supply contract and obtaining public buy-in based on clear benefits to the ratepayer and the public at large.

The Marlborough staff indicated that they held their public outreach too early—approximately one year (2007) prior to the time they went up for approval. Colonial staff cautioned that the timing of the public relations/marketing push must be accurately parallel to program approval dates in order to focus attention on the decisions among the public, the media, and stakeholders.

One key component of good marketing is arranging for smooth customer transfer procedures. Staff said power prices are obviously key, but that it is just as important to find a supplier who will abide by the terms of the CCA agreement and transfer of customers “sharply, crisply and efficiently.” Staff emphasized that it is critical to ensure the supplier can deliver and can handle switchover of customers seamlessly in order to

maintain the appearance of CCA Program stability to the public.

They caution that “behind the scenes” details such as account transfer will affect consumer’s opinions at the outset and that the program could “crash down” if the transfer does not go well on the first day of the program. Staff said, “When you choose your supplier, ask yourself what it will look like from a Grandmother’s point of view.” Staff’s primary advice, “Always keep the end user in mind.”

B. Ohio

If political orientation were to be used as an indicator of potential marketing challenges, Republican-dominated Ohio, the nation's fourth largest electricity market, would not be easily classified. Ohio became the second state after Democratic Massachusetts to include Community Choice Aggregation in its electric industry restructuring law.

From a political standpoint, supporters were particularly startled with the bipartisan nature of support for the measure. The minority Democratic caucus chose Community Choice as a top priority in its restructuring platform. The Republican House Public Utilities Committee chairwoman shepherded the measure through committee and took a leadership role in getting it passed.

Northeast Ohio Public Energy Council Executive Leigh Herington, then a state senator, was also a leader in getting the legislation passed. This direct political involvement of the pioneers of aggregation in Ohio was central to garnering wide, grassroots public support in the rollout of NOPEC and NOAC.

1. Northeast Ohio Public Energy Council (NOPEC)

Local government participation in electricity restructuring began early in Ohio. In the late 1990's, the Northeast Ohio Mayor's Legislative Action Group contributed to development of restructuring legislation. Within this organization approximately 9 counties were represented by their respective Mayors. At that time, these Northeast Ohio counties were among those paying the most for electricity in the state of Ohio. The public awareness of this situation was acute, and lead these communities to seek regulatory relief.

Two communities, lead by their mayors, filed an action with the Public Utilities Commission of Ohio (PUCO), in an attempt to obtain lower electricity rates. The Eastlake community argued that because they have a generation plant in the City, they should get a better rate, and the Brook Park community argued that the Ford Plant should have gotten a better rate since it is such a large customer. The Mayor's Legislative Action Group stood behind the two Mayors and forced First Energy (their supplier at the time) to negotiate a settlement that allowed aggregations such as NOPEC to move forward. The success of this action gave a high public profile to, and support for, efforts to form aggregations.

Another element critical to the success achieved by the Mayors was advocacy at the state level. Their participation in the restructuring legislation lead to two outcomes: 1) the recognition by the local leaders of the need for opt-out aggregation to ease marketing efforts; 2) fostering a high level of buy-in by the voting public.

Opt-out is more effective from a marketing standpoint because of the higher initial uptake rate. Ohio law requires opt-out aggregation to be approved by voters. As a result, Northeast Ohio communities put opt-out aggregation on the ballot, and passed it with a high level of support.

In Northern Ohio, where consumers were frustrated by electric rates that are 30-60% higher than the state average, investor-owned utility company FirstEnergy mounted a

letter writing and lobbying campaign to discourage city council members from supporting the initiative, even asking county officials to rescind Community Choice resolutions that had already been passed.

But the pro-Community Choice campaign's strategy proved effective. Brook Park mayor Tom Coyne led local officials statewide in testifying before House and Senate Committees and writing pro-Community Choice letters to the legislature, the most prominent of them including Eastlake mayor Dan DiLiberto, Avon Lake mayor Vince Urbin, and Lakewood city councilor Mike Skindell. In all, local officials from more than thirty cities, towns and counties passed resolutions or signed onto letters asking the legislature to support Community Choice.

There was a key element of the restructuring legislation that prevented negative utility marketing – a lesson learned that was also incorporated into California's CCA Law AB117. Under Ohio's restructuring law, the utility had to reduce its default customer base by a specified percentage each year. Utilities were also required to assist in creating an aggregation groups.

After restructuring passed the state legislature and was signed into law, local marketing campaigns were started in the communities. Prior the vote on the municipal aggregation ballot measure, a number of actions were taken in each community.

- Mayors and City Councils announced the aggregation program.
- Leadership participated in news conferences.
- Leadership organized town hall meetings to which they invited the community press.

Due to the nature of opt-out aggregation, the marketing/sales requirement has been significantly reduced. As in Massachusetts, opt-out notices are sent to eligible customers after securing a supplier. Ohio law requires an opt-out period every two years. During these efforts, NOPEC cultivates community media and press coverage, but does not seek paid media outreach.

NOPEC issues press releases on details of their agreements with suppliers, as well as other program details, such as energy efficiency and renewables. These are posted on their website and are typically picked up by local media. Every sixty to ninety days, NOPEC also sends out mailings to people who have moved. Although the NOPEC staff does not currently keep customer satisfaction data, they point to their low opt-out rate over the past nine years as evidence of customer satisfaction.

Advice for San Francisco obtained from NOPEC staff is “do not expect miracles” in the beginning, in terms of public awareness or support. They see as key to their success the legislation that was passed and the high visibility of aggregation's key role in restructuring and obtaining lower rates for customers. They cautioned that since the utility companies have had monopoly status, they will use considerable resources to fight competition. NOPEC staff recommends that San Francisco city officials and staff stay involved at the state level to strengthen legislation and level the playing field to improve the chances for success.

NOPEC staff echoed the concern expressed from other CCAs that the utility will attempt to cut off the competition. If appropriate legislation does not exist, utilities will use all available means to attempt to ensure that an aggregation will fail.

Some of the marketing messages that NOPEC used to counter the press from utilities were:

- Joining NOPEC would save money for consumers and municipalities.
- There is a need for a choice with respect to electricity providers, and CCA is the best way to access that choice.
- The CCA can perform a variety of community service functions that reduce cost for the customers.

The following is a marketing/outreach plan for CCAs from the Ohio Office of Consumer Counsel: <http://www.pickocc.org/electric/aggregation/guide/education.shtml>

C. California

1. San Joaquin Valley Power Authority/Kings River Conservation District

During its startup phase, the San Joaquin Valley Power Authority/Kings River Conservation District (SJVPA/KRCD) conducted a large marketing effort as part of dealing with intense opposition from PG&E. SJVPA implementation is currently on hold, due to effects of the recent financial market turmoil on their energy service supplier, Citigroup.

Prior to formation of SJVPA in 2006, KRCD staff spent several years communicating with the potential membership base of cities before creating a joint powers authority. PG&E was party to these early meetings, but had a neutral position at that time. During the CCA rulemaking process at the CPUC from 2001-2005, representatives from PG&E stated that they were neutral on the formation of the proposed CCA, and that they would not market against the program. Thus there were no rules of conduct with respect to marketing mandated during initial rulemaking.

Around January of 2007, PG&E changed their position and began opposing the CCA in San Joaquin Valley. As SJVPA was developing its implementation plan and strategies, PG&E started using the political process to persuade individual City Councils not to take what they claimed was “a risk” in joining the JPA.

The SJVPA leadership believes that PG&E’s strategy at the time was to use fear, confusion and misleading information to try to discourage potential members. Through these tactics, PG&E frightened away the two largest potential members of the JPA: Fresno, representing 50% of the total candidate meters and Tulare County-representing 20%-25% of total accounts.

PG&E used access to newly elected city officials to persuade them to oppose membership in SJVPA. PG&E also worked closely with elected officials who were not in support of the program to build opposition. Through these efforts, PG&E had retained over 60% of the total JPA. As a result, the SJVPA leadership realized that they could not start the CCA program and fight PG&E at the same time.

As a result of these efforts and others by PG&E, SJVPA was forced to file complaints with the CPUC and obtained three rulings against PG&E. The first was regarding joint-and-several liability of the municipalities in the CCA. The SJVPA leadership believes that PG&E used the assertion of joint-and-several to attempt to create fear and confusion among the existing and possible JPA membership.

The SJVPA also filed a complaint with the CPUC stating that PG&E had not demonstrated that it was utilizing shareholder versus ratepayer funds to do its marketing, which is a clear violation of CPUC rules. Part of the complaint stated that the utility’s marketing efforts violated AB117, since in SJVPA’s view the cooperation required by that legislation is more than simply providing customer meter information.

SJVPA ultimately settled with PG&E. Some of the terms of the settlement:

1. PG&E can market but must use only shareholder funds and must account for them publicly.
2. Staff must be designated for anti-CCA marketing efforts and those so designated cannot be involved in customer service or funded by ratepayers and vice-versa.
3. No false or misleading statements by either party.

SJVPA staff advised that there is room for legislative changes or more formal rules of conduct to prevent what they see as a relentless anti-CCA marketing campaign by PG&E. In their view, AB117 should be clarified or amended to specify legitimate marketing conduct by the utilities, and also to get utility marketing rules promulgated by the CPUC. SJVPA does not believe it is possible for a formative CCA to compete with the marketing and outreach resources of any of the IOUs.

For example, according to SJVPA staff, PG&E invested \$2.7 million dollars in their anti-CCA campaign. PG&E mounted a very high profile media campaign in which they hired an award-winning advertising company to produce a TV spot highlighting PG&E as a good utility working in the communities' best interest. Overall, PG&E has mounted an aggressive media campaign that has included paid television time, paid print advertising, and utilization of their website to post opt-out forms.

SJVPA is fighting the posting of opt-out forms on PG&E's website and the issue is before the CPUC now. The staff points out a document that PG&E has been using to get larger customers to opt out. It is a tri-fold document that includes an early opt-out form (included in attachments).

The SJVPA staff credit their success to date with the very aggressive marketing efforts they undertook. They estimate that they spent approximately \$600,000 to \$800,000, and that they could have spent ten times that amount.

Attached are the following documents:

1. An overview of the SJVPA marketing efforts (SJVPA Marketing.doc).
Included are some bullets on PG&E tactics in the write-up
2. Community Choice Strategic Communications Plan Update
3. 3-year budget for marketing to customers based on a phased implementation schedule
4. Speaker's Bureau PowerPoint
5. PG&E early opt-out brochure (marketing piece against the program)
6. Marketing settlement agreement with PG&E

In addition to the attached documents, website links are referenced in the marketing overview to other SJVPA and PG&E marketing materials.

2. Chula Vista

Chula Vista, the southern neighbor of the City of San Diego, was one of the early municipalities seeking to implement CCA and was an active participant in the California Public Utilities Commission's CCA Proceedings from 2004 to 2006. However, Chula Vista did not ultimately succeed in organizing its CCA, and is relatively inactive today.

Ultimately, after a multi-year political battle followed by victory of a new mayor not in favor of CCA, Chula Vista's Power supplier, SDG&E, made a deal with the elected officials that if they did not pursue CCA, they would move a switchyard (estimated cost \$50 million) and place underground transmission lines on the bayfront, removing existing above ground lines. They also committed to contributing \$2 million per year in energy efficiency funding in the form of partnerships to the City. Unfortunately for the City, to date SDG&E has not removed the existing above ground transmission lines and has contributed approximately \$1 million per year to the energy efficiency partnerships.

The above mentioned "deal" came after several years of a (locally) high profile political battle between SDG&E and Chula Vista's Mayor, Stephen Padilla, a Democrat who describes the marketing and anti-marketing of the utility as multi-level. "You had externally SDG&E as the utility which was getting very politically active, very connected into the regional political structure in San Diego County, which leans conservative and is adverse to risk and new initiatives in general." According to Padilla, SDG&E co-opted these internal political structures so that business organizations were effectively controlled by SDG&E as far as CCA was concerned.

"They got pretty aggressive," says Padilla. He reports that SDG&E organized a public relations campaign which culminated in a series of television debates between himself and Frank Ertassen, a representative of Sempra, the holding company of SDG&E.

Three debates at service clubs in San Diego played locally on KPBS (local public broadcasting station in San Diego), with substantial press coverage and interviews. Padilla says the debates were played as a "David vs. Goliath" theme, and that the City appeared to have political traction. "SDG&E was flipping out," with heavy lobbying and advertising in Chula Vista and nearby San Marcos, which was also considering a local power initiative. Among the major issues for Sempra was Chula Vista's interest in developing a local transmission line—"transmission was the top issue for Sempra because that is how they make their money," he said.

Sempra's story was that CCA would be "hugely expensive, too risky, and would not pencil out. They said we had bad economic estimates, and amounted to a crazy whacko left-wing idea."

Padilla describes Sempra's marketing to local officials as heavy handed. This effort included threats to city officials that if the city proceeded, its political opposition would be "heavily financed." The former mayor believes that this threat worked with some people in the local political establishment. "They fell for it, ultimately doubting that the City should spend money pursuing something that Sempra had deep pockets to fight. They began to doubt the whole idea based on this more than anything else."

The context for the CCA establishment effort was the City's franchise agreement renewal with SDG&E. "The franchise agreement allowed Chula Vista to own transmission infrastructure, and CCA provided the procurement authority. Padilla says

this opportunity to vertically integrate threatened the utility. "They pretended to support CCA, but worked hard in the background to create disincentives for the City to pursue it. The City had many policy goals involved in their negotiations around the franchise agreement, including a popular desire to remove large-size transmission lines along the Bayfront".

The City hired Manatt, Phelps & Phillips, LLC., to do an extensive analysis of options. They paid approximately \$75,000 in peer reviews and \$275,000 to engineers and gas consultants. Chula Vista initially wanted to municipalize power and then tried to organize the CCA as the best option. Chula Vista spent an estimated \$1 million between 2001 and 2003 fighting SDG&E.

Chula Vista leaders chose to market their program primarily based on savings to consumers rather than benefits to the environment. Michael Meacham, Chula Vista's director of conservation and environmental services, said. "I have to ask myself, 'Why is it that San Diego ratepayers are put in the same rate category as Manhattan and Hawaii (two of the most expensive energy cities in the United States). Why are we the third most expensive in the nation?'" The Manatt, Phelps and Phillips study showed potential savings for the city measured against current and projected SDG&E rates for 2006 to 2023 yield a net present value of between \$21 million and \$122 million.

SDG&E simply disputed the City's numbers, claiming that while the study "may seem at first glance to provide certain financial benefits, the reality is that the energy business is uncertain and unpredictable." SDG&E predicted vocally that the City's losses would mount and expose both ratepayers and taxpayers to financial risk. SDG&E made the claim that Chula Vista's potential losses were between \$150 million and \$1 billion over 20 years, depending on whether the City only implemented CCA or also developed a transmission line. SDG&E also predicted that the City would threaten public safety by pursuing CCA. "This is a very volatile business. Many large companies are struggling right now and the potential for losses is very real," said Ed Van Herik, an SDG&E spokesman. "The city needs to be asking some questions. What's plan B if plan A goes bad?"

Chula Vista's CCA efforts were also frustrated because it declared itself a CCA before rulemaking had been completed by the California Public Utilities Commission. The timing issue created openings for economic forecasting disputes. In response to Chula Vista's feasibility study, SDG&E said the city's estimated savings could actually result in a \$163 million loss, but that it was "premature to calculate estimates until the CPUC's rules and the costs are in place."

Utility Marketing

According to former Mayor Padilla, Sempra's lobbying made members of the Council, the City Manager and staff nervous, and they began to "rein in" the staff leading the effort. "A couple of council members were weak in the knees, citing negative experiences of other municipalities that had gotten into entanglements with utilities. They acted like there were no options." Padilla describes this combination as leading the City Council to decide that they wanted to scale back CCA efforts. They approved a new franchise agreement with SDG&E that delivered substantial moneys (confusingly associated with a \$100 million value—the amount Chula Vista ratepayers pay SDG&E

annually—when the franchise payment is only a very small fraction of this) to the city—“but the power lines are still on the Bayfront,” he says.

Moreover, the CCA majority on the Council depended too much on Padilla’s leadership personally. His political campaign got “nasty—I was in trouble politically,” and the election of his opponent brought CCA to a complete halt.

Lessons Learned:

Response to utility negative marketing tactics should include the following messages:

- According to the Energy Information Administration (EIA), California has the second highest electricity rates in the Nation.
- Utilities have not increased their renewable energy portfolio in compliance with state standards.
- Emphasis on the negative impact of the high cost of energy on jobs and the vulnerability of local business to out of control energy costs.
- Obtaining low energy prices through local energy projects is critical to business owners who invest in green jobs.
- Rates need to be stabilized so businesses can plan. Local portfolio development can level energy prices.
- CCAs can deliver green electricity more inexpensively than the IOUs.
- Focus on the fact that CCA's will utilize revenues on behalf of the ratepayers as opposed to generating profit for the utility's shareholders.
- The publication, "New Public Power Takeovers: Strategic Resources for Defeating Municipalization" by the Edison Electric Institute shows step-by-step how utilities will try to defeat the CCA. The utilities use the same arguments against CCA that they use against municipal utility districts.
- Utilize statistics from the American Public Power Association to indicate the stability and low rates from public power agencies. For example, almost 2,000 public power agencies deliver power at rates 25 percent less than the incumbent utility.

3. Marin Energy Authority

Marin Energy Authority has just released a request for proposal to energy service providers. 12 bids were received and are currently being evaluated. Marin Energy Authority has eight members of its CCA. Three communities in Marin chose not to join (Corte Madera, Larkspur and Novato).

In 2002 after the passage of AB117, local activists started a grassroots campaign to establish a CCA in Marin. They coordinated large public meetings in San Rafael and invited county leaders. They had a very successful kick-off, which motivated elected officials to look seriously at the issue. In 2005 a feasibility study was completed as part of a grant from the California Energy Commission. The Board of Supervisors considered it for a year, conducted a peer review of the study in 2006, and in 2007 developed a business plan.

In the fall of 2008, the Marin Energy Authority Joint Powers Agreement was drafted and sent to the cities. Many activists volunteered on a grassroots campaign to build support for the CCA. They held a large public meeting in San Rafael, along with neighborhood walks and secured the endorsement of Sierra Club of Marin and the Marin Conservation League. They also secured the appointment of an Environmental CCA Ombudsman. They scheduled a series of workshops for key environmental and community activists to provide input into the business plan, and worked to develop community support at other meetings and events.

Early in the grassroots process, PG&E made public statements that they did not object to a Marin CCA. By early 2007, community members report that PG&E's tactics changed from "benign neglect" to "aggressive opposition." Local elected officials, the press and community organizations received letters from retired PG&E engineers stating that the CCA would not work. PG&E went to the Marin Independent Journal and built a strong relationship with the editorial board. This enabled them to get negative stories printed regarding the formation of the CCA.

PG&E has also called for a public vote on whether to establish a CCA in Marin. PG&E reportedly has held private meetings with elected officials and business leaders to cast doubt as to whether the CCA could actually perform as described in the business plan. PG&E influenced the North Bay Leadership Council to take an anti-CCA position.

In Novato, community activists stated that the City received a \$50,000 check from PG&E for a partnership in energy efficiency and in renewable energy. Novato is 25% of the total Marin electric load. PG&E was also active in Marin's largest city, San Rafael. Two former Marin politicians-former Assemblyman Joe Nation and Jerry Giacominni (leader in Marin Democratic Party) were hired to be PG&E spokespersons. In February of 2009, PG&E released a "green energy plan" for Marin.

Community members reported that PG&E used the same messaging tactics utilities have used elsewhere:

- create fear, cast doubt and uncertainty on the ability of the CCA to function
- used its spokespeople to misrepresent the nature of green power provided by PG&E and proposed for the Marin CCA (downplay nuclear and large hydro, inject uncertainty about renewable capacity).
- Smaller cities and communities on the fence were told that the CCA would have higher rates and that development of the CCA would jeopardize their general fund.
- cast doubt on whether the CCA could procure the amount of renewable energy at the rates they projected
- create fear that the cities and counties would be financially liable if the program fails.
- meet with elected officials, privately lobbying key decision makers,
- direct mail encouraging opt-out, as well as other negative campaigning mentioned above.

Within the last year, the Marin Energy Authority has mounted an aggressive marketing campaign, which included press releases, peer reviews of the business plans and PG&Es comments, development of relationships with every municipality. They have hosted debates, visits to council meetings to present the program, and study sessions for each municipality organized in collaboration with environmental groups and sponsored by green businesses, which were subsequently televised. Marin used online marketing and Constant Contact marketing software to disseminate e-mails. To build their list (1,000 members), they had sign-in sheets at every meeting and event asking for e-mail addresses which they added to their list.

Marin utilized their website to promote the above events, and also created calendars in Google for each City proposed to be part of the CCA. They created copies of brochures and FAQ's (frequently asked questions) and translated them into Spanish. For one year staff attended every event they were invited to and set up a booth with information about

the CCA. They created large free-standing displays regarding the program, and used them in community meetings, including the senior centers, community centers for different districts, homeowner's associations, bar associations, and other community functions.

Lessons Learned:

- Focus on enlisting support of community groups for local renewable development.
- Provide counterpoint to PG&E contacts with elected officials.
- Encourage community members to publicly lobby for CCA policies such as RPS, local portfolio and the like.
- Utilize representatives from the San Francisco Department of the Environment (David Assman and Jared Blumenfeld) in public education work.
- Do not underestimate the resources of PG&E in its ability to oppose contract development.
- Give community groups a very visible role in the campaign to publicize contract development, including green jobs, local portfolio development. Have community groups lead educational forums, place their names on direct mail as supporters, and attend press conferences and other public events.
- Go door-to-door and use a survey (used in Marin) to get people thinking about the CCA and what it could do. Request e-mails so you can develop the outreach list.
- In marketing materials, use the language that you are offering a community-based or local energy system. People want local control and they want suppliers that are community-based.
- Publicize information demonstrating that PG&E has missed the target on energy efficiency and on renewables.
- Be prepared for the number of community organizations, politicians and other programs in the community directly supported by PG&E. Likely allies (i.e. environmental groups) might receive funding from PG&E and might be unwilling to campaign in favor of the CCA.
- Videotaping public meetings provides material that can be rebroadcast on the community TV channel.

Marketing information can be found on the website at: www.marincleanenergy.info

4. Sonoma County

Efforts to establish CCA have been made in Sonoma County since 2003. Since 2005 the Climate Protection Campaign has been investigating CCA to determine if and how it could be used in Sonoma County to help achieve the greenhouse gas emission reduction goal. Opposition from PG&E has followed much the same outline as other communities, although the focus has been on approaching elected officials and staff. PG&E has also used the threat of withdrawal of financial support from community groups as a lever to discourage advocacy of CCA. Specific messaging used in Sonoma County by PG&E is as follows:

- Private conferences with elected officials in which distorted information regarding the inherent risk of a CCA is presented. This information includes

- the presentation of apocalyptic scenarios in which the CCA is liable for huge financial losses that must then be assumed by the local governments
- Public presentations where the claim is made that many benefits such as Public Goods Charge funded programs will evaporate if a CCA is established
- The assertion has been made that net metering will be discontinued under a CCA, which will negatively impact owners of solar PV arrays.
- A CCA is not necessary to deal with greenhouse gas emissions reduction, because PG&E's programs are adequate.

The impact of their efforts has created fear, negative perceptions, and significant caution in local policy makers and business leaders. Leaders of the CCA effort have experienced that before they can discuss facts about CCA with policy makers and leaders, they must first address these fears and negative impressions.

Marketing in Sonoma County is further complicated by the perception that any large scale change will dislodge or threaten the entrenched economic interests. The agriculture sector is afraid that reducing greenhouse gas emissions will increase, not only the cost of their energy, but also the cost and availability of their water. PG&E has crafted programs targeted at the agricultural sector, and the local PG&E reps have repeated the canard (demonstrably untrue) that if the CCA takes over, all those programs would disappear, to the detriment of the agricultural sector.

For the commercial sector, PG&E has used its access to business leaders in the Chamber of Commerce and other business associations (Sonoma County Alliance) to a) play the fear card that rates will go up if a CCA is formed; b) promote their own programs as tailored or customized for the community; c) threaten recipients of charitable dollars or PGC program contractors with suspension of their funding if they are perceived as being pro-CCA. These anti-CCA marketing efforts have dramatically increased the need for education and the difficulty of overcoming basic resistance to changing the status quo.

Lessons Learned:

- PG&E misinformation can be countered with the facts. Make sure that PG&E assertions about their programs to "lower" carbon emissions are countered with data in both public and private venues.
- PG&E is not capable of demonstrating that it can meet local or statewide greenhouse gas reduction targets. Analysis of their projected carbon intensities and load growth figures can refute their promises of "helping communities reach their greenhouse gas targets."
- A broad scale outreach to general public, business leaders and elected officials to present the greenhouse gas impacts of "business as usual", i.e., PG&E, and the alternatives, i.e., CCA and integrated development of a transformed electricity supply, can be effective in resetting the conversation about CCA.

D. Rhode Island

While Rhode Island law allows CCA, none has yet formed. The Rhode Island Energy Aggregation Program (REAP) is often mentioned as a municipal aggregation, but it is in fact a consortium of thirty-six Rhode Island cities and towns, organized under the Rhode Island League of Cities and Towns ("League") to purchase electricity and other energy related services as aggregated government (only) accounts, by negotiating collectively with energy power suppliers.

E. New Jersey

There are no CCAs in New Jersey, thus there is nothing to report on CCA marketing in the state at this time.

F. Conclusions

1. Minimizing the opt-out rate is the key criterion of marketing success.
2. The most powerful marketing messages in order of effectiveness for retaining customers and compelling political support is (a) greenness, (b) local control, (c) price competitiveness, and (d) co-benefits such as jobs and local economic multiplier effects.
3. CCA product should be defined as a feature-rich product that is price-competitive with the existing service.
4. Price messaging should be defined in terms of long-term rather than short-term benefits, emphasizing rate security, and consumer protection.
5. Investment in interactive Web marketing, innovative customer participation channels and program benefits transparency is key to customer loyalty.
6. Opt-out notification is a major low-cost marketing and messaging channel
7. Negative utility marketing is best countered with press releases, materials and public statements using facts about rates, renewable portfolio standard acceleration, carbon emissions reduction, local job creation, and localizing green energy infrastructure
8. Among the most compelling messages is the benefit of increased local control over energy efficiency dollars.