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July 2, 2012

VIA ELECTRONIC MAIL ORIGINAL BY HAND DELIVERY

Mark D. Sylvia, Chairman Massachusetts Energy Efficiency Advisory Council c/o Massachusetts Department of Energy Resources 100 Cambridge Street, Suite 1020 Boston, MA 02114

Re: 2013-2015 Three-Year Electric Energy Efficiency Plan - Supplemental filing by

the Cape Light Compact

Dear Chairman Sylvia:

On behalf of the Cape Light Compact (the "Compact"), attached please find an Overview of the Compact's Energy Efficiency Programs for the Period January 1, 2013 through December 31, 2015 and supporting reports from MCR Performance Solutions, LLC and Synapse Energy Economics, Inc. This is a supplement to the July 2, 2012 Massachusetts Joint Statewide Three-Year Electric and Gas Energy Efficiency Plan (2013-2015) filed with the Energy Efficiency Advisory Council on behalf of the Massachusetts' Energy Efficiency Program Administrators.

The Compact intends to include this Overview as part of its October 2012 filing to the Department of Public Utilities that will seek approval of its 2013-2015 Three-Year Electric Energy Efficiency Plan.





June 6, 2012



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Executive Summary

Cape Light Compact engaged MCR Performance Solutions, LLC to conduct research into the question of what the Compact should do to increase engagement of the small C&I sector in its energy efficiency programs. The main feature and source of insight for the project was a series of three customer focus groups.

The conduct of the project was based upon the following work plan, developed through initial discussion and a kick-off meeting held on February 3, 2012.

Figure ES-1: Project Work Plan



Background research included analysis of existing Compact customer data and energy efficiency tracking databases, federal data sources and resources, and interviews. The focus group format and discussion were developed by analysis of the various data and through discussions between the MCR project team and Compact staff. MCR used standard focus group techniques and practices to structure a discussion guide. MCR and CLC agreed that the focus groups should be small (6 customers or fewer) to heighten the candor of the discussion. Three groups were carefully planned and participants selected to group similarly sized businesses together and include a mix of efficiency program participants, non-participants and trade allies from the primary industry segments present on Cape Cod. Recruiting of participants was undertaken based upon input from the Compact's Governing Board and analysis of customer usage and program data. The focus groups were conducted March 13-15, 2012; smaller customers were hosted at a Lower/Outer Cape hotel & restaurant in Eastham; mid-sized customers were hosted at a Mid-Cape restaurant in Yarmouthport; and larger customers were hosted at an Upper Cape resort & restaurant in Sandwich.

Focus groups, secondary research and interviews with staff and vendors all point to one fundamental driver of the Compact's energy efficiency programs, administration, marketing and policy/regulatory dealings: Customer population.. Other primary conclusions and recommendations were developed through analysis of the data and background research as well as best practices research. These conclusions and recommendations include the following:

 Cape Light Compact and its energy efficiency programs are generally well run and wellreceived by customers

- 2. Consider further study to determine whether regulatory allowances and/or accommodations are warranted, to identify them and ultimately to enable defense of the position
- Develop industry segmentation and customization of offerings in the form of measure bundles, marketing and decision-support tools specific to the small business customer demographics of Cape Cod & Martha's Vineyard
- 4. Re-package the application-based track for both prescriptive and custom measures as the "trade-ally" or "customer choice" path so that customer awareness of flexibility and options can be enhanced
- 5. Develop an "express lighting" offer within direct install to more rapidly and with less cost deliver these services without requiring a full audit for all participants, as is currently the case
- 6. Review data management needs and capabilities, so data consistency, coordination and comprehensiveness can be improved and to increase self-service access for CLC staff
- 7. Invest in a strategic marketing plan that spans all CLC C&I programs, vendors and channels
- 8. Continue enhancing the CLC website, consistent with the marketing plan (as recommended) in order to address businesses by segment or sector and to add additional self-service resources and decision support tools
- 9. Engage trade, business and civic allies as a marketing strategy and as part of enhancement or raising the profile of options other than direct install

Many of the recommendations are able to be pursued within the bounds of current budgets and statewide programs and build on efforts already undertaken or underway. Next steps for the Compact are recommended to include:

- Plan and execute a strategic marketing plan development project
- Prioritize other conclusions, recommendations and areas suggested for further study
- Establish a timeline and plan for addressing conclusions and recommendations agreed upon for action
- Initiate enhanced outreach and engagement of trade, business and civic allies by Compact staff

1. Introduction

The Cape Light Compact ("CLC" or "the Compact") engaged MCR Performance Solutions, LLC ("MCR") in January, 2012 to undertake a series of customer focus groups to enhance the Compact's understanding of the small (less than 300 peak kW) commercial and industrial ("C&I") customer population of Cape Cod and Martha's Vineyard. Ultimately, the purpose of the study was to enable better engagement of the C&I customer base and to inform the Compact's development of its next three-year energy efficiency ("EE") plan for calendar years 2013-2015. The primary research question at hand is summarized simply as follows:

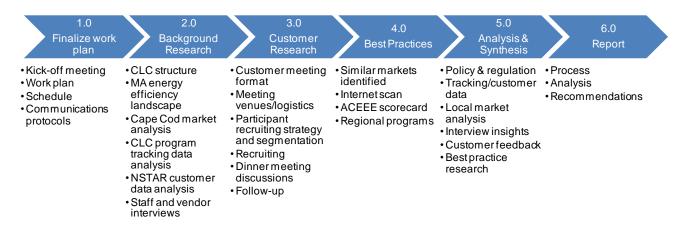
What should CLC do to increase engagement of the small C&I sector given the specifics of the population on Cape Cod and Martha's Vineyard?

Background research, a best practices review and ultimately the focus groups identified the answer to this question. The driving forces were related to the unique cultural and market environment of Cape Cod and Martha's Vineyard and various challenges brought to CLC by the budget, energy savings and administrative ramp-up underway in Massachusetts.

Defining the specific scope allowed for the identification of program design, delivery and marketing as the main areas of interest.

MCR and CLC agreed upon the project plan as depicted in Figure 1.1.

Figure 1.1 Project Work Plan



This report presents the process undertaken and the resulting insights and recommendations. Two caveats to be noted are: 1) focus group participants are, by definition, self-selected and 2) by design, the study is anecdotal in nature as opposed to statistically validated.

The project team included CLC's commercial and industrial program manager as well as MCR staff and is described in Appendix A.

2. Context

2.1 Policy and Regulation Backdrop

Investigation of the policy and regulatory context in Massachusetts as a whole was essential, because Cape Light Compact receives its funding and energy efficiency program authorizations in the same way as the utilities in Massachusetts. Thus, some understanding of the policy and regulatory backdrop is essential to developing a grasp on why CLC's portfolio of EE programs is what it is and why it is managed and administered the way it is.

Calendar year 2012 marks the third and final year of the first series of statewide energy efficiency plans required under the sweeping overhaul of Massachusetts energy policy initiated by the 2008 Green Communities Act ("GCA"). Building upon the work done by the CLC Governing Board and working together with the utilities in Massachusetts, CLC developed the first plan in consultation, coordination and with the support of the Energy Efficiency Advisory Council ("EEAC") established by the GCA. The first three-year plan initiated pursuit of procurement of "all cost-effective" energy efficiency and removed the budget ceiling implied by the ongoing system benefits charge decimal and other "legacy" revenue sources by instituting an energy efficiency reconciliation factor that would, in effect, provide new, incremental revenue for energy efficiency programming. This new revenue source allowed 2010 budgets to increase by approximately \$120 million statewide as the mandate for pursuit of all cost-effective energy efficiency was pursued. By 2012, the first three-year plan called for a near tripling of budgets versus 2009 to almost \$600 million statewide.

The Cape Light Compact's sections of the first three-year plan intended to increase spending from 2009's \$10.3 million budget (see Appendix A, Table 3 of DPU docket 07-47) to \$18.6 million in 2010 and \$32.3 million in 2012. In the commercial and industrial sector, CLC's 2009 budget of \$3.9 million was planned to grow to \$7.7 million in 2010 and

Between 2009 and

2012, CLC budgets

and energy savings were planned for a

more than threefold

increase.

over \$14.5 million by 2012 (see Exhibit E, Table IV.B in DPU docket 11-119). While budgets have been planned to increase dramatically over the 2009-2012 period as a result of the GCA, the Massachusetts Department of Public Utilities ("DPU"), in its review of reporting, savings estimation and cost-effectiveness requirements related to the GCA (docketed as DPU 08-50) largely reaffirmed the methodologies established ten years prior in its predecessor entity's docket DTE (Department of Telecommunications and Energy) 98-100, as

Massachusetts restructured its electric industry. Thus, between 2009 and 2012, CLC's budgets and energy savings were planned for a more than threefold increase. The marketing budget, on the other hand, which was a relative CLC emphasis prior to the GCA, saw a planned decrease in the C&I sector from \$135,000 to \$80,000 as the Program Administrators embarked on more consistent, broad based statewide awareness of the Mass Save® brand.

Table 2.1 C&I Budget and Savings

Year	Total	C&I	C&I Mktg	Total	C&I
	\$ million	\$ million	\$ million	MWh	MWh
				(annual)	(annual)
09 Annual Report'	8.9	3.9	0.135 (1)	14,000	8,134
2010 - Filed '09 (2)	18.6	7.7	0.054	25,700	14,152
2011 - Filed '09 (2)	25.3	10.7	0.068	39,100	17,812
2012 - Filed '09 (2)	32.3	14.5	0.08	48,600	22,040

- (1) 2009 C&I marketing dollars are budget per DPU 07-47
- (2) Filed '09 data per Exhibit E, Table IV.B in DPU 09-119

In order to develop and secure approval of statewide plans, and then report on them consistently, numerous EEAC working groups have been assembled and meet on a regular basis. The shift to statewide programming and marketing has necessarily been designed to achieve the most impact in the aggregate; but, in so doing, the focus is on markets and media, not necessarily as appropriate or applicable to the state as a whole. The focus groups undertaken with CLC customers establish clarity that they do not value messaging or programming geared to the state as a whole, but rather view themselves as "different" and respond to that which recognizes them as such. From a program administration perspective, the workload associated with participation in the EEAC and its working groups is significant.

2.2 Cape Light Compact Market and Programs

The market within which CLC operates is a unique one in Massachusetts. Data reveals three primary distinctions associated with the commercial and industrial population of Cape Cod and Martha's Vineyard:

- 1. Smaller-sized entities
- 2. High seasonality and tourism-dependency
- 3. Unique mix of business types

An extract of Cape Light Compact's customer database indicates a total of just over 21,000 accounts that had non-zero kWh consumption¹ in 2010, summarized in Table 2.2.

		-									
Customer	Total #	Avg. kWh	Accounts with Annual kWh of								
Туре	of Accounts	per Account	>1 million	500k-1 million	100k-500k	50k-100k	10k-50k	< 10k			
Government	2,116	89,598	28	37	224	190	500	1,137			
Industry/Agriculture	129	171,814	5	3	10	3	42	66			
Commercial	19,151	33,421	57	95	970	1,135	5,503	11,391			
ΤΟΤΔΙ	21 396	39 811	90	135	1 204	1 328	6.045	12 594			

Table 2.2 C&I Account Summary

The data is striking and provides an initial basis for concluding that the CLC C&I market is unique and distinct from that of the remainder of the Commonwealth. Nearly 60% of the accounts utilize less than 10,000 kWh per year, making them equivalent in terms of energy usage to residential accounts. Conversely, only 7% of the accounts utilize greater than 100,000 kWh. Such small annual

60% of the accounts use 10,000 kWh or less each year kWh consumption is indicative of a combination of seasonal and "micro" businesses, such as the art galleries and very small retail establishments common on Cape Cod and Martha's Vineyard. Two critical concerns with C&I customers this small are program cost-effectiveness and the ability to identify projects of enough significance to be of interest to the customer given issues of disruption and "process" (paperwork, screening, scheduling and distraction from the customers' business) associated with participation in EE programs. These data tend to belie

¹ The number of zero readings for 2010 total consumption contained in the extract was large, contributing to subsequent recommendations regarding data management.

simple review of the CLC population by rate code², which shows only 2,800 "seasonal" accounts in the commercial & industrial population.

Federal data (American Community Survey or "ACS") from STATSCAPECOD also supports the conclusion that CLC has a very different market than those served by the Massachusetts utility efficiency programs. Table 2.3 below explores Barnstable County employment and compares CLC participation by business sector to that of Massachusetts as a whole. The very fact that this federal data estimated the workforce of Barnstable County (Cape Cod) at only 80,000 versus a population of roughly 215,000 suggests that to even identify businesses is a challenge. Nonetheless, this data is useful in that it reveals the types of business associated with the 80,000 workers are heavily concentrated in hospitality, healthcare, office work and retail trade, with roughly 20% falling in each area. Not shown in this data is the preponderance of large government-related accounts,

program participation and savings³. CLC customer data itself confirms the ACS data by revealing numerous small hospitality and retail accounts, as well as several larger healthcare accounts. CLC program participation data for 2010 through the end of the first quarter of 2012, coded by type of business⁴, indicates 35% of participants were retail entities, 23% hospitality including fast food, 20% office/general commercial and 11% government-related. These data stand in stark contrast to preliminary market analysis being conducted in the first quarter of 2012 on a statewide basis.

and retail

Table 2.3 Barnstable County Employment and Participation versus Statewide

including schools. For example, the U.S. Coast Guard and Air Force maintain a

significant presence on Cape Cod and have proven a source of significant EE

Type of	Barnstable	CLC	Statewide
Business	Cty. Employment	Participant kWh	kWh Potential
Hospitality	18%	26%	3%
Retail	20%	31%	13%
Office	18%	14%	38%
Healthcare	19%	2%	16%
Government	N/A	14%	N/A
Other	25%	13%	30%

To serve the commercial and industrial market, CLC offers retrofit and new construction programs via prescriptive and custom incentive approaches generally consistent with the statewide Mass Save® programs. The portfolio contains a direct install program and statewide brands, such as Cool Choice and Bright Opportunities (upstream initiatives). Program marketing is generally accomplished via the direct install vendor(s), direct outreach, statewide initiatives and local CLC communication and outreach efforts.

6

² Rate coding and classification is another reason behind suggestions related to data management.

With a limited and anomalous very large customer population, challenges related to ramp-up are magnified.
 Coding of business types is accomplished manually by the direct install program vendor and appears informal, again contributing to suggestions regarding data management.

3. Best Practices

Best practices research was undertaken to identify characteristics or attributes of other efficiency programs known to be successful in engaging the C&I customer base. As a guide to identifying best practices, the National Action Plan for Energy Efficiency ("NAPEE")⁵ was reviewed. The following, among the attributes of best practices as discussed in chapter 6 of NAPEE, reveal themselves as particularly relevant:

Market focus

- a. Assess the market
- b. Seek stakeholder input
- c. Coordinate with other program administrators
- d. Simplify participation
- e. Invest in education, training and outreach

2. Leverage

- a. Cooperative activity with market allies
- b. Utilize state and federal tax and other incentives
- C. Develop financing options
- d. Outsource

3. Start with what is known to work

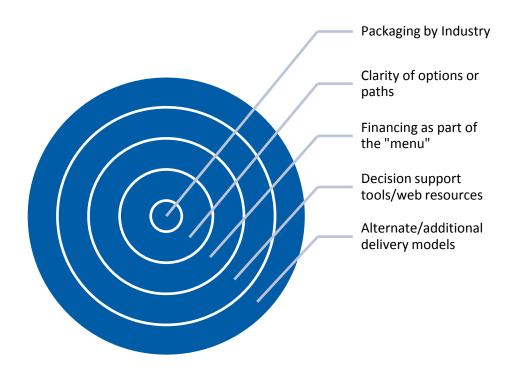
- a. Adapt program models that are known to work
- Educate and train the trade allies
- c. Move toward comprehensiveness
- d. Adjust measure mix to the market and evolution of technology

Consideration of these best practice attributes led to review of several programs throughout the country (listed in Appendix B) based on the following: reputation, proximity to Cape Cod, seasonal/tourism-related market and relative "youth" in program maturity. From NAPEE's high-level discussion of best practice, and given the context CLC operates within, Figure 3.1 on the next page identifies five specific elements of program design and delivery that are particularly noteworthy and worthy of exploration.

American Recovery and Reinvestment Act ("ARRA") and informed the resulting SEE Action (http://www1.eere.energy.gov/seeaction/) effort of the U.S. DOE.

⁵ NAPEE (http://www.epa.gov/cleanenergy/energy-programs/suca/resources.html) was developed through U.S. EPA coordination of input and assessment by a group of state, advocate and utility representatives and its report was published in 2006. NAPEE was impactful in the implementation of energy-related provisions of the

Figure 3.1 Best Practice Atributes



Packaging program offerings by industry type allows customers to more immediately grasp the opportunities and benefits of an efficiency program geared towards them. In so doing, the credibility of the program and likelihood of participation increases. Packaging of programs by industry embodies NAPEE best practices of assessing the market; responding to stakeholder input (see "Customer Focus Groups" below); simplifying program offerings; and flexibility of measure mix.

Clarity regarding options or paths is a matter of making it simple for customers to understand their options for how to participate. For example, in the case of CLC, this clarity would be with respect to what the direct install program is and how customers can utilize it; what the prescriptive measures and incentives are; and what the custom track is and how it works. Clarity reflects NAPEE best practices, including response to stakeholder input, simplifying, education and training, and flexibility.

Financing is identified explicitly in the NAPEE discussion as a best practice. However, the NAPEE discussion focuses only on financing as a matter of leverage; whereas in CLC's case, provision of financing is also about responsiveness to stakeholders, coordination, upstream cooperation, comprehensiveness and flexibility. It is important, as will be revealed in "Customer Focus Groups" below, to recognize that financing ought not to be viewed as a "silver bullet" but rather as one tool in a toolbox of program offerings and incentives. CLC is currently rolling out a new financing option via the direct install program vendor.

Web-based decision support resources are essential tools to equip customers and trade allies with specific knowledge, examples and economic analyses related to the programs. By equipping customers and trade allies, efficiency program participation and program administrator credibility are enhanced. Web-tools are responsive to NAPEE's call for simplification; and education, training and outreach. CLC has been aware of the importance of its website and has recently released significant changes and enhancements.

Alternate or additional delivery models speak not only to wholesale changes of vendors or delivery systems, but more importantly to providing additional options or means of access to the program. For example, retaining a market manager could increase coordination of the activities of a direct install vendor as well as trade allies in accessing the array of paths (direct install, prescriptive, custom). Alternatively, a Program Administrator's internal resources could be deployed with increased emphasis on such coordination. Other alternative delivery structures that could complement CLC's existing portfolio include such things as neighborhood lighting blitzes, midstream/upstream business and consumer electronics initiatives, and a vendor-driven option. This concept reflects NAPEE's discussion about coordination, simplification for the customer, cooperative activity; utilization of tax and other incentives; outsourcing; adaptation; comprehensiveness and flexibility. Although the discussion of the focus groups below and further detail in Appendix B will provide additional amplification and application regarding best practices, a "deeper dive" into the Efficiency Vermont, Wisconsin Focus on Energy and/or Energy Trust of Oregon programs is highly recommended.

4. Customer Focus Groups

Background research and analysis proved fruitful, but ultimately the "telling of the story" in the first person via interviews and focus groups was identified as the likely driver of analysis, conclusions and recommendations. Although anecdotal and subject to viewpoints arising from self-selected customers, the perspectives offered by staff, vendors, trade allies and customers provided a level of insight that secondary research and quantitative data alone simply cannot.

The background research and data was supplemented with a series of interviews with staff and vendors to complete the preliminary understanding of the CLC situation and to inform development of the customer focus groups. In early February, four 30-90 minute interviews were conducted by telephone with various members of the Cape Light Compact team as well as the lead vendor for the commercial direct install program. The interviews supported the background research conclusions that programmatic shifts and administrative workload increases are ongoing since the GCA.

The depth of program and political knowledge and the critical insights of staff and vendor alike were impressive as was the candor offered. Generally, the insights confirmed that first person information via customer focus groups would provide significant input to addressing the design, delivery and communication of CLC's commercial programs and the goal of increasing engagement of the target population. In addition, the interviews further informed the project team regarding issues and topical areas likely to generate the most discussion and subsequently insight from customers via the focus groups.

4.1 Focus Groups: Approach

Driven by analysis of the background data and insights from the personal interviews, an optimal approach to the customer focus groups emerged. In fact, given the more informal and relational nature of Cape Cod, a decision was made NOT to utilize a typical focus group format involving an antiseptic environment and two-way mirrored observation room with audio and/or video recording. Instead, the decision was made to engage customers in an informal dinner setting and guide them through a battery of targeted questions recorded by a visibly present note-taker. Therefore, the events could more appropriately be described as dinner meetings or discussions. This style of meeting was agreed to lend itself to smaller groups of not more than six customers, including the following mix:

- Program participants and non-participants
- Trade ally and/or commercial & industrial stakeholder
- Facilitator, note-taker and CLC observer (beyond the six customers)

In order to minimize travel times and match participating customers and their relative business sizes to meeting locations, three venues were selected in the Upper-, Mid- and Lower/Outer Cape. Based upon the market analysis, customer usage and participation data, the focus groups targeted hospitality, retail and healthcare businesses in particular. Although recruitment was targeted, the choice to participate or not was entirely the customers' and this self-selection bias was frequently evident in the lack of understanding, tone and "agenda" some of the discussion participants brought.

The primary questions asked at customer meetings were implicitly designed to test five hypotheses:

- 1. Decision-making is generally reactive or need-driven with little planning or sophistication
- Capital is a constraint and financing programs would be most interesting
- 3. Awareness and comprehension are not significant barriers in the CLC territory
- 4. The connection between controls and operations & maintenance and energy efficiency is not well understood
- Customers are aware of the Cape Light Compact, its programs and how to access them

Only the first hypothesis was confirmed.

The development of the discussion guide was based upon a combination of the research objective, data analysis and interviews. Based upon standard practice for focus group research, the informal meetings were structured to have introductory, transition, primary and wrap-up questions or topics over the course of a 3-hour dinner meeting. Although the conversation was intended to be organic, there were six primary questions to provide focus and for which specific insight was sought:

- 1. How are decisions made about what equipment to buy or replace and what goes into those decisions?
- 2. Where do the dollars come from to replace equipment or make upgrades to equipment?
- 3. Other than money, what else prevents you from making more efficient choices?
- 4. What do you think is the relationship between energy efficiency and how you operate and maintain equipment?
- 5. Do you think the Compact has anything available for you and how would you go about taking advantage of it?
- 6. How else can the Compact get the word out about its programs?

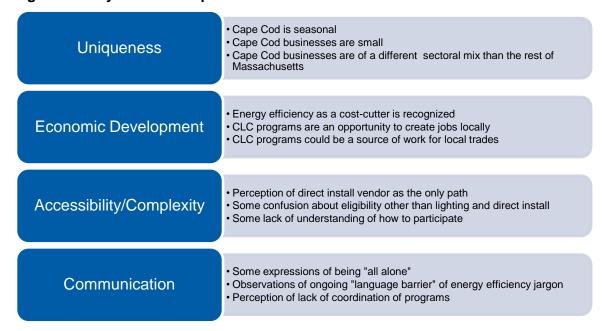
4.2 Customer Meetings: Discussion

The three informal meetings were held on March 13-15, 2012. Small customers were hosted at a Lower/Outer Cape hotel & restaurant in Eastham; mid-sized customers were hosted at a Mid-Cape restaurant in Yarmouthport; and larger customers were hosted at an Upper Cape resort & restaurant in Sandwich. In addition to discussing the six primary questions, insights, attitudes and perceptions related to economic development and economic recovery were of interest. Economic growth perceptions, or the general economic outlook of participants, were generally strong with sentiment based upon "gut feel" as well as leading indicators (e.g.,

tourism/hospitality bookings being far ahead of last year's pace). Beyond the economic outlook probes and the six planned questions, two other significant observations emerged: 1) only the very largest customers tend to have any capital and energy-related planning to speak of; and 2) there is a significant "hidden" commercial sector in the form of residential-like buildings within the Cape Cod commercial account population, including boarding schools, long-term care/assisted living and timeshares, in addition to traditional multifamily buildings. Not explicitly mentioned, but implied and generally known to be prevalent, were home-based businesses operating under residential accounts.

From the discussions, four driving issues related to the key questions and hypotheses emerged and are identified in Figure 4.1.

Figure 4.1 Key Focus Group Issues Identified



<u>Cape Cod Uniqueness</u> was repeatedly one of the points, if not the most important point, that was raised and reiterated by all participants of all sizes. While the background data and staff/vendor interviews pointed toward this phenomenon, the first-person discussions with customers made it clear that the issue of uniqueness should be embraced as the key issue to understand with respect to CLC's commercial and industrial program design, delivery and marketing. In fact, the issue of uniqueness reaches beyond just the C&I programs to all programs and to all aspects of CLC's role as an energy efficiency Program Administrator.

While the seasonality issue was expected to be important to hospitality and specialty retail, the issue was raised as important to businesses that could have been expected to be less seasonal, such as the building trades and liquor retailing. In fact, customer discussions suggest that the only non-seasonal businesses are education and healthcare. Seasonality and the economic system of Cape Cod as a whole drive business decision-making, spending and repair/improvement logistics. Two participant quotes sum up the importance of seasonality:

"We can't do anything in April-September because we are too busy; we can't do anything in January-March because we are without cash-flow."

"Cape Cod seasonality is the issue; it affects all businesses with sort of a rotational trickle effect." (This effect was clarified to mean that the 100% seasonal businesses are so much a part of the overall economy that they drive everything else.)

At two of the meetings, substantial time was dedicated to the question of what CLC should be doing with respect to customers and programming at various times of the year. Feedback from customers indicates that "It's dead in January through April but nobody has any cash-flow and money is tight." Meanwhile, in May-September when there is money flowing, businesses are generally too busy to do anything other than run the business. This reality implies that the fall and early winter are the primary

times when Cape Cod C&I customers have the time, financial means and disposition to act on discretionary spending, such as energy efficiency retrofits. A cyclical approach emerges as worthy of additional exploration:

October-December: Sell and schedule

January-April: Install

May-September: Educate, train and conduct trade ally outreach

Culturally, Cape Cod emerged as a place where, paraphrasing one customer, "we take care of our own." In each of the customer discussions, the importance of relationships and supporting local businesses was emphasized repeatedly. One participant commented:

"I was surprised when I saw the (direct install) company was out of RI...The Cape is a tight community; we help each other; we like to work with local people."

The implications of this attitude are numerous with respect to program delivery, marketing and deployment of CLC staff. While the existing direct install approach and vendor are both strong and successful, there was a clear sense among meeting participants that they "wished they could have used our existing electrical and HVAC contractors." Similarly, it was made clear by some that "generic" marketing messages delivered by "off-Cape" media do not resonate. In fact one customer specifically spoke to the need for CLC-driven grassroots activity rather than media-driven marketing. Finally in this regard, and recognizing that participants in the meetings were self-selected and generally wanted to learn as well as discuss, many customers were not shy to ask for specific access to and attention from CLC staff.

The issues of business size and sector were identified in the data but strongly reinforced by the customers as well. In the Yarmouthport and Sandwich meetings, customers expressed a lack of

savvy or sophistication with respect to awareness of options, energy-consuming systems in their businesses, and the relationship between operations and maintenance ("O&M") and efficiency. For example the response to inquiry about O&M with respect to cleaning air conditioning and refrigeration coils was identical for two participants who replied, "What's a coil?"

Looking at business type or sector, it is clear that Cape Cod has a uniquely large hospitality sector representing nearly 20% of businesses and retail represents another 20%. These two segments, representing about 40% of the total, is a stark contrast to the state as whole within which current data suggests the office segment is 40%. This contrast can be seen the implied measure mix as well, reinforced by customer questions at the meetings such as:

Unique concentration of hospitality, retail and very small business has implications for programs and measure mix.

"What can you do for my pools, my laundry and my individual unit HVAC and refrigeration?"

In the case of restaurants, customers raised concerns about lighting aesthetics and inquired about kitchen and water heating equipment.

Furthermore, adding to the point of uniqueness, the discussions revealed that within the healthcare, hospitality and even education sectors, a significant challenge exists: CLC serves a large number of residential-like commercial structures that are difficult to treat within the EE program portfolio. There are numerous assisted living/extended care facilities, time share properties, and some boarding school dormitories in CLC's territory. From a programmatic standpoint the skill-sets to address these types of buildings and the assignment of participation and savings to programs are both challenges. Although these accounts tend to be commercial accounts, the program

infrastructure required to serve them is that of the residential programs. Coordination and assignment of costs and savings are difficult to sort out and this type of building, per the meeting participants, represents untapped potential.

Even the recruiting process and outcome for the meetings underscores the unique nature of CLC's territory. Recruiting for meetings in March proved difficult because small business owners, in particular, tend to be "off Cape" for extended periods during the off-season. Even when contact was made, the extreme busyness of the small business-person was evident by the number of customers who declined to participate. In fact, even identification of small businesses on Cape Cod was challenging, because business owners very often use their name as the account name rather than the name of the business. Lastly, the heavily seasonal nature of businesses being open at all was revealed by the difficulties encountered in trying to engage the seasonal food vendors, art galleries and small inns/bed & breakfast operators for focus group participation.

<u>Economic Development</u> is an issue that mattered to all participants in the discussions, with a clear sense among all that energy efficiency is a matter of economic development. Also significant was the way in which the issue came up, more as a matter of fact recognition that by definition anything that generates jobs or cuts costs is "economic development," as opposed to the association of "economic development" with specific agencies, entities and initiatives usually encountered in policy and political circles. Energy efficiency and the Cape Light Compact were clearly articulated



and identified as related to economic development in two primary ways: local jobs within the CLC programs and energy efficiency as a cost-cutting opportunity. Echoing the comment above, related to using local trades, one participant put it this way:

"Keep the money on the Cape. You should let the local trade allies become your sales team and spread the word about the programs."

In fact, many of the meeting participants suggested that it is their existing trade ally partners that drive equipment selection and purchase decisions. This underscores the importance of cooperatively engaging local trades-people as part of the CLC program offerings.

The relationship between the CLC programs and cost-cutting was one that received attention and "steering" via the facilitator in each meeting. Participant comments indicated comprehension that the energy efficiency programs do not cause their overall costs to go up; and, if they take advantage of such programs, they receive significant ongoing cost reductions.

Accessibility and Complexity of participation emerged as lightning rod issues that revealed a surprising amount of confusion and even frustration among participants in the discussions. There was a general sense among those in the room at each event that the CLC programs are accessible only via one of the direct install vendors and are almost exclusively lighting programs. Even among the largest and most sophisticated customers with multiple accounts of over 100,000 kWh per year, there was a sense of surprise that motors, HVAC and non-electric projects were eligible for consideration and that there is a "custom" path that allows any customer and their trades/partners to work with and through the programs. Similarly, there was a consistent lack of understanding of the "how and why" with respect to measure and project eligibility issues related to cost-effectiveness. One participant suggested:

"You should have information about what to expect when going through the programs with things like timelines, conditions, processes and even who will come to the door."

Based upon these comments an opportunity for further study is to more thoroughly research customer awareness and perceptions in recognition of the fact that participants in the focus groups were self-selected and therefore likely had an agenda. Additionally, the perception that CLC's programs are dominated by installation of lighting by the direct install vendor and the customer voices stating an interest in other paths to participation suggests that although other paths indeed exist and the direct install vendor is but one delivery mechanism, there are opportunities to drive additional customer traffic to the other delivery paths.⁶

The matter of flexibility of the program design and ways to access funding was also commonly embraced, with provision of a menu of options, including technical support, prescriptive incentives, custom incentives and available financing, along with tools to support customers in undertaking their own analysis and decision-making. A summary statement provided by one participant suggests what the barriers to participation related to accessibility and complexity are in sum:

"It comes down to money, time, aesthetics, complexity (of the work) and disruption of my business."

<u>Communication</u>, awareness and outreach emerged as perhaps the key criticism and point of discussion, generating numerous clear suggestions and statements of specific points of concern in each meeting. In fact, after the first meeting, a mid-course correction was made to add explicit questions and seek specific discussion about how CLC could better "get the word out." Among the participant comments:

"The programs should do better job of referring to other programs to get full spectrum of offerings." (There was a lack of understanding that CLC, Cool Choice, Mass Save, RISE are all related to the Cape Light Compact portfolio.)

"I went to the website and couldn't understand all the materials."

"(You) need to get the word out about the programs."

"The name tends to make people think of lighting, hence Cape 'Light.""

"Make it simple: we'll help you pay for it, you'll save money."

In general, there was a pervasive sense that customers are "all alone" and that engagement with CLC generally arises from word of mouth or personal connections. There was a striking observation that, try as program managers may, there is still a significant "language barrier" with energy efficiency terminology, concepts and acronyms bogging down communication and making misunderstanding, confusion and disinterest all issues. Again, the fact that the voices raising these issues self-selected to participate and brought with them some bias or agenda, the issue of effective communication before, during and after engagement is a an area for further

study for Cape Light Compact.

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⁶ The direct install vendor is contracted to be the "gatekeeper" of work on existing buildings, performs most of the C&I portfolio marketing and outreach activity and is responsible for coding participant business types or segments. Use of local building trades is frequently accomplished by the direct install vendor itself opting to sub-contract work to them. In addition, the direct install vendor has opened a small regional office and has hired local personnel.

5. Analysis and Recommendations

Upon deliberation on the policy and programmatic background, best practice review, interviews and customer meetings, a series of recommendations emerged that can generally be grouped into three areas (see Figure 5.1).





5.1 Policy and Regulation

Cape Light Compact and its market are both unique. As a relatively new organization authorized to administer the energy efficiency programs in July, 2001, and a non-utility, CLC brings an organizational mission and an organizational size that are very different from the other Program Administrators in Massachusetts. The structure and mission of the organization drives it to be locally focused, highly customer-oriented and relational. However, CLC's ability to dedicate resources and focus to the mission seems currently strained due to the significant ramp-up of reporting and engagement of statewide processes. The policy/regulatory workload and challenges regarding representation of Cape Cod's uniqueness, and therefore its interests, are both significant and increasing since the passage of the Green Communities Act. Interviews with staff and vendors suggest excellence and commitment to be sure, but also an emerging sense of strain as "running the business" and full participation in "the process" must be balanced. Comments among some participants in the meeting discussions connote an overall positive view of CLC and its programs, but also reveal what could be an emerging sense that there is distraction and a lessening of focus on the customer. Similarly, the evidence suggests that the Cape Cod and Martha's Vineyard market is economically different from the remainder of the state, and it is logically consistent that the program offerings should embrace and address these facts. Therefore, it is recommended that although CLC

and its programs are doing well, additional study be undertaken to determine whether there are additional investments and/or policy/regulatory accommodations that would be advantageous to CLC's customers and/or consistent with the CLC's statutorily-enabled mission.

5.2 Program Strategy and Design

Cape Light Compact offers a comprehensive portfolio of programs that are generally well-received and successful. However, there are opportunities to improve the programs now, either modestly within the constraints of the post-GCA statewide process, or more broadly assuming EEAC and/or DPU accommodation. Improvement opportunities include modest changes that can be undertaken within the current budgets, goals, statewide program designs and statewide marketing plans. Given the research and customer feedback, there are four primary recommendations:

- 1. Develop segmentation and industry-specific customization of the direct install program, largely as a matter of "packaging" the existing offering. Creation and marketing of separate bundles of measures, analytics and case studies relevant for the hotel/motel, restaurant, small retail and healthcare sectors, for example, would present what is currently available to all customers in a language and applications that will better resonate with specific targeted market segments.
- 2. "Re-package" the existing application-based path (for both prescriptive and custom measures) without modification as the "trade ally" and/or "customer-driven" path. It is unclear whether customers recognize that only the direct install program involves a CLC-contracted vendor and that a separate option is available that allows them to develop their own project (within cost-effectiveness and other program rules) with their own contractors. Clearly defining the prescriptive and custom options to direct-install in these terms and marketing them would enable better understanding and increase access to the programs for trade allies.
- 3. Develop a separate "express lighting" offering within the existing direct install program and consider creating a series of targeted, local direct install canvassing events.
- 4. Conduct a focused, internal review and analysis of existing data and reporting infrastructure in recognition that, although several database and customer-relationship management systems currently exist, it is unclear whether they are consistent with one another or coordinated to maximize reporting efficiency and access to concise yet rich data on customers and program participation.

Review of the best practice program discussion and customer meeting notes provide significant insight into the industry-specific customization and the trade ally/customer-driven packaging. The concept of "express lighting" is to simply take what customers and the direct install vendor agree to be the core of the current direct install program and set it apart for ease of access and to clearly differentiate lighting from the other types of measures available to customers. It is advised to analyze the data infrastructure and reporting needs, ideally in the form of a formal written data situation analysis and a going-forward data management plan. For example, it would be beneficial to be able to quickly develop a profile of a specific customer, including energy usage, business type or segment, participation in any of the CLC programs and history of any inquiries and/or outreach. Similarly the ability of staff to seamlessly and accurately integrate participation data and customer demographic data themselves, rather than via external resources, would also be of value.

5.3 Marketing and Communications

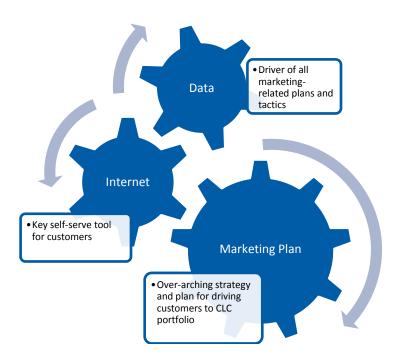
Cape Light Compact is keenly aware of and sensitive to the importance of maintaining a strong customer focused presence in its market and endeavors to do so. However, critical issues of communications, marketing, awareness and outreach are challenging.

The post-GCA energy efficiency policy/regulatory model appears to seek to limit and/or heavily scrutinize marketing investments, especially those that are beyond the common, statewide activities. From the primary and secondary research, it appears as though marketing and communications are undertaken tactically at Cape Light Compact as a response to a specific emergent need or issue and are sporadic, for the most part, other than the marketing activities of the direct install program vendor.

Over-reliance upon individual vendors for marketing and pursuit of marketing on a tactical, asneeded basis are both risky. For example, it is likely (and worthy of additional study) that reliance upon the direct install vendor for C&I program marketing planning and execution causes or at least exacerbates the perception of at least some C&I customers that the CLC portfolio is limited to direct install lighting. Similarly, tactical, as-needed marketing activities may or may not "hang together" well and could confuse the market and/or breed misunderstanding within in. Therefore, *perhaps the most critical and immediate recommendation of all is for the Cape Light Compact to invest in a comprehensive, strategic marketing plan as soon as possible.* Issues such as purpose, strategies, tactics and key messages need definition and exemplify the types of needs that a strategic marketing plan can provide.

From the customer meetings, a specific issue to be addressed at the level of a strategic marketing plan is language or word choices, since it is evident that, despite CLC's awareness and efforts, a "language barrier" remains between the Compact and customers. Feedback from customers and review of program best practices suggest a similarly significant opportunity exists for the Compact to use the recent efforts to redesign and update the web site as a starting point for a specific internet strategy and plan to be designed alone or as a major part of a strategic marketing plan. Review of the use of the internet by best practices programs, as shown in Appendix B, would be instructive in this regard (e.g., with respect to industry-specific "packaging and tools as well as decision-support resources). Industry segmentation, in fact, speaks again to the data infrastructure opportunities and possible needs. In turn, this provides an opportunity to illustrate that, in fact, data, internet and marketing planning are all related and co-dependent upon one another as shown in Figure 5.2.

Figure 5.2 Marketing Planning Relationships



Lastly, and achievable with minimal cost and within existing policy/regulatory constraints, is the matter of direct engagement of key stakeholders in a grassroots campaign and/or broader public relations campaign to tap into the expressed desire of customers to feel more connected or relational with respect to CLC. Examples of such activities might include proactive, positive engagement of local media; regular engagement of civic, trade and business groups; development of the Chambers of Commerce and trade ally communities as advocates for the program, equipped with case studies and program collateral; and promotion of a speaker's bureau. Even as a broader series of plans are developed, Cape Light Compact now has the opportunity to embark upon a defined and intentional effort to leverage statewide marketing efforts, engage trade allies, chambers of commerce and appropriate trade and civic groups.

6. Conclusion

The Cape Light Compact operates a generally well-run and well regarded portfolio with a strong track record, but now finds itself at a potentially critical moment. As administrative and regulatory workload increases, there are significant opportunities to increase engagement of the small commercial and industrial population within policy/regulatory constraints and in so doing relieve the strain that the competing priorities of program management and general administration appear to be bringing to staff and administrative infrastructure in general. Beyond the immediately accessible opportunities, there are significant investments in planning and strategy that the data, customers and post-GCA ramp-up all suggest the Cape Light Compact ought to be afforded the opportunity to undertake.

The initial packaging and grassroots communication and outreach activities can be viewed as "low hanging fruit," capable of delivering material impact in terms of awareness and program participation. However, in order for the Compact to simultaneously deliver its programs optimally and engage the EEAC and DPU at the level they each require, investment in plans and systems is necessary. Similarly, in light of the unique culture and market of Cape Cod and Martha's Vineyard, a degree of budget and program flexibility will likely be required to serve their populations. Revisiting the "Analysis and Recommendations" discussion above, the following steps are encouraged for action by Cape Light Compact:

Policy Recommendations:

 Conduct further study to determine whether regulatory allowances and/or accommodations are warranted, to identify them and ultimately to enable defense of the position

Program Recommendations:

- Develop industry segmentation and customization of offerings in the form of measure bundles, marketing and decision-support tools
- Re-package the existing application-based path (for both prescriptive and custom measures)
 as the "trade-ally driven path" so that customer awareness of flexibility and options can be
 enhanced
- Develop an "express lighting" offer within direct install to more rapidly deliver, and with less cost, these services without requiring a full audit for all participants, as is currently the case
- Review data management needs and capabilities, so that data consistency, coordination and comprehensiveness can be improved and to increase self-service access for CLC staff

Marketing Recommendations:

- Invest in a strategic marketing plan that spans all CLC C&I programs, vendors and channels
- Continue enhancing the CLC website, consistent with the marketing plan (as recommended) to address businesses by segment or sector and to add additional self-service resources and decision support tools
- Engage trade, business and civic allies as a marketing strategy and as part of enhancement or raising the profile of options other than direct install

Many of the recommendations are able to be pursued within the bounds of current budgets and programs and build off efforts already undertaken or underway; next steps for the Compact are recommended to include:

- Initiation of enhanced outreach and engagement of trade, business and civic allies
- Planning and execution of a strategic marketing plan development project
- Prioritization of other conclusions, recommendations and areas suggested for further study
- Establishment of a timeline and plan for addressing conclusions and recommendations agreed upon for action

Appendix A - Project Team

The project team included MCR staff as well as Meredith Miller, manager of C&I programs at the Compact. MCR is a 13-year old boutique management consulting firm that is headquartered in Deerfield, Illinois and focused exclusively on utilities and public power entities. In 2011, MCR initiated an expansion of its presence and its target market to include the Northeastern U.S. Edward Schmidt, Jr. has been leading the CLC project. He is a Master's-level economist and director in MCR's energy efficiency ("EE") practice and has been working in and around utilities in New England, New York and New Jersey in capacities ranging from rate design and forecasting to his primary forte in energy efficiency and related marketing. Supporting Mr. Schmidt on the project were Thomas Crooks, also a director in MCR's EE practice, and Matthew D'Alessio, who provided sub-contract support to record the discussions at the customer meetings.

Appendix B - Best Practice Research

Organizations Reviewed

- Detroit Edison
- Indiana Michigan Power
- Wisconsin Focus on Energy
- Energy Trust of Oregon
- Long Island Power Authority
- Efficiency Vermont
- Public Service Company of New Hampshire
- Duquesne Light Company
- United Illuminating

Outputs, Observations, Examples

BEST PRACTICE OBSERVATION

It is important to package a consistent core program or programs by industry type or segment utilizing industry-specific bundles of measures

For example, as shown on the next page, Efficiency Vermont's presentation of industry-segmented opportunities offers a brief description of the segment and then allows users to click on the segment of interest for industry-specific information and opportunities associated with Efficiency Vermont's offerings.

Solutions For

Ways To Save & Rebates

Whatever your business, Efficiency Vermont can help you save money on energyefficient equipment you buy today and on your energy costs for years to come. Get
started by choosing from the following:

Agriculture & Farms

Take advantage of energy- and cost- saving opportunities on your dairy, horse, and livestock farms, and fruit orchards, greenhouses, and maple sugaring operations.

Colleges & Universities

Green-up your campus and save money by starting an energy efficiency project at your college or university.

Commercial Offices

Increase the comfort of your office building, while saving energy and money.

Convenience Stores

Save money and create a better shopping environment at your convenience store, general store, or mini-mart with energy-efficient equipment.

Grocery Stores

Lower your grocery store or supermarket's energy costs and boost your bottom line with energy-efficient equipment.

Hospitals & Healthcare

Improve the experience of your patients and help sustain operations by making energy-efficient choices.

K-12 Schools

Improve learning environments and reduce costs by making energy efficiency upgrades at your school.

Lodging

Save money with energy efficiency, whether you run a quaint country bed & breakfast, full-service hotel, motel, or large resort.

Lodging



Check in to save money and energy.

Whether you run a quaint country bed & breakfast, full-service hotel, motel, or large resort, there's an energy-efficient option that will save your business money.

According to ENERGY STAR®, a 10% reduction in energy costs is equivalent to increasing RevPAR (revenue per available room) by \$0.60 for limited service hotels and \$2.00 for full-service hotels. Choosing energy-efficient equipment can also help you create more comfortable guest experiences, increase staff productivity, and demonstrate your commitment to greening your lodging establishment.

Efficiency Vermont provides standard rebates to Vermont businesses for installing a wide range of new, energy-efficient equipment. Custom rebates and technical assistance may also be available for technologies or projects not listed on our rebate forms.

BEST PRACTICE OBSERVATION

Direct install or self-driven and/or program-supported custom/prescriptive approaches, perhaps defined as a hybrid program design and emphasizing choice, comprehensiveness of direct install and flexibility of trade ally-driven custom and prescriptive offerings, would be consistent with best practice programs.

For example, Public Service Company of New Hampshire clearly defines these primary options and drives customers to one of the two paths upfront:

PSNH offers two options for utilizing the rebates through this program:

- Option 1: PSNH provides a vendor/contractor
- Option 2: Your preferred contractor performs the installation

BEST PRACTICE OBSERVATION

Financing program options, ranging from facilitated participation and interest buy-downs to on-bill financing within a menu of choices for participants, would be well-received.

BEST PRACTICE OBSERVATION

Online planning and decision support tools, such as calculators, directories of forms, providers and success stories, are associated with customer awareness and engagement.

For example, within each segment or industry-type, Energy Trust of Oregon provides the following "landing page" of resources and links:



+ Serving customers of: Portland General Electric, Pacific Power, NW Natural & Cascade Natural Gas.



Home : Business

Create a better climate for business.



Making energy efficiency and renewable energy top priorities in the places and processes that drive your business is smart any way you look at it. The savings you realize on energy costs go straight to your bottom line. Many upgrades pay back their investment in three to five years or less. And you create more comfortable surroundings for your employees and customers while reducing

your business or building's impact on the environment.

Whether you run a small retail shop, large office building or any business in between, Energy Trust can help with cash incentives, technical assistance, **finding a contractor**, installation and renewable energy solutions like solar electric, solar water heating and more.

Start by selecting your business type and project category from the drop-down menus above to find the most appropriate energy solutions and learn more about how to get cash back. Or begin by using our do-it-yourself checklist to evaluate your business for energy-saving opportunities.

Have questions or need help getting started? Call us at 1.866.368.7878 or Contact us.

BEST PRACTICE OBSERVATION

Online "virtual tours" of efficiency for specific building or industry types may stimulate participation.

Wisconsin Focus in Energy is particularly creative and heavily invested in tools for some sectors, such as hospitality:

Smart Strategies Hotel Virtual Tool



BEST PRACTICE OBSERVATION

Use of a "market manager" model, where a specialist in a particular sector manages customer-directed and/or trades-driven participation for that sector as a coordinator and administrative vendor, would allow end-to-end service to the customer.

Duquesne Light Company, a relatively new entrant to energy efficiency programming, utilizes this approach:

Retail Establishments Program

Duquesne Light partners with AllFacilities Energy Group, LLC as the Conservation Service Provider (CSP) to help our customers operating retail establishments (including restaurants and grocery stores) take advantage of energy savings and rebate opportunities. AllFacilities will work with interested customers by conducting energy audits, identifying energy savings projects, and estimating project costs, project savings, and rebate amounts. AllFacilities can assist with identifying financing, specifying equipment, and managing the installation of the energy efficient equipment. AllFacilities will offer some of these services at no charge and some of them for a fee. Each customer works directly with AllFacilities to choose which services to accept.



Memorandum

To: Cape Light Compac	To:	Cape 1	Light	Compac
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From: Jennifer Kallay, Pat Knight, Erin Malone, Doug Hurley

Date: June 7, 2012

Subject: Assessment of Cost/Lifetime MWh Savings

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2.	Summary of Potential Factors Leading to Higher Cost/Lifetime MWh Savings for the Cape Light Compact as Compared to Other Massachusetts Program Administrators	. 4
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	Distribution of Costs by C&I New Construction/Large Retrofit/Small Retrofit Programs Distribution of Costs by C&I Non-Government & Government Program Types.	. 5
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1. Introduction

On April 30, 2012, the Massachusetts Program Administrators submitted the first draft of their 2013-2015 MA Statewide Three-Year Energy Efficiency Plan to the EEAC. At the May 8, 2012 EEAC Meeting, the EEAC provided initial comments on the April 30 draft plans. The major feedback on the draft plans concerned the high cost per lifetime MWh savings relative to 2011 preliminary actuals. The Program Administrators were tasked with investigating and further substantiating these costs and reporting back to the EEAC at its next meeting on June 12, 2012.

The following was the Compact-specific feedback on the cost per lifetime MWh savings in the C&I sector:

"Statewide, the PAs have proposed a 70% cost increase for each of the three years over 2011 actuals (\$0.016/kwh to \$0.027/kwh). This is a very large increase across all PAs and the basis for it is unclear. PAs should provide the basis for the increases and tie them

to an increase in additional and more costly resources being captured through new efforts/strategies.

Generally, the smaller PAs have proposed higher costs than the larger PAs. This is partially explained by differences in scale, service territory, customer base, and demographics. However, Cape Light Compact in particular has proposed a 171% cost increase in 2013 compared to 2011 actuals, which then drops down to a 90% increase in 2014 and 2015. CLC should provide a basis for this proposal."

The purpose of this memo is to examine 2010 actuals, 2011 preliminary actuals (where available), and 2013-2015 plan data submitted by all PAs on 4/30 and report on the key drivers behind higher costs per lifetime MWh savings for the Compact as compared to other PAs.

The following tables show sector level cost per lifetime MWh savings calculations for 2010 actuals, 2011 preliminary actuals, 2013-2015 planned and the percentage change in cost per lifetime MWh savings from 2013-2015 as compared to 2011 for the Compact as compared to other PAs as well as at the statewide level.

Total Costs per Lifetime Savings by Sector (\$/MWh)									
		2010							
		CLC Other PAs Statewide							
Residential	\$	85	\$	54	-	\$	185	\$	62
Low Income	\$	224	\$	93	-	\$	156	\$	109
C&I	\$	64	\$	20	-	\$	36	\$	22
Total	\$	82	\$	28	-	\$	60	\$	32

Total Costs per Lifetime Savings by Sector (\$/MWh)									
		2011							
		CLC		0	ther	PAs			Statewide
Residential	\$	78	\$	51	-	\$	131	\$	60
Low Income	\$	262	\$	94		\$	247	\$	108
C&I	\$	36	\$	8		\$	22	\$	17
Total	\$	64	\$	13	-	\$	32	\$	26

Total Costs per Lifetime Savings by Sector (\$/MWh)											
		2013-2015									
		CLC			0	ther	PAs			Statewide	
Residential	\$		87	\$	62	_	\$	149	\$		79
Low Income	\$		257	\$	35	-	\$	297	\$		65
C&I	\$		46	\$	25		\$	35	\$		27
Total	\$		68	\$	35	-	\$	51	\$		37

% Change in Cost per Lifetime Savings by Sector										
	2013-2015 vs. 2011									
	CLC	Other PAs Statewide								
Residential	11%	_13%_		45%	31%_					
Low Income	-2%	-67%		129%	-40%					
C&I	26%	27%		333%	63%					
Total	5%	19%	-	288%	40%					

First, the Compact's 2011 preliminary actual costs per lifetime MWh in the 2013-2015 April 30 draft plan were too low as the data was based on the information submitted in the Q4 Quantitative Quarterly Report. This report contained most of the savings, but many of the costs were not available at the time that this report was assembled. Including complete costs, the Compact is currently showing a \$36 cost per lifetime MWh savings for its C&I sector in 2011 instead of the \$21 shown in the tables of the initial draft 2013-2015 plan. As a result, the cost increase for the plan years is 26% on average over the course of the three years (from \$36 to \$46) for the C&I Sector, and just 5% overall.

The 2013 increase makes sense considering the scale and cost effectiveness of the street lighting initiative proposed in 2013.

The 2014 and 2015 increases make sense considering that the cost per lifetime MWh savings were increased 20% to account for the following program changes:

New Construction

• Increased incentives for Advanced Buildings projects

Large Retrofit

• MOUs with top 10 users with higher incentives to reward deeper savings efforts and multi-year customer commitments

Small Retrofit

- Increased incentives from 80% to 95% for tenants
- Additional interest rate buy down incentive for direct install customers who are interested in financing

Second, the question as to the high cost per lifetime MWh for the Compact is as much a question about why costs are higher for the Compact as compared to other PAs across all years, especially considering that with the changes to the 2011 preliminary actuals the Compact is no longer showing particularly high cost increases for 2013-2015 relative to 2011. The Compact had the highest cost per lifetime MWh savings for the C&I sector in 2010, 2011 and in 2013-2015. As a result, this memo will primarily address the factors that may be leading to higher baseline costs per lifetime MWh for the Compact as compared to other PAs. It is important to note, that as some of the data required to analyze these factors is revised through the iterative EEAC review process, further

analysis may be necessary. Additionally, 2011 preliminary actuals are draft until filed with the Department on August 1, at which time the Compact will be able to report 2011 actuals.

2. Summary of Potential Factors Leading to Higher Cost/Lifetime MWh Savings for the Cape Light Compact as Compared to Other Massachusetts Program Administrators

The following is a list of the factors that may be leading to higher baseline costs per lifetime MWh for the Compact as compared to other PAs:

- The Compact has a unique service territory as compared to other PAs which
 requires a different cost allocation by program than other PAs. The programs that
 the Compact spends more on are more expensive to implement. This will be
 discussed and analyzed further in the section entitled Distribution of Costs by
 Program Type.
- The Compact, consistent with statewide program design, offers different incentive levels than other PAs and therefore will have different costs per lifetime MWh savings as compared to other PAs.
- The Compact has significant non-electric savings that are not captured in cost/lifetime MWh savings calculations as compared to other PAs. This will be discussed and analyzed further in the section entitled Distribution of Non-Electric Savings and Benefits below.
- The Compact's measure mix is skewed more towards more expensive end uses in the Residential and Low Income sectors. This will be discussed and analyzed further in the section entitled Distribution of Savings by End Use below.

3. Distribution of Costs by Program Type

The Compact's unique service territory requires a different cost allocation by program than other PAs.

Pass spent more on C&I Small Retrofit than C&I Large Retrofit programs while other PAs spend more on C&I Large Retrofit programs. This is due to the fact that there are fewer large customers in the Compact's service territory. In general, greater implementation costs are required to achieve the same savings across the many smaller customer sites in the Compact's territory as compared to a few larger customer sites, which has historically driven up Compact costs relative to other PAs.

• The Compact may have spent more on C&I Government than Non-Government program components in some years as compared to other PAs or statewide. Government programs are more expensive to implement than Non-Government programs due to higher incentives. However, since data is reported at the program level a direct comparison of this distribution with other PAs is not available.

Distribution of Costs by C&I New Construction/Large Retrofit/Small Retrofit Programs

Several tables follow showing the program level cost per lifetime MWh savings analysis for 2010 actuals and 2011 preliminary actuals for the Compact as compared to other PAs as well as at the statewide level.

The Compact's cost distribution for C&I New Construction, Large Retrofit and Small Retrofit has historically been different than other PAs, with higher cost allocations to Small Retrofit than other PAs.

2010 Actuals

% C&I Costs by Program Type										
2010										
	CLC	CLC Other PAs Statewide								
NC	14%	18%	-	29%	24%					
LG Retro	30%	25%	-	65%	50%					
SM Retro	56%	17%	-	46%	26%					
Total	100%	100%	-	100%	100%					

2011 Preliminary Actuals

% C&I Costs by Program Type										
	2011									
	CLC	CLC Other PAs Statewide								
NC	23%	12%	-	25%	23%					
LG Retro	12%	33%	-	57%	48%					
SM Retro	65%	20%	_	43%	29%					
Total	100%	100%	-	100%	100%					

Distribution of Costs by C&I Non-Government & Government Program Types

Several tables follow showing the program level cost per lifetime MWh savings analysis for 2010 actuals, 2011 preliminary actuals, and 2013-2015 planned for the Compact only.

The following are some key findings:

• The Compact's cost distributions for Non-Government and Government programs have shifted over time. The cost distribution for 2013-2015 is more similar to the

cost distribution in 2010 than 2011. As Government programs are more costly to administer than Non-Government programs due to higher incentives, this is driving an overall cost increase relative to 2011.

- Costs per lifetime MWh savings have been declining since 2010 for Non-Government programs and are projected to continue to decline in 2013-2015.
- Costs per lifetime MWh savings are increasing in 2013-2015 for Government programs due to the proposed street lighting initiative in 2013. However, the costs per lifetime MWh saved are not as high as in 2010.

% C&I Costs by Non-Gov/Gov Programs								
CLC								
	2010 2011 2013-15							
Non	5:	L%	74%	50%				
Gov	49	9%	26%	50%				
Total	100	0%	100%	100%				

C&I Costs per Lifetime Savings by Non-Gov/Gov Programs (\$/MWh)									
CLC						% Change (2013-			
		2010			2011			2013-15	2015 vs. 2011)
Non	\$		49	\$		40	\$	31	-22%
Gov	\$		93	\$		28	\$	81	195%
Total	\$		64	\$		36	\$	45	26%

4. Distribution of Non-Electric Savings and Benefits

Distribution of Non-Electric Savings

The Compact has significant non-electric savings as compared to other PAs. As these savings are not captured in cost per lifetime MWh savings calculations, the Compact has a higher cost per lifetime MWh saved than some of the other PAs.

The table below shows 2010 annual non-electric savings in MMBtus as compared to annual electric savings converted to MMBtus using a natural gas combined cycle heat rate of 6,719 Btus/kWh. 2010 is the only year shown as it is the only year that the Compact has actual data from all PAs at this time. Non-electric lifetime savings are not readily available through existing reporting templates, so annual savings are used to gain more insight into overall trends. In 2010, the Compact reported a high proportion of annual non-electric savings across all sectors as compared to other PAs.

% Non-Electric Savings - Total (Annual MMBtu)								
	2010							
	CLC Other PAs Statewide							
Electric	75%	71%	-	99%	96%			
Non-Electric Total	25%	1%	-	29%	4%			
Total	100%	100%	-	100%	100%			

Distribution of Non-Electric Benefits

The table below shows that the Compact also has a significant proportion of non-electric resource benefits as compared to other PAs. 2010 is the only year shown as it is the only year that the Compact has actual data from all PAs at this time.

% Non-Electric Benefits - Total									
	2010								
	CLC Other PAs Statewic								
Electric Benefits	76%	76%	_	92%	88%				
Non-Electric Resource Benefits	9%	2%		13%	4%				
Non-Electric Non-Resource Benefits	16%	6%	_	16%	8%				
Total	100%	100%	-	100%	100%				

5. Distribution of Savings by End Use

The Compact's measure mix is skewed more towards more expensive end uses in the Residential and Low Income sectors. 2010 is the only year shown as it is the only year that the Compact has actual data from all PAs at this time.

Residential

The Compact's measure mix is skewed more towards more expensive end uses in 2010 in the Residential sector, as the Compact saved proportionately more from non-lighting measures than some other PAs.

% of Residential Lifetime Savings by End Use Type								
	2010							
	CLC Other PAs Statewide							
Lighting	62%	52%		82%	75%			
Non-Lighting	38%	18%		48%	25%			
Total	100%	100%	-	100%	100%			

Low-Income

The Compact's measure mix is skewed more towards more expensive end uses in 2010 in the Low Income sector, as the Compact saved proportionately more from non-lighting measures than some other PAs.

% of Low Income Lifetime Savings by End Use Type								
	2010							
	CLC	Other PAs Statewide						
Lighting	28%	17%		79%	57%			
Non-Lighting	72%	21%	-	83%	43%			
Total	100%	100%	-	100%	100%			

OVERVIEW OF THE CAPE LIGHT

COMPACT'S ENERGY EFFICIENCY PROGRAMS FOR THE PERIOD JANUARY 1, 2013 through DECEMBER 31, 2015

I. INTRODUCTION

- 1. The purpose of this Overview is to provide additional background information for the Energy Efficiency Advisory Council's ("EEAC") review of the Cape Light Compact's ("Compact") Energy Efficiency Plan ("EEP") by summarizing significant Compact-specific enhancements to the collaboratively and jointly prepared July 2, 2012 version of the Massachusetts Statewide Three-Year Electric Energy Efficiency Plan (the "Statewide Plan").
- 2. Consistent with the Green Communities Act (the "GCA"), the Statewide Plan contains the Compact's proposed expanded program budgets and savings goals that will allow for the implementation of all sustainable and available cost-effective energy efficiency for the three year plan period from January 1, 2013 through December 31, 2015, subject to factors and concerns including, but not limited to, bill impacts, environmental benefits, additional impacts from pending evaluations and the need to pursue long term sustainable and deliverable programs.

II. THE GOALS OF THE COMPACT

3. The Compact is the only publicly-funded, municipal aggregator (as defined by G.L. c. 164, § 134) energy efficiency program administrator (PA) in Massachusetts. Unlike every other Department-approved energy efficiency PA, the Compact has no stockholders or rate of return, and is controlled by a governing board consisting of representatives from its municipal members. Each Compact member appoints a representative to the Compact Governing Board,

which is responsible for setting policy and overseeing the Compact's energy efficiency programs.

- 4. The purposes of the Compact include, among other things, (1) to provide the basis for aggregation of all consumers on a non-discriminatory basis; (2) to acquire the best available market rate for electricity supply and transparent pricing; (3) to provide sharing of economic savings to consumers based on current electric rates and/or cost-of service ratemaking approved by the Department; (4) to utilize and encourage demand side management and other forms of energy efficiency and, (5) to advance consumer awareness and adoption of a wide variety of energy efficiency measures through the implementation of an energy efficiency plan.
- 5. This unique governing structure permits the Compact to maintain its community roots and to be responsive to consumer needs and concerns, as well as devote itself to the advancement of energy efficiency. Over the past 6 months, the Compact Governing Board has been involved in the development and review of the Compact's proposed budget and savings goals for the 2013 2015 EEP. As part of this planning process, the Compact Governing Board authorized the use of focus group research to better understand how to best serve the Compact's unique commercial customers (see attached, *Small Commercial Retrofit Program Insights Report, June 6, 2012, MCR Performance Solutions, LLC.*).
- 6. Since one of the Compact's basic tenets is to represent and protect consumer interests, the budget and goals established for the Compact's energy efficiency plan were set at a level that would minimize impacts to ratepayers while still maintaining robust energy efficiency programs. In the Compact's 2010-2012 EEP, the Compact Governing Board approved budget and savings goals that they knew would be a stretch to achieve. The 2013-2015 EEP reflects more sustainable long-term budget and savings goals. The Compact's proposed budget and savings goals will allow for the Compact to continue offering outstanding energy efficiency

programs on Cape Cod and Martha's Vineyard. The Compact Governing Board recognizes that should additional funds be required during the three-year plan, a mid-term modification would enable the Compact to adjust is budgets and savings goals to appropriately serve its customer base.

- 7. Additionally, the Compact acknowledges the EEAC's comments and concerns on its April 30, 2012 EEP filing regarding the higher cost per lifetime MWh savings relative to 2011 preliminary actuals. As requested by the EEAC, the Compact submits the attached *Assessment of Cost/Lifetime MWh Savings, prepared by Synapse Energy Economics, Inc. dated June 7, 2012 ("Assessment")*, which explains the Compact's particular cost structure, as well as the genesis of the Compact's proposed 3-year plan figures as compared to 2011 actuals. One key example of the factors noted in the Assessment, is the fact that due to the Compact Governing Board's policy to serve all customers comprehensively regardless of fuel type, the Compact's non-energy benefits are a significant portion of Compact savings savings that are not however reflected in the electric MWh savings tallies.
- 8. The Compact prides itself on its energy efficiency accomplishments and on being a respected leader in energy efficiency program design, development and delivery. Some noteworthy achievements include: (1) a municipal energy efficiency incentive structure that eliminated the co-pay barrier for public entities and reached a historically under-served customer base; (2) cutting edge projects, such as one retrofitting traffic signals to LED lighting for all three colors throughout Cape Cod, (3) the Behavior/Feedback Power Monitoring Pilot, which demonstrated that residential customers do save more energy when given real time access to energy usage information in their homes; (4) community-wide turn-in events, targeting inefficient room air conditioners and dehumidifiers; and (5) significant return of ratepayer funds

through energy efficiency incentives and services with a total proposed 2013-2015 budget of approximately \$84.8 million with only 4.4% allocated to Program Planning and Administrative costs . In addition, as discussed more fully below, the Compact is an award winning leader in community education and outreach in the area of energy efficiency and conservation.

III. COMPACT SPECIFIC INFORMATION

- 9. For the most part, the Compact's program descriptions and offerings are identical to those that are proposed in the Statewide Plan. The Compact does depart from the Statewide Plan in several areas. Some of these program departures result from the Compact's desire to continue existing programs that are both successful and responsive to the Compact's particular customer population. Eliminating these programs would result in customers being eligible for fewer energy efficiency measures than is currently the case under Compact programs. As such, the Compact has tailored the statewide program offerings, where necessary, to better meet its customers' unique profiles and needs.
- 10. The Compact views these departures as enhancements necessary for it to continue to best serve the needs and meet the demands of its unique customer base. The commercial and industrial customer sector on Cape Cod and Martha's Vineyard is unique relative to other Program Administrator service territories. The Compact has approximately 21,000 commercial and industrial accounts. Nearly 60% of these accounts use less than 10,000 kWh per year, which is roughly equivalent to the usage of a large residential account. Only 225 Compact commercial and industrial accounts use over 500,000 kWh per year. Hospitality and retail customers dominate Compact claimed savings at 57%; whereas, this same customer group represents only

14% of statewide potential savings.¹

11. Further, 87% of all Compact electric accounts are residential customers, including a large number of seasonal homes. Significantly, 11% of these residential accounts use electric heat, and 10 of the 21 Compact member towns do not have access to natural gas (primarily in the outer Cape towns from North Eastham to Provincetown and the six towns on Martha's Vineyard).

A. The Compact Program Enhancements

- 1. Residential Programs
- a. ENERGY STAR Appliances & Products Adding to the

 Statewide ENERGY STAR Appliances & Products program, the Compact

 offers rebates, on a promotional basis, to customers who purchase

 energy efficient dehumidifiers. The Compact's decision to include

 dehumidifiers is based upon the Massachusetts RASS Study that

 demonstrated that, within the Compact territory, there where significant

 energy savings resulting from such an incentive program, noting the

 higher hours of operation for dehumidifiers in the Compact service

 territory. A copy of the RASS Study is available at

 http://www.capelightcompact.org/library/2010/08/08.27.09-Cape-Light-Compact-Annual-Report-on-Energy-Efficiency-Activities-in-2008.pdf
- b. 60% 80% Median Income Enhanced Residential

 Program for Customers In 2007, the Compact began offering an

¹ . Small Commercial Retrofit Program Insights Report, June 6, 2012, MCR Performance Solutions, LLC., pages 5 - 6.

enhanced incentive for customers whose income was 60% to 80% of the state median income. The Compact implemented these programs because this customer segment was identified as hard to reach and hard to serve.

Residential Rental Incentives - In 2010, the Compact began offering an enhanced incentive for customers that rent their domicile year-round, have rental receipts or a lease, and pay their own electric bills. The Compact implemented these programs again because this customer segment was identified as hard to reach and hard to serve.

2. Commercial and Industrial Programs

- a. LED Municipal Owned Streetlight Retrofit Initiative In 2013, the Compact will introduce an LED streetlight retrofit initiative for Cape Cod and Martha's Vineyard towns owning their own streetlights.

 This cost-effective initiative will cover retrofitting approximately 14,542 streetlights and is expected to yield an estimated savings of 2,555,700 kWh annually. Consistent with the Compact's municipal incentive structure, there will be no co-pay for participating municipalities. It is anticipated that this program should be completed within calendar year 2013.
- b. New Construction Advanced Buildings In 2013, the
 Compact proposes to offer an increased incentive (from the current \$1.56
 to \$2.00 per square foot up to \$150,000) for qualified Advanced Building
 projects. Increasing the incentive amount is intended to encourage

greater customer participation in the program and to overcome the reporting and documentation barriers that have been identified by architects and trade allies.

- c. **Small Retrofit Tenant Initiative** In 2013, the Compact will increase its direct install incentive for qualifying tenant customers who pay their own electric bill, from the current up to 80% of to up to 95% of the cost of all cost-effective measures.
- d. Small Retrofit Vendor Financing Initiative In 2013, the Compact's primary direct install vendor will offer financing and interest rate buy down for qualifying direct install customers. This will be funded by the Compact above the standard incentive offering. This option will not be available to customers participating in the tenant initiative.

IV. THE COMPACT'S CONTINUED COMMITMENT TO PUBLIC EDUCATION AND COMMUNITY AWARENESS

A. Education Outreach

- 12. The Compact has always made a strong commitment to energy education and continues to be a nationally recognized leader in the design and implementation of energy education programs. As a wholly unique municipal aggregator and energy efficiency program administrator, the Compact strives to address the continuing need for greater consumer awareness and to encourage the development of community knowledge of energy efficiency technology and practices.
 - 13. Recognizing that education is the key to affecting change in our society, the

Compact remains committed to the education of its residents and has applied its outreach and marketing efforts accordingly. The Compact continues to work with a Teacher Advisory Board consisting of teachers, school administrators, Compact board members and staff. This group assists with direction, implementation and evaluation of the Compact's energy education programs.

- 14. The showpiece of the Compact's education initiative is its collaboration with the National Energy Education Development (NEED) Project, a 501(c)3 non-profit educational organization affiliated with the Department of Energy's Energy Information Administration, in the development of an energy education program for elementary through secondary level teachers and students on the Cape and Vineyard. Using a curriculum with a foundation of science-based facts, the Compact and NEED have created curriculum materials which are aligned with the Massachusetts State Frameworks for Science and Technology, allowing teachers to introduce lessons on energy efficiency and conservation.
- 15. For the past eight years (2004-2012), the Compact has been honored with NEED's Region of the Year Award for ongoing efforts in energy education. For six consecutive years, the schools in the Compact's region have received national and state awards for their energy education outreach efforts in their communities. In addition, the Compact's energy education program was awarded the 2007 and 2011 Innovation Award by the Interstate Renewable Energy Council for its "Solarize our Schools" program and was recognized in the spring of 2009 by the state with a 15th Annual Secretary's Award for Excellence in Energy and Environmental Education. The Massachusetts Association of Science Educators awarded Compact staff with the 2011 "Educator of the Year" award for efforts in energy education.
 - 16. Since its inception in 2003, the Compact through its partnership with NEED has

helped over 60 schools adopt and implement lessons on energy efficiency and conservation.

The Compact's EEP proposes to continue a substantial budget allocation for its Energy

Education program.

17. The Compact proposes budget allocations to fund expanded community outreach programs to increase Compact customers' understanding and utilization of the many energy efficiency programs.

B. Local Events

- 18. The Compact will continue its unique local marketing efforts through its commitment to participating in local community events that focus on energy. Participation in these joint events allow the Compact to maximize its reach to the customer while minimizing costs by sharing event total costs with other community groups. The Compact has partnered with Barnstable County's Cape Cod Cooperative Extension Service to conduct community "turn-in" events for inefficient air conditioners and dehumidifiers during the very popular Household Hazardous Waste collections.
- 19. The Compact will continue to participate in PA initiatives that market energy efficiency services to targeted customer groups. In the past, the Compact has worked successfully with other PAs to design, implement and market commercial and industrial programs, as well as the products and services programs for the residential and commercial sector.

V. CONCLUSION

20. The Compact is repeatedly described as having a unique service territory and being unique because of its governing structure as a municipal aggregator. The goal of providing this Overview and supporting documents was to further articulate why the Compact is unique

and to provide an explanation for why the Compact's energy efficiency budget and goals and some of its initiatives are different from other Program Administrators. The Compact trusts this Overview will assist the EEAC in its review of the July 2, 2012 EEP filing.

Mark D. Sylvia, Chairman July 2, 2012 Page 2

If you require further information or have any questions, please do not hesitate to contact me.

Sincerely,

Jo Ann Bodemer

Jolin Bakmer

JAB/drb

Enclosures

cc: Energy Efficiency Advisory Council (via email only)

Christina Halfpenny, Department of Energy Resources (via email only) Margaret T. Downey, Cape Light Compact (via email and first class mail)

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