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September 19, 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 a summary of the Compact's unique service territory and a revised supporting report from Synapse Energy Economics, Inc. This is a supplement to the September 19, 2012 Massachusetts Joint Statewide Three-Year Electric and Gas Energy Efficiency Plan (2013-2015) that will be filed with the Energy Efficiency Advisory Council on behalf of the Massachusetts' Energy Efficiency Program Administrators.

The Compact intends to include these materials 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.

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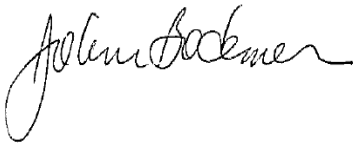
If you require further information or have any questions, please do not hesitate to contact me.

Sincerely,



Jo Ann Bodemer

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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Cape Light Compact
2013-2015 Energy Efficiency Plan

Highlights of the Compact's unique structure & customer demographics and the impacts on its delivery of energy efficiency programs[1]

- The Compact is governed by a twenty-three member board with a representative from each of the twenty-one towns and two counties. The Governing Board supports the stretch goals and budgets proposed for 2013-2015 Energy Efficiency Plan; however, it recognizes that these aggressive goals will likely not be sustainable beyond 2015.
- The Compact's Governing Board voted and authorized higher incentives for several programs, as well as reaffirmed its commitment to comprehensively serve oil and propane customers, which the implementation of has resulted in the Compact's 2013-2015 Energy Efficiency Plan having higher costs per MWh savings than other Program Administrators.
    - Serving all customers comprehensively regardless of fuel type, results in a significant portion of Compact savings realized from non-electric benefits which are not captured in cost/lifetime MWh savings calculations.
    - 45% of residential customers in the Compact's service territory currently use oil or propane as a means of heating their homes.
- The Compact's Governing Board's policy reflects the Compact's community roots and requires the Compact to be responsive to consumer needs and concerns with tailored statewide programs to service its unique customer base.
    - The Compact provides 100% incentive levels for government customers, which increases its cost to achieve.
    - The Compact has a large percentage of small commercial customers compared to other PA's and the cost to achieve is inherently higher for this customer base.
    - The Compact emphasizes more non-lighting measures as a means to capture deeper, but often more costly savings, when delivering services to its residential and low-income customers.

[1] For more information, please refer to the Overview of the Cape Light Compact's Energy Efficiency Programs for the Period January 1, 2013 through December 31, 2015, dated October 30, 2012 and the attachments thereto.

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Memorandum

To: Cape Light Compact

From: Erin Malone, Doug Hurley, Pat Knight, and Jennifer Kallay

Date: September 19, 2012

Subject: Assessment of Costs/Lifetime MWh Savings

1. Introduction

The Massachusetts electric Program Administrators (PAs) submitted draft versions of their proposed 2013-2015 Statewide Three-Year Energy Efficiency Plan to the Energy Efficiency Advisory Council (EEAC) on April 30, 2012, and on July 2, 2012. While both plan drafts were well received by the EEAC, feedback was provided concerning the high costs per lifetime MWh savings relative to 2011 preliminary results, especially for smaller PAs like the Cape Light Compact (Compact or CLC).

With regard to the April 30 plan draft, the EEAC questioned the generally higher costs per lifetime savings as compared to 2011 preliminary results for all PAs, and the Compact's higher costs per lifetime MWh savings for the commercial and industrial (C&I) sector more specifically. In response, the Compact supplemented the July 2 plan draft with a memo by Synapse Energy Economics, Inc. (Synapse) dated June 7, 2012. The June 7 Synapse memo examined 2010 actuals, 2011 preliminary actuals (where

available at the time), and 2013-2015 plan data submitted by all PAs on April 30. The memo reported on the key drivers behind higher costs per lifetime MWh savings for the Compact as compared to the other electric PAs.

With regard to the July 2 plan draft, the EEAC passed a resolution on July 23, 2012 in support of the three-year plan draft, while highlighting elements of the plan that could be improved or would benefit from further explanation. However, the EEAC did not provide specific feedback to the Compact on the July 2 plan draft as it did for the April 30 plan draft. Nonetheless, the Compact takes the September 19 plan draft as an opportunity to update the June 7 Synapse memo with 2011 actual results, as reported by PAs in their 2011 Annual Reports, which were unavailable for the July 2 plan,[1] and the 2013-2015 plan data submitted by all PAs on July 2.[2]

2. Summary of Costs per Lifetime Savings

The purpose of this memo is to examine 2010 and 2011 actual results and the 2013-2015 plan data submitted by all PAs on July 2, in order to report on the key drivers behind higher costs per lifetime MWh savings for the Compact as compared to other PAs.

Tables 1 through 3 below summarize actual sector level costs per lifetime MWh savings for 2010 and 2011, and the planned sector level costs per lifetime MWh savings proposed for 2013-2015 for the Compact, the other electric PAs, and statewide. Table 4 shows the percentage change in costs per lifetime MWh savings from 2013-2015 as compared to 2011 for the Compact, the other electric PAs, and statewide.

Table 1: 2010 Actual Total Costs per Lifetime Savings by Sector ($/MWh)

Sector	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

[1] The 2011 actual results became available on August 1, 2012 when each PA filed its 2011 Energy Efficiency Annual Reports with the Massachusetts Department of Public Utilities (DPU) for review and approval. All previous analyses referencing 2011 data (including the June 7 Synapse memo and the EEAC's analyses mentioned here within) were based on 2011 preliminary results. The availability of final data for 2011 allows for a more thorough and accurate comparison between the historical and planned program information.

[2] The information and data included in the September 19 plan draft does not become available in time to conduct a statewide analysis for this memo. While this memo provides a thorough analysis of the best information available to date, the final plan values filed with the DPU in October could vary significantly from the July 2 plan data included here within. The Compact's preliminary review of its September 19 plan indicates values that differ from the July 2 plan, as noted where appropriate in this memo.

Table 2: 2011 Actual Total Costs per Lifetime Savings by Sector ($/MWh)									
Sector	2011								
	CLC		Other PAs				Statewide		
Residential	$	86	$	52	-	$	117	$	63
Low Income	$	221	$	101	-	$	189	$	117
C&I	$	33	$	6	-	$	26	$	16
Total	$	64	$	9	-	$	36	$	26

Table 3: 2013-2015 Planned Total Costs per Lifetime Savings by Sector ($/MWh)									
Sector	2013-2015								
	CLC		Other PAs				Statewide		
Residential	$	131	$	88	-	$	170	$	95
Low Income	$	349	$	150	-	$	407	$	196
C&I	$	48	$	24	-	$	41	$	26
Total	$	83	$	35	-	$	62	$	39

Table 4: Percent Change in Total Cost per Lifetime Savings by Sector from 2011 Actual to 2013-2015 Planned (%)				
Sector	2013-2015 v. 2011			
	CLC	Other PAs		Statewide
Residential	53%	39%	- 81%	51%
Low Income	58%	34%	- 142%	68%
C&I	45%	-3%	- 628%	65%
Total	29%	11%	- 570%	52%

The EEAC's initial question as to the high costs per lifetime savings for the Compact is as much a question about why costs are higher for the Compact as compared to other PAs across all years. The Compact had the highest costs per lifetime savings in the state for 2010 and 2011 for the Low Income and C&I sectors, while its Residential costs per lifetime savings were within the range of other PA's costs per lifetime savings. Such results are reflective of the Compact's service territory, which is primarily comprised of residential and small business customers, with limited large C&I customers. For the Low Income sector, the Compact served many customers without ARRA dollars, reflecting a higher cost than the other PAs. The Compact's proposed 2013-2015 plan maintains this trend of higher costs per lifetime savings as compared to other PAs, particularly for the C&I sector. As a result, this memo will primarily address the factors that the Compact believes may be leading to higher baseline costs per lifetime savings for the Compact as compared to other PAs.

As a reminder, the June 7 Synapse memo more specifically explains the increase in costs per lifetime savings for the C&I sector for 2013-2015, as compared to the 2011 preliminary results. To summarize here, the 2013 increase is reasonable considering the scale and cost-effectiveness of the proposed one-time LED Streetlight Initiative for all municipally-owned fixtures in 2013. The 2014 and 2015 increases are reasonable considering that the C&I programs were modified to accommodate higher incentives to customers. Specifically, incentives were increased in the New Construction program for Advanced Building projects, in the Large Retrofit core initiative within the C&I Retrofit program for MOUs with its largest customers, and the C&I Retrofit program for qualifying tenants. Additionally, the C&I Retrofit program will now offer an interest rate buy-down incentive for certain small Direct Install customers interested in financing

energy efficiency projects directly through the program vendor. This latter option is offered in addition to other existing statewide program financing options.

Importantly, despite relatively higher costs when compared to the other electric PAs, the Compact's portfolio of energy efficiency programs has been cost-effective in every year since its inception. The July draft of the 2013-2015 plan is no exception, as it again proposes a cost-effective set of programs. The Compact fully expects that all of its programs will remain cost-effective in the final 2013-2015 plan filed with the DPU in October.

While costs per lifetime MWh savings is an informative metric by which to compare PAs' actual and proposed performance, an alternative metric is to look at total costs versus total lifetime dollar benefits through energy efficiency benefit-cost ratios (BCRs), taking into account savings in other fuels and non-energy impacts, as well as customer costs. Particularly for the Compact, as further discussed below, other fuel savings can represent a significant portion of savings.

To compare total measure costs to total lifetime benefits, it is best to consider energy efficiency BCRs, the inverse of a cost per savings metric. When considering cost per lifetime savings, the cost value provides the amount the PA is spending to achieve each lifetime MWh saved. A higher cost per lifetime savings indicates that a PA is spending more to achieve each MWh saved relative to other PAs. Conversely, when considering BCRs, the BCR value provides the total dollar benefits achieved (which includes not only energy and capacity benefits, but also other fuel benefits and non-energy impacts) per total resource cost dollar spent (which includes both the PA's and the customer's costs) on energy efficiency. A higher BCR indicates that a PA is achieving more dollar benefits per total resource dollar spent on energy efficiency relative to other PAs.

Tables 5 through 7 below provide the actual sector level BCRs for 2010 and 2011, and the planned sector level BCRs for 2013-2015 for the Compact, the other electric Program Administrators, and statewide. Table 8 below provides the percent change in the sector level BCRs from 2013-2015 as compared to 2011 for the Compact, the other electric PAs, and statewide.

Table 5: 2010 Actual Benefit-Cost Ratio by Sector (BCR)

Sector	2010		
	CLC	Other PAs	Statewide
Residential	2.70	2.72 - 3.90	2.88
Low Income	2.35	2.78 - 4.56	3.03
C&I	2.42	2.82 - 3.91	3.65
Total	2.54	2.86 - 3.54	3.34

Table 6: 2011 Actual Benefit-Cost Ratio by Sector (BCR)

Sector	2011		
	CLC	Other PAs	Statewide
Residential	3.84	3.19 - 3.98	3.57
Low Income	2.62	2.26 - 5.01	2.87
C&I	3.48	3.13 - 5.34	4.42
Total	3.58	3.50 - 4.24	3.98

Table 7: 2013-2015 Planned Benefit-Cost Ratio by Sector (BCR)				
Sector	2013-2015			
	CLC	Other PAs		Statewide
Residential	4.58	2.58 -	3.90	2.97
Low Income	4.03	1.74 -	2.80	1.99
C&I	3.56	2.78 -	3.58	3.45
Total	4.16	2.67 -	3.43	3.19

Table 8: Percent Change in Benefit-Cost Ratio by Sector from 2011 Actual to 2013-2015 Planned (%)				
Sector	2013-2015 v. 2011			
	CLC	Other PAs		Statewide
Residential	19%	-26% -	-2%	-18%
Low Income	54%	-65% -	-23%	-32%
C&I	2%	-33% -	6%	-23%
Total	16%	-26% -	-3%	-21%

For 2010, the Compact had the lowest BCRs among the PAs. For 2011, all of the Compact's BCRs increased to be within the range of other PAs' BCRs. For 2013-2015, the Compact's BCRs are projected to continue increasing relative to 2011 and 2010, concluding with some of the highest BCRs in the state. Specifically, the Compact increased its total portfolio-level BCR by 16% from 2011 to 2013-2015, while, on a statewide basis, total BCRs decreased by 21% from 2011 to 2013-2015.

This ramp up in BCRs is particularly evident in the Compact's Residential and Low Income sectors in 2013-2015, which increased from 2011 by 19% and 54%, respectively. The Compact's BCRs for the Residential and Low Income sectors have risen due to increased benefits for oil and propane, as well as increased non-energy impacts resulting from weatherization activities.

Ultimately, the Compact has the largest increase in BCRs in the state for 2013-2015 as compared to 2011, apart from the C&I sector, which is within the range of other PAs' BCR adjustments. This trend indicates that the Compact continues to advance its energy efficiency efforts in order to achieve greater benefits for its customers for every resource dollar spent on energy efficiency.

The Program Administrators are required to achieve all available cost-effective energy efficiency through their three-year energy efficiency plans.[3] While all available cost-effective energy efficiency has not been defined by Massachusetts' law or through DPU precedent, benefit-cost ratios are a readily available metric by which to gauge achievement of this statutory requirement. However, BCRs are not a perfect metric, as a high or low BCR could indicate achievement of all available cost-effective energy efficiency. One could make the case that higher BCRs might reflect room for additional spending to acquire harder to reach customers or measures. Conversely, higher BCRs could also indicate robustly cost-effective programs that, through exceptional program implementation and administration or thorough pursuit of additional non-electric benefits, are able to achieve maximum benefits in a cost-efficient manner.

[3] G.L. c. 168, § 21(b)(1).

In the Compact's case, rising BCRs show significant improvement from prior years, and alignment with other PAs, perhaps due to more common assumptions used statewide. Additionally, the preliminary September 19 plan draft results in three-year total BCRs of 4.25 for Residential, 3.69 for Low Income, 3.81 for C&I, and 4.04 for the portfolio of programs; all of which are less than the BCRs included in the July 7 plan draft except for C&I. Such a result is demonstrative of the Compact's efforts to balance the need for programs that go both deeper and broader, while cost-efficiently administering program implementation.

3. Summary of Potential Factors Leading to Higher Costs per Lifetime MWh Savings for the Cape Light Compact as Compared to Other Massachusetts Program Administrators

While BCRs, as discussed above, reflect an assessment of total resource benefits as compared to total resource costs, the cost per lifetime MWh savings metric focuses specifically on a PA's costs to achieve electric energy savings. Therefore, differences in each PA's incentive levels are more readily apparent in the cost per lifetime MWh savings metric. The following is a list of the factors that the Compact believes may be leading to higher baseline costs per lifetime MWh savings, which includes differences in incentive levels, 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.
- As mentioned above, the Compact has significant non-electric savings, as compared to other PAs, that are not captured in costs per lifetime MWh savings calculations. This will be discussed and analyzed further in the section entitled Distribution of Non-Electric Savings and Benefits below.
- The Compact's measure mix trends toward 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.

4. Distribution of Costs by Program Type

The Compact's unique service territory requires a different cost allocation by program than other PAs, particularly for C&I programs.

- The Compact historically has 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 many smaller customer sites in the Compact's territory as compared to a few larger customer sites. This has historically driven up Compact costs relative to other PAs.
- The Compact may have spent more on C&I Government than C&I Non-Government program components in some years as compared to other PAs or statewide, because CLC offers higher incentive levels to the government sector than to the private sector. However, the PA's provide information at the program level in their 2010 and 2011 annual reports, which does not allow for a direct comparison of this variable across PAs.

Distribution of Costs by C&I Program

The Compact's cost distribution for C&I New Construction, Large Retrofit and Small Retrofit has historically been different than other PAs, with a higher allocation of costs to Small Retrofit than other PAs. Tables 9 and 10 below summarize the actual allocation of costs across the C&I programs for 2010 and 2011 for the Compact, the other electric Program Administrators, and statewide. The Compact's budget allocation for Small Retrofit has been consistently higher than any other PA and is more than twice the average statewide in 2010 and 2011.

Table 9: Percent 2010 Actual C&I Costs by Program Type (%)

C&I Program	2010				
	CLC	Other PAs			Statewide
NC	14%	18%	-	29%	24%
LG Retro	30%	25%	-	65%	50%
SM Retro	56%	17%	-	46%	26%
LG Retro & SM Retrofit Subtotal	86%	71%	-	82%	76%
Total	100%	100%	-	100%	100%

Table 10: Percent 2011 Actual C&I Costs by Program Type (%)

C&I Program	2011				
	CLC	Other PAs			Statewide
NC	19%	11%	-	25%	22%
LG Retro	13%	33%	-	54%	47%
SM Retro	68%	22%	-	42%	31%
LG Retro & SM Retrofit Subtotal	81%	75%	-	89%	78%
Total	100%	100%	-	100%	100%

Beginning with the July 2 version of the 2013-2015 plan, the C&I program names and designs have been adjusted, and the new C&I core initiatives are New Construction, Retrofit, and Direct Install. The Retrofit core initiative is similar to the Large Retrofit program, although not directly comparable. Similarly, the Direct Install core initiative is similar to the Small Retrofit program, although not directly comparable. Table 11 below

provides the planned allocation of costs across the new C&I core initiatives for 2013-2015 for the Compact, the other electric Program Administrators, and statewide.

Table 11 appears to show a decrease in the Direct Install percentage of costs and an increase in the Retrofit percentage of costs relative to the Large Retrofit and Small Retrofit programs in 2010 and 2011. Even though these programs are not directly comparable, it is still worth noting that this difference in cost allocation is largely due to the Compact's LED Streetlight Initiative, offered as part of the Large Retrofit program within the Retrofit core initiative for 2013. This Streetlight Initiative results in a large, one-time increase to the Retrofit budget allocation, obscuring the continued dominance of the Small C&I program within the Direct Install core initiative in the Compact's 2013-2015 plan. To isolate the effect of the Streetlight Initiative in 2013, Table 12 below provides the Compact's planned allocation of costs across the C&I core initiatives for each year in 2013 through 2015. As Table 12 shows, the Compact maintains emphasis on its predominantly small customer population through its planned budget allocations for 2013-2015.

Table 11: Percent 2013-2015 Planned C&I Costs by Program Type (%)

C&I Program	2013-2015			
	CLC	Other PAs		Statewide
NC	21%	14%	- 34%	27%
Retrofit	43%	31%	- 54%	49%
Direct Install	36%	20%	- 43%	24%
Retrofit & Direct Install Subtotal	79%	66%	- 86%	73%
Total	100%	100%	- 100%	100%

Table 12: CLC's Percent 2013-2015 Planned C&I Costs by Program Type (%)

C&I Initiative	Cape Light Compact			
	2013	2014	2015	2013-2015
NC	16%	25%	24%	21%
Retrofit	59%	29%	30%	43%
Direct Install	26%	45%	46%	36%
Retrofit & Direct Install Subtotal	84%	75%	76%	79%
Total	100%	100%	100%	100%

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

The Compact separately identifies Government and Non-Government versions of its C&I programs. Table 13 below summarizes the Compact's actual allocation of costs across Government and Non-Government C&I programs for 2010 and 2011, the proposed allocation of costs for 2013-2015, and the percent change in C&I cost allocation from 2013-2015 as compared to 2011. Table 14 below summarizes the Compact's actual costs per lifetime MWh savings for 2010 and 2011, the proposed costs per lifetime MWh savings for 2013-2015, and the percent change in costs per lifetime MWh savings from 2013-2015 as compared to 2011 for its Government and Non-Government C&I programs.

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.[4] As CLC Government programs are more costly to administer than Non-Government programs due to higher CLC incentives for this sector, this is driving an overall cost increase relative to 2011. The Government cost allocation in 2013 is especially high because of the proposed one-time LED Streetlight Initiative for municipally- owned streetlights.
- Costs per lifetime MWh savings have been declining since 2010 for Non-Government programs and are projected to continue to decline and then remain relatively constant in 2013-2015.
- Costs per lifetime MWh savings are increasing in 2013-2015 for Government programs due to the one-time LED Streetlight Initiative proposed for 2013.[5] However, the costs per lifetime MWh saved over 2013-2015 are still not as high as in 2010.

Table 13: CLC's Percent C&I Costs by Non-Gov/Gov Program Type (%)

C&I Program	Actual		Proposed				% Change (2013-
Type	2010	2011	2013	2014	2015	2013-2015	2015 vs. 2011)
Non-Gov	51%	72%	35%	60%	59%	48%	-33%
Gov	49%	28%	65%	40%	41%	52%	86%
Total	100%	100%	100%	100%	100%	100%	0%

Table 14: CLC's C&I Costs per Lifetime Savings by Non-Gov/Gov Program Type ($/MWh)

C&I Program	Actual		Proposed				% Change (2013-
Type	2010	2011	2013	2014	2015	2013-2015	2015 vs. 2011)
Non-Gov	$ 49	$ 34	$ 32	$ 33	$ 33	$ 33	-5%
Gov	$ 93	$ 28	$ 106	$ 61	$ 62	$ 81	187%
Total	$ 64	$ 32	$ 58	$ 40	$ 41	$ 47	46%

5. Distribution of Non-Electric Savings and Benefits

Distribution of Non-Electric Resource Savings

The Compact has significant non-electric resource savings from energy efficiency as compared to other PAs. As these savings are not captured in costs per lifetime MWh

[4] Participation in Government programs in 2011 was low because a number of projects expected to be completed in 2011 were delayed until 2012, and so are credited to the 2012 program year.

[5] Excluding the proposed one-time LED Streetlight Initiative, costs per lifetime MWh savings in 2013 would be $62. In addition, as indicated in the Compact's 2011 Annual Report, 2011 Government actual costs for this program were impacted by an unusually large project having no incentive payout.

savings calculations, it is reasonable that the Compact would have higher costs per lifetime MWh saved than some of the other PAs.

Tables 15 through 17 below show actual 2010 and 2011 lifetime electric and non-electric resource savings in MMBtus, and the electric and non-electric savings proposed for 2013-2015 for the Compact, the other electric PAs, and statewide.[6] Table 18 shows the percentage change in costs per lifetime MWh savings from 2013-2015 as compared to 2011 for electric and non-electric savings for the Compact, the other electric PAs, and statewide. Lifetime electric savings have been converted to MMBtus using a natural gas combined cycle heat rate of 6,719 Btus/kWh.[7]

In both 2010 and 2011, the Compact reported a high proportion of lifetime non-electric savings across all sectors as compared to other PAs. The Compact achieves more savings in deliverable fuels relative to other PAs, which drives the high proportion of non-electric resource savings. The Compact proposes to continue this trend in its 2013-2015 plan, with little deviation from the 2011 savings proportion.

Table 15: Percent 2010 Actual Non-Electric Savings - Total (%)

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

Table 16: Percent 2011 Actual Non-Electric Savings - Total (%)

Savings	2011				
	CLC	Other PAs			Statewide
Electric	81%	91%	-	223%	108%
Non-Electric Resource	19%	-123%	-	9%	-8%
Total	100%	100%	-	100%	100%

Table 17: Percent 2013-2015 Planned Non-Electric Savings - Total (%)

Savings	2013-2015				
	CLC	Other PAs			Statewide
Electric	82%	90%	-	110%	101%
Non-Electric Resource	18%	-10%	-	10%	-1%
Total	100%	100%	-	100%	100%

Table 18: Percent Change in Percent Non-Electric Savings from 2011 Actual to 2013-2015 Planned (%)

Savings	2013-2015 v. 2011				
	CLC	Other PAs			Statewide
Electric	1%	-60%	-	4%	-7%
Non-Electric Resource	-5%	-172%	-	-25%	-91%
Total	0%	0%	-	0%	0%

[6] Tables 16 and 17 show negative percentages because natural gas savings can be negative, usually due to increases in heating as a result of more efficient lighting that produces less heat as a byproduct, especially for the C&I sector.

[7] The electric savings shown in Tables 15 through 18 include annual electric savings. The non-electric resource savings in Tables 15 through 18 include natural gas, oil, and propane savings.

Distribution of Non-Electric Benefits

The above analysis focuses on the savings associated with energy efficiency programs, as split between electric savings and other fuel savings known as non-electric resource savings. In this section, the electric and non-electric resource savings are converted to benefits, and the additional component of non-electric non-resource benefits[8] is added to the comparison. Tables 19 through 21 summarize the actual percentage of electric benefits, non-electric resource benefits, and non-electric non-resource benefits for 2010 and 2011, and the planned percentage of these same components for 2013-2015 for the Compact, the other electric PAs, and statewide.[9] Table 22 shows the percentage change in benefits allocation from 2013-2015 as compared to 2011 for the Compact, all PAs, and statewide.[10]

As these tables show, the Compact has a significant proportion of non-electric resource benefits as compared to other PAs. As mentioned above, the Compact achieves more savings in deliverable fuels relative to other PAs, which drives the high proportion of non-electric resource benefits. In addition, these tables show that the Compact has the highest non-electric non-resource benefits as a percentage of total benefits in the state, both historically and planned for 2013-2015. The Compact's non-electric non-resource benefits have continued to increase as a percentage of program benefits since 2010.

Table 19: Percent 2010 Actual Electric Benefits - Total (%)

Benefits	2010				
	CLC	Other PAs			Statewide
Electric Benefits	60%	63%	-	87%	84%
Non-Electric Resource Benefits	29%	8%	-	31%	10%
Non-Electric Non-Resource Benefits	11%	5%	-	7%	6%
Total	100%	100%	-	100%	100%

[8] The DPU defines non-electric non-resource benefits in its Energy Efficiency Guidelines as "benefits, which include, but are not limited to: (A) reduced costs for operation and maintenance associated with efficient equipment or practices; (B) the value of longer equipment replacement cycles and/or productivity improvements associated with efficient equipment; (C) reduced environmental and safety costs, such as those for changes in a waste stream or disposal of lamp ballasts or ozone-depleting chemicals; and (D) all benefits associated with providing energy efficiency services to Low-Income Customers." D.P.U. 08-50-B (October 26, 2009), p. 51.

[9] Again, Table 20 shows negative percentages due to negative avoided natural gas savings.

[10] The electric benefits shown in Tables 19 through 22 include the benefits associated with the avoided costs of capacity and energy. The non-electric resource benefits shown in Tables 19 through 22 include the benefits associated with the avoided cost of natural gas, oil, propane, and water. The non-electric non-resource benefits shown in Tables 19 through 22 include those costs and benefits that are not part of the costs, or the avoided cost, of the energy provided by the PAs.

Table 20: Percent 2011 Actual Electric Benefits - Total (%)					
Benefits	2011				
	CLC	Other PAs			Statewide
Electric Benefits	51%	71%	-	142%	88%
Non-Electric Resource Benefits	23%	-48%	-	16%	-2%
Non-Electric Non-Resource Benefits	26%	6%	-	15%	14%
Total	100%	100%	-	100%	100%

Table 21: Percent 2013-2015 Planned Electric Benefits - Total (%)					
Benefits	2013-2015				
	CLC	Other PAs			Statewide
Electric Benefits	42%	71%	-	93%	84%
Non-Electric Resource Benefits	28%	0%	-	15%	7%
Non-Electric Non-Resource Benefits	30%	6%	-	18%	9%
Total	100%	100%	-	100%	100%

Table 22: Percent Change in Percent Electric Benefits - Total from 2011 Actual to 2013-2015 Planned (%)					
Benefits	2013-2015 v. 2011				
	CLC	Other PAs			Statewide
Electric Benefits	-18%	-50%	-	4%	-4%
Non-Electric Resource Benefits	22%	-130%	-	211%	-486%
Non-Electric Non-Resource Benefits	16%	-63%	-	152%	-37%
Total	0%	0%	-	0%	0%

6. Distribution of Savings by End Use

The Compact's measure mix is inclined toward more expensive end uses in the Residential and Low Income sectors due to the comprehensive nature of the programs that are the focus for the Compact. Lighting measures tend to be some of the least expensive, most cost-effective measures offered through energy efficiency programs. End use data is currently only provided for all PAs through the annual reporting process, so 2013-2015 planning information by end use is unavailable for comparison. Nevertheless, the Compact provides its planned end use data in the analysis that follows to allow for a comparison between historical and planned information.

Residential

Consistent with the policy direction from the Compact's Governing Board,[11] the Compact's measure mix trended toward more expensive end uses in 2010 and 2011 in the Residential sector, as the Compact saved proportionately more from non-lighting measures than some other PAs. Tables 23 and 24 below present the actual Residential allocation of savings by lighting and non-lighting end uses for 2010 and 2011 for the Compact, the other electric PAs, and statewide.

[11] The Compact has a 23 member Governing Board that represents all 15 Cape Cod and 6 Martha's Vineyard towns and 2 counties. The Governing Board sets policy direction for the Compact's energy efficiency plan under the Green Communities Act.

Table 25 below presents the Compact's planned 2013-2015 Residential allocation of savings by lighting and non-lighting end uses. As Table 25 shows, the Compact proposes to increase its percentage of non-lighting savings in 2013-2015 relative to 2010 and 2011. Such an increase of non-lighting savings highlights the Compact's continued commitment to a comprehensive measure mix for its Residential customers.

Table 23: Percent 2010 Actual Residential Lifetime Savings by End Use Type (%)

Savings	2010			
	CLC	Other PAs		Statewide
Lighting	62%	52%	82%	75%
Non-Lighting	38%	18%	48%	25%
Total	100%	100%	100%	100%

Table 24: Percent 2011 Actual Residential Lifetime Savings by End Use Type (%)

Savings	2011			
	CLC	Other PAs		Statewide
Lighting	70%	75%	83%	78%
Non-Lighting	30%	17%	25%	22%
Total	100%	100%	100%	100%

Table 25: CLC's Percent 2013-2015 Planned Residential Lifetime Savings by End Use Type (%)

Savings	Cape Light Compact			
	2013	2014	2015	2013-2015
Lighting	56%	52%	48%	52%
Non-Lighting	44%	48%	52%	48%
Total	100%	100%	100%	100%

Low Income

Consistent with the policy direction from the Compact's Governing Board, the Compact's measure mix in the Low Income sector, was also inclined toward more expensive end uses in 2010 and 2011, as the Compact saved proportionately more from non-lighting measures than some other PAs. Tables 26 and 27 below present the actual Low Income allocation of savings by lighting and non-lighting end uses for 2010 and 2011 for the Compact, the other electric PAs, and statewide. For the Compact, the increase in lighting in 2011 from 2010 can generally be credited to the Low Income Single Family program, which increased CFL installations and offered a wider variety of bulbs. Further, the Low Income Multi-Family program shifted to only electric units in 2011 to be consistent with the statewide program.

Table 28 below presents the Compact's planned 2013-2015 Low Income allocation of savings by lighting and non-lighting end uses. As this table shows, the Compact proposes to increase its percentage of non-lighting savings in 2013-2015 relative to 2011, and is more consistent with the percentage allocation in 2010. Such an increase in percentage of non-lighting savings further highlights the Compact's commitment to a comprehensive measure mix for its low income customers.

Table 26: Percent 2010 Actual Low Income Lifetime Savings by End Use Type (%)					
Savings	2010				
	CLC	Other PAs			Statewide
Lighting	28%	17%	-	79%	57%
Non-Lighting	72%	21%	-	83%	43%
Total	100%	100%	-	100%	100%

Table 27: Percent 2011 Actual Low Income Lifetime Savings by End Use Type (%)					
Savings	2011				
	CLC	Other PAs			Statewide
Lighting	48%	42%	-	69%	54%
Non-Lighting	52%	31%	-	58%	46%
Total	100%	100%	-	100%	100%

Table 28: CLC's Percent 2013-2015 Planned Low-Income Lifetime Savings by End Use Type (%)				
Savings	Cape Light Compact			
	2013	2014	2015	2013-2015
Lighting	25%	25%	23%	24%
Non-Lighting	75%	75%	77%	76%
Total	100%	100%	100%	100%