

Cape Light Compact JPE Executive Committee & Governing Board Meeting

DATE: Wednesday, July, 11, 2018
LOCATION: Cape Light Compact Offices – MV Conference Room
261 Whites Path, Unit 4, South Yarmouth
TIME: 2:00 – 4:30 p.m.

AGENDA

2:00 PM Public Comment

Approval of Minutes

Chairman's Report

Fiscal Report, Peter Cocolis

Recap of the 2017 Energy Efficiency Term Report, Briana Kane

2019-2021 Energy Efficiency Plan, Cape Light Compact Enhancements, Phil Moffit

Update on DPU 18-50, Eversource Performance Metrics for Its Performance-Based
Ratemaking Mechanism, Jeff Bernstein

Board Member Update (Reserved for Updates on Member Activities the Chair Did Not
Reasonably Anticipate Would be Discussed – No Voting)

**Cape Light Compact JPE
2018 Operating Fund 001
Budget Report
As of June 30, 2018**

	<u>Budget Amount</u>	<u>Actual Amount</u>	<u>Remaining Amount</u>	<u>Remaining %</u>
REVENUE				
OPERATING FUND CY18-TRANSFERS IN	848,765.00	848,765.00	0.00	0.00%
OPERATING FUND CY18-INTEREST INCOME	0.00	28,635.64	(28,635.64)	
TOTAL REVENUES	848,765.00	877,400.64	(28,635.64)	
EXPENSES				
OPERATING FUND CY18-ADVERTISING (POWER SUPPLY)	85,000.00	24,974.94	60,025.06	70.62%
OPERATING FUND CY18-AUDIT FEES	11,250.00	612.50	10,637.50	94.56%
OPERATING FUND CY18-BANK FEES	500.00	0.00	500.00	100.00%
OPERATING FUND CY18-BUILDING RENOVATNS/FURNITU	3,500.00	1,134.97	2,365.03	67.57%
OPERATING FUND CY18-COMPUTER EQUIPMENT	5,000.00	0.00	5,000.00	100.00%
OPERATING FUND CY18-CONTRACTUAL	67,805.00	67,803.25	1.75	0.00%
OPERATING FUND CY18-CUSTODIAL SERVICES	4,438.00	1,814.24	2,623.76	59.12%
OPERATING FUND CY18-FINANCIAL SOFTWARE SYSTEM	6,250.00	2,700.00	3,550.00	56.80%
OPERATING FUND CY18-FOOD SUPPLIES	5,500.00	5,020.67	479.33	8.72%
OPERATING FUND CY18-GROUP INSURANCE	19,790.00	11,771.06	8,018.94	40.52%
OPERATING FUND CY18-IN STATE TRAVEL	16,000.00	6,500.52	9,499.48	59.37%
OPERATING FUND CY18-INSURANCE	10,600.00	0.00	10,600.00	100.00%
OPERATING FUND CY18-INTERNET	2,700.00	1,522.29	1,177.71	43.62%
OPERATING FUND CY18-IT SERVICES	5,000.00	81.77	4,918.23	98.36%
OPERATING FUND CY18-LEGAL SERVICES	263,660.00	194,651.14	69,008.86	26.17%
OPERATING FUND CY18-MEDICARE	2,060.00	941.98	1,118.02	54.27%
OPERATING FUND CY18-MISC FRINGES	585.00	67.43	517.57	88.47%
OPERATING FUND CY18-MISC RENTALS	3,200.00	1,078.62	2,121.38	66.29%
OPERATING FUND CY18-OPEB LIABILITY	7,100.00	0.00	7,100.00	100.00%
OPERATING FUND CY18-OUT OF STATE TRAVEL	1,800.00	0.00	1,800.00	100.00%
OPERATING FUND CY18-OUTREACH/MARKETING SERV	15,000.00	4,819.00	10,381.00	69.21%
OPERATING FUND CY18-PAYROLL SERVICES	1,500.00	1,492.25	7.75	0.52%
OPERATING FUND CY18-POSTAGE	26,000.00	10,418.10	15,581.90	59.93%
OPERATING FUND CY18-PRINTING	12,500.00	6,074.63	6,425.37	51.40%
OPERATING FUND CY18-PROFESSIONAL DEVELOPMENT	5,000.00	0.00	5,000.00	100.00%
OPERATING FUND CY18-RENT	22,500.00	11,250.00	11,250.00	50.00%
OPERATING FUND CY18-RETIREMENT	35,447.00	0.00	35,447.00	100.00%
OPERATING FUND CY18-RETIREMENT LIABILITY	5,300.00	0.00	5,300.00	100.00%
OPERATING FUND CY18-SALARIES	141,790.00	64,965.87	76,824.13	54.18%
OPERATING FUND CY18-SALARY RESERVE	5,000.00	0.00	5,000.00	100.00%
OPERATING FUND CY18-SHIPPING/FREIGHT	500.00	49.98	450.02	90.00%
OPERATING FUND CY18-SOFTWARE LICENSES	3,750.00	1,341.43	2,408.57	64.23%
OPERATING FUND CY18-SPONSORSHIPS	35,000.00	26,301.00	8,699.00	24.85%
OPERATING FUND CY18-SUBSCRIPTIONS	5,500.00	5,496.40	3.60	0.07%
OPERATING FUND CY18-SUPPLIES	500.00	24.37	475.63	95.13%
OPERATING FUND CY18-TELEPHONES	4,540.00	1,944.81	2,595.19	57.16%
OPERATING FUND CY18-TREASURY SERVICES	5,000.00	2,352.50	2,647.50	52.95%
OPERATING FUND CY18-UNPAID BILLS	2,000.00	0.00	2,000.00	100.00%
OPERATING FUND CY18-UTILITIES	400.00	225.00	175.00	43.75%
TOTAL EXPENSES	848,765.00	457,230.72	391,534.28	46.13%
CHANGE IN NET POSITION	0.00	420,169.92		

2018 Budgeted (Based on 2018 Energy Efficiency Surcharge)

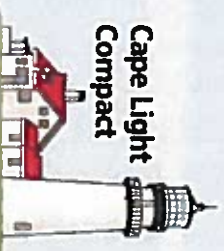
Program	PA Costs					Total PA Costs
	PP&A	Marketing	Incentives	STAT	EMV	
A - Residential	\$ 1,432,521	\$ 582,977	\$ 17,246,431	\$ 5,837,393	\$ 989,443	\$ 24,088,905
A1 - Residential Whole House	\$ 980,755	\$ 356,607	\$ 12,111,756	\$ 4,871,209	\$ 794,116	\$ 19,292,442
A1a - Residential New Construction	\$ 26,019	\$ 8,842	\$ 524,850	\$ 112,034	\$ 25,889	\$ 697,633
A1b - Residential Multi-Family Retrofit	\$ 44,004	\$ 32,131	\$ 586,000	\$ 350,098	\$ 40,232	\$ 1,052,465
A1c - Residential Home Energy Services - Measures	\$ 778,565	\$ 153,265	\$ 11,128,209	\$ 2,545,379	\$ 636,626	\$ 15,242,044
A1d - Residential Home Energy Services - RCS	\$ 97,977	\$ 45,393	\$ -	\$ 1,735,738	\$ 78,811	\$ 1,957,938
A1e - Residential Behavior/Feedback Program	\$ 12,191	\$ 16,976	\$ 172,698	\$ 127,960	\$ 12,538	\$ 342,162
A2 - Residential Products	\$ 226,629	\$ 153,478	\$ 3,700,000	\$ 726,755	\$ 195,546	\$ 5,002,108
A2a - Residential Heating & Cooling Equipment	\$ 114,665	\$ 38,083	\$ 1,500,000	\$ 390,737	\$ 84,925	\$ 2,028,410
A2b - Residential Consumer Products	\$ 18,804	\$ 26,797	\$ 200,000	\$ 156,605	\$ 16,222	\$ 418,528
A2c - Residential Lighting	\$ 93,160	\$ 88,598	\$ 2,000,000	\$ 279,392	\$ 94,100	\$ 2,555,150
A3 - Residential Hard-to-Measure	\$ 247,138	\$ 172,612	\$ 1,134,875	\$ 239,430	\$ -	\$ 1,794,055
A3a - Residential Hard-to-Measure	\$ -	\$ 117,017	\$ -	\$ -	\$ -	\$ 117,017
A3b - Residential Statewide Marketing	\$ 13,253	\$ -	\$ -	\$ -	\$ -	\$ 13,253
A3c - Residential DOER Assessment	\$ 145,089	\$ -	\$ -	\$ -	\$ -	\$ 145,089
A3d - Residential EEAC Consultants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A3e - Residential Sponsorships & Subscriptions	\$ 27,522	\$ 11,165	\$ -	\$ -	\$ -	\$ 38,687
A3f - Residential HEAT Loan	\$ 6,273	\$ 11,930	\$ 1,099,875	\$ 144,830	\$ -	\$ 1,311,908
A3g - Residential Workforce Development	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,600
A3h - Residential R&D and Demonstration	\$ -	\$ 12,500	\$ 35,000	\$ 75,000	\$ -	\$ 122,500
A3i - Residential Education	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ 25,000
B - Low-Income	\$ 312,468	\$ 86,286	\$ 3,564,650	\$ 1,080,729	\$ 205,199	\$ 5,249,528
B1 - Low-Income Whole House	\$ 221,978	\$ 61,340	\$ 3,564,650	\$ 1,080,729	\$ 205,199	\$ 5,135,996
B1a - Low-Income Single Family Retrofit	\$ 155,472	\$ 41,084	\$ 2,000,000	\$ 493,014	\$ 128,598	\$ 3,020,167
B1b - Low-Income Multi-Family Retrofit	\$ 68,507	\$ 18,256	\$ 1,564,650	\$ 387,716	\$ 76,601	\$ 2,115,729
B2 - Low-Income Hard-to-Measure	\$ 88,687	\$ 24,946	\$ -	\$ -	\$ -	\$ 113,633
B2a - Low-Income Statewide Marketing	\$ -	\$ 22,684	\$ -	\$ -	\$ -	\$ 22,684
B2b - Low-Income Statewide Database	\$ 2,684	\$ -	\$ -	\$ -	\$ -	\$ 2,684
B2c - Low-Income DOER Assessment	\$ 29,381	\$ -	\$ -	\$ -	\$ -	\$ 29,381
B2d - Low-Income Energy Affordability Network	\$ 46,627	\$ -	\$ -	\$ -	\$ -	\$ 46,627
B2e - Low-Income Sponsorships & Subscriptions	\$ 9,996	\$ 2,262	\$ -	\$ -	\$ -	\$ 12,258
C - Commercial & Industrial	\$ 1,139,338	\$ 294,981	\$ 13,104,277	\$ 2,720,701	\$ 693,645	\$ 17,960,061
C1 - CMI New Construction	\$ 78,202	\$ 13,794	\$ 714,879	\$ 326,443	\$ 49,175	\$ 1,182,593
C1a - CMI New Buildings & Major Renovations	\$ 60,356	\$ 9,091	\$ 454,879	\$ 268,615	\$ 35,727	\$ 828,668
C1b - CMI Initial Purchase & End of Useful Life	\$ 17,847	\$ 4,703	\$ 260,000	\$ 57,827	\$ 13,448	\$ 333,923
C2 - CMI Retrofit	\$ 918,648	\$ 193,368	\$ 12,319,398	\$ 2,367,258	\$ 644,390	\$ 16,449,062
C2a - CMI Existing Building Retrofits	\$ 224,343	\$ 56,791	\$ 6,217,000	\$ 541,594	\$ 243,235	\$ 7,284,962
C2b - CMI Small Business	\$ 551,786	\$ 103,110	\$ 5,993,048	\$ 1,393,344	\$ 326,413	\$ 7,567,701
C2c - CMI Multifamily Retrofit	\$ 47,055	\$ 17,087	\$ 250,000	\$ 346,373	\$ 28,995	\$ 689,511
C2d - CMI Upstream Lighting	\$ 95,465	\$ 14,379	\$ 359,350	\$ 185,948	\$ 45,746	\$ 900,888
C3 - CMI Hard-to-Measure	\$ 142,387	\$ 87,819	\$ 70,000	\$ 35,000	\$ -	\$ 335,206
C3a - CMI Statewide Marketing	\$ -	\$ 75,299	\$ -	\$ -	\$ -	\$ 75,299
C3b - CMI Statewide Database	\$ 8,959	\$ -	\$ -	\$ -	\$ -	\$ 8,959
C3c - CMI DOER Assessment	\$ 97,530	\$ -	\$ -	\$ -	\$ -	\$ 97,530
C3d - CMI EEAC Consultants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C3e - CMI Sponsorships & Subscriptions	\$ 35,948	\$ 7,520	\$ -	\$ -	\$ -	\$ 43,468
C3f - CMI Workforce Development	\$ -	\$ 5,000	\$ -	\$ 20,000	\$ -	\$ 25,000
C3g - CMI R&D and Demonstration	\$ -	\$ -	\$ 70,000	\$ 15,000	\$ -	\$ 85,000
GRAND TOTAL	\$ 2,884,524	\$ 942,964	\$ 32,915,558	\$ 9,446,823	\$ 1,888,426	\$ 49,299,295

2018 Actuals through May 2018

Program	PA Costs					Total PA Costs	PA Costs as Percent
	PP&A	Marketing	Incentives	STAT	EMV		
A - Residential	\$ 311,198	\$ 124,546	\$ 4,152,276	\$ 1,191,674	\$ 199,502	\$ 5,980,196	24.8%
A1 - Residential Whole House	\$ 239,331	\$ 310,653	\$ 3,079,633	\$ 1,059,700	\$ 117,971	\$ 4,529,699	21.3%
A1a - Residential New Construction	\$ 6,495	\$ 859	\$ 87,464	\$ 29,119	\$ 6,003	\$ 129,942	18.6%
A1b - Residential Multi-Family Retrofit	\$ 10,966	\$ 1,452	\$ 41,178	\$ 19,519	\$ 11,878	\$ 87,012	8.3%
A1c - Residential Home Energy Services - Measures	\$ 194,350	\$ 26,912	\$ 3,121,938	\$ 481,439	\$ 86,960	\$ 3,702,620	24.3%
A1d - Residential Home Energy Services - RCS	\$ 24,458	\$ 3,440	\$ -	\$ 319,481	\$ 11,352	\$ 558,630	28.3%
A1e - Residential Behavior/Feedback Program	\$ 3,043	\$ 402	\$ 36,050	\$ 10,121	\$ 878	\$ 51,494	15.0%
A2 - Residential Products	\$ 56,572	\$ 36,696	\$ 855,533	\$ 105,293	\$ 81,531	\$ 1,137,625	22.7%
A2a - Residential Heating & Cooling Equipment	\$ 28,623	\$ 7,328	\$ 233,090	\$ 28,964	\$ 19,646	\$ 327,652	16.2%
A2b - Residential Consumer Products	\$ 4,694	\$ 9,498	\$ 35,486	\$ 24,034	\$ 4,389	\$ 135,100	31.3%
A2c - Residential Lighting	\$ 23,255	\$ 21,870	\$ 566,957	\$ 42,295	\$ 38,496	\$ 674,872	26.4%
A3 - Residential Hard-to-Measure	\$ 15,295	\$ 52,785	\$ 218,110	\$ 26,682	\$ -	\$ 312,872	17.4%
A3a - Residential Hard-to-Measure	\$ -	\$ 31,996	\$ -	\$ -	\$ -	\$ 31,996	30.3%
A3b - Residential Statewide Marketing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%
A3c - Residential Statewide Database	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%
A3d - Residential DOER Assessment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%
A3e - Residential EEAC Consultants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%
A3f - Residential Sponsorships & Subscriptions	\$ 15,295	\$ 3,177	\$ 218,110	\$ 25,161	\$ -	\$ 261,944	19.9%
A3g - Residential HEAT Loan	\$ -	\$ -	\$ -	\$ 1,521	\$ -	\$ 1,521	7.8%
A3h - Residential R&D and Demonstration	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%
A3i - Residential Education	\$ -	\$ 15,412	\$ -	\$ -	\$ -	\$ 15,412	61.6%
B - Low-Income	\$ 57,468	\$ 16,478	\$ 471,033	\$ 112,278	\$ 39,490	\$ 697,382	13.3%
B1 - Low-Income Whole House	\$ 50,375	\$ 8,825	\$ 471,033	\$ 112,278	\$ 39,550	\$ 682,462	13.3%
B1a - Low-Income Single Family Retrofit	\$ 34,968	\$ 6,126	\$ 214,548	\$ 54,038	\$ 29,536	\$ 339,215	11.2%
B1b - Low-Income Multi-Family Retrofit	\$ 15,408	\$ 2,699	\$ 256,485	\$ 58,240	\$ 10,014	\$ 343,247	16.2%
B2 - Low-Income Hard-to-Measure	\$ 7,075	\$ 7,653	\$ -	\$ -	\$ -	\$ 14,728	13.1%
B2a - Low-Income Statewide Marketing	\$ -	\$ 7,845	\$ -	\$ -	\$ -	\$ 7,845	34.6%
B2b - Low-Income Statewide Database	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%
B2c - Low-Income DOER Assessment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%
B2d - Low-Income Energy Affordability Network	\$ 7,075	\$ -	\$ -	\$ -	\$ -	\$ 7,075	15.2%
B2e - Low-Income Sponsorships & Subscriptions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%
C - Commercial & Industrial	\$ 249,238	\$ 64,386	\$ 1,122,518	\$ 277,942	\$ 64,598	\$ 1,819,719	10.1%
C1 - CMI New Construction	\$ 23,941	\$ 2,401	\$ 69,644	\$ 53,852	\$ 5,807	\$ 155,425	1.1%
C1a - CMI New Buildings & Major Renovations	\$ 18,449	\$ 1,851	\$ 43,557	\$ 45,205	\$ 4,104	\$ 113,166	13.7%
C1b - CMI Initial Purchase & End of Useful Life	\$ 5,492	\$ 550	\$ 26,087	\$ 8,647	\$ 1,703	\$ 42,059	1.9%
C2 - CMI Retrofit	\$ 245,334	\$ 37,378	\$ 1,063,875	\$ 221,654	\$ 61,011	\$ 1,629,352	9.9%
C2a - CMI Existing Building Retrofits	\$ 67,935	\$ 6,800	\$ 483,665	\$ 50,786	\$ 15,598	\$ 634,865	8.6%
C2b - CMI Small Business	\$ 140,984	\$ 26,127	\$ 376,819	\$ 119,070	\$ 35,374	\$ 698,375	9.2%
C2c - CMI Multifamily Retrofit	\$ 12,023	\$ 1,443	\$ 18,226	\$ 25,297	\$ 3,229	\$ 160,317	21.2%
C2d - CMI Upstream Lighting	\$ 24,392	\$ 2,928	\$ 85,165	\$ 26,901	\$ 6,810	\$ 145,795	16.2%
C3 - CMI Hard-to-Measure	\$ -	\$ 26,666	\$ -	\$ 2,415	\$ -	\$ 29,081	8.7%
C3a - CMI Statewide Marketing	\$ -	\$ 23,536	\$ -	\$ -	\$ -	\$ 23,536	31.3%
C3b - CMI Statewide Database	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%
C3c - CMI DOER Assessment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%
C3d - CMI EEAC Consultants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%
C3e - CMI Sponsorships & Subscriptions	\$ -	\$ 3,071	\$ -	\$ -	\$ -	\$ 3,071	7.1%
C3f - CMI Workforce Development	\$ -	\$ -	\$ -	\$ 2,415	\$ -	\$ 2,415	9.7%
C3g - CMI R&D and Demonstration	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%
GRAND TOTAL	\$ 637,923	\$ 207,402	\$ 5,787,827	\$ 1,881,894	\$ 306,056	\$ 8,491,296	17.2%

DPU 11-120-A

(PAS guiding principles/guidelines)



- Addressed (Evaluation and Approval of Plans, and Reports):
 - Funding, Budgets, Cost Effectiveness, Evaluation, Performance Incentives, Energy Efficiency Surcharge, Mid-term Modifications, Reporting (Three-Year Term report and Plan-Year Reports)
- Plan Year report items to note
 - Cumulative present value is why PAS discount the second and third year costs and benefits back to the first year dollars. For example for the 16-18 plan, 2016\$ are used as that is the present value at the time the plan is approved. PAS then continue in 2016\$ for the rest of the planning and reporting cycles
 - Variances between planned and actual: budgets, lifetime savings, total benefits
 - Refers to the Green Communities Act that energy efficiency programs spend a certain amount on low income programs (10 percent for electric PAS)

2017 Summary full snapshot



Cape Light Compact 2017 Summary Results

	PA Costs (2017\$) (aka Budget)	Participant Costs (2017\$)	Total Costs (2017\$)	PA Costs (2016\$) (aka Budget)	Participant Costs (2016\$)	Total Costs (2016\$)	Total Benefits (2016\$)	Annual MWh Savings	Lifetime MWh Savings	BCR
Planned										
Residential	\$22,558,347	\$4,813,157	\$27,371,504	\$21,999,558	\$4,693,931	\$26,693,489	\$ 61,650,073	18,921	201,747	2.31
Low-Income	\$4,460,916	\$0	\$4,460,916	\$4,350,415	\$0	\$4,350,415	\$ 11,084,297	1,750	18,219	2.55
C&I	\$15,216,941	\$5,153,556	\$20,370,497	\$14,840,005	\$5,025,898	\$19,865,903	\$ 57,506,827	37,138	331,257	2.89
Total	\$42,236,204	\$9,966,712	\$52,202,916	\$41,189,978	\$9,719,829	\$50,909,807	\$ 130,241,198	57,809	551,223	2.56
Actual										
Residential	\$22,125,001	\$6,940,749	\$29,065,750	\$21,576,946	\$6,768,821	\$28,345,767	\$ 63,555,689	33,952	278,956	2.24
Low-Income	\$2,828,292	\$0	\$2,828,292	\$2,758,233	\$0	\$2,758,233	\$ 5,226,385	1,888	16,039	1.89
C&I	\$9,148,015	\$3,489,685	\$12,637,701	\$8,921,411	\$3,403,243	\$12,324,654	\$ 29,771,431	13,645	171,504	2.42
Total	\$34,101,308	\$10,430,435	\$44,531,743	\$33,256,590	\$10,172,064	\$43,428,654	\$ 98,553,505	49,484	466,498	2.27

A 2017 report with 2016 costs?

Pas look to DPU guidelines: DPU 11-120-A "An Energy Efficiency Program shall be deemed cost-effective if the cumulative present value of its benefits, defined in § 3.4.4, below, are equal to or greater than the cumulative present value of its costs, defined in § 3.4.5, below."

The cumulative present value or sometimes called net present value (NPV) is why we discount 2017 and 2018 costs and benefits back to 2016 dollars. Pas put the planned numbers into 2016\$ because that's the present value at the time the plan is approved. Pas then continue in 2016\$ for the rest of the planning and reporting cycles.

1. Cost effectiveness is determined using a Total Resource Cost (TRC) Test
2. TRC Test calculates a benefit cost ratio (BCR)
3. BCR = ratio of total benefits and total costs. To calculate the BCR, you must take the Total Benefits in 2016\$ divided by the Total Costs in 2016\$
4. Total Benefits = value of the savings from program participation (electric benefits, natural gas benefits, and other resource benefits)
5. Total Costs = all costs to the PA and the Participant that result from the program

What goes into a measure?



- Measure summary
 - Measure name, reference #, sector, PA specific or Statewide, description
- Measure overview
 - Measure ID, name, end-use, electric or gas PA, PA, program, sector
- Savings
 - General (baseline, high efficiency, calculation method), electric (gross annual kW and kWh, summer/winter coincidence factors), non-electric (gross annual gas MMBtu), water
- Measure life
- Non-Energy impacts
- Impact Factors
 - In-Service Rate, Savings Persistence Factor, Realization Rate, Summer/Winter Peak Demand Coincidence Factors
- Net-to-gross
 - Free Ridership, Spillover, Net-to-Gross
- Flows from Technical Reference Manual into the Benefit Cost Model



Total Resource Costs

used to determine cost effectiveness

- Benefit Cost Ratio (BCR) = Total benefits \$ / Total costs \$
 - PAs look to make sure the BCR is ≥ 1.0 which is considered cost effective (benefits exceed costs)
 - Benefits include
 - Electric Savings, Avoided Costs (Electricity Generation and Transmission), Non-Electric Impacts, Non-Electric Benefits (Fuel Savings (Oil, Natural Gas, Propane)), Non-Energy Impacts (Reduced Water/Sewer Costs, Reduced Lighting/Equipment Maintenance, Increased Property Value)
 - Costs include
 - Program implementation costs (PP&A, Marketing, Incentive, STAT, EM&V), Performance incentives (CLC does not claim PI), Participant costs (incremental costs or total costs)

Cape Light Compact JPE 2017 Plan Year Report Update

July 11, 2018



**Cape Light
Compact**

Working Together Toward A Smarter Energy Future

2017 Summary Results



	PA Costs 2017 (aka Budget)	Total Costs	Total Benefits	BCR
Planned				
Residential	\$22,558,347	\$26,693,489	\$61,650,073	2.31
Low-Income	\$4,460,916	\$4,350,415	\$11,084,297	2.55
C&I	\$15,216,941	\$19,865,903	\$57,506,827	2.89
Total	\$42,236,204	\$50,909,807	\$130,241,198	2.56
Actual				
Residential	\$22,125,001	\$28,345,767	\$63,555,689	2.24
Low-Income	\$2,828,292	\$2,758,233	\$5,226,385	1.89
C&I	\$9,148,015	\$12,324,654	\$29,771,431	2.42
Total	\$34,101,308	\$43,428,654	\$98,553,505	2.27

1. Cost effectiveness is determined using a Total Resource Cost (TRC) Test
2. TRC Test calculates a benefit cost ratio (BCR)
3. BCR = ratio of total benefits and total costs.
4. Total Benefits = value of the savings from program participation (electric benefits, natural gas benefits, and other resource benefits)
5. Total Costs = all costs to the PA and the Participant that result from the program

2017 Electric PA Comparison



2017 Electric PA Comparison				
	Actuals			
	CLC	Eversource	Nationalgrid	Unicell
Expenditures 2017	\$34M	\$259M	\$272M	\$4.2M
Total Costs	\$43.4M	\$356.5M	413.1M	\$5.86M
Total Benefits	\$98.5M	\$1.015B	\$935.8M	\$13.8M
Annual Savings (MWh)	49K	707K	724K	7K
Lifetime Savings (MWh)	467K	7.4M	6.5M	71K
Portfolio BCR	2.27	2.85	2.27	2.35

Total Costs and Benefits have been rounded

Cape Light Compact JPE 2019-2021 Energy Efficiency Plan Updates

July 11, 2018



Working Together Toward A Smarter Energy Future

New Residential Enhancements



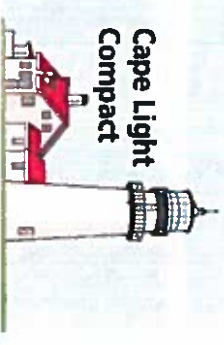
- Proposed new offer: \$5,000 grant to be used for energy efficiency measures/upgrades for organizations (public and non-profit) that recruit **100** residents that complete Home Energy Assessments (HEA) in any one year (\$50 head fee)
 - Should CLC provide incentive for HEA only or require implementation of a measure(s)?
- **Opower**
 - Is interested in working with the Compact and is putting together a price proposal
 - Would the Board like to move forward?

Residential and C&I Enhancements



- Residential
 - Continue with cost effective no cap insulation offer for residential customers
 - Continue offering 100% insulation incentives to our renter and moderate income customers
 - Continue to explore ways to serve our hard-to-reach customers
- C&I
 - Continue enhanced incentives for:
 - Municipal
 - Non-profits
 - Year-round tenants
 - Oil, propane and unregulated fuels
 - “Main Streets”

Demand Management - Storage



- Small Scale Battery Storage for Residential and Small Commercial Customers
 - Proposed to focus mostly on residential and small commercial customers who have installed distributed generation (DG) such as solar and wind
 - Modeled after existing utility programs (e.g., Unitil and Green Mountain Power)
 - Objective is to reduce system and local peak demand

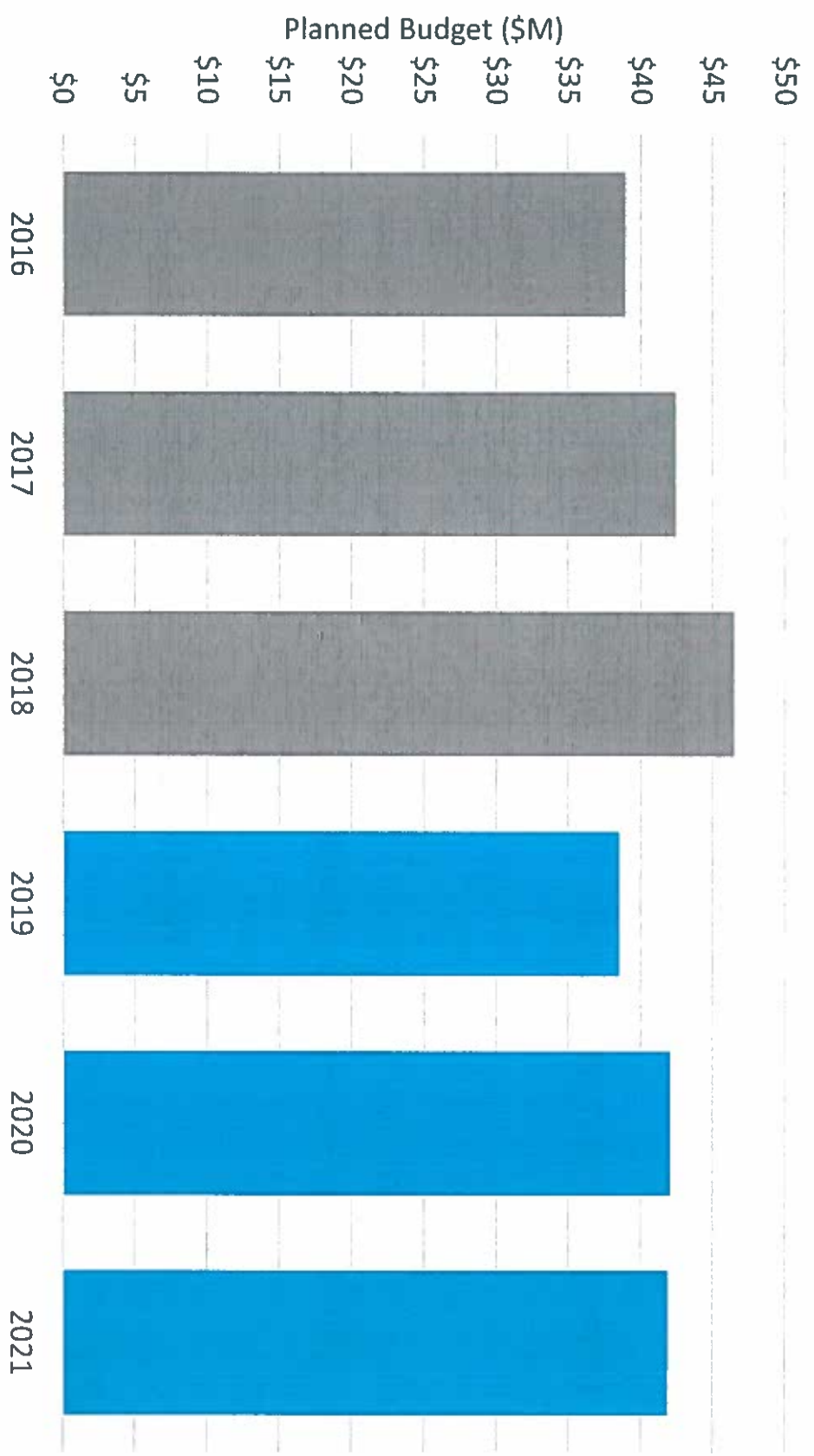
Demand Management

- Residential Demand Management
 - Connected devices
 - R&D funds to explore potential for load management through connected devices (e.g., plug load controllers, pool pumps, smart lighting, etc.)
 - Behavioral
 - Continue to explore a home energy report model (e.g. OPower)
- C&I Demand Management
 - Thermal Storage
 - Shifts air conditioning load to off-peak hours
 - Pay-for-performance load curtailment





Proposed 2019-2021 Energy Efficiency Budget: \$122,671,330



2016-2018 are Planned values only, no actuals.
Budgets shown include Demand Response (Behavior and Active Demand).

Next Steps as CLC heads towards the October 31 Filing



- July 31st, Program Administrators (PAs) will receive approval or comments on the April plan from the Energy Efficiency Advisory Council (EEAC)
- 2nd draft of Plan will be submitted sometime between August 31st and September 17th (date is still being negotiated)
 - MA DOER and PAs negotiate PA specific budgets and savings goals (Term Sheet)
- Late September – Early October CLC Board approves Final Budget and Savings Goals
 - Early October EEAC Resolution should be issued
- October 31st, plan filed with the DPU
- November – December:
 - discovery, hearings
- January:
 - Briefs
 - January 29th, DPU will issue its order on the 2019-2021 Three Year Plan

Eversource Rate Case Compliance Update



Presented by:

Jeffrey M. Bernstein, Esq.

7/11/2018

Cape Light Compact Board Meeting

Eversource Rate Case Compliance Update - Overview

- MMRC Education and Outreach Plan (“E&O Plan”)
- D.P.U. 18-50, Performance-Based Metrics
- Pending Rate Case Appeal of MMRC
- DPU has not yet opened generic investigation on contribution in aid of construction (“CAIC”) or commenced street light stakeholder group.

MMRC Education & Outreach Plan

(1 of 2)

- 4/25: Eversource held stakeholder meeting
- 5/25: Eversource filed draft E&O Plan.
- 6/1: CLC sent comments to Eversource on draft E&O Plan

MMRC Education & Outreach Plan

(2 of 2)

**6/8: Eversource filed final E&O Plan with
DPU**

- Eversource added reference to CLC as the PA on Cape Cod and Martha's Vineyard and a few other minor edits.

7/13: Comments due to DPU

D.P.U. 18-50: Metrics Proceeding Overview

- CLC recently filed to be a participant in proceeding.
- Adjudicatory proceeding
 - Discovery now rolling. CLC will file interrogatories soon.
 - Hearings anticipated in October.

D.P.U. 18-50: Metrics Three CLC Issues

- 1) Peak Demand Reduction Metrics:** The DPU should ensure that Eversource's Energy Efficiency Plan Performance Incentive (PI) for Peak Demand reduction is not duplicated through Performance Metrics (i.e. ratepayers paying twice peak demand reduction).
- 2) Peak Demand Reduction and Climate Change Adaptation Metrics:** If Eversource participates with another PA, or a third party vendor, to help Eversource achieve Peak Demand Reduction and Climate Change Adaptation metrics, Eversource should be able to count these efforts towards one, or both, of these metrics.
- 3) Climate Adaptation Metric:** Add a new goal of 25% conversion of privately-owned streetlights from HPS to LED with a focus on municipalities that have purchased their streetlights and converted them to LEDs (i.e. Boston, Dartmouth, New Bedford, Cape Cod and Martha's Vineyard).

Next Steps

- MMRC E&O Plan: comments due 7/13/18.
- Metrics, D.P.U. 18-50: file interrogatories.
- Other Rate Case Proceedings
 - Rate Case Appeal Pending: waiting for DPU to certify record to the court
 - Preparing Amicus Brief