### Cape Light Compact Governing Board and Executive Committee Meeting

DATE:

Wednesday, January 11, 2017

LOCATION:

Innovation Room, Open Cape Building

3195 Main Street, Barnstable County Complex

TIME:

1:30-4:30 p.m.

### **AGENDA**

	TIODITO
1:30 - 1:45 1:45 - 1:55	2017 Open/Close Nominations and Vote on 2017 Executive Committee Member Public Comment
1:55-2:05	Approval of Minutes
2:05 - 2:15 2:15 - 2:20	Treasurer's Report, Potential Vote to Ratify Treasurers' Approval of Contracts Chairman's Report
2:20 - 2:25	Administrators' Report
2:25 - 2:35	Power Supply, Marketing Plan Update, Austin Brandt and Lindsay Henderson
2:35 – 2:55	Overview of DPU 16-177: Presentation and Potential Vote on Cape Light Compact Demand Response Offering and Potential Mid-Term Modification, Austin Brandt
2:55 – 3:45	Discussion and Presentation on Joint Powers Act and Establishment of a Joint Powers Entity, Compact Counsel
3:45 = 4:20	Open Session Vote on entry into Executive Session pursuant to M.G.L. c. 30A §§21(a)(3) to discuss and potential vote on matters below, not to return to open session.
	<ol> <li>Regulatory litigation strategy. Discussion and Potential Vote on Participation in 2017 Eversource Rate Case</li> </ol>
	2. Pending regulatory litigation strategy (D.P.U. 16-169) regarding dispute with National Grid and Compact and National Grid Agreement for Natural Gas Heated Homes
4:20	Board Member Update (Reserved for Updates on Member Activities the Chair
	Did Not Reasonably Anticipate Would be Discussed – No Voting)

Draft Minutes subject to correction, addition and Committee/Board Approval

### Cape Light Compact Governing Board and Executive Committee Open Session Meeting Minutes Wednesday, December 7, 2016

The Cape Light Compact Governing Board and Executive Committee met on Wednesday, December 7 2016 in the Innovation Room, Open Cape Building, Barnstable County Complex, 3195 Main Street, Barnstable MA 02630 at 2:00 p.m.

### PRESENT WERE:

- 1. Joyce Flynn, Chair, Yarmouth
- 2. Robert Schofield, Vice-Chair, Bourne
- 3. Ronald Zweig, Secretary, Falmouth
- 4. Peter Cocolis, Treasurer, Chatham
- 5. Fred Fenlon, Eastham
- 6. Valerie Bell, Harwich
- 7. Thomas Donegan, Provincetown
- 8. Tim Carroll, Chilmark
- 9. Richard Elkin, Wellfleet
- 10. Sue Hruby, West Tisbury
- 11. Paul Pimentel, Edgartown by phone at 2:12 PM.
- 12. Martin Culik, Orleans Alternate Until 4:01 PM
- 13. David Anthony, Barnstable
- 14. Richard Toole, Member at Large, Oak Bluffs by phone at
- 2:12 PM.
- 15. Andrew Gottlieb, Mashpee
- 16. Sheila Lyons, Barnstable County

### LEGAL COUNSEL

Jeff Bernstein, Esq., BCK Law, PC

### STAFF PRESENT:DF

Maggie Downey, Administrator Austin Brandt, Power Supply Planner Phil Moffitt, Residential Manager Lindsay Henderson, Analyst Jacob Wright, Special Projects Coordinator

### PUBLIC PRESENT

Chris Powicki Jillian Douglass

### PUBLIC COMMENT

No members of the public wished to speak.

### ABSENT WERE:

- 17. Brewster Vacant
- 18. John Alley, Dukes County
- 19. Michael Hebert, Aquinnah
- 20. Brad Crowell, Dennis
- 21. Tisbury vacant
- 22. Joshua Peters, Sandwich
- 23. Joseph Buteau, Truro

Members physically present: 14

Members present by phone: 2

Draft Minutes subject to correction, addition and Committee/Board Approval Maggie Downey requested a vote on a proposed motion so that the record reflect what the Board wishes her to do in regards to pursuit of a new fiscal agent.

Richard asked if the Compact is restricted to specifically member towns as fiscal agents. Jeff Bernstein replied and said that we are not restricted to member towns, although the proposed motion refers simply to discussion with Compact members. David Anthony asked what the scope and ability of this motion was in terms of execution of a new agreement. Jeff Bernstein stated that this allows for wide ranging discussion, but any execution would return to the board first. The motion itself only allows the discussion with the 23 members, including Barnstable County.

Peter Cocolis said that the agreement would be simpler with one of our own towns, and then the Compact could look outside of that if no agreements can be reached. He said MUNIS and other systems would be much more seamlessly transferred to another town.

David Anthony said that the Town of Barnstable is one of the towns potentially serving as fiscal agent. He said that OPEB liability is a major issue, but it's the easiest one to deal with. He went on to say that the biggest true problem is absorbing employees and retirement obligations. He said he's surprised that more towns haven't had conversations regarding taking on the Compact. Maggie Downey said she brought this issue to the town managers, and town managers said collectively that the Town of Barnstable was best suited, and should start there.

Tom Donegan stated that the Board of Selectmen of Provincetown did vote 5-0 to enter into discussions. He said that there's many opportunities for the towns to work together. He said that there are many people who are committed to working this out.

Sheila Lyons spoke, saying that she was not in favor of this entire situation (the County terminating its relationship as fiscal agent with the Compact), and said she'll be making a statement regarding the situation at the commissioner's meeting. She said that there is good work being done here at the Compact, and the County is making a mistake.

Martin Culik responded by saying that he had received the impression that Jack Yunits was more on the side of the Compact, and not wanting the Compact to depart. Maggie Downey responded by saying that while that may be true, members of the Assembly the County Commissioners feel very strongly about not supporting the Compact as it is currently constructed.

Consistent with the Cape Light Compact's Intergovernmental Agreement, Article II(P), Ronald Zweig moved the Board vote to authorize the Compact Administrator, legal counsel, and Compact Board members to enter into discussions with Compact members regarding serving as the fiscal agent for the Cape Light Compact.

The Compact Administrator is authorized and directed to take all actions necessary or appropriate to implement this vote, and to execute and deliver all documents as may be necessary or appropriate to implement this vote, seconded by Robert Schofield and voted by roll call as follows:

### Draft Minutes subject to correction, addition and Committee/Board Approval

David Anthony moved the board vote to authorize the Compact Chair to execute a Transition Agreement Between Barnstable County and the Cape Light Compact, to be approved as to form by legal counsel. The Transition Agreement shall terminate the Administrative Services Agreement and allow for the Cape Light Compact's orderly transition to a new fiscal agent, and shall include, but not be limited to, provisions for: (i) Barnstable County's role as fiscal administrator during the transition; (ii) additional related services to be provided by Barnstable County during the transition; and (iii) payment by the Cape Light Compact for such services.

The Compact Administrator is authorized and directed to take all actions necessary or appropriate to implement this vote, and to execute and deliver all documents as may be necessary or appropriate to implement this vote, second by R. Schofield and voted by roll call as follows:

1.	D. Anthony - Barnstable	yes	10. T. Donegan - Provincetown	abs
2.	R. Schofield - Bourne	yes	11. S. Hruby – West Tisbury	yes
3.	F. Fenlon - Eastham	yes	12. J. Flynn - Yarmouth	yes
4.	P. Pimentel – Edgartown	yes	13. T. Carroll – Chilmark	yes
5.	R. Zweig - Falmouth	yes	14. A. Gottlieb – Mashpee	yes
6.	V. Bell – Harwich	yes	15. R. Toole - Oak Bluffs	yes
7.	R. Elkin – Oak Bluffs	yes	<ol><li>Richard Elkin – Wellfleet</li></ol>	yes
8.	M. Culik – Orleans	yes	30	•
9.	P. Cocolis - Chatham	yes		

Motion carried in the affirmative (15-0-1)

### **CHAIRMAN'S REPORT**

Joyce Flynn asked all members to see their board of selectmen very soon. She wants the Towns to understand the green aggregation power supply program and that the Compact is entering negotiations for a new fiscal agent. She then recognized Sheila Lyons, as her last board meeting as a County Commissioner.

### TREASURER'S REPORT

Peter Cocolis stated that the operational fund is paying Barnstable County for services, reflecting our continued payments to the county for rent and other expenses.

### **ADMINISTRATOR'S REPORT**

1. Nominations for Executive Committee

Maggie. Downey notified the Board that nominations for Executive Committee positions are now open, and will be open through the January meeting, when they will be voted on.

- R. Elkin and B. Schofield nominated Joyce Flynn for Chairman.
- P. Cocolis and S. Lyons nominated Bob Schofield for Vice Chairman.

### Draft Minutes subject to correction, addition and Committee/Board Approval

1.	D. Anthony - Barnstable	yes	<ol><li>T. Donegan – Provincetown</li></ol>	yes
2.	R. Schofield - Bourne	yes	11. S. Hruby – West Tisbury	yes
3.	F. Fenlon - Eastham	yes	12. J. Flynn - Yarmouth	yes
4.	P. Pimentel – Edgartown	yes	13. T. Carroll – Chilmark	yes
5.	R. Zweig - Falmouth	yes	14. A. Gottlieb – Mashpee	yes
6.	V. Bell – Harwich	yes	15. R. Toole – Oak Bluffs	yes
7.	R. Elkin – Oak Bluffs	yes	16. Richard Elkin - Wellfleet	yes
8.	M. Culik – Orleans	yes		, 00
9.	P. Cocolis – Chatham	ves		

Motion carried in the affirmative (16-0-0)

No updates from the Board Members.

Meeting adjourned at 4:33 pm.

Respectfully submitted, Jacob Wright

### **LIST OF DOCUMENTS & EXHIBITS**

- Meeting Notice/Agenda
- October 11<sup>th</sup> Meeting Minutes Draft
   November 9<sup>th</sup> Meeting Minutes Draft
- 8074 CLC Operating Fund Budget dated 12/6/2016

### Agenda Action Request Cape Light Compact Meeting Date: 1/11/17



Aquinnali

Barnstable

Barnstable County

Bourne

Brewster

Chatham

Chilmark.

Dennis

Dukes County

Eastham

Edgartown

Falmouth

Harwich

Mashpee

have on the state

Oak Bluffs

Orleans

Provincetown

Sandwich

Tisbury

Truro

Wellfleet

West Tisbury

Yarmouth

### **Ratify Actions of Treasurer**

**REQUESTED BY:** Peter Cocolis

### **Proposed Motion(s)**

I move the Board vote to ratify the actions of the Compact Treasurer relative to Compact contracts from January 1, 2017 through January 11, 2017.

The Compact Administrator is authorized and directed to take all actions necessary or appropriate to implement this vote, and to execute and deliver all documents as may be necessary or appropriate to implement this vote.

### **Additional Information**

 This motion is consistent with the Board's March 11, 2015 vote to establish a contract review process

### **Record of Board Action**

Motion by:	Second by:	# Aye	# Nay	# Abstain	Disposition
					-
				S	



### Power Supply Price Comparison

### **Cape Light Compact Prices**

321	Price	Term (meter read dates)
Residential	9.930 cents/kWh	January 2017 - June 2017
Commercial	9.700 cents/kWh	December 2016 - June 2017
Industrial	9.800 cents/kWh	December 2016 - March 2017

- No Contracts, No Termination or Monthly Service Fees = No Surprises
- 100% Renewable = 100% of customers' supply load will be matched with RECs some of which are from local projects
- Support Future Renewable Energy Development = Supplier Fee (which would have been paid anyways) is redirected to the EarthEra™ Renewable Energy Trust for future development

### **Eversource Basic Service Prices**

	Price	Term
Residential	10.318 cents/kWh	January 1, 2017 - June 30, 2017
Commercial	10.033 cents/kWh	January 1, 2017 - June 30, 2017
Industrial	10.144 cents/kWh	January 1, 2017 - March 30, 2017

- No Contracts, No Termination or Monthly Service Fees
- If customer leaves Basic Service before end of month there will be a tru-up as to what they would have been expected to pay
- Not 100% Renewable



## Other Available Programs:

New Construction - Homes that are to be built more energy efficient than a typical, code-built home. Call 1-800-628-8413 to learn more.

Income Eligible Households - Increased incentives for customers on Eversource's Discount Rate, Fuel Assistance, or whose household income is below 60% of median income.

Multi-Family Facilities - Residential facilities with 5 or more dwelling units on the property. For more info call 1-800-594-7277.



Did you know that shipping is free if your order is \$20.00 or more on the ENERGY STARD Lights Online Catalog? Visit masssave.com/store to see what we offer.



OpenCape Building PO Box 427 Barnstable, MA 02630 1-800-797-6699 www.capelightcompact.org



### Rebates 2017

www.capelightcompact.org

Aquinnah. Barnstable. Bourne. Brewster Chatham. Chilmark. Dennis. Eastham Edgartown. Falmouth. Harwich. Mashpee Oak Bluffs. Orleans. Provincetown. Sandwich Tisbury. Truro. Wellfleet. West Tisbury Yarmouth. Barnstable County. Dukes County

# Cape Light Compact Demand Response **Demonstration Offering**

January 11, 2017

**CLC Governing Board Meeting** 



Austin Brandt, Power Supply Planner

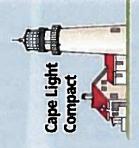
Working Together Toward A Smarter Energy Future

### Purpose



- Conceptual overview of Demand Response (DR)
- Review Compact's current DR Demonstration Offering and 2016 Recap
- Review DR Demonstration Offering expansion proposal
- Decide whether to file a Mid-Term Modification to expand DR Demonstration Offering

# Demand Response



Demand Response: demand curtailment in response to a signal

si S Demand Reduction: any reduction in demand, including through passive measures (e.g., energy efficiency measures) Energy efficiency has resulted in overall demand reduction, but is fundamentally different from active demand response, where the focus is reduction in instantaneous demand rather than energy savings.

Some DR measures may have negative energy savings, i.e., may result in a net increase in energy consumption

e.g., dispatching batteries to reduce peak demand

Green Communities Act mandates pursuit of cost effective demand

# Summer 2016



- Numbers:
- 9 DR Events
- 39 participants enrolled, 56 thermostats installed
- ~160 thermostat DR events called
- Successes
- Very low opt-out rate for events
- Overall, technology and concept was well-received by customers
- Evaluation being currently being finalized

# 2017 Residential Improvements



### Platform

- Develop algorithm to call events to target demand
- Day-of baseline adjustment

# Expanding participation

- Leverage thermostats installed through HES, and include offering information in HES packets
- Bring Your Own Thermostat (BYOT) for customers with eligible thermostats already installed
- Expanding a/c equipment compatibility to increase participation
- Plan to incorporate load control for ductless mini-split systems
- Reduce costs by eliminating energy monitoring equipment
- Possibly use currently enrolled customers with monitoring equipment to help model demand reductions

### Ice Bears

- Ice Bears are a thermal storage technology that works in concert with air conditioning units to reduce their demand during certain hours
- Makes ice during off-peak hours and uses the ice in place of the A/C compressor during peak hours

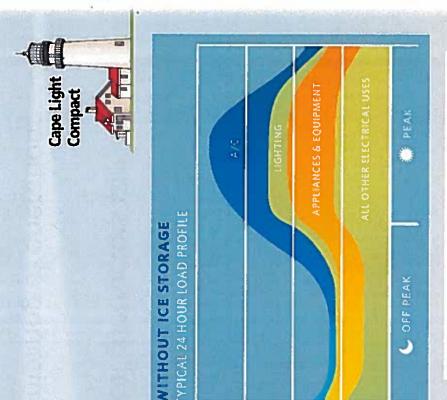




Image source: Ice Energy

## Discussion:



Support staff's recommendation to expand the DR Demonstration Offering?

- Expansion would:
- Provide a DR offering to commercial & industrial customers
- Demonstrate potential of more than one primary DR technology as part of the Offering
- Explore energy storage, and measure associated benefits
- Further inform the development of the 2019-2021 Energy **Efficiency Plan**



# THE JOINT POWERS STATUTE AND FORMATION OF A JOINT POWERS ENTITY

January 11, 2017



# GENERAL FORMATION CONCEPTS/LIABILITY

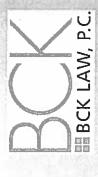
- The Act allows governmental units to enter into joint powers agreements. A joint powers agreement ("JPA") is a contract specifying the terms and conditions of the joint exercise of powers and duties within a region.
- At least two government units are needed to sign a JPA to establish a joint powers entity ("JPE").
- authorized by law to execute a contract for the Town may enter into the In a Town, the chief executive officer or a board, committee or officer JPA. The JPA must be authorized by the board of selectmen for each governmental unit.
- governmental unit or the JPE itself unless otherwise agreed to in the JPA. governmental unit for the acts or omissions of another participating The Joint Powers Statute is clear that there is no liability of one



### GENERAL POWERS OF THE JPE GRANTED BY STATUTE

The JPE is a body politic and corporate with the power to:

- sue and be sued;
- make and execute contracts and other instruments necessary for the exercise of the powers of the region;
- make, amend and repeal policies and procedures;
- receive and expend funds;
- apply for and receive grants from the commonwealth, the federal government and other grantors;
- submit an annual report to each member governmental unit, which shall contain a detailed audited financial statement and a statement showing the method by which the annual charges assessed against each governmental unit were computed; and
- any such other powers as are necessary to properly carry out its powers as a body politic and corporate.



# FINANCIAL CONTROLS

- The Joint Powers Statute contains audit, reporting and accounting requirements.
- The JPE must establish and maintain a budget and perform annual audits. The audits are to be distributed to its constituent members, and to DOR.
- Annual reports to members are also required.
- requiring review by the board of directors, its treasurer and its business Management of funds is subject to a system of checks and balances
- outside vendor to perform payroll, check writing, bookkeeping, accounting The JPE could choose to enter into a services contract with a member or an and other functions, but it does not have to.



### DISCUSSION

- The Compact's current IGA expires in 2022.
- In 2016, Barnstable County notified the Compact that it no longer wished to continue to render administrative and fiscal services.
- Agreement with Barnstable County that runs through June 2017, and may In December 2016, the Compact executed a Termination and Transition be extended through December 2017, subject to certain conditions.
- The formation of a JPE will provide the Compact with the administrative and fiscal functions that Barnstable County no longer wishes to provide.
- operations to the JPE such that the JPE would serve as the operational The Compact could implement an orderly transition to transfer its successor to the Compact.



# DRAFTING THE JPA FOR PHASE I

- The Town of Provincetown and the Town of Sandwich intend to schedule consideration of the JPE/JPA by their respective Boards of Selectmen in early 2017.
- Compact member Towns on the Cape & Vineyard, including Provincetown A draft JPA is currently under consideration by Town Counsel to several and Sandwich.
- Provincetown and Sandwich Boards of Selectmen for consideration prior to the Compact Governing Board approving a final form of JPA (but after Due to time constraints, a draft of the JPA will need to be provided to review and input from Town Counsel).



# JPA DISCUSSION ITEMS

Transition from Phase II to Phase III of the JPE

determine whether a revised Aggregation Plan or some other notification/filing is required for the Compact when fully operational as the JPE. Guidance from the Department of Public Utilities ("DPU") is necessary to

Trigger of transition – how many Compact members must join the JPE for the transition to Phase III to commence? The transition will be over a period of time such that Compact members will be informed of the ultimate end date to consider joining the JPE.

If a Compact member municipality does not wish to join the JPE, there are two options available to the municipality: In order to continue operating as a municipal aggregator, the municipality would need to petition the DPU in accordance with state law for approval of its own aggregation plan and for approval of its own energy efficiency plan.

If the municipality does not petition DPU for this approval, customers in the Eversource will deliver energy efficiency programs within the municipality. municipality will default to Eversource basic service power supply and

### 2016 Budgeted (Based on 2016 Planned)

PRIJAMA   Randenilal   STAT   STAT	C 17 37 6 64 3	1 477 604	۸	7.054.275	8	77.709 959	-	400 064	•	2 4 4 4 4 4		Charle Total
PRASE   PRAS	\$ 50,000		*	10,000	\$	+0,000	~		~	<b>.</b> (5)	5	C3g - C&I R&D and Demonstration
PASA   PATA			8	60,000	~	*5	_	20,000	46	2	s	C3f - C&l Workforce Development
PASA   PATA			~	×	S		-	6.821	45	30,438	S	C3e - C&I Sponsorships & Subscriptions
PRASE   PRINCE   PRASE   PRINCE   PRASE   PRINCE   PRIN			~		~	* 0	-		45		<b>S</b>	C3d - C81 EEAC Consultants
PPBEA   PPBE			\$		\$	**	₩.	22	5	97,530	\$	C3c - C8I DOER Assessment
PPBAN   PPBA			8	ı	*	*	~		45	8,909	\$	C3b - C8i Statewide Database
PPBEA   PPBE			8	,	49	134	_	75,299	45	松	\$	C3a - C8I Statewide Marketing
PPBA   Phreing   PPBA   Phreing   Incentions   STAT   ENV   100   PPBA   Phreing   Incentions   STAT   ENV   100   PPBA   Phreing   Incentions   STAT   ENV   STAT   ENV   STAT   ENV   STAT   STAT   STAT   ENV   STAT	Mary S	255 F 75	\$	70,000	\$	40,000	-	102,120	5	136,877	5	- C&I Hard-to-Measure
PREA   Parketing   Incentives   STAT   EHY   Incentives   STAT   EHY   Incentives   STAT	L	-	8	141,206	s	1,385,820	-	8,781	45	91,688	5	C2d - C&I Upstream Ughting
PRIA   Price   Price		-	~	231,700	W	427,406	_	23,905	5	40,776	5	C2c - C&I Multifamily Retrofit
PREA   Parketing   Incentives   STAT   EHY   Incentives   STAT   EHY   Incentives   STAT		-	~	674,040	\$	4,221,754	-	58,326	5	295,760	*	C2b - C&I Small Business
PREAD   Parketing   Incentives   STAT   EHY   Incentives   STAT   EHY   Incentives   STAT		+	~	365,059	55	2,504,305	-	51,702	5	174,387	5	C2a - C&l Existing Building Retrofts
PREA   Parketing   Incentives   STAT   EHY   Incentives   STAT   EHY   Incentives   STAT	0	-	\$	1,412,005	44	8,539,285	-	142,714	*	602,611	45	- C&I Retrofit
PPBA   Principle   PPBA   Principle   Incentives   STAT   EPY   10	\$ 609,938	23,990	~	53,597	5	494,180	-	5,162	5	33,010	50	Clb - C& Initial Purchase & End of Useful Life
PPBAA   Planketing   Incentives   STAT   EPV   100	\$ 1,069,334	42,058	5	240,510	~	723,350	<del></del>	5,543	*	57,873	  ••	C1a - C&l New Buildings & Major Renovations
PPBA   Prieting   Incentives   STAT   EPY   10   Thole House   STAT   State   STAT   State	6	$\leftarrow$	5	-	5	1,217,530	-	10,704	50	90,884	*	- C&I New Construction
PPBAN   Parketing   Incentives   STAT   EMV   10	1	-	5	1,776,112	45	9,796,815	-	255,539	*	830,371	*	Commercial & Industrial
PPBAA   Ptarketing   Incentives   STAT   EMV   10	l	┼—	-		5		-	2,052	5	9,348	*	B2e - Low-Income Sponsorships & Subscriptions
Program			-		5	.4.	5	-	5	36,070	5	B2d - Low-Income Energy Affordability Network
Program			5		~	,	S	,	50	29,381	•	82c - Low-Income DOER Assessment
PPBA   Parketing   Incentives   STAT   EHV   Incentives   STAT   EHV   Incentives   STAT   EHV   Incentives   STAT   STAT   EHV   Incentives   STAT   STAT			~		~	*	5		5	2,684	5	82b - Low-Income Statewide Database
PPBA   Parketing   Incentives   STAT   EHV   Incentives   STAT   EHV   Incentives   STAT   EHV   Incentives   STAT   Incentives   STAT   EHV   Incentives   STAT   STAT   EHV   Incentives   STAT   STAT   STAT   EHV   Incentives   STAT   ST		,	8		~		-	22,684	5	2	40	82a - Low-Income Statewide Marketing
Program	1	The Course	5	St. Deliberation	\$	D4230934	$\leftarrow$	24,736	5	77,483	•	- Low-Income Hard-to-Measure
Program		-	5	182,593	8	912,420	-	6,485	50	58,641	•	B1b - Low-Income Multi-Family Retrofit
PPBA   PPBA   Ptarketing   Incentives   STAT   EMV   Incentives   STAT   STAT		-	4	535,701	\$	1,933,450	-	22,670	44	132.659	•	81a - Low-Income Single Family Retrofit
Program	\$ 3,938,279	153,661	5	-	*	2,845,870	-	29,155	*	191,300	\$	- Low-Income Whole House
Program         PPEA         Marketing         Incentives         STAT         EMV         10           Whole House         \$ 1,268,568         \$ 477,634         \$ 14,564,274         \$ 4,559,869         \$ 769,948         \$ 21           Whole House         \$ 815,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 12           Intal New Construction         \$ 23,099         \$ 6,994         \$ 31,481         \$ 83,011         \$ 16,370         \$ 16,318         \$ 12,017         \$ 12,017         \$ 12,017         \$ 12,017         \$ 12,017         \$ 12,017         \$ 12,017         \$ 11,182         \$ 11,182         \$ 11,182	53	-	\$	718,294	\$ 10	2,845,870	-	53,890	4	268,783	\$	- Low-Income
PPEA   Marketing   Incentives   STAT   EMV   Incentives   STAT   STAT   EMV   Incentives   STAT   STAT   EMV   Incentives   STAT   EMV   Incentives   STAT   EMV   STAT   STAT   EMV   STAT   STAT   EMV   STAT	\$ 25,000		~		~		_	25,000	*		\$	A3i - Residential Education
Program         PPEA         Marketing         Incentives         STAT         EMV         10           whole House         5 1,268,568         \$ 477,634         \$ 14,566,274         \$ 4,559,869         \$ 769,948         \$ 21           maid New Construction         \$ 815,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11           maid Home Energy Services - Measures         \$ 38,042         \$ 23,099         \$ 427,406         \$ 121,702         \$ 27,174         \$ 10,548,164         \$ 380,1241         \$ 616,118         \$ 11           maid Home Energy Services - Measures         \$ 656,565         \$ 22,831         \$ 9,634,746         \$ 1,888,715         \$ 27,174         \$ 1,888,715         \$ 500,378         \$ 11           maid Home Energy Services - Program         \$ 66,091         \$ 3,6329         \$ 147,706         \$ 1,897,128         \$ 61,014         \$ 1,897,128         \$ 61,014         \$ 1,897,128         \$ 61,014         \$ 1,897,128         \$ 61,014         \$ 1,897,128         \$ 11,182         \$ 11,182         \$ 11,182         \$ 11,182         \$ 11,182         \$ 11,182         \$ 11,182         \$ 11,182         \$ 11,182         \$ 11,182         \$ 11,182         \$ 11,182         \$ 11,182         \$ 11,182         \$ 11,182         \$ 11,182         \$ 11,182 </td <td></td> <td>L</td> <td>*</td> <td>-</td> <td>~</td> <td>22,500</td> <td>-</td> <td>3,500</td> <td>45</td> <td>(e)</td> <td>ys.</td> <td>A3h - Residential R&amp;D and Demonstration</td>		L	*	-	~	22,500	-	3,500	45	(e)	ys.	A3h - Residential R&D and Demonstration
Program         PPEA         Marketing         Incentives         STAT         EMV         10           Whole House         5 1,268,568         \$ 477,634         \$ 14,564,274         \$ 4,559,869         \$ 769,948         \$ 21           Whole House         \$ 981,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11,110           Inial New Construction         \$ 23,099         \$ 6,694         \$ 321,491         \$ 83,011         \$ 616,118         \$ 11,110           Inial Home Energy Services - Measures         \$ 656,565         \$ 92,833         \$ 9,614,746         \$ 1,888,725         \$ 500,378         \$ 11,102           Inial Home Energy Services - RCS         \$ 86,091         \$ 36,529         \$ 147,746         \$ 1,888,725         \$ 500,378         \$ 11,102           Products         \$ 86,091         \$ 16,159         \$ 146,531         \$ 110,675         \$ 11,102         \$ 11,102           Products         \$ 217,054         \$ 139,010         \$ 3,145,610         \$ 520,041         \$ 11,102         \$ 11,102           Inial Consumer Products         \$ 18,887         \$ 166,139         \$ 1,497,128         \$ 13,724         \$ 123,435         \$ 10,004         \$ 62,272         \$ 13,724         \$ 13,724         \$ 13,724         \$ 13,724			~	19,600	~	100	٠,		۰۰	(X)	~	A3g - Residential Workforce Development
Program         PP&A         Marketing         Incentives         STAT         EMV         10           Whole House         \$ 1,268,568         \$ 477,634         \$ 14,566,274         \$ 4,539,869         \$ 769,948         \$ 21           Whole House         \$ 815,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11           Intal New Construction         \$ 23,099         \$ 6,994         \$ 321,481         \$ 83,011         \$ 16,370 <td< td=""><td>_</td><td></td><td>*</td><td>99.468</td><td>45</td><td>B\$0,000</td><td>_</td><td>11,532</td><td>*</td><td>53,945</td><td>**</td><td>A3f - Residential HEAT Loan</td></td<>	_		*	99.468	45	B\$0,000	_	11,532	*	53,945	**	A3f - Residential HEAT Loan
Program         PP&A         Marketing         Incentives         STAT         EMV         10           Whole House         5 1,268,568         \$ 477,634         \$ 14,566,274         \$ 4,539,869         \$ 769,948         \$ 21           Whole House         5 815,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11           Intal New Construction         \$ 23,099         \$ 6,994         \$ 321,481         \$ 83,011         \$ 163,70         \$ 11,370         \$ 11,370         \$ 11,374         \$ 10,548,164         \$ 3,801,241         \$ 163,70         \$ 11,370         \$ 11,374         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11,370         \$ 11,374         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11,370         \$ 11,474         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11,370         \$ 12,704         \$ 3,21,401         \$ 27,774         \$ 27,774         \$ 27,774         \$ 27,774         \$ 11,474         \$ 10,548,745         \$ 10,877         \$ 11,474         \$ 10,474         \$ 10,474         \$ 10,474         \$ 11,474         \$ 10,474         \$ 11,474         \$ 10,474         \$ 11,474         \$ 10,474         \$ 11,474         \$ 11,474         \$ 11,474         \$ 11,474         \$ 11,474         \$ 11,474			8		8	40	_	10,127	~	23,827	~	A3e - Residential Sponsorships & Subscriptions
Program         PP&A         Marketing         Incentives         STAT         EMV         10           Whole House         5 1,268,568         \$ 477,634         \$ 14,566,274         \$ 4,539,869         \$ 769,948         \$ 21           Whole House         5 815,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11           Indal New Construction         \$ 23,099         \$ 6,994         \$ 31,481         \$ 83,011         \$ 163,70         \$ 163,70         \$ 163,70         \$ 163,70         \$ 163,70         \$ 163,70         \$ 27,74	-	-	*		۰۰	*		Ç	"	*:	~	A3d - Rusidential EEAC Consultants
Program         PPEA         Marketing         Incentives         STAT         EMV         10           Whole House         \$ 1,268,568         \$ 477,634         \$ 14,566,274         \$ 4,559,869         \$ 769,948         \$ 21           Whole House         \$ 815,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11           Indial New Construction         \$ 23,099         \$ 6,994         \$ 30,1481         \$ 83,011         \$ 16,370         \$ 11,482         \$ 11,482         \$ 11,482         \$ 11,482         \$ 11,482         \$ 11,482         \$ 11,482         \$ 11,482         \$ 11,482         \$ 11,482 <t< td=""><td></td><td></td><td>\$</td><td></td><td>\$</td><td>20</td><td>5</td><td>ĢÍ</td><td>5</td><td>145,089</td><td>\$</td><td>A3c - Residential DOER Assessment</td></t<>			\$		\$	20	5	ĢÍ	5	145,089	\$	A3c - Residential DOER Assessment
Program         PPEA         Marketing         Incentives         STAT         EMV         10           Whole House         \$ 1,268,568         \$ 477,634         \$ 14,564,274         \$ 4,559,869         \$ 769,948         \$ 21           Whole House         \$ 815,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11           Indal New Construction         \$ 815,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11           Indal Hunte Energy Services - Measures         \$ 38,342         \$ 23,099         \$ 9,694         \$ 31,701         \$ 21,702         \$ 21,730         \$ 1,717         \$ 1,71         \$ 1,71         \$ 1,71         \$ 1,71         \$ 1,71         \$ 1,71			*		\$	*	5		~	13,253	50	A3b - Residential Statewide Database
Program         PPEA         Marketing         Incentives         STAT         EMV         10           Whole House         \$ 1,258,568         \$ 477,634         \$ 14,566,274         \$ 4,559,869         \$ 769,948         \$ 21           Whole House         \$ 915,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11,182           Indial New Construction         \$ 93,009         \$ 6,94         \$ 30,141         \$ 83,011         \$ 616,118         \$ 11,102           Indial Home Energy Services - Measures         \$ 38,042         \$ 23,992         \$ 427,406         \$ 128,872         \$ 27,174         \$ 1,971,128         \$ 11,072         \$ 27,174         \$ 1,971,128         \$ 11,072         \$ 11,072         \$ 1,971,128         \$ 11,072	П	1.7	~		۳	£20	_	112,017	50	•	\$0	Alla - Residential Statewide Marketing
Program         PP&A         Harketing         Incentives         STAT         EMV         100           Whole House         \$ 1,268,568         \$ 477,634         \$ 14,566,274         \$ 4,539,869         \$ 769,948         \$ 21           Whole House         \$ 815,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11,200           Intal New Construction         \$ 23,099         \$ 6,994         \$ 321,481         \$ 83,011         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370	8	3X - CO XS	5	176,568	\$	872,500	$\vdash$	162,177	5	236,114	45	- Residential Hard-to-Measure
Program         PP&A         Harketing         Incentives         STAT         EMV         100           Whole House         \$ 1,268,568         \$ 477,634         \$ 14,566,274         \$ 4,559,869         \$ 769,948         \$ 21           Whole House         \$ 815,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11           Intal New Construction         \$ 23,999         \$ 6,994         \$ 321,481         \$ 83,011         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         \$ 16,370         \$ 27,174         <		_	\$	231,603	\$	1,622,322	_	85,666	5	108,878	\$	A2c - Residential Lighting
Program         PP&A         Marketing         Incentives         STAT         EMV         10           Whole House         \$ 1,268,568         \$ 477,634         \$ 14,566,274         \$ 4,539,869         \$ 769,948         \$ 21           Whole House         \$ 815,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,18         \$ 11           Intal New Construction         \$ 23,099         \$ 6,994         \$ 321,481         \$ 83,011         \$ 16,370		_	2	160,454	\$	158,788	_	25,736	~	19,365	\$	A2b - Residential Consumer Products
Program         PP&A         Marketing         Incentives         STAT         EMV         10           Whole House         \$ 1,268,568         \$ 477,634         \$ 14,566,274         \$ 4,539,869         \$ 769,948         \$ 21           Whole House         \$ 815,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11           Intal New Construction         \$ 23,099         \$ 6,994         \$ 321,481         \$ 83,011         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 16,370         \$ 27,174         \$ 27,174         \$ 27,174         \$ 27,174         \$ 27,174         \$ 1,888,725         \$ 27,174         \$ 1,888,725         \$			S	190,004	\$	1,364,500	-	27,608	٠,	88,611	\$	A2a - Residential Heating & Cooling Equipment
PPEAD         Marketing         Incentives         STAT         EMV         100           Whole House         \$ 1,268,568         \$ 477,634         \$ 14,566,274         \$ 4,559,869         \$ 769,948         \$ 21           Whole House         \$ 815,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11           Indial New Construction         \$ 23,099         \$ 6,994         \$ 30,118         \$ 83,011         \$ 16,370         \$ 16,370         \$ 10,348,144         \$ 10,348,145         \$ 10,348,145         \$ 10,370         \$ 16,370         \$ 10,348,145         \$ 10,370         \$ 10,3	3	_	\$		5	3,145,610	$\overline{}$	139,010	45	217,054	\$	- Residential Products
PPEA         Marketing         Incentives         STAT         EMV         100           Whole House         \$ 1,258,568         \$ 477,634         \$ 14,564,274         \$ 4,559,869         \$ 769,948         \$ 21           Whole House         \$ 815,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 11,248,164         \$ 3,801,241         \$ 616,118         \$ 11,248,164         \$ 3,801,241         \$ 616,118         \$ 11,248,164         \$ 3,801,241         \$ 616,118         \$ 11,248,164         \$ 3,801,241         \$ 616,118         \$ 11,248,164         \$ 3,801,241         \$ 616,118         \$ 11,248,164         \$ 3,801,241         \$ 616,118         \$ 11,248,164         \$ 3,801,241         \$ 616,118         \$ 11,248,164         \$ 3,801,241         \$ 616,118         \$ 11,248,164         \$ 3,801,241         \$ 616,118         \$ 11,248,164         \$ 3,801,241         \$ 616,118         \$ 11,248,164         \$ 3,801,241         \$ 616,118         \$ 11,248,164         \$ 3,801,241         \$ 616,118         \$ 21,041         \$ 21,041         \$ 21,041         \$ 21,041         \$ 21,041         \$ 21,041         \$ 21,041         \$ 21,041         \$ 21,041         \$ 21,041         \$ 21,041         \$ 21,041         \$ 21,041         \$ 21,041         \$ 21,041         \$ 21,041         \$ 21,041         \$ 21,041		_	*	120,675	S	164,531	-	16.159	~	11,303	s	Ate - Residential Behavior/Feedback Program
Program         PP&A         Harketing         Incentives         STAT         EHV         102           Whole House         \$ 1,768,568         \$ 477,634         \$ 14,566,274         \$ 4,559,869         \$ 769,948         \$ 21,769,768         \$ 21,769,768         \$ 10,548,164         \$ 3,801,241         \$ 616,118         \$ 15,769,768         \$ 15,769,778         \$ 16,778         \$ 17,778         \$ 17,774         \$ 16,778         \$ 17,774         \$ 17,778         \$ 17,774         \$ 17,778         \$ 17,774         \$ 17,778         \$ 17,		_	\$	1,497,128	S	0	$\vdash$	36,529	45	86,091	*	Ald - Residential Home Energy Services - RCS
Program         PP&A         Harketing         Incentives         STAT         EHV         100           Whole House         \$ 1,268,560         \$ 477,634         \$ 14,566,274         \$ 4,559,869         \$ 769,948         \$ 21,760,188         \$ 15,770,188         \$ 15,770,188	\$ 12,753,248	500.378	\$	1,868,725	8	9,634,746	-	92,833	44	656,565	\$	Alc - Residential Home Energy Services - Measures
Program         PPEA         Pharketing         Incentives         STAT         EHV         10th           Whole House         \$ 1,268,568         \$ 477,634         \$ 14,566,274         \$ 4,559,869         \$ 769,948         \$ 21,0           Whole House         \$ 815,400         \$ 176,447         \$ 10,548,164         \$ 3,801,241         \$ 616,18         \$ 15,000,00           miss New Construction         \$ 23,099         \$ 6,994         \$ 321,481         \$ 83,011         \$ 16,370         \$ 16,370         \$ 16,270	\$ 748,556	27,174	\$	231,702	~	427,406	-	23,932	44	38.342	\$	A15 - Residential Multi-Family Retrofit
Program         PPZA         Prarketing         Incentives         STAT         EHV           477,634         \$ 14,566,274         \$ 4,539,869         \$ 769,948	\$ 450,955	16,370	8	83,011	8	321,481	$\vdash$	6,994	45	23,099	\$	Ala - Residential New Construction
Program PP&A Ptarketing Incentives STAT EMV S 1,748,548 \$ 477,634 \$ 14,546,274 \$ 4,559,869 \$ 769,948 \$	3	-	\$	3,801,241	\$	10,548,164	$\overline{}$	176,447	5	815,400	\$	- Residential Whole House
PPEA Marketing Incentives STAT EMV	5.00	-	\$	4,539,869	45	14,566,274	-	477,634	45	1,768,568	\$	- Residential
	1 Dtal 5 74	EMV		STAT	П	Incentives	H	darketing	Ţ	PP&A		rrogerama

### 2016 Actuals through Dec 2016

22,933,603	775,397 \$	775	7 S	3,987,837	40	\$ 15,937,924	40	534,596	in.	1.697.849	s	GRAND TOTAL
27	. 5		7   \$	27	~		5		*	¥1	~	C3g - C&I R&D and Demonstration
1,844			*	1.844	~		5		SQ.		45	C3f - C&i Workforce Development
1,567			۰s		~		u		S	1,567	S	C3e - C&I Spansorships & Subscriptions
			5		~	,	u		s		50	C3d - C&I EEAC Consultants
91,978			so.		~		s		s	91,978	es.	C3c - C&I DOER Assessment
175	- 5		S		~	,	s		\$5	175	s	C3b - C&I Screwide Database
72,163	. 5		\$		~		S	72,163	50	47.	40	C3a - C&I Statewide Marketing
167,755	- 5	SCHOOL	\$	1,871	%	発売の場合の数	•	72,163	49	93,721	\$	C3 - C&l Hard-to-Measure
892,685	30,138 \$	30	\$	103,185	۰	682,022	s	9,387	\$	67,953	45	C2d - C&I Upstream Lighting
178,079	11,807 \$	_	s	33,710	*	98,167	*	4,175	s	30,220	\$	C2c - C81 Multifamily Retrofit
2,068,345	92,107 \$	9	2 \$	318,452	\$	1,405,951	<b>~</b>	32,636	S	219,199	S	C2b - C&I Small Business
2.092.043	62,525 \$	6.	S	342,698	*	1,539,722	<b>~</b>	17,853	5	129,245	~	C2a - C&l Existing Building Retrofit
5,231,152	196,577 \$	196	\$	798,045	8	3,725,862	5	64,050	45	446,617	5	2 - C&l Retrofit
	15,763 \$		5	53,574	50	225,796	<u>~</u>	4,380	w	24,465	5	Cib - Căi înitial Purchase & End of Useful Life
	35,749 \$	ير	8	168,286	5	354,176	<b>~</b>	5,925	45	42.892	45	Cla - C&! New Buildings & Major Renovations
931,006	51,512 \$	S.	\$	221,860	8	379,972	150	10,304	55	67,357	55	- C&I New Construction
	+-	248	-	1,021,776	5	4,305,834	50	146,518	40	607,696	υĭ	- Commercial & Industrial
1			ļ.,		~		<u></u>			ĸ	-	BZe - Low-Income Spansorships & Subscriptions
22 122			w		5		5		55	22,122	5	B2d - Low-Income Energy Affordability Network
			55	,	5		5		55	29,381	5	B2c - Low-Income DOER Assessment
51			55		S		55		5	15	5	B2b - Low-Income Statewide Ontabase
21,709			5		~		S	21,709	55		*	82a - Low-income Statewide Marketing
73 263	. 5	SUSCEPTION	65	Section of	40	SI-MORE SE	50	21,709	95	5),554	55	B2 - Low-Income Hard-to-Measure
765,962	15.375 \$		9	122,299	\$	580,017	Ş	6,932	÷	41,339	45	Bib - Low-Income Multi-Family Retrofit
1,596,994	33,916 \$	Le Co	\$	212,899	50	1,238,093	S	18,570	S	93,517	\$	Bla - Low-income Single Family Recrofic
2,362,956	49,291 \$	45	8	335,198	40	1,818,110	\$	25,501	45	134,856	\$	81 - Low-Income Whole House
2,436,219	49,291 \$	49	\$	335,198	\$	1,818,110	Ş	47,211	\$	186,410	\$	- Low-Income
16,236	,		s		\$		\$	16,236	s		Ş	A31 - Residential Education
26	٠ \$		\$	26	~		~		5		٠,	A3h - Residential R&D and Demonstration
3,778			\$	3,778	4		*		<u>ب</u>		\$	A3g - Residential Workforce Development
729,609	•		\$	82,028	\$	600,853	s,	7,577	5	39,151	s,	A37 - Residential HEAT Loan
374	٠		5		۰۰		55		5	374	Ş	A3e - Residential Sponsorships & Subscriptions
	1 55		5		~	æ	<u>~</u>		S		S	A3d - Residential EEAC Consultants
114,662			5		55		55		55	114,662	S	A3c - Residential DOER Assessment
			~		~		<u>ب</u>		<u>~</u>	257	w	A3b - Residential Statewide Database
107,139			<b>~</b>		~	*	w.	107,139	~	,	\$	Alla - Residential Statewide Marketing
972,080	45	090346	8	85,832	\$	600,853	S	130,952	55	154,442	8	3 - Residential Hard-to-Measure
1.676.836	151,653 \$	15	₩ ₩	167.956	~	1,204,989	'n	73,219	<u>~</u>	79,018	~	AZc - Residential Lighting
254,144	4.007 \$	l,	×	76,977	~	136,866	<u>ب</u>	22,240	~	14,054	45	AZb - Residential Consumer Products
1,333,391	62,632 \$	63	~	136,503	~	1,053,939	~	15,863	~	64,454	45	AZa - Residential Heating & Cooling Equipment
3,264,37	218,292 \$	216	7 %	381,437	45	2,395,794	55	111,322	4	157,526	45	12 - Residential Products
157,523	7,715 \$		₩.	62,608	~	77,757	S.	1,239	-55	8,203	~	Ale - Residential Behavior/Feedback Program
903,104	18,172 \$	=	~	B09,561	~		45	12,891	y.	62,480	\$	Ald - Residential Home Energy Services - RCS
7,917,934	173,420 \$	173	7 5	1_149,447	٠,	6.041,761	٠,	76,805	S	476,501	٠,	Alc - Residential Home Energy Services - Measures
342,710	19,182 \$	-5	5	54,641	\$	236,856	۰,	4,203	2	27,827	٠,	Alb - Residential Multi-Family Retrofit
609,749	41,235 \$	<u>+</u>	8	87,338	\$	460,957	~	3,456	~	16,764	S	Ala - Residential New Construction
9,931,020	259,725 \$	259	*	2,163,594	\$	6,817,332	s	98,594	S	591,775	Ş	AI - Retidential Whole House
14,167,471	478,017 \$	478	\$	2,630,863	s	9,813,980	\$	340,868	\$	903,744	44	A - Residential
10mm	Н	EMV	Н	STAT		Incentives		Marketing	Н	PP&A	Т	Program
				P	Costs	PΑ	1				1	

PA Costs

Notes	initial contract was done in 1/1/15, new contract (in place of 2nd amendment) to accommodate change with Barnstable County.	initial contract was for FY17, new contract replaces in order to carry through the rest of the FY	new contract to accommodate change with Barnstable County	new contract to accommodate change with Barnstable County	new contract to accommodate change with Barnstable County	new contract to accommodate change with Barnstable County	new contract to accommodate change with Barnstable County	initial contract was done in 7/2012, new contract (in place of 4th amendment) to accommodate change with Barnstable County.
P. COCOLIS APPROVED/DENIED	1/11/2017	1/11/2017	1/11/2017	1/11/2017	1/11/2017	1/11/2017	1/11/2017	1/11/2017
COMPETITIVELY PROCURED YES/NO	Yes	No	yes	yes	sak	yes	yes	yes
PURPOSE	Statwide Marketing Services	EE & P5 Consulting	andilary services	ancillary services	municipal retrofit	ancillary services	ancillary services	QA/QC for C&I Upstream Lighting & HVAC
TERM	1/1/17-12/31/17	1/1/17 - 6/30/17	1/15/16-12/31/18	1/15/16-12/31/18	2/1/16 - 12/31/17	1/15/16-12-31/18	1/15/16-12/31/18	1/1/17-6/30/17
AMOUNT OF AMENDMENT			n/a	u/u		e/u	u/u	
MOUNT OF CONTRACT	210,000.00	12,973.89	u/a	e/u	1,429,453.00	e/u	u/a	15,000.00
AM	₩.	v,			vs			v
VENDOR NAME	Ke iher Samets Volk	Stephan Wollenburg	Galligan Energy Consulting, Inc.	Peregrine Energy Group	RISE Engineering	TRC Energy Group	Demand Management Institute	CMC Energy Services



### Cape Light Compact P.O. Box 427, Barnstable, MA 02630

1.800.797.6699 Fax: 508.362.4136 capelightcompact.org

January 11, 2017

TO:

Cape Light Compact Governing Board

FROM:

Maggie Downey, Administrator

Austin Brandt, Power Supply Planner

Re:

January 6<sup>th</sup> Communication from Mr. Powicki Regarding the Cape Light

Compact's Renewable Power Supply Offering

In his January 6, 2017 CIRENEW email blast, attached, Mr. Powicki made several false and misleading statements regarding the Cape Light Compact's renewable power supply program. In his article, Mr. Powicki manipulates data to the detriment of the Compact and makes statements that are factually inaccurate. Since last Friday, Mr. Powicki has circulated his allegations to many different organizations in what can only be interpreted as another effort to discredit and undermine the efforts of the Cape Light Compact, as he has done frequently in the past. His apparent animus for Compact staff and the Board are evident in this article. We wanted to take this opportunity to correct the record and provide you with information that you can use to address Mr. Powicki's allegations.

### **Inaccurate Statements Regarding Town Meeting votes:**

Mr. Powicki's article claims that the Compact promised Town Meeting voters that the Compact would have the "least expensive" electricity. No such claim was made at Town Meeting, as evidenced in the attached May 4, 1998 Brewster Town Meeting Article. For the past fifteen years, the Compact has operated in a manner consistent with that vote, which states the Compact member towns resolve "to seek lower electric rates in a competitive electric market." The Town Meeting vote makes no promises or guarantees that the Compact would have the lowest electric rates. This was intentional because the Compact understood that electricity is a market commodity and therefore the Compact could not promise to deliver the lowest price electricity at all times. Mr. Powicki seems to be under the impression that the Compact is, or should be, in a position to automatically procure the lowest-priced electricity for its customers. This is not the case - the Compact is simply one participant in the regional electricity market, and thus subject to the same rules and market conditions as all other market participants. The power of aggregation is not to beat the market, but to bring the weight of many customers to bear in supply contract negotiations. In this regard, the Compact has been successful in securing power supply contracts that protect its customers with strong terms and conditions that are generally unavailable to an individual customer, except through Basic Service. Mr. Powicki's allegations demonstrate a lack of understanding of electricity markets and the purpose of municipal aggregation, and his blatant disregard of facts.

### Manipulation of Data in an Attempt to Undermine the Cape Light Compact:

The Cape Light Compact has been offering customers a competitive supply option since January of 2002. Mr. Powicki claims that the "average Cape Light Compact customer paid about

\$325.00 relative to NSTAR/Eversource service." In calculating this number Mr. Powicki focuses on a specific period of time, 10 years, and fails to include the complete data set and calculate the actual number. His manipulation of pricing data, which is all publicly available, fails to present the actual cost/savings for a residential customer, and appears to be a deliberate attempt to show the Compact in a negative light. In reality, an average residential customer participating in the Compact's power supply program from January 2002 through June of 2017 will have paid \$95.51 in total above Eversource's basic service rate for this 15-plus-year period. This equates to less than \$0.52 more per month for each of the 185 months.

### Cape Light Compact's 2017 100% Renewable Energy Offering:

Mr. Powicki criticizes the Compact for having 100% of its "all-requirements electricity" supplied to Compact customers sourced from a "fossil fuel-heavy market mix." His statements on this issue are disingenuous and misleading. The basis of this criticism is centered on the distinction between the Renewable Energy Certificates (RECs) and the electricity itself.

RECs are individually-tracked certificates that represent the environmental qualities of electricity produced by renewable resources. For every 1,000 kilowatt hours (kWh) of electricity that a renewable generator produces, it also produces one REC, which is tracked and traded independently of the electricity itself. Since it is impossible to track the ultimate use point of the renewably-produced electrons themselves, RECs are used to track the production of renewable energy at its source, and then the ultimate "use" of the renewable energy through retirement of the certificate. In order for one to be considered to be using renewable electricity, they must retire RECs in an amount equal to their usage (e.g., a person using 5,000 kWh per year must retire 5 RECs per year to have used 100% renewable electricity). This concept of what constitutes renewable energy and been upheld time and time again by the Federal Trade Commission, the Association of Attorneys General, and by the state of Massachusetts itself through its requirement that suppliers obtain RECs in order to meet the renewable electricity procurement requirements set forth by the Massachusetts Renewable Portfolio Standards (RPS).

What Mr. Powicki is criticizing in this statement is the fact that the Compact's supplier is purchasing the <u>electricity</u> for the Compact's customers from the regional electricity market, which is operated by ISO New England. The statement includes a link to the ISO New England resource mix, which shows the different resources that provide power to the electric grid, and is indeed comprised of mostly fossil-fuel resources. However, what Mr. Powicki fails to mention is that every entity interconnected to the grid draws at least portion of its electricity from these sources – the only way you can avoid using electricity from the regionalized grid (and thus, from the market mix of resources) is to disconnect entirely from the grid. This is an admirable goal, but an impossibility for any retail supplier selling reasonably-priced electricity to grid-tied customers, as the Compact does. The Compact is not aware of any retail supplier, including Eversource basic service, operating in Massachusetts offering electricity provided from somewhere other than the regional electric grid.

Furthermore, Mr. Powicki contradicts himself by criticizing the Compact's (accurate) claim of providing 100% renewable electricity by matching all usage which RECs while still purchasing market-mix power from the regional grid, but then going on to uphold the concept of RECs and their value in his mention of other Massachusetts green aggregations. It is also worth noting that

the green aggregations praised by Mr. Powicki in his article are acquiring the additional 5% MA Class 1 RECs through a non-profit REC aggregator that has long-term REC contracts with renewable generators, which enables them to provide low-cost Class 1 RECs. This allows these communities to have a higher MA Class 1 REC content at a reasonable price while directly supporting renewable energy generators. However, Mr. Powicki has been a vocal critic of the Compact's entering in to these types of long-term REC contracts in the past.

The Compact's power supply, provided by NextEra Energy Services, will be 100% renewable because the supplier will acquire and retire enough RECs on an annual basis to meet 100% of all Compact customers' usage. A further criticism from the article is the fact that most of these RECs will be voluntary, out-of-state RECs that are not providing additionality, i.e., the retirement of which are not driving the development of new renewable resources. While it is often true that the retirement of voluntary RECs does not provide additionality in and of itself, the Compact board and staff only decided to use voluntary RECs because NextEra agreed to direct all proceeds from the sale of those RECs in to the EarthEra<sup>TM</sup> Renewable Energy Trust, a third-party-administered trust that ensures 100% of all Trust funds are invested in new renewable energy projects in the United States, thus ensuring additionality.

The article then goes on to allege that this arrangement to direct funds to new renewable resources is "lining the pocket" of NextEra with "\$3M in additional annual revenue," and that "\$6M in ratepayer funds will be siphoned away to the benefit of NextEra shareholders by helping this large corporation expand its continent-wide asset base, rather than applied to provide additionality or better yet to deliver localized benefits to Cape and Vineyard residents, businesses, and other consumers." These are further examples of incorrect and misleading statements. The only additional revenue collected by NextEra is revenue from the sale of the voluntary EarthEra™ RECs (less than 0.1 cents/kWh), which will be placed in the EarthEra™ Trust. However, this is a relatively small portion of the approximately \$3M of Compact power supply customer funds that will be placed in to the Trust. Most of \$3M is actually NextEra's supplier and retail fees, which it agreed to place in the Trust to be put towards new renewable energy projects as part of the power supply contract negotiations. To be clear, these fees are built into the price and would have been paid by the consumer even if the Compact did not go 100% renewable. In this instance, these fees are being redirected to the EarthEra<sup>TM</sup> Renewable Energy Trust and are guaranteed to be used for the development of new renewable energy projects in North America, with an effort to direct those funds to projects in New England if they become available.

While it is also true that the money is ultimately used by NextEra to develop new renewable resources that will be owned by NextEra, this is irrelevant to the fact that these new renewable projects will ultimately be offsetting carbon-based resources, and thus mitigating the climate change impacts of electricity production. Even though these projects may not be developed locally on Cape Cod and Martha's Vineyard, climate change is a global, not just a local, problem. The Compact is providing a way for local electricity customers to address this global problem.

It is ironic that Mr. Powicki disparages the Compact's increased purchase of Renewable Energy Certificates because, in a meeting with him and other members of Self Reliance in 2014, while he was President of Self Reliance, he encouraged community choice aggregators to exceed the Renewable Portfolio Standard (RPS) while maintaining affordability, which is exactly what the Compact's renewable energy supply offer is now doing. Exceeding the RPS standard by 1% and contributing to the development of new renewable energy generation, regardless of where the generation is located, is a step forward in the battle against climate change.

In summary, Cape Light Compact's new renewable power supply program is going above and beyond its original purpose to seek lower electric rates – not only is the Compact and its power supply customers playing a role in addressing climate change by purchasing 100% renewable electricity and helping fund new renewable energy projects, but it is doing so at a reasonable cost – less than an additional 0.1 cents/kWh. This means it will be less expensive than Basic Service for the first half of 2017. While Basic Service is the most comparable product to the Compact's supply, it is not 100% renewable electricity, and it is not driving the development of renewable energy by going above and beyond RPS requirements and directly funding new projects, like the Compact is doing in cooperation with NextEra Energy Services. Doing this at a reasonable cost exemplifies the power and purpose of municipal aggregation – leveraging the aggregated purchasing power of its customers in negotiations with suppliers to provide better value and consumer protections to customers.

Enclosures

### Cape Light Compact Aggregation Goes Green - 100% Renewable Electricity or 1% Solution?

At a December 7 media event, town and county officials announced that the Cape Light Compact (CLC) municipal aggregation would be providing 100% renewable electricity to local electricity consumers (<u>press release</u>). Representatives of the <u>Cape Cod Climate Change Collaborative</u> and <u>Cape & Islands Self-Reliance</u> expressed unqualified support for this new offering at the media event.

The "100% Renewable" offering comes through the CLC aggregation's new business partner, NextEra Energy Services. This signals a welcome departure of long-time CLC power supplier ConEdison Solutions (CES). Over some 10 years of CES service, the average CLC residential consumer experienced excess supply costs of about \$325 relative to NStar/Eversource service - despite the foundational promise of "least expensive" electricity accepted by Town Meeting voters who authorized individual towns to form municipal aggregations. With CES, "best terms and conditions" became the CLC procurement metric - and look who enjoyed those terms and conditions: CES. Now the CLC aggregation power supply avers to be "going green."

Claiming that the new 2-year contract with NextEra will deliver "100% Renewable Electricity" is greenwashing. Yes, NextEra Energy Services is a subsidiary of the leading US owner of wind and solar energy capacity. However, 100% of the all-requirements electricity supplied through the CLC aggregation will continue to be based on a fossil-fuel-heavy market mix of power generated throughout New England and imported from New York and Canada. Some energy, capacity, and other services could come directly from NextEra generating assets within New England, which include gas-fired plants in MA, oil-fired plants in Maine, and Seabrook nuclear but no wind or solar projects. So the power supply itself will certainly not be "100% Renewable."

To meet the state Renewable Portfolio Standard (RPS), NextEra also will need to purchase renewable energy certificates (RECs) and other attribute-based commodities equivalent to more than 20% of total electricity sales to CLC consumers, in megawatt-hours (MWh). These RECs must be certified as Class I, meaning that they are based on renewable electricity supplied within the New England electricity marketplace. The CLC aggregation refuses to disclose the sources of RECs procured for RPS compliance purposes.

With the "100% Renewable" offering, the CLC aggregation and NextEra are not only meeting the RPS but also matching every single MWh sold with a REC. However, only 1% represents beyond-RPS REC purchasing of Class 1 RECs. About 700 kW of PV capacity funded in part by Cape and Vineyard ratepayers will chip in some of these RECs, but the majority will be generated by gas-fired turbines at the operating Crapo landfill in New Bedford. The Sierra Club has expressed opposition to this form of renewable energy, in that landfill operators may juice landfill cells and continue burying compostable or recyclable

organics to guarantee a steady fuel supply. Still, taking these Class I RECs off the RPS compliance market will provide 1% "additionality" by helping support deployment of new renewable projects in New England.

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The overwhelming majority of RECs underlying the "100% Renewable" offering are to be purchased from NextEra-owned wind and solar projects deployed in areas where these RECs have no additionality value - beyond lining the pocket of the owner with additional profit. In this instance, NextEra has promised that the \$3M in additional annual revenue it expects to collect from Cape and Vineyard ratepayers will be placed into a trust, which NextEra then promises to invest in developing new renewable energy projects in North America. At the December 7 event, NextEra representatives noted that the funds would not be applied to support offshore wind projects developed in local waters, as they view the technology as not commercially viable.

In conclusion, this is a 1% solution, in two different ways. First, it falls well short of green aggregations in Massachusetts communities like Dedham, which has committed to 5% additionality based on beyond-RPS Class I RECs from wind and solar projects in New England. Second, some \$6M in ratepayer funds will be siphoned away to the benefit of NextEra shareholders by helping this large corporation expand its continent-wide asset base, rather than applied to provide additionality or better yet to deliver localized benefits to Cape and Vineyard residents, businesses, and other consumers.

Achieving "100% Green Power Production" as envisioned through CIRenew - based on renewable energy output relative to electricity consumption, not RECs - is no easy challenge, but now is not the time to lower sights or compromise principles. The good news is that consumers able to install solar power systems can expect full return on investment within about 5 years, and that the electricity marketplace offers a growing diversity of options for people who cannot host or afford solar. Also, the state's utilities are scheduled to procure 400 MW of offshore wind later this year, helping pave the way for bulk renewable energy production from future projects south of the Vineyard.



### **Town of Brewster**

2198 MAIN STREET

JOAN K. COLE TOWN CLERK NOTARY PUBLIC

OFFICE OF:

BREWSTER, MASSACHUSETTS 02531-1898

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To Whom It May Concern:

This is to certify that at the Special Town Meeting held May 4, 1998, with a quorum being present, the following article was adopted unanimously.

**ELECTRIC DEREGULATION** 

ARTICLE 8.

To see if the Town will vote to adopt the following resolution:

### RESOLUTION TO SEEK LOWER ELECTRIC RATES IN A COMPETITIVE ELECTRICITY MARKET

WHEREAS the Commonwealth of Massachusetts is engaged in a process to establish a competitive market place through deregulation and restructuring of the electric utility industry, and;

WHEREAS the citizens of Brewster in Barnstable County have a substantial economic, environmental, and social interest at stake, and;

WHEREAS the town's residential and business consumers are interested in lowering their electric rates and improving service;

BE IT THEREFORE RESOLVED that Town Meeting members of Brewster, grant the Board of Selectmen authority to participate in a contract for power supply independently or in joint action with other towns. If such contracts are effected individually, consumers would regain the option not to participate and to choose any alternatives they desire.

or to take any other action relative thereto.

(Board of Selectmen)

MOTION: I move that the Town vote to approve Article 8 as printed in the warrant.

ACTION: ADOPTED UNANIMOUSLY

A TRUE COPY ATTEST:

Joan K. Cole Town Clerk

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