



Cape & Vineyard Electric Cooperative, Inc.
ANNUAL REPORT FISCAL YEAR 2013
July 1, 2012 - June 30, 2013

Prepared September 2013

Cape & Vineyard Electric Cooperative, Inc.
P.O. Box 427 / 3195 Main Street
Barnstable, MA 02630
508-375-6648
www.cvecinc.org



Table of Contents

<u>I. EXECUTIVE SUMMARY.....</u>	3
<u>II. INTRODUCTION.....</u>	3
A. Cape & Vineyard Electric Cooperative, Inc. - History.....	3
B. Cape & Vineyard Electric Cooperative, Inc. - Members.....	4
<u>III. OFFICERS, BOARD OF DIRECTORS, AND STAFF.....</u>	4
A. Officers.....	4
B. Board of Directors.....	4
C. Executive Committee.....	5
D. Staff and Consultants.....	5
<u>IV. Fiscal Year 2012/2013</u>	
<u>ACCOMPLISHMENTS.....</u>	6
A. Summary of Activities.....	6
B. Detailed Energy Benefits from CVEC Solar PV Initiatives Rounds 1 & 2...7	
C. CVEC Photovoltaic Initiative Round 1.....	8
D. CVEC Photovoltaic Initiative Round 2.....	9
E. CVEC Initial Round.....	12
F. Study on Avoided Cost of Solar PV on Cape Cod, conducted by Synapse Energy Economics, Inc.....	12
G. Strategy Sessions 2013.....	14
<u>V. Fiscal Year 2012/2013 Financials.....</u>	15
A. CVEC Preliminary Balance Sheet.....	15
B. CVEC Preliminary Income Statement for Fiscal Year 2013.....	16



I. Executive Summary

Since its organization in 2007, the Cape & Vineyard Electric Cooperative, Inc. (“CVEC”) has worked to develop renewable energy projects in support of CVEC’s goals and objectives of developing and/or owning renewable electric generation facilities and procuring and/or selling long term electric supply or other energy-related goods or services at competitive prices to help stabilize electric rates for CVEC member communities. This Annual Report provides a recap of CVEC’s activities and operations in fiscal year 2013.

II. Introduction

A. Organizational History

CVEC was formed out of a strategic planning process commissioned and undertaken by the Cape Light Compact (“CLC”). CVEC was organized in 2007 with three members: CLC, Barnstable County, and the Town of Barnstable. Currently, CVEC has 20 members consisting of 17 towns, Barnstable and Dukes County, and the CLC. CVEC's long-term goal is to develop electric generation projects or contracts to stabilize electric rates for all CLC customers. At the time CVEC was formed, the CLC and its members did not have the authority to develop electric generation projects. CVEC was formed under Massachusetts General Laws, c. 164, §136. This statute provides for the establishment of energy cooperatives. Section 136 cooperatives can, among other things: (1) purchase and own generation, transmission and other projects and property; (2) enter into contracts and incur liabilities; (3) borrow money, issue notes and bonds; (4) enter into private/public collaboration (contractual); (5) purchase, sell and distribute energy; and (6) sell electricity to any consumer within CVEC member communities.

CVEC’s goals and objectives include developing and/or owning renewable electric generation facilities and procuring and/or selling long term electric supply or other energy-related goods or services including renewable energy certificate contracts at competitive prices to member communities and consumers within member communities.

B. Current CVEC Members

Since its inception CVEC has grown from its three founding members (County of Barnstable, Cape Light Compact and Town of Barnstable) to its current twenty members. The subsequent CVEC members include Dukes County, Town of Brewster, Town of Harwich, Town of Dennis, Town of Tisbury, Town of Bourne, Town of Eastham, Town of Sandwich, Town of Provincetown, Town of Mashpee, Town of Edgartown, Town of Orleans, Town of Yarmouth, Town of Falmouth, Town of Chatham, Town of West Tisbury, and Town of Oak Bluffs.

III. Officers, Board of Directors and Staff

Listed below are the Directors and Staff as of the end of the fiscal year. Directors who joined CVEC during the course of the fiscal year are so noted with an asterisk (*). A special thank you goes to those officers, directors and staff who left CVEC during the course of the fiscal year; Barbara Austin (Staff), Margaret Downey (Clerk, Cape Light Compact), Martin McDonald (Eastham), Paul O'Keefe (Bourne), and Tim Twombly (West Tisbury).

A. Officers (As of June 30, 2013)

John C. Checklick, Falmouth, President
Charles McLaughlin, Barnstable, Vice-President
E. Mark Zielinski, Barnstable County, Treasurer
Chuck Hanson, Brewster, Clerk

B. Board of Directors (As of June 30, 2013)

Joe Soares*, Cape Light Compact
Larry Cole, Harwich
Rick White, Dennis
Peter Cabana, Dukes County
Paul O'Keefe, Bourne
Pam Dolby*, Edgartown
Joseph Bayne*, Eastham
William Straw, Tisbury
Richard Toole, Oak Bluffs
Michael Richardson, Mashpee
David Gardner, Provincetown
James Killion, Sandwich
Steve Gavin, Yarmouth

John Scott, Chatham
John Jannell, Orleans
Jennifer Rand*, West Tisbury

C. Executive Committee (As of June 30, 2013)

John C. Checklick, Falmouth
Charles McLaughlin, Barnstable
E. Mark Zielinski, Barnstable County
Joe Soares, Cape Light Compact
Peter Cabana, Dukes County

D. Staff and Consultants

BCK Law, P.C., Legal Counsel
Ron Collins, Staff, Construction Supervisor
Liz Argo, Argo Consulting, Technical Consultant
Karen Loura, Administrative Assistant/Assistant Clerk



Figure 1. June 2013 – Former CVEC Board Member, Maggie Downey, accepts a small token of appreciation from Cape & Vineyard Electric Cooperative President, John Checklick, for her “enormous contributions in founding and growing CVEC”.

IV. Fiscal Year 2013 Accomplishments

A. Summary of Activities in Fiscal Year 2013

In fiscal year 2013 CVEC continued its focus on developing and/or owning renewable electric generation facilities and procuring and/or selling long term electric supply or other energy-related goods or services at competitive prices to member communities. CVEC continued to work closely with American Capital Energy in the development of CVEC Round 1 Solar PV Initiative and with Broadway Electrical Co in the development of CVEC Round 2 Solar PV Initiative. Round 1 will provide about 16MW of solar PV generation and Round 2 about 20 MW of solar PV generation.

In June 2013, CVEC's Developers met a significant milestone when thirty of CVEC's Round 1 & 2 projects received Statements of Qualification for the Massachusetts Department of Energy Resources Solar Carve-Out program. The thirty projects represent all eight Round 1 projects and twenty-two of the original one hundred and eight Round 2 projects.

All eight Round 1 projects have reserved capacity in the Massachusetts System of Assurance, thereby securing Net Metering eligibility. Round 2 projects will be registered in the system as soon as they receive their Interconnection Services Agreements (ISAs) from the local utility and other major permits. There is no guarantee that the utility will provide the ISAs in the timely fashion that will allow registration, but every effort is being made to expedite registration.

Construction of Round 1 projects & those Round 2 projects that receive System of Assurance eligibility is slated to start in fall 2013.

In a further effort to expand upon and clarify CVEC's future development and activities relative to renewable energy projects, procuring and/or selling long term electric supply and expanding its portfolio of other energy-related goods or services at competitive prices, CVEC's Board of Directors participated in a series of Strategic Planning sessions led by Dr. Jonathan Raab of Raab Associates. Sessions were held from December 2012 through May 2013 and the results will be shared with CVEC members during the coming fiscal year, 2013/2014.

B. Detailed Energy Benefits from CVEC Solar PV Initiatives Rounds 1 & 2

Based on current totals of photovoltaic generating capacity to be installed in FY 2013/2014 under CVEC Rounds 1 & 2, projections of first-year estimated annual outputs show the participating entities, including eight Cape and Martha's Vineyard municipalities, the Barnstable Fire District, and the DY School District projected to benefit from 44,597,839 kilowatt hours of renewable energy. With the total municipal usage of these entities calculated in 2011 to be about 63,659,365 kilowatt hours, CVEC's Round 1 and 2 projects are projected to meet about 70% of these entities' loads.

The chart below indicates the portion of the total usage load of 63,659,365 kilowatt hours that will be met by Round 1 and the portion that will be met by Round 2.

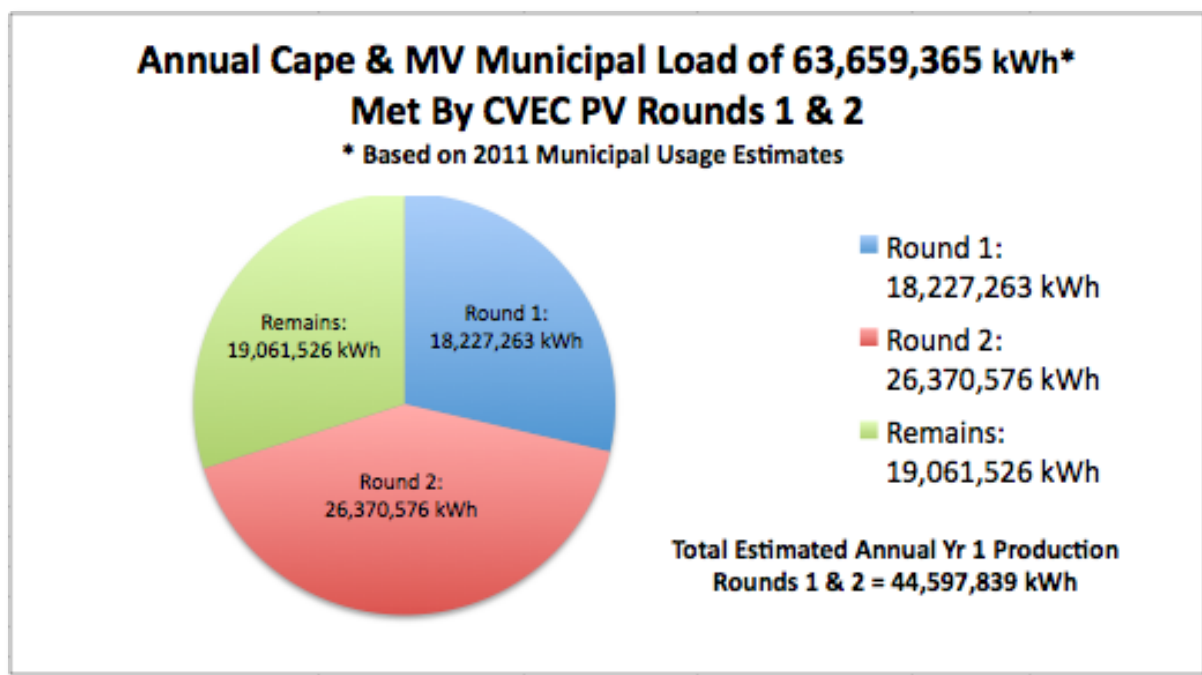


Chart 1. Chart of CVEC Solar PV Initiative Projects Round 1 & 2

C. Solar PV Initiative Round 1

In October 2010, CVEC issued an RFP for CVEC's Photovoltaic Initiative Round 1. Round 1 consisted of 18 megawatts of proposed solar PV on behalf of seven Cape Cod and Martha's Vineyard towns; Barnstable, Brewster, Harwich, Eastham, Chatham, Tisbury, and Edgartown. The proposed ground mounted installations were planned primarily for capped landfills, with two of the proposed ground mounts planned for lands other than landfills. CVEC selected American Capital Energy ("ACE"), to construct and provide a Power Purchase Agreement for eight PV installations equaling about 16 megawatts.



Photo courtesy of Liz Argo

Figure 2. Contractors review example of PV panels and racking outside the CLC offices at CVEC's Solar PV Initiative Round 1 press conference in 2011.

ACE anticipates the initiation of construction for Round 1 in Fall 2013.

SITE	kilowatts	kilowatt hours
Barnstable Landfill	4,044	5,117,400
Brewster Landfill	1,219	1,097,964
Chatham Landfill	1,908	2,179,700
Eastham Landfill	627	498,600
Nunnepog Well	1,419	1,961,400
Harwich Landfill	4,602	4,888,500
Tisbury Landfill	1,226	1,244,077
Katama Farm	1,198	1,239,622
TOTAL	16,243	18,227,263

Table 1. Table describing CVEC Solar PV Initiative Round 1

D. Solar PV Initiative Round 2

CVEC issued an RFP for CVEC's Solar PV Initiative Round 2 on September 21, 2011. The Round 2 proposed installations ranged from 10-kilowatt roof mounts to 6-megawatt ground mounts and represented requests for PV from thirteen Cape and Vineyard towns and four non-member governmental entities; DY Schools, Nauset Schools, Mass Military Reservation, and Cotuit, Osterville, and Marston Mills Water/Fire District. The total amount of solar PV proposed for installation under CVEC's Solar PV Initiative Round 2 advertisement was approximately 69 megawatts.

On April 19, 2012 a press conference was held to announce the award of just over 48 megawatts of proposed photovoltaic installations under Power Purchase Agreements comprising the bid from Broadway Electrical Inc.

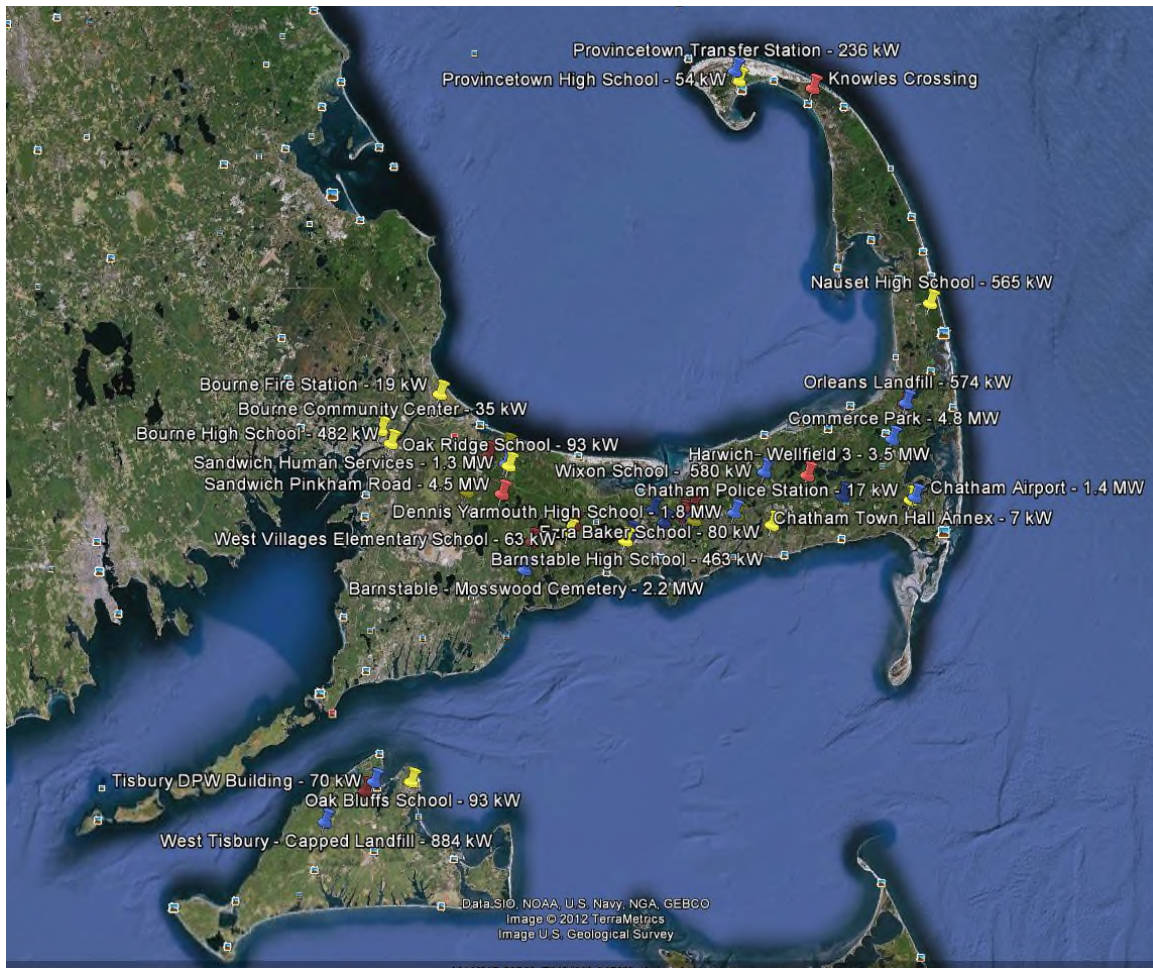


Photo courtesy of Broadway Electrical

Figure 2. Map showing location of some of the proposed installations comprising CVEC's Solar PV Initiative Round 2

During the detailed engineering, permitting and utility interconnection processes the number of kilowatts comprising Round 2 was adjusted multiple times. As of June 30, 2013, Round 2 consists of just over 20 megawatts.

Broadway Electrical anticipates the initiation of construction for Round 2 in Fall 2013.

SITE	kilowatts	kilowatt hours
Barnstable Airport - Section 1	5997.2	1,224,524
Barnstable Airport - Section 2, including Fire District	998.47	7,801,518
Barnstable Senior Center	140.36	186,769
Barnstable High School	462.55	537,935
West Villages Elem. School	60.61	74,969
Barnstable Independence Park	1,378.08	1,833,251
Bourne Community Center	35.09	42,420
Brewster Commerce Park	4,606.36	6,127,811
Chatham Airport	867.68	1,154,269
Chatham Police Station	23.49	29,076
Chatham Town Hall Annex	23.49	29,076
DY High School Roof, Yarmouth	714.56	750,969
DY High School Ground, Yarmouth	641.19	950,606
Ezra Baker School, Dennis	71.39	87,177
Marguerite Small School Ground, Yarmouth	861.30	1,145,782
Mattacheese School Ground, Yarmouth	998.47	1,328,302
Mattacheese School Roof, Yarmouth	213.73	256,689
Wixon School Ground, Dennis	459.36	599,704
Orleans Capped Landfill	574.20	755,000
Provincetown Transfer Station	153.12	199,858
Tisbury DPW Ground Mount	63.80	79,306
West Tisbury Capped Landfill	883.63	1,175,565
TOTAL	20,228.13	26,370,576

Table 2. Table of CVEC Solar PV Initiative Projects Round 2

E. Solar PV Initiative, Initial Round

CVEC began its “Initial Round” of solar PV initiatives by issuing an RFP in 2009. The selected vendor was ConEdison Solutions. In 2010 ConEdison Solutions installed 761 kilowatts of PV on six Cape Cod school roofs and on one DPW roof.

The following table summarizes benefits accrued to CVEC members and all ratepayers since the “Initial Round” of PV projects was commissioned in 2010.

CVEC PV SOLAR PROJECT CON ED SOLUTIONS SITES PRODUCTION & BENEFITS											
					CAPACITY	ESTIMATED					
				6/30/13	FACTOR	\$ 0.030					
SYSTEM		SIZE (KW DC)	APPROX. ONLINE	PRODUCTION TO DATE (kWh)	SINCE INCEPTION	SAVINGS /KwH	ENVIRONMENTAL BENEFITS (lbs)				
							CO2	Nox	SO2		
Barnstable High School	Barnstable	131	August 23, 2010	454,308	14.74%	\$ 13,629.25	763,238	1,109	3,339		
Bourne Middle School	Bourne	142.56	April 30, 2010	599,875	16.01%	\$ 17,996.24	1,007,789	1,464	4,408		
Eddy Elementary School	Brewster	100.98	July 16, 2010	400,584	14.76%	\$ 12,017.53	672,982	977	2,944		
Stonybrook Elementary	Brewster	100.98	July 16, 2010	387,520	14.25%	\$ 11,625.59	651,033	946	2,848		
Eastham Elementary	Eastham	100.8	February 27, 2010	402,271	13.30%	\$ 12,068.14	675,816	982	2,956		
Eastham DPW	Eastham	80.4	February 25, 2010	320,549	14.32%	\$ 9,616.47	538,522	782	2,356		
Harwich Elementary School	Harwich	103.95	July 22, 2010	404,115	15.67%	\$ 12,123.46	678,914	986	2,970		
		760.67		2,969,222		\$ 89,076.66	4,988,293	7,245	21,821		
						SAVINGS					
						Since Interconnection in 2010					

Table 3. Table of CVEC Initial Photovoltaic Projects from 2010 – Savings and Environmental Benefits

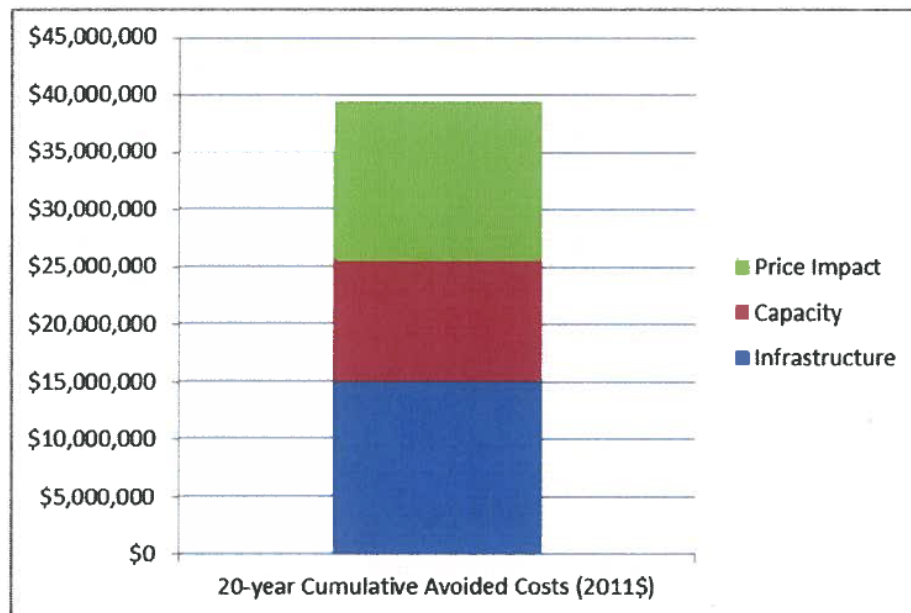
F. Review of Study on Avoided Cost of Solar PV on Cape Cod, conducted by Synapse Energy Economics, Inc. in 2011 in light of 36 Megawatts of Renewable Energy from Rounds 1 & 2

To convey the benefits from CVEC’s planned photovoltaic installations, the CLC and CVEC requested that Synapse Energy Economics, Inc. of Cambridge, MA (“Synapse”) calculate the avoided costs for Cape and Vineyard ratepayers attributable to the CVEC Solar PV installations.

Synapse has a history of providing research, testimony, reports, and regulatory support to consumer advocates, environmental organizations, regulatory commissions, state energy offices, and others. The firm was founded in 1996 to specialize in consulting on energy, economic, and environmental topics.

The Synapse study delivered in October 2011 points out savings associated with the energy production from CVEC's solar PV installations, and also from infrastructure upgrades (costs for which are born by the PV Developers), the lowered need for heavy-load carrying capacities, and the added pressure for price reductions due to lowered demand for electricity from the utilities. In addition, the study calculated the impact of the CVEC Solar PV projects on carbon emissions.

As portrayed in the chart below, an exemplary 16.5MW of Solar PV was defined by Synapse as capable of saving ratepayers nearly \$40 million in avoided costs over the 20-year term of the contracts.



Courtesy of Synapse Energy Economics

Chart 2. 20-year Cumulative Value of Avoided Costs from 16.5MW of Solar PV Installations on Cape Cod and Martha's Vineyard.

The Synapse study provides demonstration of both the obvious and the less obvious advantages of the CVEC mission to develop renewable energy projects to stabilize electric rates for ratepayers within CVEC member communities based on a 16.5MW PV initiative. With CVEC's PV Initiatives Rounds 1 & 2 currently projected to provide over 36MW of PV to the Cape and Martha's Vineyard, the study suggests that the obvious and less obvious advantages to ratepayers from Rounds 1 & 2 may provide over \$87.2 million in a 20-year cumulative value.

With the construction of Rounds 1 & 2, due to be completed in 2014, CVEC will be taking significant strides towards meeting its objective of developing renewable energy projects and realizing the significant benefits inherent in renewable energy deployment for the ratepayers within CVEC member communities.

G. Cape & Vineyard Electric Cooperative Strategy Sessions 2013

With the imminent successful installation of CVEC's Solar PV Initiatives Rounds 1 & 2, the Cooperative Directors recognized the need for professionally led future visioning. An RFP was posted, and in November 2012 Dr. Jonathan Raab of Raab Associates was selected to lead the strategizing.

Dr. Raab has been lead facilitator/mediator for many of the cutting edge energy, utility, and climate related stakeholder processes in the Northeast, including the Regional Greenhouse Gas Initiative (RGGI), the New England Demand Response Initiative (NEDRI), Cape Wind, and the greenhouse gas stakeholder processes in Rhode Island (which received US EPA's Outstanding Climate Protection Award in 2005) and in Maine. In addition, for over a decade Dr. Raab has run the New England Electricity Restructuring Roundtable,

Led by Dr. Raab, starting in January 2013 the CVEC Directors dedicated multiple strategy sessions with the goal of creating an outline of a strategic plan based on CVEC's summarized purposes:

To develop and/or own energy and renewable energy projects, or to sell renewable energy products.

It was noted that CVEC originated as a response to the Cape Light Compact's inability to own generation and as a result of the "pre-Green Communities Act" legislation restricting municipalities from owning generation. It was also noted that the work of CVEC should continue to stabilize energy costs for the ratepayers of the Cape and Martha's Vineyard.

The sessions were conducted throughout the summer of 2013. Once the sessions conclude, CVEC will produce a report to be shared with member towns and county representatives.

IV. Fiscal Year 2013 Financials

The Cape Light Compact has provided funding for the Cape & Vineyard Electric Cooperative and CVEC's development of renewable projects since CVEC's inception. The Compact has committed to continued funding through fiscal year 2014/2015.

A. CVEC Preliminary Balance Sheet For Fiscal Year 2013

**CAPE & VINEYARD ELECTRIC COOPERATIVE, INC.
PRELIMINARY BALANCE SHEET
AS OF JUNE 30, 2013**

Assets

Current Assets:

Cash and cash equivalents	\$ 336,152.00
Receivables - Members - energy sales	\$ 20,866.88
Receivables - Members - renewable energy certificates	\$ 52,645.00

Total Assets	<u>\$ 409,663.88</u>
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Liabilities and Members' Equity

Current Liabilities:

Accounts Payable	\$ 71,864.00
Accrued Liabilities	<u>\$ 26,412.00</u>

Total Liabilities	\$ 98,276.00
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Members' Equity	\$ 311,388.00
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Total Liabilities and Members' Equity	<u>\$ 409,664.00</u>
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B. CVEC Preliminary Income Statement for Fiscal Y

**CAPE & VINEYARD ELECTRIC COOPERATIVE, INC.
PRELIMINARY INCOME STATEMENT
FOR THE FISCAL YEAR ENDED JUNE 30, 2013**

REVENUES

Grant Revenue	\$ 402,885.00
Member Fee Revenue	\$ -
Interest Income	\$ 53.00
PV Solar Towns Revenue	\$ 122,001.00
PV Solar Adder Revenue	\$ 4,711.00
PV Solar Design/Engineering Support	\$ -
PV Solar REC Revenue	<u>\$ 70,085.00</u>
Total Revenues	\$ 599,735.00

EXPENSES

Legal	\$ 322,306.00
Filing Fees	\$ 125.00
Consulting	\$ 68,657.00
Insurance	\$ 14,043.00
Travel	\$ 2,193.00
Dues	\$ 1,200.00
Salaries	\$ 34,660.00
Taxes	\$ 919.00
Supplies/Office Expenses	\$ 700.00
Professional Development	\$ -
Engineering	\$ 3,007.50
Purchased Power Costs	\$ 122,001.00
Renewable Energy Certificates	\$ 70,085.00
Advertising	\$ 52.58
PV Solar Design/Engineering Support	\$ -
Miscellaneous	<u>\$ 2,587.00</u>
Total Expenses	\$ 642,536.08
NET INCOME/(LOSS)	<u><u>\$ (42,801.08)</u></u>