

*Cape & Vineyard Electric  
Cooperative, Inc.*

*HARWICH WIND TURBINES  
PUBLIC HEARING  
October 26, 2009*

# *CVEC Cooperative Model*

- CVEC Non-Profit Municipal Coop - 13 Members
  - Barnstable and Dukes Counties, Towns of Barnstable, Bourne, Brewster, Dennis, Eastham, Edgartown, Harwich, Mashpee, Orleans, Provincetown & Tisbury, Cape Light Compact
- Members Share Benefits
- Net Metering (Green Communities Act) Provides Savings Opportunities
- Wind Turbine Projects – Host Community Receives up to 90% of the Energy Generated for Municipal Load
- Harwich Utilizes ~79%
- Cape Light Compact – 10% of the Energy to General Aggregated Power Supply
- Other CVEC Members Receive Remaining 11% on a Pro-Rata Share Based on Municipal Load

# *Benefits Through CVEC Model*

- CVEC Greater Financing Options through CREBS (application pending), RUS, Tax Equity Financing
- CVEC Responsible for Engineering, Procurement, Construction, Operation & Maintenance
- Power Purchase Agreement for Allocated Power are Members' only Obligation
- No Impact on Town's Debt Capacity, Balance Sheet, etc.
- Coop Structure Limits Member Liability
- Lease Payment for Host Community

# *ASSUMPTIONS*

- Two, 1.5MW turbines producing 6.386 million kWh of energy annually (24.3% NCF)
- Harwich Municipal Load – 5.04 million kWh annually
- Net Metering Credit value of \$0.16704/KWH:
  - Energy - \$0.10999
  - Transmission - \$0.00564
  - Transition - \$0.01800
  - Distribution - \$0.03341
- Project Financed Amount in Base Scenarios- \$8,800,000 (does not include \$600,000/turbine MTC grant)
- Term – 15 years, 2%
- REC Price \$25/MWH for 15 years
- Harwich Electric Bill at \$0.183/kWh
- O&M escalator – 2.5%
- PPA Price - \$0.133 Year 1, \$0.046 Year 15, Avg. \$0.0873

## *YEAR 1 SAVINGS TO HARWICH*

- Original NStar Bill was \$922,470
- Net Metering Credit - \$842,019
  - Offsets 4 charges on Electric Bill
- Net NStar Electric Bill - <\$80,451>
- CVEC Power Purchase - <\$667,909>
- New Total Energy Cost - <\$748,360>
- Savings on Energy is \$174,110 (Year 1)
- Lease Payment - \$100,000 annually
- Replaces an \$922,470 Electric Bill with a \$748,360 Electric Bill
- Total Year 1 Savings (Savings on Energy + Lease Payment) is \$274,110
- 15 Year Total Savings - \$7,528,316

# *15 YEAR SAVINGS TABLE*

YEAR	CVEC PRICE OF POWER	ENERGY SAVINGS TO HARWICH	ENERGY SAVINGS PLUS LEASE PMT.	HARWICH IMPACT ON TAX RATE
1	\$0.1325	\$174,110	\$274,110	-\$0.052
2	\$0.1325	\$174,110	\$274,110	-\$0.052
3	\$0.1226	\$224,059	\$324,059	-\$0.062
4	\$0.1154	\$260,160	\$360,160	-\$0.069
5	\$0.1088	\$293,811	\$393,811	-\$0.075
6	\$0.1001	\$337,593	\$437,593	-\$0.083
7	\$0.0920	\$378,036	\$478,036	-\$0.091
8	\$0.0844	\$416,668	\$516,668	-\$0.099
9	\$0.0772	\$452,648	\$552,648	-\$0.105
10	\$0.0707	\$485,529	\$585,529	-\$0.112
11	\$0.0647	\$516,044	\$616,044	-\$0.118
12	\$0.0591	\$544,140	\$644,140	-\$0.123
13	\$0.0541	\$569,168	\$669,168	-\$0.128
14	\$0.0497	\$591,465	\$691,465	-\$0.132
15	\$0.0459	\$610,775	\$710,775	-\$0.136

## *NEXT STEPS*

- Issue the Bid for an Engineering, Procurement and Construction (EPC) Contractor
- Select Vendor and Begin Permitting Process
- Prepare Grant Application for the Next MTC Commonwealth Wind Funding Round
- Prepare the NSTAR Interconnect Agreement