Massachusetts Wind Working Group
March 5, 2014

We bought the first New England REC.
We entered into the first long-term contract. I think.

Larry Chretien
Mass Energy Consumers Alliance
larry@massenergy.org
Meet Mass Energy

❖ Nonprofit founded 1982

❖ Pro-consumer pro-environment

❖ Green power, discount heating oil, and energy efficiency
Green power 3-pronged approach

- Advocacy
- Market-Based Program
  - Buying RECs wholesale, selling retail
- Education
April 29, 2005 Restructuring Roundtable on value of long-term contracts for RPS

- Tom Robinson - National Grid: “Long term contracting by Distribution Companies is a poor idea”

- David O’Connor – DOER: “Over time, market forces should bring supply and demand into balance”

- Larry Chretien: called for expansion of long-term contracting by distribution companies
Buy RECs wholesale, bundle them with utility-provided Basic Service electricity, and sell retail to voluntary consumers who want to change the grid.

Emphasis on Mass. Class I

- If not, Class I – no additionality
- RPS compliance market is our backstop
- Pay project finance needs & hopefully not more
- Offer contracts of up to 12 years
National Grid has “GreenUp” and WMECO will have “WMECO Green Options”

In both cases, utilities provide Basic Service (electrons) and REC suppliers provide RECs

NSTAR

Currently has NSTAR Green, but likely won’t for long

Should have program for REC suppliers within a year
### Mass Energy Products

<table>
<thead>
<tr>
<th>Product</th>
<th>Price Above Basic Service</th>
<th>Class I RECs</th>
<th>Low-Impact Hydro RECs</th>
</tr>
</thead>
<tbody>
<tr>
<td>New England Green Start</td>
<td>2.4 cents, tax-deductible</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>New England Wind</td>
<td>3.8 cents, tax-deductible</td>
<td>100%</td>
<td>0</td>
</tr>
</tbody>
</table>

- **With New England Green Start**, you get 34% Mass. RPS RECs in 2014
- **With New England Wind**, you get 109% Mass. RPS RECs in 2014
  - 100 years ahead of Mass. state law
Spending should translate into new, additional projects that displace fossil fuels & not subsidize projects that would have happened without your money.

It matters the type and location of RECs you buy!
Mass. RPS Class I RECs (i.e. “new”, post 12/31/97) create additionality by displacing fossil fuels

- New RECs from outside New England may or may not create additionality
- “Existing” RECs (i.e. before 1/1/98) do not create additionality

Mass Energy’s green power consumer aggregation is a voluntary extension of the Mass. Renewable Portfolio Standard
2013 Ph.D. dissertation reviewed US voluntary market and found it was “impotent due to small magnitude of REC price signal and absence of long-term contracts”


Gillenwater was NOT talking about Mass Energy
Mass Energy’s way

Mass Energy signs long-term contracts with community-wind projects

More customers = more projects

Blade signing in Gloucester
A long-term contract with Mass Energy was critical to the project's success. Without it, the project would not have been able to move forward at all.”

-Kially Ruiz, developer, Ipswich Wind Independence LLC
### Mass Energy’s RECs

**wind unless otherwise noted**

<table>
<thead>
<tr>
<th>Project</th>
<th>Megawatts</th>
<th>Annual Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gloucester</td>
<td>4</td>
<td>9000</td>
</tr>
<tr>
<td>Plymouth</td>
<td>1/3 of 8 MW</td>
<td>7000</td>
</tr>
<tr>
<td>Ipswich</td>
<td>2</td>
<td>4320</td>
</tr>
<tr>
<td>Princeton</td>
<td>3</td>
<td>4000</td>
</tr>
<tr>
<td>Scituate</td>
<td>1.5</td>
<td>3655</td>
</tr>
<tr>
<td>Rutland - Cow Power</td>
<td>0.5</td>
<td>3400</td>
</tr>
<tr>
<td>Portsmouth, RI</td>
<td>1.5</td>
<td>3300</td>
</tr>
<tr>
<td>Coventry, RI</td>
<td>1.5 – 2</td>
<td>3200</td>
</tr>
<tr>
<td>Solar – over 400 sites</td>
<td>1.4</td>
<td>1620</td>
</tr>
<tr>
<td>Hull 1</td>
<td>0.66</td>
<td>1200</td>
</tr>
<tr>
<td>Lynn</td>
<td>.6</td>
<td>1000</td>
</tr>
<tr>
<td>Berkshire East</td>
<td>.9</td>
<td>825</td>
</tr>
<tr>
<td>Holy Name, Worcester</td>
<td>0.60</td>
<td>700</td>
</tr>
</tbody>
</table>
The fish that got away.
Princeton

Photo by Sam Feinsilver
Gloucester
Scituate
Ipswich 2
Mt. St. Mary’s Abbey - Wrentham
Lynn
Education

Turbine Tours

Hull 1 w/ Mass Audubon, Berkshire East Ski Area, Holy Name in Worcester, and Medford

3/12/2014
Final Thoughts

- Voluntary market tiny compared to RPS
  - Big opportunity for growth
    - Good case for public support

- Expand RPS with long-term contracts