

OffshoreMW

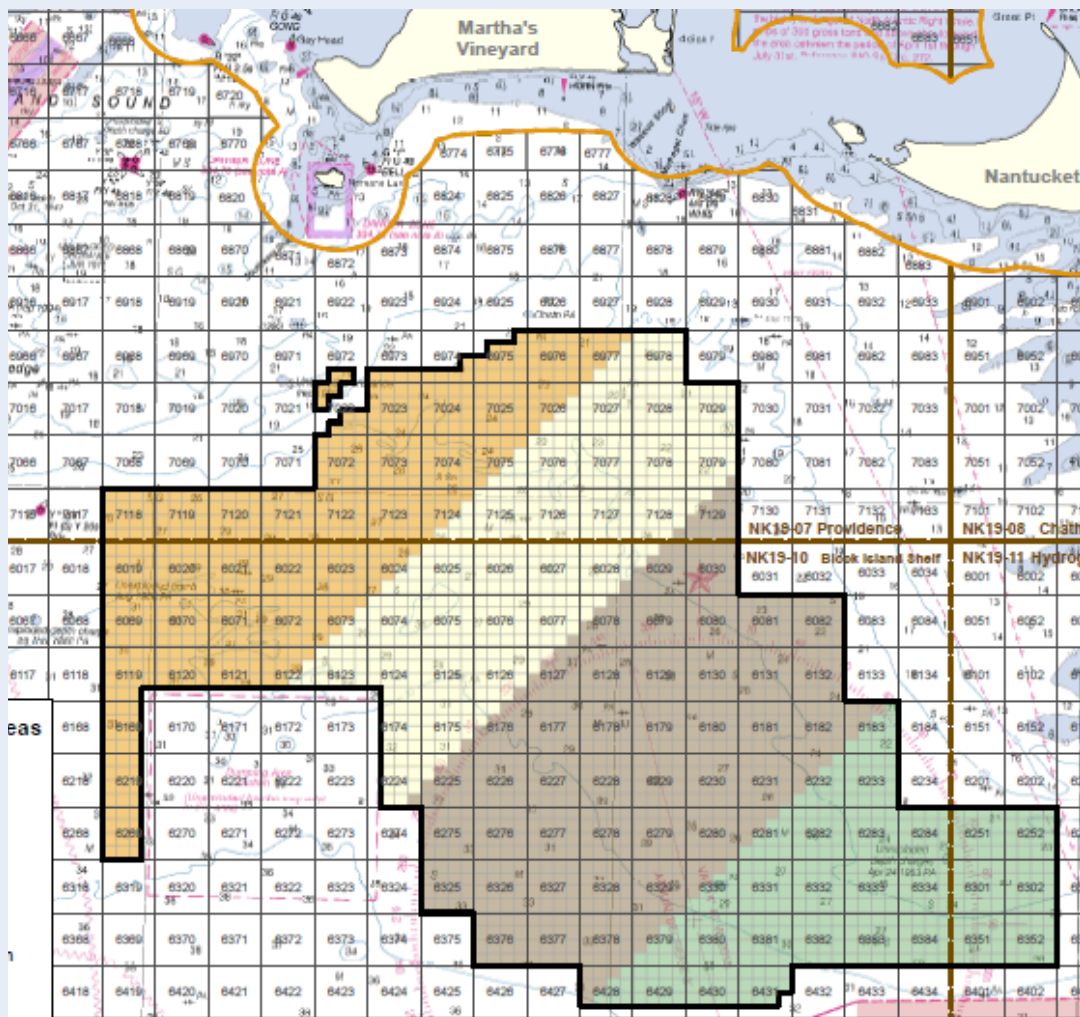
Blackstone

- A Blackstone Group company
- Sister company to WindMW in Germany
- Project “Meerwind”
 - 288 MW in German North Sea
 - On-time, on-budget, no accidents
 - USD 1.6 billion, project financed



US BOEM Auction of Mass. Wind Energy Area

- Auction held January, 2015
- Two Bidders:
 - RES/DONG
 - OffshoreMW/Vineyard Power
- Next Step: One year to submit Site Assessment Plan





Vineyard Power

- A not-for-profit renewable energy cooperative
 - Founded in 2009 in response to the Island Plan
 - Coincided with the start of the OCS leasing process\
- Goal is to create a 21st century utility owned by the community of Martha's Vineyard
 - Model for other communities regionally and nationally
 - Currently representing 1,500 electric meters
- Goal to have develop a 100MW of OSW capacity
 - To date: 400kW of PV on MV
- Promotion of EVs and smart-grid technology

Community Benefits Agreement

To date and on-going:

- Wind park siting
- Strategic planning for community input and participation
- State policy support necessary for all projects to succeed
 - OSW policy for Massachusetts
 - Community Empowerment

Next:

- Support through permitting process
- Community involvement during project design/construction
- Explore job creation and economic development
- Develop ways to deliver more of the benefits of OSW to MV
- Support regarding infrastructure, etc

Community Empowerment: Rationale and Reasoning

- We need more renewable energy projects to address climate change, energy security, and reliability
 - Main barrier to more projects is financing
 - Projects need long-term contracts with credit-worthy buyers
 - Federal and State level policies alone probably not sufficient to deliver
- Americans are supportive of renewable energy, especially where there is a local benefit

Given above, we should also look to local initiatives and support as a basis for new policies to finance renewable energy projects

Community Empowerment: *What is it?*

A state enabling policy that :

- Empowers local communities, through a democratic process, to set their own course for their energy future
 - Communities can enable financing (“support”) projects that meet criteria of local values and concerns
 - Communities support projects of the community’s choice
- Meaningful, direct support: Enabling financing
 - Residents provide credit-worthy buyer that projects need to secure financing and construct projects
- Long-term energy cost stabilization opportunities
- Ability to purchase above RPS for community’s residents, businesses and municipal buildings

Community Empowerment: Advantages and Features

- Additional to, and compatible with, current clean energy policies
 - Builds on the Green Communities Act and existing municipal aggregation law
- Compatible with existing electricity markets
- No national legislation necessary
- State legislation is enabling only
- Can be deployed anywhere nationally, in any regulatory setting
- Biggest Challenge:
 - Requires many, strong local initiatives to get to significant scale

Community Empowerment: Compared to current structures for getting electricity

	Community own and operate wires?	Customer able to choose supply?	Ability to enable finance of RE projects?
Municipal Utility	Yes	No	Yes
Municipal Aggregation	No	Yes	No
Investor-owned regulated utility	No	Yes	Yes, but only through state law/process which ends 2016
Community Empowerment	No	Yes	Yes

Community Empowerment - Compared to existing MA clean energy policies

	Customer level decisions?	Community level decisions?	Ability to enable finance of RE projects?
Renewable Portfolio Standard (RPS)	No	No	No
Section 83/83a (Long Term Contracting)	No	No	Yes
Net-metering	Yes	No, but large groups possible	Yes, but limited to PV and dependent on subsidy
Community Empowerment	No	Yes	Yes

Community Empowerment: How would it work under MA legislative proposal?

1. Community makes the decision to enter into Community Empowerment contracts on behalf of all end-users in community

- Decision process is same as under current law for Community Aggregation, MGL Chapter 164. Section 134
- If a community decides “yes”, individual end-users can continue to choose whichever electricity supplier they want
BUT
- End-users cannot opt-out of the Community Empowerment contract after 60 day opt-out window
- Town and school users automatically included

Community Empowerment: How would it work under MA legislative proposal?

2. Specific project decisions are per vote of community's governing body: the process is transparent and democratic
 - Anticipate that most towns will use Energy Committees, or existing Community Aggregator, and a transparent RFP process to select projects
 - Communities can choose to cooperate with other communities in the state, so as to increase buying power
 - Requirement for public hearings and independent analysis
 - Model Community Empowerment contract and technical assistance made available

Community Empowerment: How would it work under MA legislative proposal?

3. Contracts are on a “contract-for-difference” basis:

- Town and developer agree to a “*Strike Price*”: a fixed price per MWh
- Once operational the project sells its energy into the wholesale market “*Reference Price*”
- The difference between the wholesale price (“*Reference Price*”) actually received by the project and the “*Strike Price*” is charged -or credited– to residents on a per KWh basis
- This charge or credit appears as a line item on the distribution utility portion of the residents’ electric bills



69 DOYLE AVE HSMTR
PROVIDENCE RI 02906

FEB 2, 2015 TO MAR 3, 2015

ACCOUNT NUMBER
13217-37018

PLEASE PAY BY
Mar 29, 2015

AMOUNT DUE
\$ 161.23

Enrollment Information

To enroll with a supplier or change to another supplier, you will need the following information about your account:

Loadzone Rhodelsland

Acct No: 13217-37018 Cycle: 3, ERIC

Choosing an Energy Supplier You can choose who supplies your energy. No matter which energy supplier you choose, National Grid will continue to deliver energy to you safely, efficiently and reliably. We will also continue to provide your customer service, including emergency response and storm restoration. National Grid is dedicated to creating an open energy market that lets you choose from a variety of competitive energy suppliers, who may offer different pricing options. For information on authorized energy suppliers and how to choose, please visit us online at www.nationalgridus.com/energychoice

DETAIL OF CURRENT CHARGES

Delivery Services

Electricity Delivery

Service Period	No. of days	Current Reading	Previous Reading	=	Total Usage
Feb 2 - Mar 3	29	35843 <i>Actual</i>	35206 <i>Actual</i>		637 kWh

METER NUMBER 41675898 NEXT SCHEDULED READ DATE ON OR ABOUT Apr 2

RATE Small C&I Rate C-06

Customer Charge				10.00
LIHEAP Enhancement Charge				0.73
Distribution Energy Chg	0.03428	x 637 kWh		21.83
Energy Efficiency Pgrms	0.00983	x 637 kWh		6.26
Renewable Egy Dist Chg	-0.00024	x 637 kWh		-0.15
Transmission Charge	0.02003	x 637 kWh		12.75
Transition Charge	0.00096	x 637 kWh		0.61

Total Delivery Services \$ 52.03



What about the Renewable Energy Credit (REC)?

Proposed legislation allows communities to make this decision:

- Some communities might want to make use of price-stabilization benefit only, and not buy the REC or sell off the REC in the short-term market

OR

- Communities might want to “go green”, in which case the RECs are included in the contract and applied to the end-users of the community, in addition to the RECs provided by each supplier as required by the RPS
- In either case, community can offer a credit-worthy contract that developers can use to finance projects, and residents and businesses get price stabilization benefit

Example: Nantucket

(using hypothetical numbers)

1. Town of Nantucket decides to make use of Community Empowerment and establishes, or authorizes, an energy committee to gather information and explore options:

- The average annual usage of Nantucket's 9,000 residents is 10 MWh each year, for a total of 90,000 MWh / year
- Nantucket municipal and school properties use another 10,000 MWh / year
- Therefore, Nantucket's total usage is 100,000 MWh / year

Community Empowerment: Example (continued)

2. Nantucket's Energy Committee puts out an RFP and receives proposals from a wind developer in Maine:

- The project generates 10,000 MWh per year, i.e. 10% of Nantucket's total usage
- Offer is for a 15 year contract (PPA) for differences on wholesale energy price in MA, using *model* Community Empowerment contract provided by the state
- The "Strike Price": \$80/MWh if RECs are included, OR
\$50/MWh for the contract for differences only
- The Energy Committee holds a public hearing to describe the project and proposal, answer questions, and gets input from the community

Community Empowerment: Example (continued)

3. The Energy Committee recommends to the Selectman that the Town accept the contract offer:

- Buying the RECs so that the residents can claim to be using more renewable “wind energy”
- Town Meeting votes to enter into contract on behalf of town: this is same authorization process for a town to form a municipal aggregation under MGL Chapter 164, Section 134
- Residents and businesses are notified of vote and given a one-time 60 day window to opt out

Community Empowerment: Example (continued)

4. In the first year of the contract the project developer receives an average weighted wholesale price, “Reference Price” of \$67 per MWh

- Therefore, Nantucket’s residents owe to the wind project \$13 per MWh ($\$80 - \$67 = \13), which is 13 cents per KWh
- Because the wind project generates 10% of the town’s usage, each user pays 10% of this amount owed to the project, on a per KWh basis
- 10% of 13 cents is 1.3 cents, so each user is charged 1.3 cents per KWh on their distribution utility bill
- The RPS requirement in this year was 10%, so with the additional 10% from the wind project, Nantucket residents used 20% renewable energy

Community Empowerment: Example (continued)

5. In the second year of the contract, the average weighted wholesale price, “Reference Price”, is \$81 per MWh

- Therefore, Nantucket’s residents are owed from the wind project \$1 per MWh ($\$80 - \$81 = -\1), which is 0.1 cents per KWh
- Because the wind project generates 10% of the town’s usage, each user is entitled to 10% of this amount owed from the project, on a per KWh basis
- 10% of 0.1 cents is 0.01 cents, so each user is credited 0.01 cents per KWh on their bill
- The RPS requirement in this year is 11%, so with the additional 10% from the wind project, Nantucket’s residents use 21% renewable energy

Community Empowerment: Example (continued)

6. Benefits from Nantucket's contract

- Nantucket's residents, businesses and government have 10% of their electricity cost stabilized at 8 cents / KWh, for 15 years
 - The price could also have been stabilized at 5 cents/KWh, if the town decided they didn't care about using more renewable energy than the RPS
- A new wind project is able to be built in Maine which wouldn't have been built otherwise, because the project is able to secure financing on the basis of its contract with Nantucket
- All of New England benefits from lower electric and gas costs, because there is that much less demand for gas, and because of the wholesale price suppression from the wind project being a "price taker" in the wholesale electric market

Community Empowerment: Opportunities

Community Empowerment can support many types of projects, bringing variety of local benefits

For example:

- Combined Heat-Power at town / school buildings or area neighborhoods
- PV on town or school property combined with storage for emergency operations
- Anaerobic digestion as part of local waste solution
- Ensure wind projects really do benefit host communities
- Projects that create local jobs

Community Empowerment: Next Steps

- Representative Tim Madden (Falmouth, MV, Nantucket, Elizabeth Islands) has introduced H3557
 - An Act to promote long-term renewable contracts for municipal aggregators and municipalities
 - It is a “placeholder” bill while gain wider input and refine language
- Networking with other stakeholders
- Open invite to participate and provide input
- Contacts via: info@vineyardpower.com
 - Richard J Andre
 - Erik N Peckar