



Renewable Energy Trust Support for Kingston Community Wind

October 21, 2008

RENEWABLE ENERGY TRUST

The Community Wind Collaborative

Initiative to provide resources to qualified MA communities to explore and develop megawatt class wind power projects, including

- wind monitoring equipment and data analysis
- technical assistance
- financial assistance for project completion

Project leadership provided by town's energy committee

RENEWABLE ENERGY TRUST





Kingston CWC Project Early Stages

- Kingston's Secure Energy Future Committee identified landfill/wastewater treatment plant vicinity to explore
- RET arranged for UMass to monitor wind at the landfill from July 2005 to June 2006

Site Screening and Feasibility Studies

- Objectives
 - evaluate technical and financial opportunities and constraints
 - identify a specific location and plant configuration
 - highlight for Town feasible options and issues that may need further evaluation
- RET assigned task to KEMA, Inc.

Site Screening and Feasibility Studies

- KEMA studied
 - Wind resources and potential electrical generation from different turbine models
 - Existing and planned infrastructure at WWTP, transfer Station and Kingston's Place
 - Environmental and permitting issues
 - Site electrical infrastructure
 - Constructability, operational, and safety issues
 - Visual simulations and other potential community impacts
 - Economics of different ownership models
- Reviewed with Green Energy Committee; completed 6/08



Feasibility Study Conclusions

- Yes, a project appears technically and economically viable
- Most suitable of 7 sub-locations: near existing drainage basin to the southwest of WWTP building
- Town may wish to investigate acoustic and icing issues

Locations Considered



RENEWABLE ENERGY TRUST

Recent Developments

- RET assigned Tech Environmental to perform acoustic analysis
- RET assigned KEMA to investigate icing phenomenon and potential mitigation strategies
- FAA approved project up to 420'
- Green Communities Act passed – “virtual net metering”
- Kingston special legislation passed

RET Expenditures to Date

RET expenditures on services provided to Kingston have been approximately \$145,000 thus far



RENEWABLE ENERGY TRUST



What's Next?

- Green Energy Committee conducts additional public outreach to explain project, answer questions
- Board of Selectmen states intention to proceed with a well-defined project
- Town applies for RET's "Standard Financial Offer" to help with development expenses

RENEWABLE ENERGY TRUST



Standard Financial Offer

- Development Support Grant
 - for technical and/or legal assistance in preparing RFP and evaluating bids; interconnection fees and studies; updated financial analysis and financing plan; etc.
 - up to \$150,000 total
- REC Purchase Commitment
 - Provides price certainty for an important component of project revenues for up to 15 years
 - RET will buy Kingston's Renewable Energy Certificates for \$40 each, up to \$1.2 million per installed MW (\$1.8 million for a 1.5 MW turbine)
 - Schedule of sales determined at signing of contract between Kingston and RET

RENEWABLE ENERGY TRUST

Standard Financial Offer Application Review Process

- RET staff evaluation
- External review panel evaluation
- Internal approval
 - RET Management
 - RET Governing Board
- Announcement of award



RENEWABLE ENERGY TRUST



Getting to the Finish Line

- Town prepares RFP for construction
- Town Meeting authorizes bonding
- Town issues RFP and selects contractor
- Town finalizes REC purchase contract with RET, including specific schedule of REC sales
- Construction and commissioning

RENEWABLE ENERGY TRUST



“Blow, Baby, Blow”

Amy Barad

Massachusetts Technology Collaborative
Renewable Energy Trust

barad@masstech.org

508-870-0312

RENEWABLE ENERGY TRUST