# Siting Challenges: Savoy Wind Project

Presentation to

Massachusetts Wind Working Group

March 23, 2011

Stephen B. Barrett

### Your Presenter

- Harris Miller Miller & Hanson Inc.
  - Director Clean Energy
  - Wind Noise, Solar at Airports, Tidal Energy off
     Vineyard
- Minuteman Wind, LLC
  - Member
  - Developing 12.5 MW wind project in Savoy, MA



## Minuteman Philosophy

- Minuteman Wind is committed to bringing renewable energy to New England.
- Wind energy is currently the most economic renewable energy resource.
- Minuteman Wind recognizes that development of wind powered electric generation in New England is especially challenging. Land use in New England consists of intensively developed urban areas, extensive scenic areas which support a large recreation economy, and many environmentally sensitive conservation areas. Further, New England lacks large areas of agricultural land where wind energy has been most successfully developed to date in the United States.
- Minuteman Wind believes that onshore wind energy development in New England needs to focus on small projects which are consistent with existing development and landscape in New England.



## The Dream



#### Photo Simulation of Savoy Wind Power Project

About the Project:
Owner: Minuteman Wind, LLC
Project Site: West Hill, Savoy, MA

Clipper Windpower Liberty, 2.5MW, five turbines Turbines:

96 m (315 ft) Hub height:

42° 35.6' N 72° 58.3' W to 42° 36.1' N 72° 58.2' W

#### About the Photo:

Viewpoint: Hawley Road 38 degrees 42° 34.3' N 72° 59.6' W Angle of view: Distance to nearest turbine: 1.88 miles (9941 ft.)

Apparent size and location of this turbine from this viewpoint is determined geometrically using EMD WindPro Software

### Renewable Energy Research Laboratory Department of Mechanical & Industrial Engineering

University of Massachusetts 160 Governor's Drive Amherst, MA 01003-9265 413-545-4359 www.ceere.org/rerl rerl@rerl.org





## The Moral





## Project Summary

- 12.5 MW Project (five 2.5 MW turbines)
- Located on West Hill, Savoy, MA
- Privately owned forested land
- Limited environmental impacts
- Produce > 30,000 MWh per year (about the consumption of a small college)
- Received principal permits
- Looking to sell power & RECs



## Development Timeline

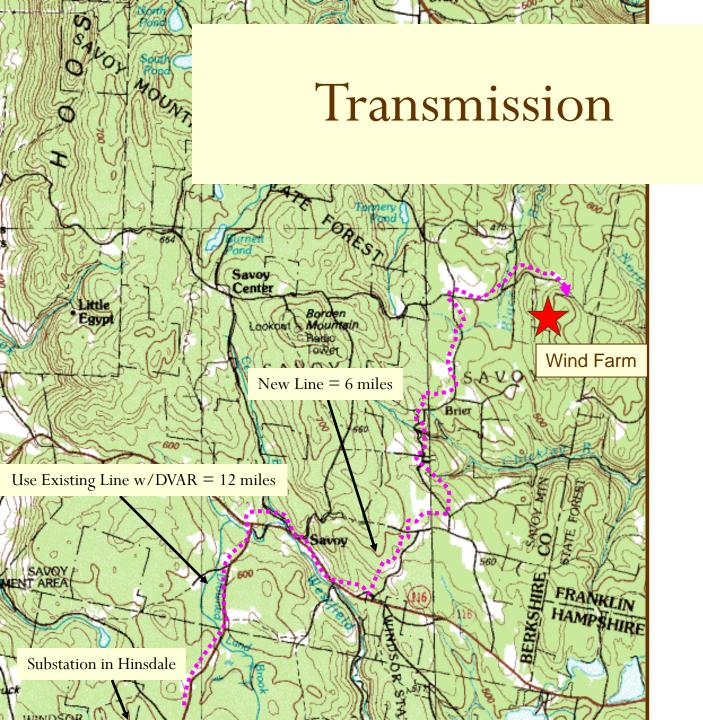
- 2005: Site Lease / Met Tower / Local Meetings
- 2006: MRET Loan / Env. Studies / Local Meetings
- 2007: BRPC Bylaw vs. Savoy Bylaw / Local Mtgs
- 2008: Savoy Bylaw Passed! / Renew Lease
- 2009: File Town Application, ZBA disbands, DPU?
- 2010: Re-file Town Application, Special Permit granted, Secretary's Certificate Granted, RDA filed
- 2011: Wetlands Application, PPA, Transmission



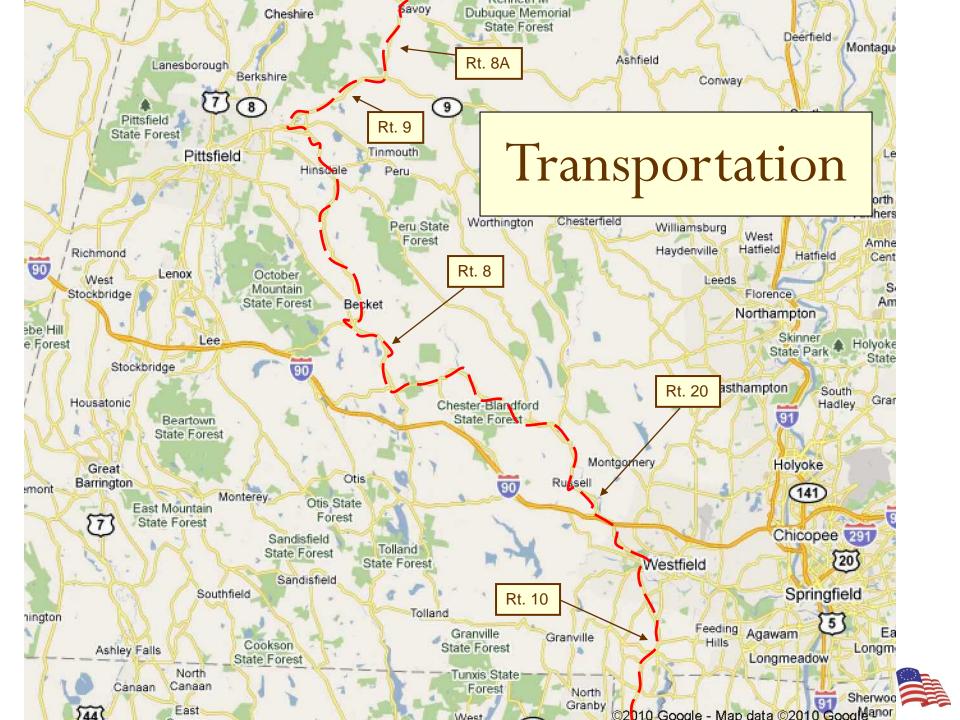
# Consideration of Impacts

- Community Character
  - Visual Impact
  - Industrial facilities in agricultural/residential community
- Effect on Neighbors
  - Noise and Flicker
- Public Safety
  - Demands on Police and Fire Services
  - Traffic impacts
- Roads and Electric Distribution









## Consideration of Benefits

- Environmental Benefit of Carbon-free electric generation
- Property Taxes
- Infrastructure Benefits
- Community Profile
  - "Our little town can show the way"



# Questions?



