

Nicollet County Wind Energy Conversion Systems Ordinance

MACPZA & MNAPA Training & Legislative
Update

June 10, 2010

History of WECS Events

- 7 Non Commercial Turbines Permitted in County Prior to 2005
- Adopted Model Ordinance in November 2005
- Amended State Rules Effective – February 2008
- New Ulm Public Utilities Project –
Met Tower Permitted in September 2008
- Moratorium Adopted in September 2008
- Creation of WECS Committee October 2008

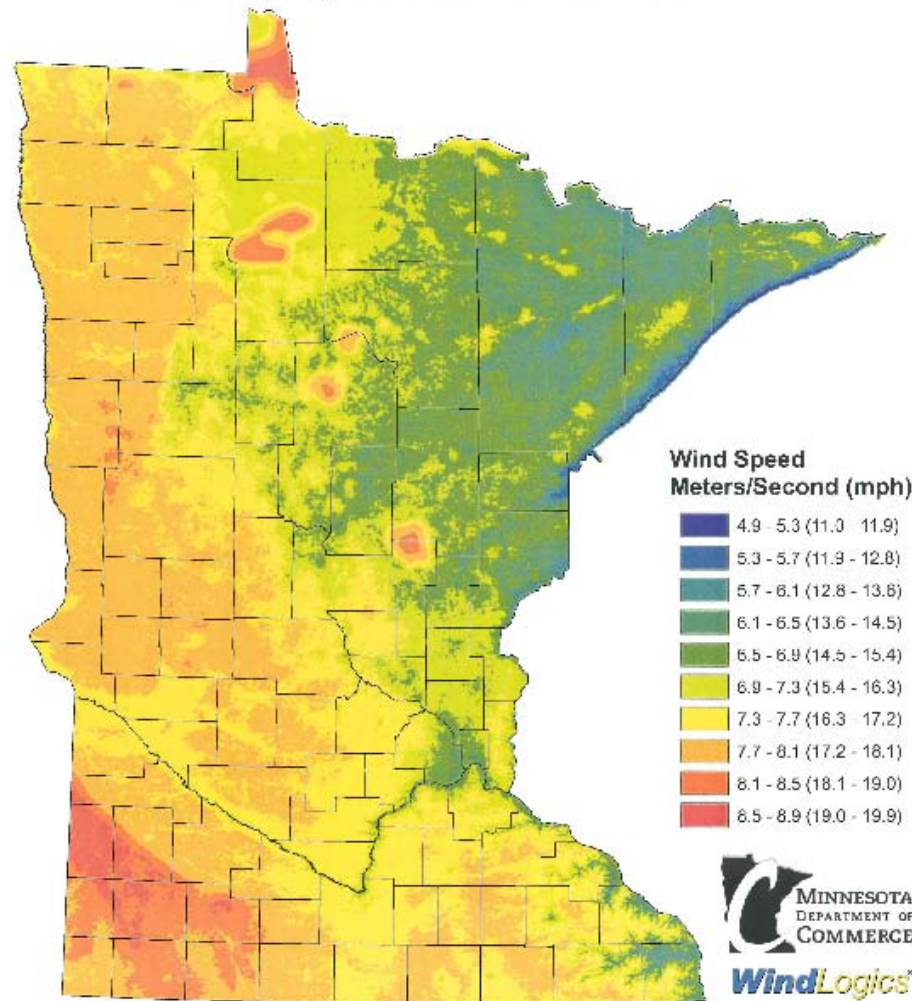
WECS Committee

- Committee Members – 7 (2 Staff)
 - 2 Planning and Zoning Commissioners
 - 2 Rural Residents
 - 1 County Commissioner
 - 1 City Official
 - 1 Township Official
- 12 Meetings Plus the Tour

WECS Committee Tour

- 3 Sites
 - St. Olaf and Carleton Colleges (Northfield)
 - G. McNeilus Wind Energy Company (Dodge Center)
 - Xcel and enXco “Grand Meadow” Project (Dexter)

Minnesota's Wind Resource by Wind Speed at 80 Meters



This map has been prepared under contract by WindLogics for the Department of Commerce using the best available weather data sources and the latest physics-based weather modeling technology and statistical techniques. The data that were used to develop the map have been statistically adjusted to accurately represent long-term (40 year) wind speeds over the state, thereby incorporating important decadal weather trends and cycles. Data has been averaged over a cell area 500 meters square, and within any one cell there could be features that increase or decrease the values shown on this map. This map shows the general variation of Minnesota's wind resource and should not be used to determine the performance of specific projects.

January 2005

1. Northfield →

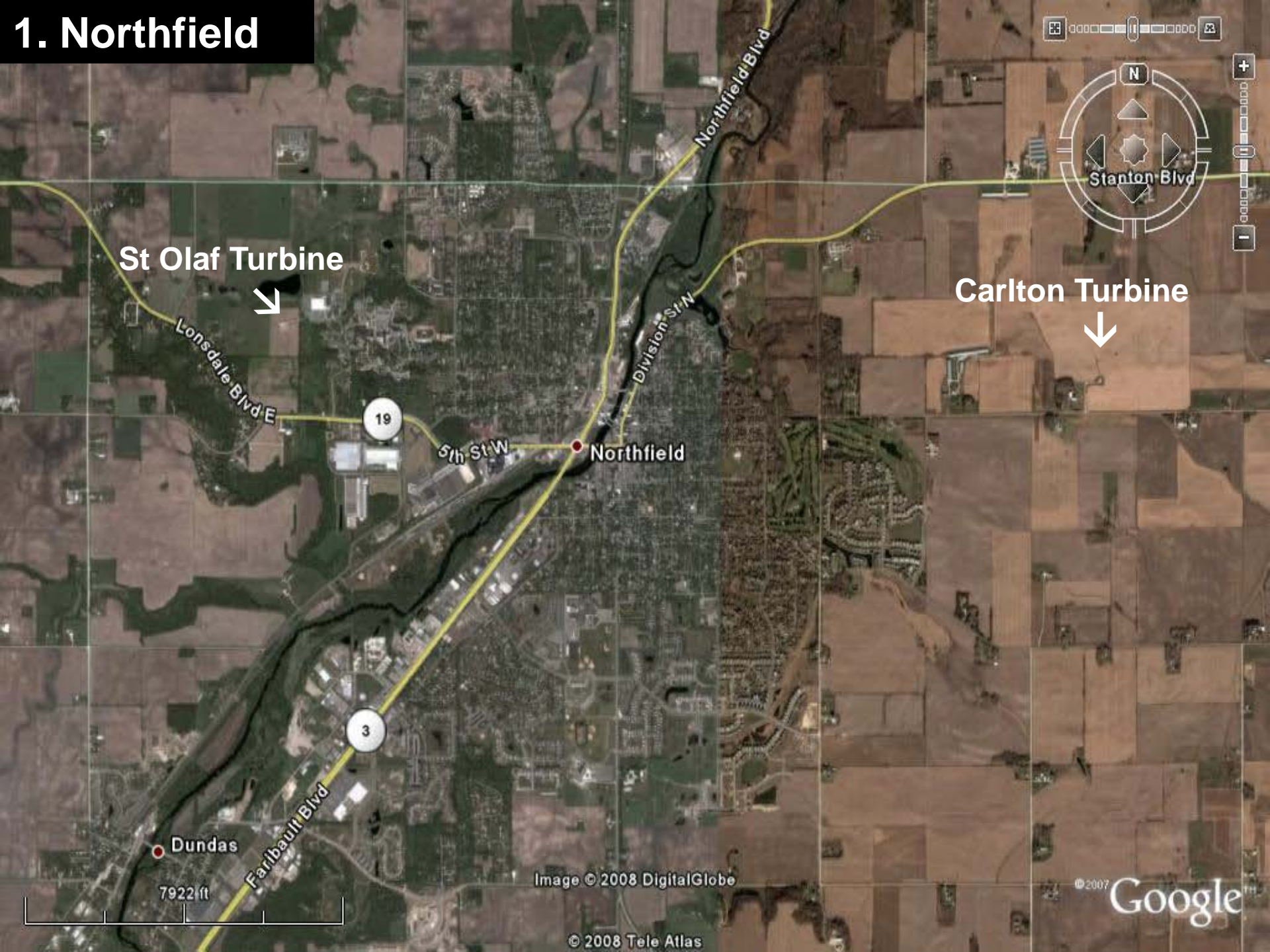
← St Peter

2. Dodge Center →

3. Dexter →



1. Northfield



St Olaf Turbine



Carlton Turbine



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1. Northfield

70M Hub Height
82M Rotor Diameter
1.65MW Gen
~1/3 of Power Need



St Olaf

Lonsdale Blvd E

St Olaf C

90th St E

Image © 2008 DigitalGlobe

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19

Google

1205 ft

Pointer 44°27'40.57" N 93°11'32.27" W

Streaming 100%

Eye alt 4166 ft

1. Northfield

Carlton Turbine
Located ~1-1/2 Miles
East of Campus

70M Hub Height
82M Rotor Diameter
1.65MW Gen

90th St E

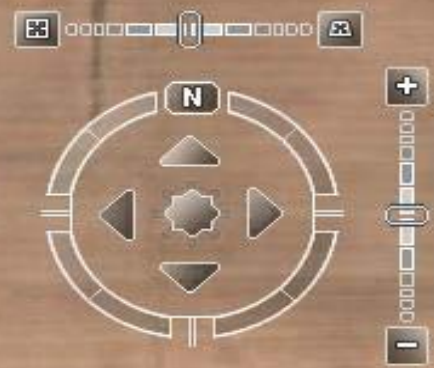


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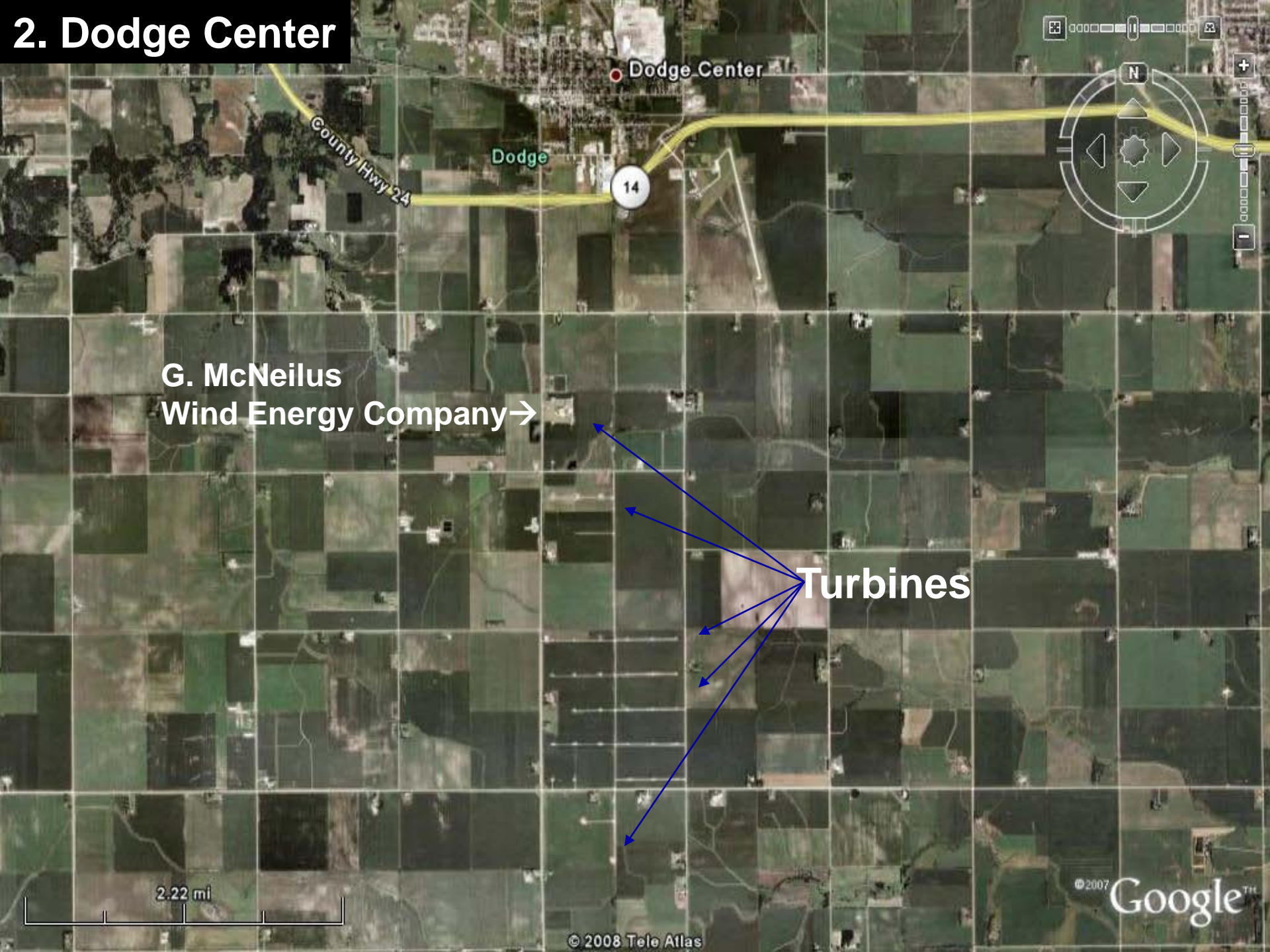
832 ft

Pointer 44°27'28.06" N 93°06'54.52" W

Streaming ||||| 100%

Eye alt 2876 ft

2. Dodge Center



Dodge Center

County Hwy 24

Dodge

14

G. McNeilus
Wind Energy Company →

Turbines

2.22 mi

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2. Dodge Center

56 Turbines On >1000-Acres in Two Townships

Power >22,000 Homes at Projected Capacity



3. Dexter

Both Sites Began as a Single ~200MW Project Developed by enXco



Xcel Energy Bought ~100MW "Wapsipinicon" Project

enXco Owns 100MW "Grand Meadow" Project and Will Operate & Maintain for Xcel

3.46 mi

3. Dexter “Grand Meadow” Project



Will Consist of 67 1.5MW Turbines When Complete
Power >33,000 Homes at Projected Capacity

Experts

- Larry Hartman, MN Department of Commerce
- Dr. Nina Pierpont, MD, PhD
- Dr. Thomas Huber, Gustavus Adolphus College
- Richard James, INCE E-Coustic Solutions
- Minnesota DNR - Wildlife Experts
- Aerial Applicators and Air Ambulances
- Industry Reps/Wind Farm Operators

Where are we today?

- Adopted WECS Ordinance August 2009
- Rescinded Moratorium August 2009
- December 2009, a variance was denied to reduce the ½ mile setback for a commercial turbine.
- On June 21st, 2010, P&Z Commission will hold a public hearing for a WECS project that will consist of 3 non commercial turbines.
- Continue delegation authority discussions.

WECS Fees

- Micro - \$50
- Non Commercial - \$250
- Commercial - \$500

- Conditional Use Permit - \$350
- Recording Fee - \$46

Questions?