# NYSERDA Wind Innovation & Technology



October 15, 2014

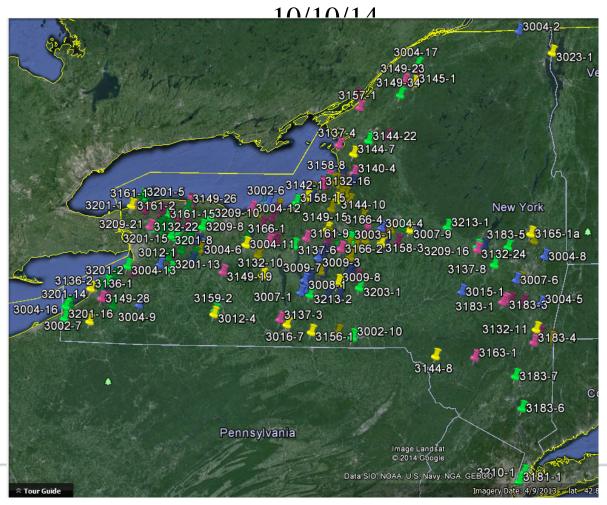
## What is the Future of NYSERDA's Distributed Wind Turbine Incentive Program?

- Current program in effect through 2015
  - Start year with \$4 Million
  - A "boat-load" potentially available

• After 2015?



#### NYSERDA-Funded On-Site Wind Turbines as of



## Applications Received

Year	Number	Range (kW)	NYSERDA \$	Annual MWh	\$/kWh
2008	15	4.25 to 10	\$480,000	140	\$3.43
2009	34	2.1 to 20	\$976,000	290	\$3.75
2010	19	2.5 to 100	\$710,000	315	\$2.25
2011	58	2.1 to 850	\$3,600,000	3,800	\$0.95
2012	16	8.9 to 100	\$700,000	350	\$2.00
2013	19	5.2 to 1,800	\$2,600,000	6,700	\$0.39
2014	37	5 to 100	\$1,900,000	1,200	\$1.58

#### Wind Turbine Incentive Program (PON 2439)

- The program is cost-effective.
- But it's not PV!
- Maybe?
- Program set to expire on December 31, 2015!

#### REV vs. CEF

Reforming the Energy Vision
The future of New York Utilities

Clean Energy Fund
The future of NYSERDA

Newest Goal

Reduce Greenhouse Gas Emissions

40% by 2030 – 80% by 2050

## New York Generation Attribute Tracking System (NYGATS)

- REC Certificates (to most)
- Characteristics per megawatt-hour
- Allow for the exchange of information
- Not a Trading Platform
- System in place by end of 2015

## Reforming the Energy Vision

- Utilities will be:
  - Managers of Distributed Energy Resources
  - In Charge of all Energy-Efficiency Measures
  - "a future in which solar and wind power and energy efficiency can deliver grid resilience and reduce pollution"
  - Policy Determination in 2015

## Clean Energy Fund

- 10 Years \$5 Billion
- Four Major Initiates
- 1. Green Bank
- 2. Market Development
- 3. Technology & Business Innovation
- 4. NY Sun

#### Green Bank

- Expand Credit Available for Renewable Energy Projects
- Transition away from grants
- Should be a place for Distributed Wind

## Market Development

- Breaking down non-monetary barriers
- Try to achieve streamlining & standardization
- Create awareness
- Provide direct financial incentives, only as a temporary bridge
- Should be a place for Distributed Wind

## Technology & Business Innovation

- Used to be called R&D
- Level funding for 10 years
- Must focus on GHG emission reduction in NY
- Should be a place for Distributed Wind

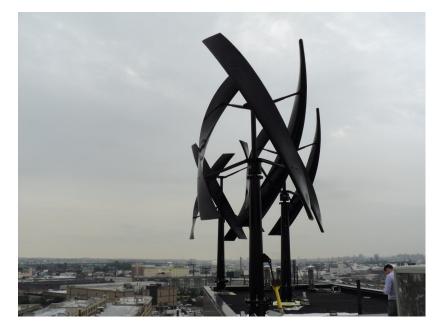
## Did you notice a pattern?



Soap Box

## Pearson Court Square – Long





Urban Green Energy - VisionAir5 - 17' x 10'
Currently Under Test for Certification at Intertek (Cortland, NY)

• NYSERDA wants the data!

#### **Innovation**

**XC Associates & RPI** – Synthetic Jet Actuators vs. Deployable Vortex Generators

LC Drives & Clarkson – Liquid-Cooled Generators

Illing Engineering – Innovative Hub Design

Weaver Wind Energy – 5 kW turbine

#### Where Do We Go From Here?

It all depends on you.

#### **GET INVOLVED!**

Register with DPS as an "Active Party" Contact people with influence

No one will listen to me.