New York State Renewable Portfolio Standard

Joe Visalli NYSERDA Association of Towns Annual Meeting February 2007

Topical Outline

- New York RPS Program Description
 - Key Features / Structure / Funding
- Main Tier Cumulative Outcomes
- Scale of Development & Economic Implications
- Tools for Towns

Maple Ridge Wind Farm

NYSERDA Snapshot

- > A Public Benefit Corporation established in 1975
- Mission: to identify solutions to State's energy challenges in ways that benefit the State's economy and environment
- > Broad definition of "energy challenges"
- > Public/private partnerships strategic engagement
- Competitive and market-oriented approach resulting in risk reduction investments

NYS Renewable Portfolio Standard (RPS)

> Public Service Commission (PSC) adopts Renewable Portfolio Standard in September of 2004

> Goal is to have 25% of the power consumed at retail to come from renewable generation by 2013

> Program objectives:

- Environmental improvement
- Fuel diversity
- Economic development
- Energy price suppression

Alfred University Turbine

New York State Renewable Portfolio Standard (RPS)

- Existing resources account for about 19.5%
- Incremental requirement to be satisfied by:
 - Main Tier (NYSERDA).....(9,800,000 MWH)
 - Customer-Sited Tier (NYSERDA)... (200,000 MWH)
 - Voluntary Green Retailing(1,800,000 MWH)
 - State Agency Purchases......(300,000 MWH)

Note: Voluntary Market 15% of incremental target !

Maple Ridge Project in Lewis County, NY

NYSERDA as Central Procurement Agent

NYSERDA procurement obligation is broken out into two components:

<u>Grid – Connected Generation</u> sells energy into the power grid for resale via the utility or an energy service provider.....referred to as the <u>Main - Tier Program</u>

<u>Behind the meter generation</u> is that which is situated on the customer's side of the electric meter and the energy produced is used by that customer to serve its own load...referred to as the <u>Customer - Sited Tier Program</u>

RPS Program Funding

- > RPS funding mechanism (similar to SBC funding protocols)
- > PSC orders utilities to assess surcharge on deliveries (basis of non-bypassable wires charge)
- > \$764.4 M total funding through 2013 (collections + interest)



RPS Main-Tier Features

- > NYSERDA is central buyer on behalf of ratepayers of all IOUs in state
- > Projects in service/using new eligible fuels after 1/1/2003 are eligible
- > NYSERDA pays fixed production incentive (\$/MWh)
 - Prices set competitively
 - Secure property rights to Renewable Energy Certificates
 - Secure product claims of environmental improvement
- > NYSERDA does not purchase energy; however,
 - Energy must be delivered to New York ISO on hourly-scheduled basis
- > Out-of-state resources currently eligible
- > Project selection <u>now</u> a function of REC price <u>and NYS economic benefits</u>

2nd Main Tier Solicitation (RFP 1037- RPS 2)

- Step One: Qualification to submit Bid Proposal
 - 44 Application Packages received; 6 facilities outside NY
 - 38 facilities qualified for Bid Proposals
 - 19 Wind, 8 Biomass, and 10 hydroelectric in NYS
- Step Two: Competitive Bid Proposal Submission
 - Participation rose while costs have come down
 - 34 bid facilities involved ; a 54% increase in participation !
 - Bid Prices compared dropped approximately 30%

- Contract execution pending









Cumulative Main Tier Procurement Outcomes¹ (Expected outcomes for RFP 1037; RPS 2 contracts are pending)



11500

Richmond___

Cumulative Development Since Inception of SBC and RPS

	WIND	HYDROPOWER	BIOMASS	
	Nameplate Capacity	Incremental Capacity	Nameplate Capacity	
In operation or under construction in New York State				
RPS 2	828.0 ¹	8.0	44	
RPS 1	231.0 ²	.8	19	
SBC	48.5	0	0	
Merchant	110.0	0	0	
TOTAL	1217.5	8.8	63	

¹ 549.0 supported directly through RPS payments ; balance supported on merchant basis

² Excludes 29.5 MW from Bear Creek (PA) and Atlantic City (NJ) wind farms

Execution of RPS 2 Contracts is pending

RPS Customer-Sited Tier Structure

➢ Modeled after New York Energy \$mart SM incentive program currently administered by NYSERDA

 Accelerate development of photovoltaic systems, fuel cells, small wind turbines and digesters

 Combination of incentive packages, performance incentives and competitive procurement

 In general, participation will be limited to customers paying the RPS surcharge



Wind Development by County



County	# of Projects	MW
Cattaraugus	2	178
Chautauqua	4	328
Clinton	4	354
Delaware	1	129
Franklin	3	477
Genesee	2	558
Herkimer	2	234
Jefferson	3	472
Lewis	1	80
Erie	1	60
Madison	2	80
Otsego	1	80
Steuben	5	472
Suffolk	1	140
Wyoming	4	392
Yates	2	155
Orleans	1	120
Total:	39	4309

Wind Related Economic Impacts

Economic impacts to New York include direct, indirect and induced economic activities:

- purchase of goods/materials and related services
- revenue associated with land use/wind rights
- taxes/payments in lieu of taxes/other
- temporary/permanent employment
- manufacture of energy/price suppression

Wind Related Economic Impacts

Benefits approx. \$10/MWh¹ (project-life basis of 20 years)

> 100 MW project results in benefits approaching \$2.6 million annually; or about \$50+ million over project life

Benefits associated with cumulative RPS procurements approach <u>\$ 600 million dollars on a project-life basis</u>

Expected benefits on total program basis likely exceed \$1 billion (assuming current procurement objectives are fully funded through 2013)

¹http://www.powernaturally.org/Programs/Wind/MajorEcoImpactsUtility ScaleWind.pdf (excludes indirect benefits and price suppression effects)

Wind Energy Toolkit to Help Municipalities

- Comprehensive Plan
- Sample Ordinance Standards
- Avian, Bat, and Biological Impacts
- Other Potential Environmental Impacts
- Electrical Grid and Wind Generation
- Wind Turbine Technology Overview
- Wind Project Lifecycle Overview
- Current Wind Development in New York
- Legal Guidebook for Landowners
- Lease Agreements
- Sample Annotated Land Lease Agreement
- Site Identification & Land Requirements
- Meteorological Poles and Towers

- Government Agencies' Role in Approval Process
- Types of Permits and Approvals Often Needed
- Public Health and Safety
 Property Tax: Exemptions and PILOT
- School District Tax Impacts
- Economic and Socioeconomic Impacts
- Property Values
- Property Tax Exemption, Project Improvements, and State School Aid
- Small Wind Fact Sheet
- Large Wind Fact Sheet.
- Frequently Asked Questions
- Myth Busters
- How to Critically Evaluate Information

www.powernaturally.org/Programs/Wind/toolkit.asp or www.nyserda.org

For More Information

NYSERDA's Renewables Programs

- www.nyserda.org/rps
- www.PowerNaturally.org
- NYSERDA Wind Energy Toolkit www.powernaturally.com/Programs/Wind/toolkit.asp
- www.dps.state.ny.us
- <u>www.nyiso.com (interconnection governance)</u>

John Saintcross 518-862-1090, ext. 3384 js1@nyserda.org