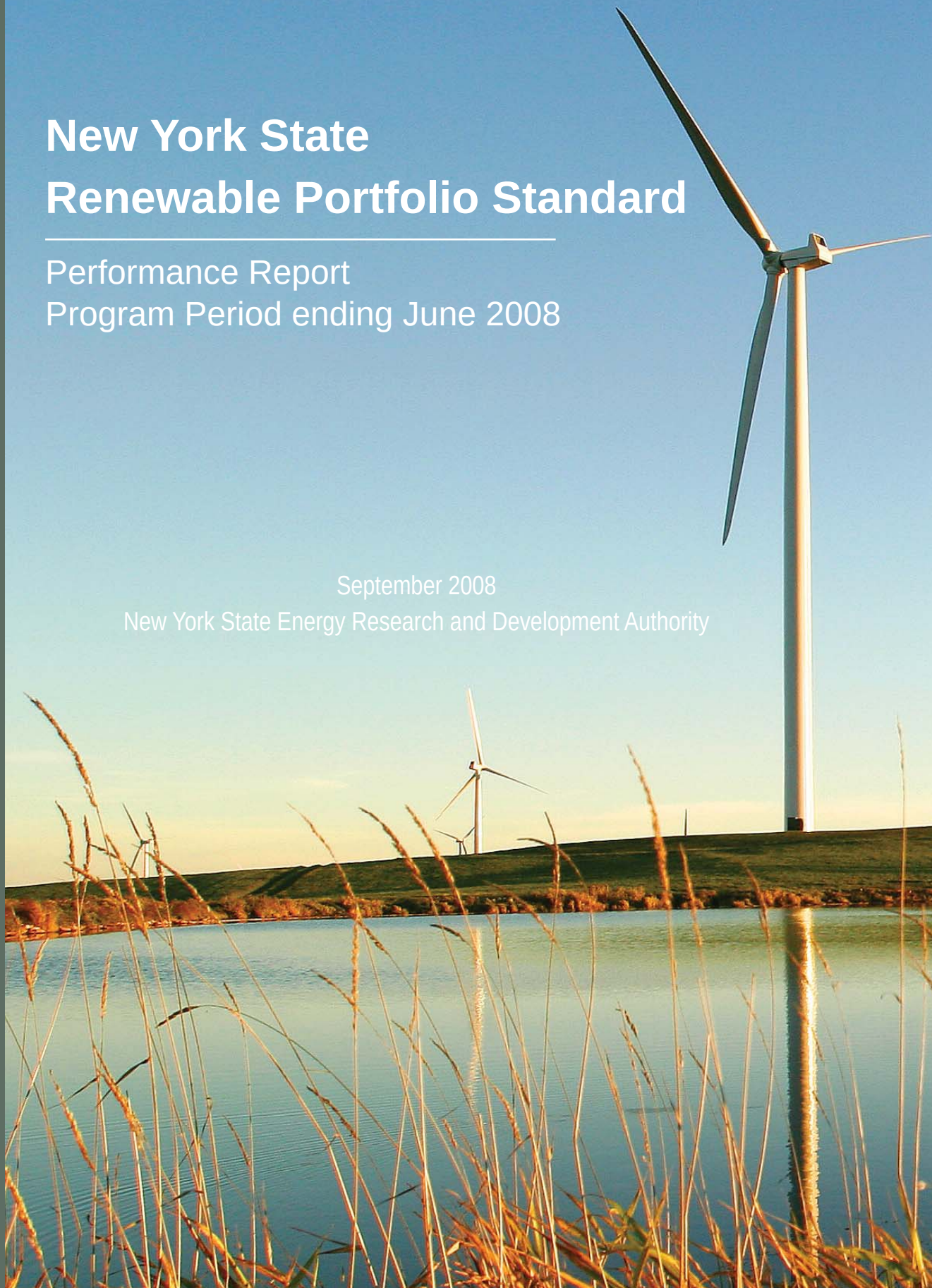
New York State
Renewable Portfolio Standard

Performance Report
Program Period ending June 2008



September 2008

New York State Energy Research and Development Authority

NYSERDA

New York State
Energy Research and
Development Authority


Photo courtesy of Iberdrola Renewables, Inc.

Table of Contents

Executive Summary

From January 1, 2007 through June 30, 2008 ("the reporting period"), the New York State Energy Research and Development Authority (NYSERDA) and the Department of Public Service took several actions to implement the New York State Renewable Portfolio Standard program ("RPS Program"). Some of the major actions include the completion of the third Main Tier competitive solicitation, the release of the Customer-Sited Tier Operating Plan, and the launch of Customer-Sited Tier programs. Additionally, several Main Tier facilities commenced operation.

Eleven new renewable generating facilities were selected in the third Main Tier competitive solicitation. The award group includes four existing hydroelectric facilities that have been or will be upgraded, six wind facilities, and one traditional coal-fired facility, which is planning to co-fire biomass fuel to produce electricity.

The total renewable capacity associated with the RPS Program could reach nearly 1,340 megawatts (MW) by late 2009. This renewable capacity is expected to produce approximately 3.8 million megawatt hours (MWh) of electricity per year, or enough clean energy to supply 635,000 average homes.

Of the 30 new renewable electric generating facilities in New York selected under the RPS program, 15 are now operating, and 11 are under construction. The remaining four are expected to be operating by the end of 2009.

The investments in New York-based renewable generation facilities have the potential to yield more than $1.4 billion of in-state economic benefits over a 20-year period. In addition to these significant economic benefits, New York will enjoy cleaner air as a result of the operation of these new renewable resources. If the energy expected to be generated by these new renewable resources is instead generated by the system-wide mix of conventional, non-renewable generating resources, New York would experience an increased release of emissions amounting to 2,600 tons of nitrogen oxides, 5,200 tons of sulfur dioxides, and 1.9 million tons of carbon dioxide per year.

Program Highlights

- New renewable capacity installed since the onset of the RPS Program could reach nearly 1,340 MW by the end of 2009, of which 1,303 MW would be located in New York.
- The estimated economic benefits that could accrue to New York from these in-state investments could exceed $1.4 billion over the next 20 years.
- Average contract award prices under the second and third Main Tier solicitations were more than 30% lower than under the first Main Tier solicitation ($15 per MWh compared to $22.90 per MWh).
- As of the end of the reporting period, 1160 MW of new renewable capacity from facilities under contract are operating or under construction.

Introduction

This report summarizes activities conducted by NYSERDA and the Department of Public Service in implementing the New York State Renewable Portfolio Standard (RPS). The report includes background on the RPS, including objectives and performance targets; a description of recently completed program design and implementation activities; and a summary of RPS Program outcomes, funding, and expenses. Program reports for activities conducted through the first quarter of 2007 can be found at http://www.nyserda.org/rps/resourcesReports.asp

Background

The 2002 State Energy Plan warned of the possible consequences of New York's heavy dependence on fossil fuel.[1] The Energy Plan noted that the State's fossil fuel resources (gas, coal, oil) are largely imported from abroad or out-of-state, have significant long-term negative environmental impacts, and face ultimate depletion. Recognizing the need for a proactive approach to the State's energy and environmental challenges, in February of 2003, the New York State Public Service Commission (Commission) initiated a proceeding to explore the development of a Renewable Portfolio Standard (RPS). On September 24, 2004, following an extensive stakeholder process, the Commission issued an order[2] adopting an RPS, with a goal of increasing the proportion of renewable energy used by New York consumers from the then-current 19.3% (baseline resources) to at least 25% by the end of 2013.

As part of the September 24, 2004 Order, the Commission designated NYSERDA as the central procurement administrator for the RPS Program. In doing so, the Commission noted an expectation that retail customers ("Voluntary Market") would contribute at least 1% toward the 25% goal, thus leaving baseline resources, State Agencies' purchases under Executive Order 111 (EO 111), and NYSERDA procurements to realize the remaining 24%. As part of the September 24, 2004 Order, the Commission directed the major investor-owned utilities to collect funds from ratepayers to be administered by NYSERDA for the purpose of supporting NYSERDA's implementation responsibilities.

In most other states with RPS programs, a renewable energy percentage target is implemented by requiring the local delivery utilities to supply their customers with a certain percentage of electricity from renewable sources. Under New York's RPS Program, NYSERDA, as the central procurement administrator, does not procure electricity. Rather, NYSERDA pays a production incentive for the environmental attributes ("RPS Attributes") created with the generation of electricity by eligible renewable resources under long-term contracts. RPS Attributes include any and all reductions in harmful pollutants and emissions, such as carbon dioxide and oxides of sulfur and nitrogen. In exchange for receiving the production incentive, the renewable generator provides NYSERDA all rights and/or claims to the RPS Attributes associated with each MWh of renewable electricity generated and delivered to New York State.

One RPS Attribute is created by the production and delivery into New York's power system of one MWh of electricity by an eligible RPS resource. By acquiring the RPS Attributes, rather than the associated electricity, the RPS Program ensures that increasing amounts of renewable electricity will be injected into the State's power system, while minimizing interference with the State's competitive wholesale power markets.

Tiered Approach to Implementing the RPS

The Commission established two tiers of resource types under the RPS Program. The first, or "Main Tier," consists primarily of medium to large-scale electric generation facilities that deliver their electrical output into the wholesale power market administered by the New York Independent System Operator (NYISO). The second, or "Customer-Sited Tier," consists of smaller, "behind-the-meter" resources that produce electricity for use on site.

Only renewable energy systems installed on or after January 1, 2003 are eligible to participate, and Customer-Sited Tier resources must be located in New York State. While the Main Tier operates through the issuance of periodic competitive solicitations, eligible Customer-Sited Tier resources are supported through a combina-

[1] State Energy Plan, 1-1, June 2002.
[2] Order Regarding Retail Renewable Portfolio Standard, Case 03-E-0188.

tion of incentives for the "buy-down" of capital costs and/or energy production.

Eligible resources and technologies for both the Main and Customer-Sited Tiers are described in Orders issued by the Commission[3]. The RPS Program includes a process for evaluation of new resources and technologies for eligibility as the program progresses.

Renewable Energy Targets

The Commission's September 24, 2004 Order set forth annual renewable energy targets that represent an incremental glidepath toward achievement of the 2013 goal of having 25% of the power consumed in New York come from renewable energy. As the administrator of the RPS, NYSERDA is responsible for managing incentive programs to satisfy both the Main Tier and the Customer-Sited Tier targets. Those renewable energy targets are shown in Table 1 below.

Table 1: RPS Energy Targets (in MWh)

	Main Tier Targets	Customer-Sited Tier Targets	EO 111 Targets	Voluntary Market Targets	Combined Targets
2006	1,121,247	25,259	282,812	228,584	1,657,902
2007	2,326,171	50,488	314,579	457,167	3,148,405
2008	3,549,026	75,685	346,366	685,751	4,656,828
2009	4,767,994	100,855	378,174	914,335	6,161,358
2010	6,012,179	125,988	410,002	1,142,919	7,691,088
2011	7,297,746	151,081	391,857	1,371,502	9,212,186
2012	8,556,710	176,123	373,712	1,600,086	10,706,631
2013	9,854,038	201,130	355,568	1,828,670	12,239,406

In its June 28, 2006 Order[4], the Commission established new capacity and energy targets for the Customer-Sited Tier through 2009, authorized incentive funding of $45 million, and directed the development of a Customer-Sited Tier Operating Plan ("CST Plan") for solicitation of customer-sited renewable resources.[5] See Table 2, below, for new capacity and generation targets for each resource category. The CST Plan reflects the experience that NYSERDA has gained through implementation of similar programs funded by the Systems Benefit Charge (SBC) from 1998 through 2006.

Table 2. Customer-Sited Tier Expected Program Results by Resource Category 2007-2009*

Resource Category	Target Capacity in MW by 12/31/09	Target Annual Generation in MWh by 12/31/09	Authorized Funding (million $)
Solar Photovoltaics	3.5	4,533	18.2 **
Fuel Cells	2.7	18,700	11.2
Anaerobic Digester Biogas	3.7	25,700	12.5 ***
Small Wind	1.8	3,945	3.1
Program Total	11.7	52,878	45.0

* Pursuant to CST Operating Plan.
** Includes $3.0 million of approved discretionary funding and $1.4 million of authorized reprogrammed funding from the small wind program.
*** Includes $1.5 million of approved discretionary funding.

[3] Case 03-E-0188, "Order Approving Implementation Plan, Adopting Clarifications, and Modifying Environmental Disclosure Program," Appendix B, April 14, 2005, and "Operating Plan for Customer-Sited Tier Program," February 12, 2007..

Maintenance Resource Participation

In establishing the RPS target of 25%, the Commission recognized that 19.3% of the energy sold at retail in New York was being generated by renewable resources that existed prior to the RPS being adopted in 2004 (baseline resources). For the purpose of ensuring the continuing operation of these valuable existing resources, the Commission established an additional Maintenance Resource program. To be eligible to receive RPS program funding as a Maintenance Resource, a baseline resource is required to demonstrate financial hardship through a formal request to the Commission. The Commission then determines the existence and degree of hardship and makes a determination as to the eligibility of the facility for Maintenance Resource treatment. The Commission may or may not grant Maintenance Resource status. If this status is granted, the Commission determines the form and magnitude of support to be offered.

NYSERDA has contracts with two Maintenance Resources, the Lyonsdale Biomass Plant located in Lyons Falls, New York, and Boralex Biomass Plant, located in Chateaugay, New York. In combination, the Lyonsdale and Boralex contracts will support the retention of approximately 39 MW of in-state biomass capacity and involve approximately 259,000 MWh of annual energy production. The total funding committed to these multi-year contracts is approximately $33.9 million. These maintenance resource quantities do not count toward Main Tier incremental energy targets. During the reporting period, no additional facilities were granted Maintenance Resource status.

Photo courtesy of Lyonsdale Biomass, LLC

[4] Order on Customer–Sited Tier Implementation, Case 03-E-0188.

[5] The CST Plan was released in February 2007 and can be found at http://www.dps.state.ny.us/CST_OP_02-12-07.pdf.

Results of Main Tier Solicitations

NYSERDA has conducted three competitive Main Tier solicitations in pursuit of the renewable energy procurement targets as set forth in Table 2 above. A total of 30 facilities, capable of producing up to 3,479,000 MWh of renewable energy per year from approximately 1,338 MW of new renewable capacity,[6] are under contract or have contracts pending with NYSERDA as a result of these procurement actions. The facilities include two traditional fossil fuel plants that will use biomass as a fuel source, fifteen hydroelectric station upgrades, and thirteen wind farms.

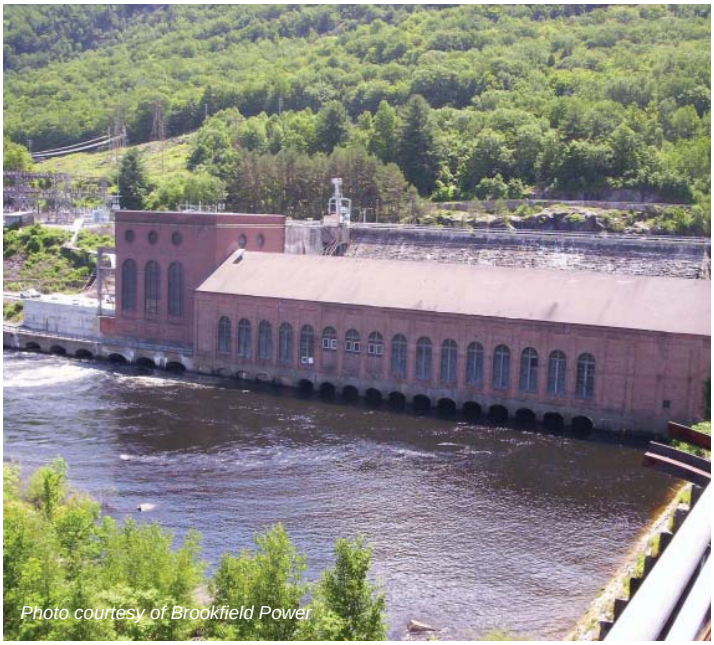


Photo courtesy of Brookfield Power

Of the 30 new renewable electric generating facilities in New York selected under the RPS Program, 15 are now operating, and 11 are under construction. The remaining four are under development and are expected to be operating by the end of 2009. The status of these projects, listed by technology, as of the end of the reporting period is presented in Table 3 below.

Table 3. Project Development Status.

	MW Operating	MW In Construction	MW Under Development	Totals
Wind	625.0	480.5	174.0	1,279.5
Hydroelectric	7.1	21.6	-	28.6
Biomass	26.0	-	4.0	30.0
Totals	658.1	502.1	178.0	1,338.1

	# Operating	# In Construction	# Under Development	Totals
Wind	5	5	3	13
Hydroelectric	9	6	-	15
Biomass	1	-	1	2
Totals	15	11	4	30

[6] "New renewable capacity" generally refers to nameplate capacity at facilities under contract in the RPS that did not exist prior to the start of the RPS program, including any portion not under contract with NYSERDA.

The 1,338 MW of new renewable capacity associated with the RPS are owned by or affiliated with eight different entities, as shown in Table 4 below. Additional details of each Main Tier facility participating in the RPS can be found in Appendix B.

Table 4. Main Tier Facilities

Facility	Contractor	Type	County
AES Greenidge Station	AES Greenidge, LLC	Biomass	Yates
Niagara Generating Facility	USRG Niagara Biomass, LLC	Biomass	Niagara
High Falls	Brookfield Energy Marketing Inc.	Hydro	NA – Canada (Quebec)
Effley Hydro	Brookfield Power New York	Hydro	Lewis
Piercefield Hydro	Brookfield Power New York	Hydro	St. Lawrence
Sherman Island	Brookfield Power New York	Hydro	Saratoga
Allens Falls	Brookfield Power New York	Hydro	St. Lawrence
Browns Falls	Brookfield Power New York	Hydro	St. Lawrence
Colton	Brookfield Power New York	Hydro	St. Lawrence
Eagle	Brookfield Power New York	Hydro	Lewis
East Norfolk	Brookfield Power New York	Hydro	St. Lawrence
Higley	Brookfield Power New York	Hydro	St. Lawrence
Norfolk	Brookfield Power New York	Hydro	St. Lawrence
Norwood	Brookfield Power New York	Hydro	St. Lawrence
Oswego Falls	Brookfield Power New York	Hydro	Oswego
Raymondville	Brookfield Power New York	Hydro	St. Lawrence
Spier Falls	Brookfield Power New York	Hydro	Saratoga
Dutch Hill Wind Farm	FirstWind (formerly UPC Wind)	Wind	Steuben
Cohocton Wind Farm	FirstWind (formerly UPC Wind)	Wind	Steuben
Windfarm Prattsburgh	FirstWind (formerly UPC Wind)	Wind	Steuben
Maple Ridge Wind Farm	Iberdrola Renewables/Horizon Wind	Wind	Lewis
Noble Allegany Windpark	Noble Environmental Power	Wind	Allegany
Noble Altona Windpark	Noble Environmental Power	Wind	Clinton
Noble Bliss Windpark	Noble Environmental Power	Wind	Wyoming
Noble Chateaugay Windpark II	Noble Environmental Power	Wind	Franklin
Noble Chateaugay Windpark	Noble Environmental Power	Wind	Franklin
Noble Clinton Windpark I	Noble Environmental Power	Wind	Clinton
Noble Ellenburg Windpark	Noble Environmental Power	Wind	Clinton
Noble Wethersfield Windpark	Noble Environmental Power	Wind	Wyoming
Bear Creek	PPL EnergyPlus, LLC	Wind	N/A - Pennsylvania

First Main Tier Solicitation

NYSERDA's first competitive Main Tier solicitation (RFP 916) was conducted in 2004 with an expected facility online date of January 1, 2006. This solicitation was issued in pursuit of the 2006 year-end target of 1,121,247 MWh. The solicitation was issued as a sealed bid, pay-as-bid Request for Proposal (RFP). In this solicitation, bidders were awarded contracts based on the price bid for RPS Attributes alone. No other factors were taken into account to determine selection and the ultimate award of a contract.

The first Main Tier solicitation resulted in contracts for the development of 254 MW of renewable capacity at five facilities (two wind and three hydroelectric upgrades), from which NYSERDA would provide production incentives for 865,582 MWh per year.[7] The total funding commitment associated with this solicitation is approximately $173.6 million, and the weighted average production incentive awarded was $22.90 per RPS Attribute.

Second Main Tier Solicitation

The second competitive Main Tier solicitation was conducted in early 2007 with an expected facility online date of January 1, 2008. This solicitation was issued in pursuit of the 2008 year-end target of 3,549,026 MWh. The second Main Tier competitive solicitation was completed in the first quarter of 2007. Unlike the first Main Tier solicitation, awards were based on two evaluation components: (1) the bid price, weighted at 70%; and (2) the ability of the bidder to demonstrate economic benefits to New York State created by the construction and operation of the bid facility, weighted at 30%.[8] The solicitation was designed as a two-step process, consisting of: (1) an application step that pre-qualified bidders; and (2) a competitive bid proposal submission step. Only those bidders found pre-qualified through the Step 1 application process were permitted to submit bid proposals in Step 2.

The second solicitation resulted in NYSERDA awarding contracts to provide production incentives to 20 new or upgraded facilities in New York. One facility, the proposed Jordanville Wind Farm, failed to meet contract milestones, and the contract was terminated. Under the remaining 19 contracts, contractors are obligated to build 538 MW of renewable capacity, from which NYSERDA will provide production incentives for approximately 1,800,000 MWh per year. Facilities were expected to be operating by January 1, 2008 but had the option to extend this date to November 1, 2008. As of June 30, 2008, 11 facilities or 314 MW of new renewable capacity have come on-line, and the remaining eight facilities have opted to extend their on-line date to November 1, 2008. The total funding commitment associated with this solicitation is approximately $266.3 million, and the weighted average price awarded was $15.52 per RPS Attribute.

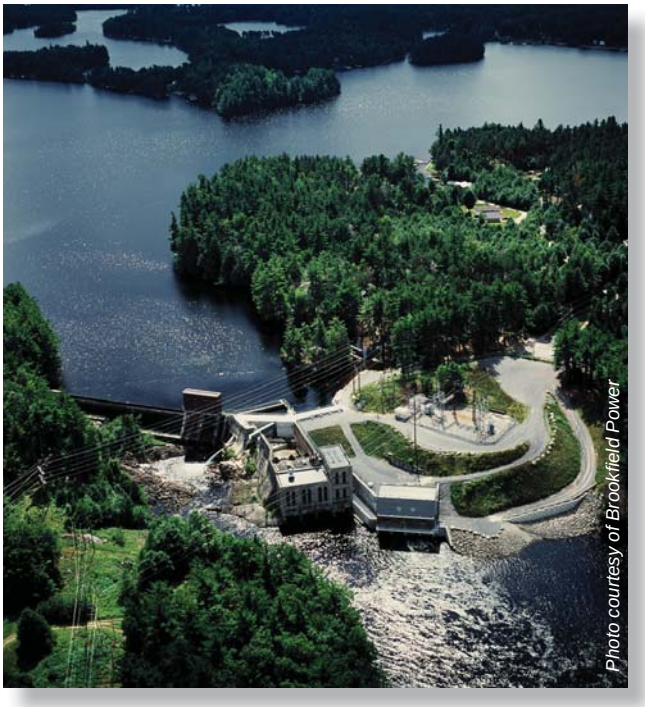


Photo courtesy of Brookfield Power

[7] There were initially seven bidders that won contracts in this solicitation, but two facilities, the Criterion Wind Farm and the Jersey Atlantic Wind Farm, failed to meet contractual obligations and their contracts were terminated.

[8] This solicitation structure was authorized by the Commission's October 19, 2006 "Order Authorizing Solicitation Methods and Consideration of Bid Evaluation Criteria."

Third Main Tier Solicitation

The third competitive Main Tier Solicitation (RFP 1168) was conducted in early 2008 with an expected facility online date of January 1, 2009. This solicitation was issued in pursuit of the 2009 year-end target of 4,767,994 MWh. The solicitation was completed in the first quarter of 2008. As was the case for the second Main Tier Solicitation, awards were based on price, weighted at 70%, and economic benefits to New York State, weighted at 30%. The solicitation followed the same two-step bid evaluation process employed for the previous solicitation.

Twenty-eight facilities submitted Step 1 applications for qualification to submit a bid proposal, three of which were located outside of New York. Upon completion of the qualification process, a total of 24 facilities (13 wind, three biomass, and eight hydroelectric), were qualified to participate in Step 2. On December 20, 2007, bidders representing 23 of the 24 qualified facilities submitted 33 bid proposals (alternate proposals were submitted for some facilities).

After the completion of the evaluation process, NYSERDA selected bidders representing 11 facilities. The diverse award group includes four hydroelectric facilities with planned upgrades (one of which will export from the Hydro Quebec control area), six wind farms (including three that contracted for a percentage of their output under the second Main Tier solicitation and offered an additional percentage), and one traditional fossil fuel facility planning to use biomass. Successful bidders from this solicitation are expected to build 310 MW of new renewable capacity from which NYSERDA will provide production incentives for the first 824,550 MWh generated each year. Facilities are expected to be operating by January 1, 2009 but can exercise an option to extend the operation date to November 30, 2009. The total funding commitment associated with this solicitation is approximately $118.6 million. The weighted average price NYSERDA will pay for RPS Attributes produced by the facilities selected under this solicitation is $14.75 per RPS Attribute.

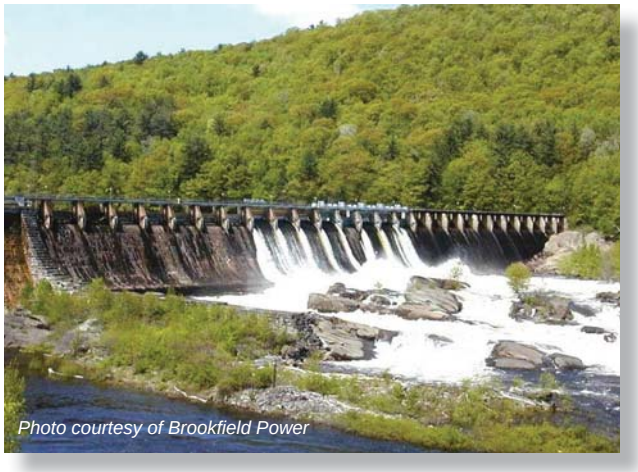


Photo courtesy of Brookfield Power

Steps Taken to Support the Voluntary Market

Several program design features have been incorporated into the Main Tier in an effort to support the ultimate program goal of transitioning to the voluntary market. For example, the Main Tier solicitations do not require contractors to bid the attributes related to the entire output of their facilities; and, in the second and third Main Tier solicitations, NYSERDA instituted a requirement that capped bids at 95% of a facility's attributes, thus leaving 5% available for voluntary sales. These design features were instituted in large part to help satisfy the growing demand from retail energy consumers for renewable energy products. As a result of these key design features, three wind farms are currently offering NYSERDA only 40% of their output, and 236 MW of new capacity has been constructed or will be constructed without an RPS contract for the RPS Attributes. It is estimated that this merchant capacity will produce nearly 400,000 MWh each year, which may be available for sales to retail customers in New York or elsewhere.[9] Furthermore, in the second and third Main Tier solicitations, NYSERDA structured its contracts to provide flexibility for contractors to suspend deliveries to NYSERDA in order to make sales to the NY voluntary green market.[10] As of June 30, 2008, at least one contractor has inquired about exercising this option.

[9] The output from this merchant capacity is recognized by NYSERDA not as progress towards the Main Tier targets, but rather in terms of its potential to support growth in the voluntary market and satisfy other program policy objectives.

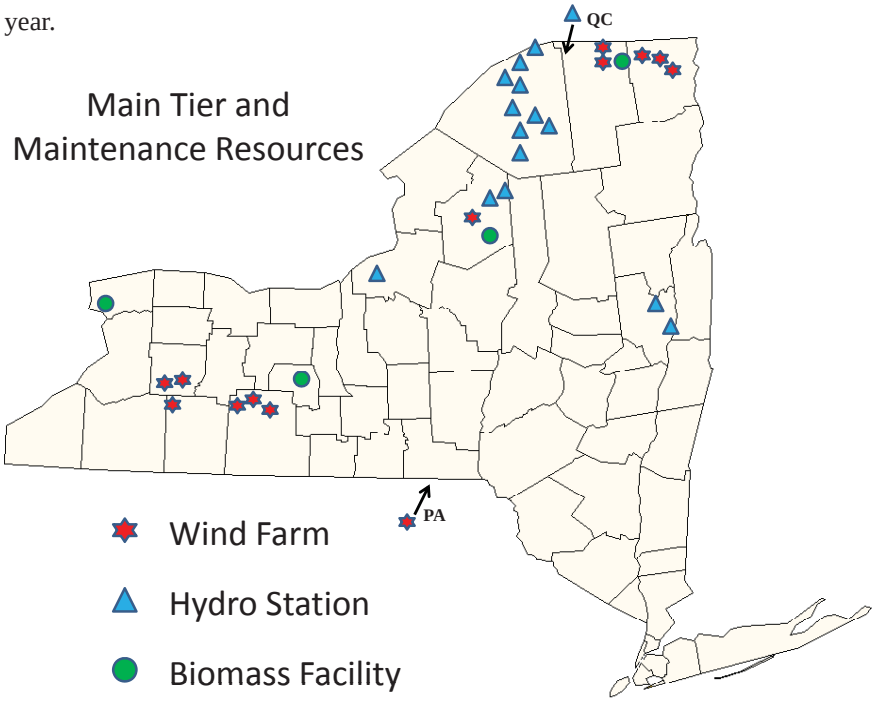
[10] Contractors are not obligated to serve the NY voluntary market with any output not under contract with NYSERDA, while contractors who suspend delivery to NYSERDA are required to make sales into the NY voluntary market.

Economic and Environmental Impacts

The economic benefits associated with expected in-state investment accruing to New York could exceed $1.4 billion[11] over the next 20 years, not including the impact of any economic spill-over or multiplier effects or energy price suppression effects. These economic benefits will come in the form of planning and construction jobs, long-term operations and maintenance jobs, property tax or payment-in-lieu of taxes benefits to local governments and school districts, and lease and/or royalty payments to landowners.


NYSERDA Photo

The 32 in-state renewable electric generating facilities under contract or with pending contracts, inclusive of the Maintenance Resources, will also provide material environmental benefits to New York. Compared to the environmental impact of having the expected energy generated by the system-wide mix of conventional, non-renewable generating resources in New York, generation by these new renewable resources will result in decreased emissions, amounting to 2,600 tons of nitrogen oxides, 5,200 tons of sulfur dioxides, and 1.9 million tons of carbon dioxide per year.



[11] This figure is aggregated from bid information provided by the facilities during the bid evaluation and award selection process. Contract terms require that facilities demonstrate actual investment of no less than 85% of the bid-based amount, or they will be penalized through a lowering of their contract payment rate.

Progress and Results

Main Tier

Combined, the three competitive Main Tier solicitations conducted through the first half of 2008 resulted in contracts (or pending contracts) for NYSERDA to provide production incentives for up to 3,478,901 MWh per year from 1,102 MW of renewable capacity. As displayed in Table 5, this combined contract quantity puts New York at 75% of the 2008 Main Tier target and 34% of the 2013 Main Tier target.

Actual production under contract in 2006 was 582,313 MWh; actual production in 2007 was 582,558 MWh.

Table 5: Main Tier Targets and Results (000s MWh)

	2006	2007	2008	2009	2013
Main Tier Targets	1,121	2,326	3,549	4,768	9,854
Progress toward Annual Targets	582	583			
Expected Progress toward Annual Targets from Facilities under Contract*			2,654	3,479	3,382
Results as % of Target	52%	25%	75%	73%	34%

*Estimated - expected annual production from facilities under contract or with pending contracts. Expected contract totals decline slightly after 2009 due to the expiration of certain 3- and 4-year contracts.

Customer-Sited Tier

Four Customer-Sited Tier solicitations have been issued, offering funding support through an open enrollment, first-come, first-served process. Subsequent competitive solicitations may be issued at NYSERDA's discretion to reach underserved customers, to stimulate the adoption of new technologies, and to build and support renewable markets.

As described below, Customer-Sited Tier solicitations were released between April 2007 and January 2008 for each of the eligible technologies.

- **Anaerobic Digester Gas-to-Electricity Program** was released in August 2007. $12.5 million in financial incentives was made available, in the form of buying down capacity costs and performance-based payments. $1.5 million of discretionary funding was added to the original CST Plan budget of $11 million. Up to $1 million is available per anaerobic digester system. To keep pace with increasing market demand for this program, additional funding beyond the CST Plan allocation will be needed.

- **Fuel Cell Program** was released in December 2007. $11.2 million was made available in the form of capacity buy-down and performance-based payments for commercially mature fuel cell modules (experimental fuel cells are supported through the SBC Program). Program payments are differentiated by the scale and type of application of fuel cell system, with a $1 million cap for large systems and a $50,000 cap for small systems.

- **PV Incentive Program** was issued in late January 2008 to replace the similar SBC-funded PV incentive program.

$18.2 million was made available for cash incentives of $4.00-$5.00 per watt for new solar-electric or photovoltaic (PV) system capacity installed by eligible installers. Because of escalating market demand, $4.4 million of discretionary funding has been added to the original CST Plan budget of $13.8 million. To keep pace with increasing market demand for this program, additional funding beyond the CST Plan allocation will be needed.

- **Small Wind Incentive Program** was released in April 2007. $3.1 million was made available through December 2009. (Program funding has been reduced by $1.4 million in order to meet demand in the PV program.) Funding of up to $150,000 per installation is provided. Funding amounts are based on the lesser of $4,000 per meter of rotor diameter or $4,000 per rated kW. Adjustments to the funding level are made based on tower height. Higher incentives are available for farms, schools, not-for-profits, municipalities, and counties.

Program progress is summarized in Figure 1 below, and Table 6 on page 12.

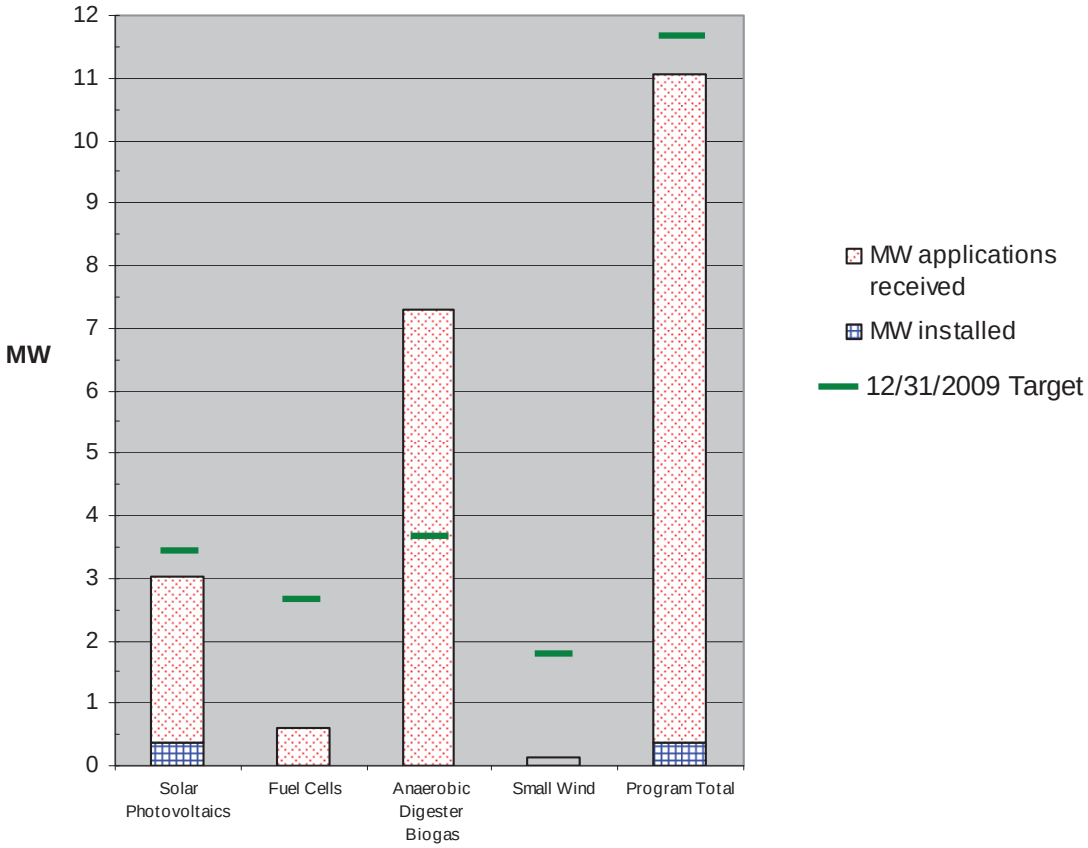


Figure 1. Progress toward CST Plan 2009 Targets as of June 30, 2008

Table 6. Customer-Sited Tier Progress through June 30, 2008.

Customer-Sited Tier Program	Operating Plan: Target Capacity by 12/31/09 (in MW)	Pending Contracts (in MW)	Contract Applications Received	Actual Installed Capacity (in MW)	Operating Plan: Target Annual Generation by 12/31/09 (in MWh)	Expected Production from Pending Contracts (in MWh)	Actual Annual Production from Installed Capacity (in MWh)	Expected Production from Pending Contracts as % of Annual Generation Target
Solar Photovoltaics	3.5	2.657	391	0.361	4,533	3,445	468	86%
Fuel Cells	2.7	0.605	3	-	18,700	4,994	-	27%
Anaerobic Digester Biogas	3.7	7.294	24	-	25,700	53,625	-	209%
Small Wind	1.8	0.130	10	-	3,945	162		4%
Program Total	11.7	10.686	426	0.361	52,878	62,226	468	119%

Customer-Sited Tier Program	Current Authorized Operating Plan Budget*	Encumbered	Pending Funding Commitments**	Invoiced	Encumbered and Pending Funding as % of Budget***
Solar Photovoltaics	$ 18,200,000	$ 8,489,645	$ 2,651,732	$ 2,444,146	67%
Fuel Cells	$ 11,200,000	$ -	$ 1,032,210	$ -	9%
Anaerobic Digester Biogas	$ 12,500,000	$ 4,072,896	$ 9,384,204	$ -	108%
Small Wind	$ 3,100,000	$ 65,710	$ 48,316	$ 44,744	4%
Program Total	$ 45,000,000	$ 12,628,251	$ 13,116,462	$ 2,488,890	59%

* per CST Plan; total authorized funding is $45 million
** applications received but not yet contracted/encumbered
*** As of the print date of this report, applications have been received for 100% of the available PV funding.

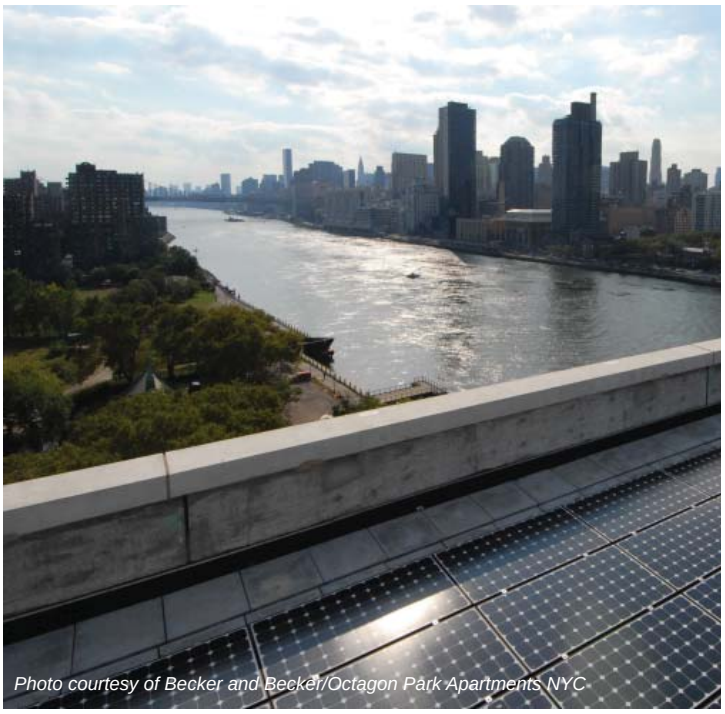
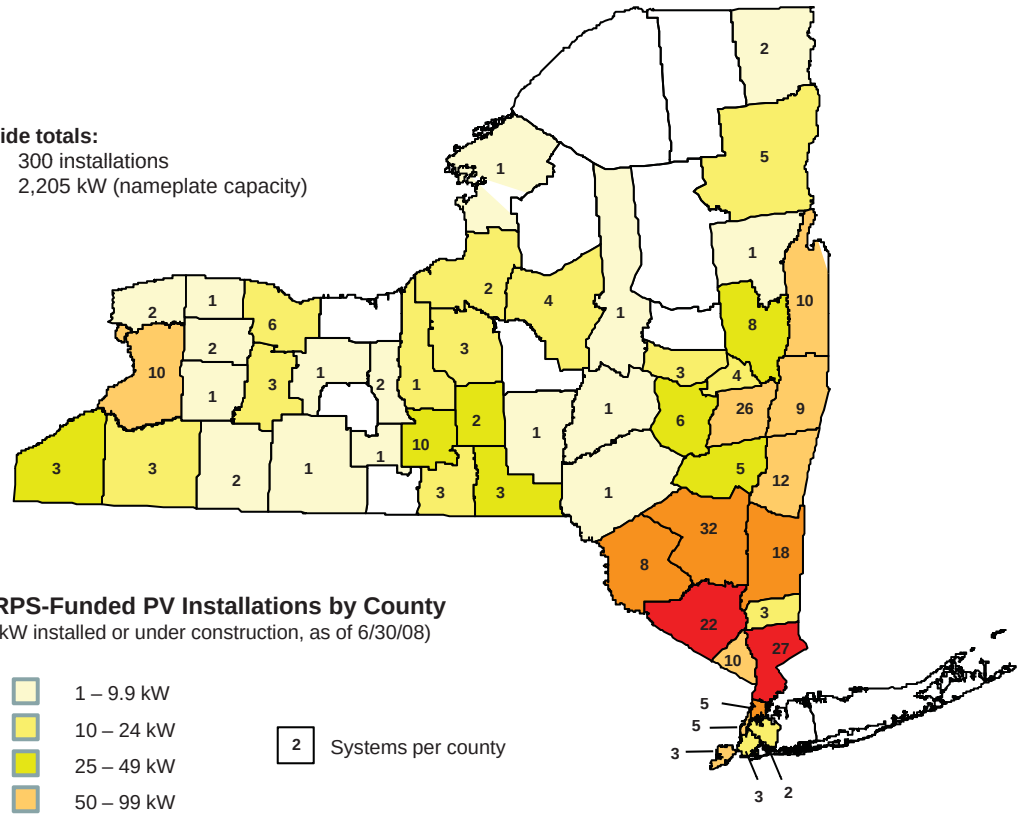


Photo courtesy of Becker and Becker/Octagon Park Apartments NYC

Photo courtesy of Bergey Windpower Company and Michael and Shaun Lord

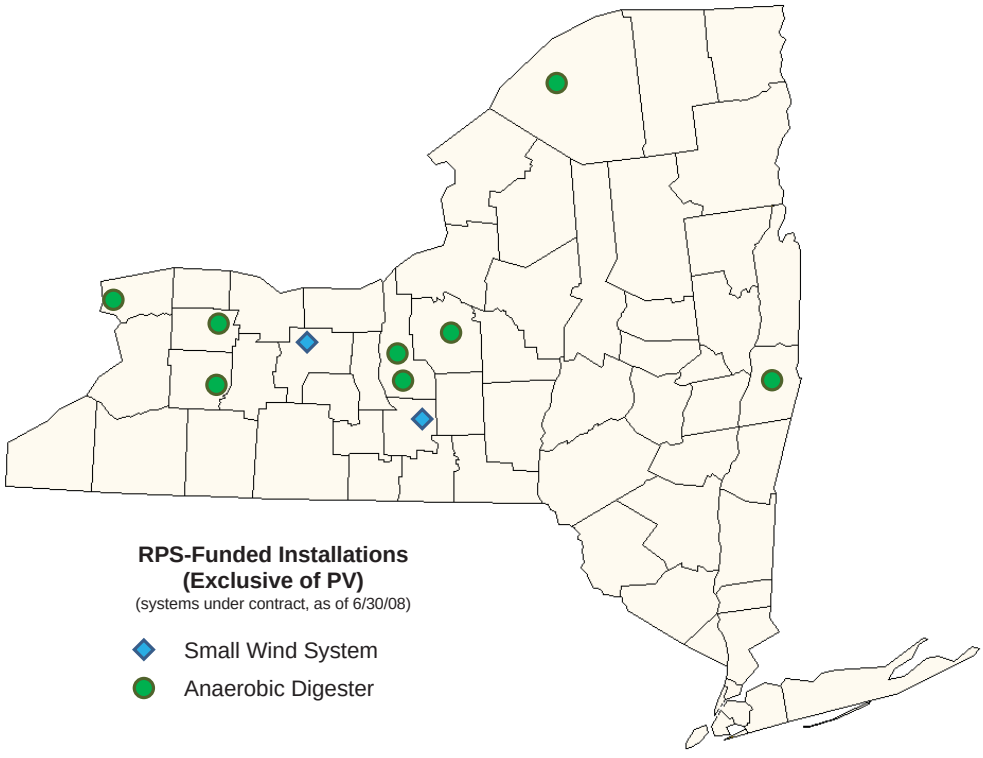
Statewide totals:
300 installations
2,205 kW (nameplate capacity)



RPS-Funded PV Installations by County
(kW installed or under construction, as of 6/30/08)

- 1 – 9.9 kW
- 10 – 24 kW
- 25 – 49 kW
- 50 – 99 kW
- 100 – 199 kW
- 200+ kW

2 Systems per county



RPS-Funded Installations (Exclusive of PV)
(systems under contract, as of 6/30/08)

- Small Wind System
- Anaerobic Digester

Voluntary Market Activity and Executive Order 111

As mentioned earlier in this report, several steps have been taken to support voluntary market and EO 111[12] purchases in New York. As a result of these design features, the NY RPS is helping more than a dozen competitive energy service providers offer clean energy products to retail consumers in New York.[13]

While annual data on voluntary market activity is unavailable, Department of Public Service (DPS) staff estimates that in September 2007, more than 59,000 accounts statewide were purchasing renewable energy through voluntary "green power" providers; the estimated "green" consumption through the voluntary market in September 2007 was approximately 64,000 MWh.

At the close of program year 2007, the NYS Office of General Services reported that state agency purchases of clean energy pursuant to Executive Order 111 were estimated to be 261,000 MWh, or 83% of the 2007 target.

Program Funding

Based on a comprehensive cost study conducted in 2003, the Commission, in the September 24, 2004 Order, specified an escalating annual collection schedule lasting through 2013 and totaling approximately $741.5 million.[14] The Commission recognized that under the Main Tier, NYSERDA would be entering into long-term contracts requiring payments past 2013 but deferred specifying an amount of collections to cover those payments above the currently specified $741.5 million until the program was underway and program costs became better known.[15]

As part of the Commission's plan to reassess specified collections and program costs once the program was underway, NYSERDA engaged the services of Sustainable Energy Advantage and LaCapra Associates in late 2007 to prepare a study that estimated the costs to achieve the balance of program targets.[15] The scope of the cost study was established through consultation with the Department of Public Service. The cost study reflects the commitment of $672.1 million of the currently specified collections and the current availability of about $71.8 million for new program activities. It also incorporates more recent energy forecasts and new energy efficiency initiatives, with a separate examination of achieving more ambitious overall goals of 30% by 2015 and achieving a more aggressive photovoltaic program goal. (100 MW of PV by 2011).

Department of Public Service Staff has issued a SAPA Notice addressing a re-allocation of available cash flow funding from the Main Tier program to support the PV and Anaerobic Digester Gas-to-Electricity incentive programs under the CST Plan. Both of these programs are experiencing unprecedented market demand that far exceeds the program expectations expressed in the current CST Plan. (Please see http://www.dps.state.ny.us/SAPA-BudgetModForCST-07_08-FINAL.pdf)

[12] Executive Order 111 requires NY state agencies to procure 20% of their electricity from renewable sources by 2010.
[13] It should be noted that there is no requirement that generators sell the attributes from the 236 MW of merchant capacity into retail markets in New York.
[14] Order Regarding Retail Renewable Portfolio Standard, Case 03-E-0188.
[15] The estimate of costs to acquire resources through 2013 in the 2003 cost study excluded costs associated with (a) program administration, (b) NYS public authority fees, (c) maintenance tier contracts and (d) acquisition costs associated with NYSERDA contracts extending beyond 2013. The updated cost assessment will provide a basis for specifying these costs and establishing collections to support further progress in achievement of the RPS targets.

Funding Commitments and Expenses

Approximately $672.1 million of currently specified collections is committed, leaving a total of $71.8 million uncommitted.

Current commitments for resource acquisition costs towards NYSERDA's targets total approximately $603.5 million and include approximately $558.5 million for the 1st, 2nd and 3rd Main Tier solicitations, and $45 million for the Customer-Sited Tier (through 2009). Other costs associated with the program include $33.9 million for Maintenance Resource contracts, $25.6 million for NYSERDA administration, and $9.1 million for NYS fees.

Figure 2 illustrates these commitments; complete program budget details can be found in Appendix A. Actual Program expenditures on a cumulative basis through the second quarter 2008 are shown in Table 7.

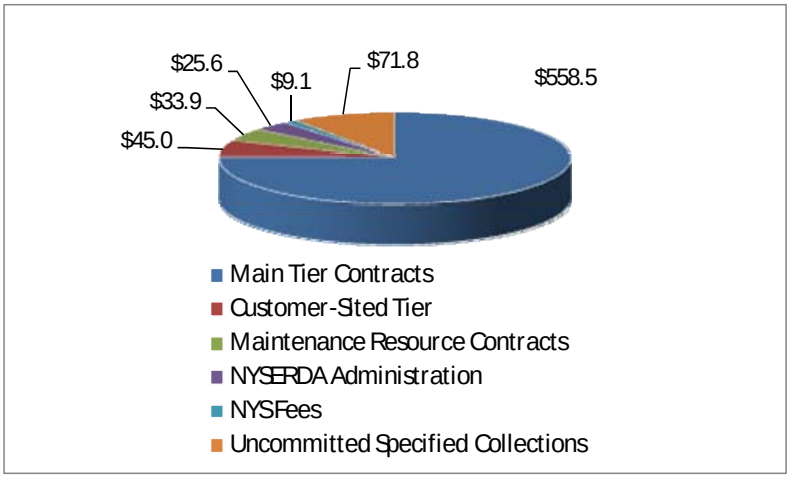


Figure 2. RPS Program Commitments (million $)

Table 7. Program Expenditures through June 30, 2008

Expenditure	Through 2nd Qtr 2008
NYSERDA Program Administration Costs*:	
Salaries and Overhead	$ 3,453,341
Consulting Support	$ 1,106,217
Evaluation – staff overhead and consultant support	$ 404,987
NYS Fees	$ 1,527,587
Main Tier Contracts Expenditures	$ 31,326,304
Maintenance Resource Expenditures	$ 4,609,977
Customer-Sited Tier Expenditures	$ 2,488,890
Total Expenditures	$ 44,917,303

* Includes estimated overhead.

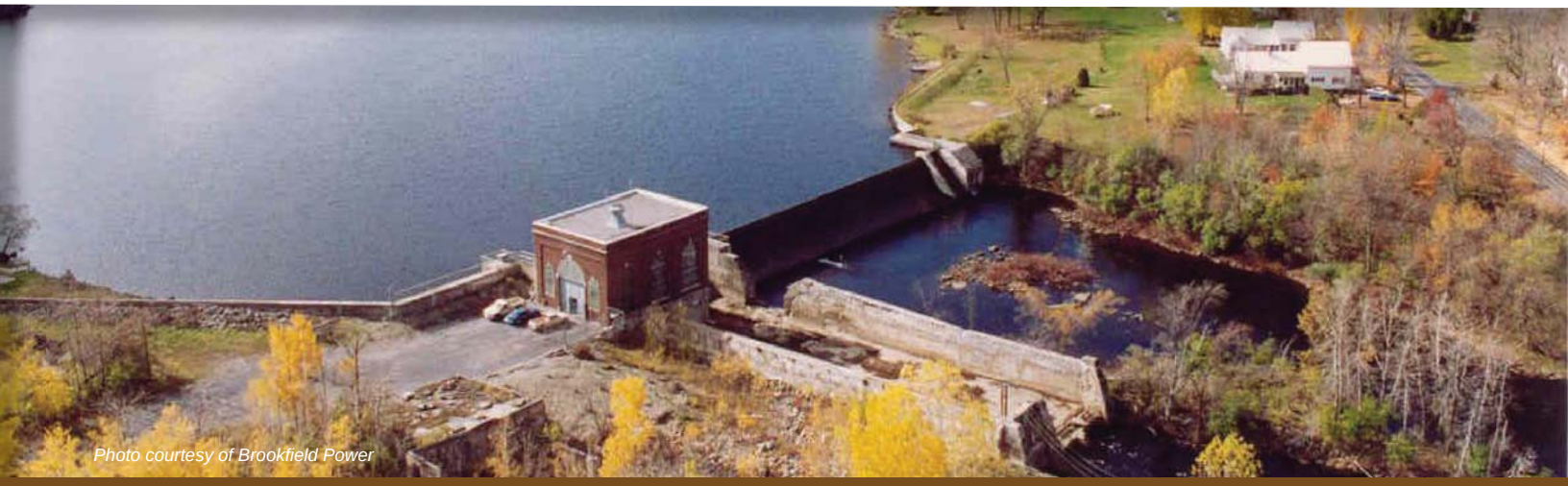


Photo courtesy of Brookfield Power

Appendix A – Current RPS Program Cash Flow Estimates

Current RPS Program Cash Flow Estimates

	Revenues			Estimated Costs							
	Specified Collections	Interest	Ltr of Credit proceeds	NYSERDA Admin	NYS Fees	Main Tier 3 RFPs	Maintenance Tier	Cust Tier	Total Estimated Costs	Annual Cash Flow	Cash Balance
2006	$24,072,908	$ 308,826	$ 192,107	$ (2,448,522)	($460,820)	($8,216,756)	$0	$0	$ (11,126,098)	$13,447,743	$13,447,743
2007	$43,143,017	$ 1,247,056	$ 662,256	$ (1,505,690)	($511,003)	($14,407,485)	($3,104,220)	($6,735)	$ (19,535,133)	$25,517,196	$38,964,939
2008	$62,136,526	n/a	$ -	$ (2,807,631)	($746,000)	$ (33,223,153.78)	($4,289,379)	($14,997,755)	$ (56,063,919)	$6,072,607	$45,037,546
2009	$82,639,913	n/a	$ -	$ (3,767,632)	($992,000)	$ (56,353,529.08)	($4,124,798)	($14,997,755)	$ (80,235,714)	$2,404,199	$47,441,745
2010	$100,765,818	n/a	$ -	$ (3,767,631)	($1,209,000)	$ (58,424,563.55)	($4,124,798)	($14,997,755)	$ (82,523,748)	$18,242,070	$65,683,815
2011	$122,617,832	n/a	$ -	$ (3,767,631)	($1,471,000)	$ (58,094,782.19)	($4,124,798)	$0	$ (67,458,212)	$55,159,620	$120,843,436
2012	$138,876,294	n/a	$ -	$ (3,767,631)	($1,667,000)	$ (57,683,313.44)	($4,124,798)	$0	$ (67,242,743)	$71,633,551	$192,476,987
2013	$167,222,814	n/a	$ -	$ (3,767,631)	($2,007,000)	$ (57,546,157.19)	($4,124,798)	$0	$ (67,445,587)	$99,777,227	$292,254,214
2014	$0	n/a	$ -			$ (57,546,157.19)	($3,480,439)	$0	$ (61,026,596)	($61,026,596)	$231,227,618
2015	$0	n/a	$ -			$ (57,546,157.19)	($1,920,000)	$0	$ (59,466,157)	($59,466,157)	$171,761,461
2016	$0	n/a	$ -			$ (44,080,065.66)	($480,000)	$0	$ (44,560,066)	($44,560,066)	$127,201,395
2017	$0	n/a	$ -			$ (25,642,128.85)		$0	$ (25,642,129)	($25,642,129)	$101,559,266
2018	$0	n/a	$ -			$ (26,861,060.02)		$0	$ (26,861,060)	($26,861,060)	$74,698,206
2019	$0	n/a	$ -			$ (2,923,222.31)		$0	$ (2,923,222)	($2,923,222)	$71,774,984
2020	$0	n/a	$ -					$0	$ -	$0	$71,774,984
2021	$0	n/a	$ -					$0	$ -	$0	$71,774,984
	$741,475,122	$ 1,555,882.00	$ 854,363.00	($25,600,001)	($9,063,823)	($558,548,531)	($33,898,028)	($45,000,000)	$ (672,110,383)	$71,774,984	

NYSERDA Administration

	Staff/overhead	Consultant Support	Program Evaluation	CST Systems M&V	Total Admin
2006	$ 1,713,459	$ 675,715	$ 59,348	$ -	$ 2,448,522
2007	$ 1,122,544	$ 242,663	$ 138,865	$ 1,618	$ 1,505,690
2008	$ 1,610,666	$ 246,937	$ 550,297	$ 399,731	$ 2,807,631
2009	$ 2,570,666	$ 246,937	$ 550,298	$ 399,731	$ 3,767,632
2010	$ 2,570,666	$ 246,937	$ 550,298	$ 399,730	$ 3,767,631
2011	$ 2,570,666	$ 246,937	$ 550,298	$ 399,730	$ 3,767,631
2012	$ 2,570,666	$ 246,937	$ 550,298	$ 399,730	$ 3,767,631
2013	$ 2,570,666	$ 246,937	$ 550,298	$ 399,730	$ 3,767,631
Totals	$ 17,300,001	$ 2,400,000	$ 3,500,000	$ 2,400,000	$ 25,600,001

Notes:
1. Shaded cells are actual figures obtained from NYSERDA finance department
2. Original NYS fee budget for 2006-2013 period ($12.12 million) was based on program's share of the then current annual assessment, which was subsequently reduced
3. Main Tier estimated costs are based on maximum contract commitments; actual production from facilities may reduce actual contract expenditures.

Appendix B - Main Tier Projects

Facility	Resource Type	Location	New Renewable Capacity (MW)	Contract Capacity (MW)	Annual Contract Quantity (MWh)	Contract Duration (years)	Status
1st Main Tier Solicitation (RFP 916)							
Spier Falls	Hydro	NY	0.8	0.8	3,582	10	operating
Higley Falls*	Hydro	NY			10,255	1	*
Browns Falls*	Hydro	NY			1,125	1	*
Maple Ridge	Wind	NY	321	231	781,916	10	operating
Bear Creek	Wind	PA	22	22	68,704	4	operating
Totals for RFP 916			**343.8**	**253.8**	**865,582**		
2nd Main Tier Solicitation (RFP 1037)**							
Niagara Generating Facility	Biomass	NY	26.0	26.0	189,525	10	operating
Allens Falls	Hydro	NY	0.3	0.3	1,675	10	operating
Browns Falls	Hydro	NY	0.4	0.4	1,277	10	operating
Colton	Hydro	NY	0.7	0.7	4,851	10	operating
Eagle	Hydro	NY	0.5	0.5	3,181	10	operating
East Norfolk	Hydro	NY	0.9	0.9	6,207	10	operating
Higley Falls	Hydro	NY	1.9	1.9	11,648	10	operating
Norfolk	Hydro	NY	1.5	1.5	10,154	10	operating
Norwood	Hydro	NY	0.5	0.5	4,628	10	in construction
Oswego Falls	Hydro	NY	0.6	0.6	4,049	10	in construction
Raymondville	Hydro	NY	0.7	0.7	5,044	10	in construction
Cohocton Wind Farm	Wind	NY	82.5	8.3	23,372	10	in construction
Dutch Hill Wind Farm	Wind	NY	42.5	4.3	12,818	10	in construction
Noble Altona Windpark	Wind	NY	102.0	96.9	270,782	10	in construction
Noble Bliss Windpark	Wind	NY	100.5	95.5	294,400	10	operating
Noble Chateaugay Windpark	Wind	NY	127.5	121.1	385,163	10	in construction
Noble Clinton Windpark I	Wind	NY	100.5	95.5	303,599	10	operating
Noble Ellenburg Windpark	Wind	NY	81.0	77.0	252,107	10	operating
Windfarm Prattsburgh	Wind	NY	54.0	5.6	15,670	10	under development
Totals for RFP 1037			**724.5**	**538.0**	**1,800,148**		
3rd Main Tier Solicitation (RFP 1168)							
AES Greenidge, LLC	Biomass	NY	4.0	3.8	28,500	3	under development
Piercefield Hydro	Hydro	NY	0.1	0.1	385	10	operating
Effley Hydro	Hydro	NY	0.3	0.3	1,399	10	in construction
Sherman Island	Hydro	NY	4.7	4.5	19,292	10	in construction
High Falls	Hydro	Quebec	14.7	14.0	26,410	10	in construction
Noble Allegany Windpark	Wind	NY	100.5	95.5	250,908	10	under development
Noble Chateaugay Windpark II	Wind	NY	19.5	18.5	48,684	10	under development
Windfarm Prattsburgh***	Wind	NY		16.2	40,500	10	***
Dutch Hill Wind Farm***	Wind	NY		11.3	28,200	10	***
Cohocton Wind Farm***	Wind	NY		26.3	65,700	10	***
Noble Wethersfield Windpark	Wind	NY	126.0	119.7	314,572	10	in construction
Totals for RFP 1168			**269.8**	**310.0**	**824,550**		
Program Totals			**1,338.1**	**1,101.9**	**3,478,901**		
Maintenance Resources							
Boralex Chateaugay Biomass Plant	Biomass	NY		20.0	128,000	10	operating
Lyonsdale Biomass	Biomass	NY		19.0	131,238	7	operating
				39	**259,238**		

* Higley and Browns Falls had one year agreements that allowed them to participate in RFP 1037. Only the contract quantities from RFP 1037 will be used when calculating progress towards post 2006 program targets.

** Lyonsdale Business was authorized by the PSC to participate as a Maintenance Resource. Therefore, it is not included with "new renewables."

*** Dutch Hill, Cohocton, and Windfarm Prattsburgh were awarded contracts for a percentage of output under RFP 1037 and an additional percentage under RFP 1168. The total new facility capacity is only listed once.

The New York State Energy Research and Development Authority (NYSERDA), a public benefit corporation, was created in 1975 by the New York State Legislature. NYSERDA works to improve New York State's energy, environmental, and economic future by sponsoring energy analysis, research and development, and efficiency deployment programs.

State of New York
David A. Paterson, Governor

New York State Energy Research and Development Authority
Vincent A. DeIorio, Esq., Chairman

NYSERDA
New York State Energy Research and Development Authority

1-866-NYSERDA • info@nyserda.org
www.nyserda.org

Albany Office
17 Columbia Circle
Albany, NY 12203
518.862.1090

New York City Office
10th Floor, Suite 1006
485 Seventh Avenue
New York, NY 10018
212.971.5342

West Valley Site Management Program
10282 Rock Springs Road
West Valley, NY 14171
716.942.9960

Buffalo Office
726 Exchange Street
Suite 821
Buffalo, NY 14210
716.842.1522

Rev 12/02/08