## New York State Renewable Portfolio Standard

## **Performance Report** Program Period ending March 2007





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## **Executive Summary**

From January 1, 2006 through the first quarter of 2007 ("the reporting period"), NYSERDA and the Department of Public Service have taken several actions to implement the New York State Renewable Portfolio Standard program (RPS). Some of the major actions include the acceptance of two facilities into the RPS program as Maintenance Resources<sup>1</sup> and the completion of a second Main Tier competitive solicitation. In addition to the major actions taken by NYSERDA and the Department of Public Service to implement the RPS, several contracts from the first RPS Main Tier solicitation commenced during the reporting period.

The 19 Megawatt ("MW") Lyonsdale Biomass plant located in Lewis County, NY and the 20 MW Boralex Biomass plant located in Franklin County, NY were both accepted into the RPS program as Maintenance Resources during the reporting period. As a result of the financial support that will be provided to these two plants under the RPS, New York will enjoy the retention of 39 MW of valuable base load energy capacity along with several dozen full and part time jobs.

During calendar year 2006, NYSERDA paid production incentives on approximately 582,000 Megawatt hours ("MWh") of production from five renewable energy facilities awarded contracts from the first Main Tier solicitation. While contractors from this solicitation were required to build 254 MW of new renewable capacity, more than 344 MW was actually built and is currently operating. This was due in large part to a 90 Megawatt expansion of the Maple Ridge wind farm located in Lewis County, NY, taking it to 321 Megawatts to become the second largest wind farm in North America.<sup>2</sup>

Early in the first quarter of 2007, NYSERDA announced that twenty new renewable electric generating facilities in New York were selected in the second Main Tier competitive solicitation. The diverse award group includes ten existing hydroelectric facilities that have been or will be upgraded, nine new wind facilities, and one biomass facility planning to displace coal with biomass as a fuel to produce electricity. While contractors from this second solicitation will be required to build 583 MW of new renewable capacity, project sponsors have indicated that their project plans call for more than 862 MW of new renewable capacity.

When combining the results of the first two Main Tier solicitations with the capacity above that under contract with NYSERDA, the total new renewable capacity associated with the RPS program could exceed 1,206 MW by the fall of 2008. This total renewable capacity is expected to produce approximately 3.6 million MWh of electricity per year, or enough clean energy to supply 600,000 average size homes.

NYSERDA estimates that more than \$1.9 billion will be invested to construct the New York based renewable generation facilities awarded contracts under the RPS. These investments have the potential to yield more than \$720 million of in-state economic benefits over a 20-year period. In addition to these significant economic benefits, the facilities awarded contracts under the RPS

<sup>&</sup>lt;sup>1</sup> The Maintenance Resource category was created as a subset of the Main Tier. It is designed to provide as needed support to renewable facilities in service prior to January 1, 2003.

<sup>&</sup>lt;sup>2</sup> Based on 2006 figures released by the American Wind Energy Association

will provide added environmental benefits, with potential reductions of 2,000 tons of nitrogen oxides, 4,400 tons of sulfur oxides, and 1.3 million tons of carbon dioxide per year.

#### **Program Highlights**

- The RPS program has helped to support the construction of the 321 MW Maple Ridge Wind Farm located in Lewis County, NY, which at that time made the project the second largest wind farm in North America.
- New renewable capacity installed since the onset of the RPS program could exceed 1,206 MW by the end of 2008, of which 1,184 would be located in New York.
- It is estimated that \$1.9 billion will be invested in New York by the end of 2008 to finance this 1,184 MW of new in-state renewable capacity.
- The estimated economic benefits that could accrue to NY with these in-state investments could exceed \$720 million over the next 20 years.
- Bid prices contracted under the second Main Tier solicitation were more than 30% lower than under the first Main Tier solicitation (\$15 per megawatt hour compared to \$22.90 per megawatt hour).

## 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 program outcomes, funding and expenses. The program report for activities conducted through the end of 2005 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. The 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. The New York State Public Service Commission (PSC) initiated on February 19, 2003, a proceeding to explore the development of a Renewable Portfolio Standard (RPS). On September 24, 2004, the PSC issued an order<sup>3</sup> adopting an RPS, with a goal of increasing the proportion of renewable energy used by New York consumers from the then current 19.3% to at least 25% by the end of 2013.

As part of the September 24, 2004 Order, the PSC designated the New York State Energy Research and Development Authority (NYSERDA) as the central procurement administrator for the RPS Program. This approach assures that all contributing ratepayers pay a pro rata share for the public benefits resulting from the RPS program. The PSC ordered the major investor-owned utilities to collect funds from ratepayers to be administered by NYSERDA for the purpose of achieving an RPS target set at 25% of retail consumption. The PSC expects that at least 1% of the 25% target will come from retail customers ("Voluntary Market"), so that at the end of the RPS program period in 2013, the State will have a quarter of its energy use provided by renewable resources.

#### Tiered Approach to Implementing the RPS

The PSC 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 sell 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 such as solar and small wind projects that produce power for use on site. Eligible resources and technologies for both the Main and Customer-Sited Tiers are currently described in Orders issued by PSC; they may change over time (refer to Appendix B of the April 14, 2005 Order<sup>4</sup> of the PSC). The RPS program includes a process for evaluation of new resources/technologies for eligibility as the program progresses. For example, the PSC added anaerobic digestion (biogas generation) as an eligible Customer-Sited Tier resource during 2005.

<sup>&</sup>lt;sup>3</sup> Order Regarding Retail Renewable Portfolio Standard, Case 03-E-0188.

<sup>&</sup>lt;sup>4</sup> Order Approving Implementation Plan, Adopting Clarifications, and Modifying Environmental Disclosure Program, Case 03-E-0188.

In most other states with RPS programs, the local delivery utilities are required to supply their customers with a certain percentage of electricity from renewable sources. In the Main Tier component of the NY RPS program, NYSERDA, as the central procurement administrator, does not procure electricity. Rather, NYSERDA pays a production incentive on a MWh basis for electricity produced from eligible renewable resources under long-term contracts. In exchange for receiving the production incentive, the renewable generator provides NYSERDA all rights and/or claims to the renewable environmental attributes ("RPS Attributes") associated with each MWh of renewable electricity generated and delivered to New York State. RPS Attributes include any and all reductions in harmful pollutants and emissions, such as carbon dioxide and oxides of sulfur and nitrogen.

Eligible Customer-Sited Tier resources, which include on-site photovoltaics (PV), small wind, anaerobic digesters and fuel cells, are supported through a combination of buy-down incentives and/or production incentives in a manner similar to NYSERDA's current New York Energy \$mart<sup>SM</sup> programs.

#### **Renewable Energy Targets**

The September 24, 2004 PSC Order set forth annual energy targets representing how much renewable energy should be used by New York ratepayers to satisfy 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 the Main Tier and Customer Sited Tier targets. In the September 24, 2004 PSC Order, the Commission noted an expectation that all State Agencies, under Executive Order 111 (EO 111), and retail customers ("Voluntary Market") would also contribute to the 25% goal. The RPS energy targets set forth by the PSC in its September 24, 2004 PSC Order can be found in Table 1 below.

	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

Table 1: RPS Energy Targets (in Megawatt hours)

Note: Not shown are energy targets associated with voluntary compliance by the Long Island Power Authority (LIPA) and the New York Power Authority (NYPA)

## **Main Tier Program Development**

Throughout 2006, the PSC issued a series of orders addressing open program implementation issues. In its January 26, 2006 order<sup>5</sup>, the PSC confirmed the funding levels and procurement targets established in its September 24, 2004 order, authorized NYSERDA to conduct second and third Main Tier solicitations in 2006 and 2007 respectively, authorized the use of three solicitation approaches: (1) a declining clock auction (DCA); (2) a sealed-bid Request for Proposals (RFP); and (3) a standard offer. The PSC further authorized NYSERDA, in an order<sup>6</sup> dated October 19, 2006, to reduce the influence that price has in project selection by assigning value to the economic benefits that accrue to New York State from resource development at a weighting not to exceed 30%.

In a series of orders effective on June 28, 2006, the PSC: (a) recognized the creation and trading of environmental attributes separate and apart from energy commodity and authorized NYSERDA and DPS to develop an attribute tracking system to account for the unique sale/trading of such attributes, including accounting for RPS Attributes; (b) established that RPS Attributes associated with physical bilateral transactions for the sale of energy to end-use consumers in New York would be allowed; and (c) required that out-of-state generators deliver energy associated with RPS Attributes to New York State on an hourly basis.

Various resource documents, studies and reports prepared by NYSERDA, DPS, and consultants employed by NYSERDA in the administration of the RPS program can be found at: http://www.dps.state.ny.us/03e0188.htm#related and at http://www.nyserda.org/rps/resourcesReports.asp

## **Maintenance Resource Participation**

The PSC established the RPS target of 25%, recognizing 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. For the purpose of ensuring that these valuable existing resources continue to operate, the PSC established an additional program category of Maintenance Resources. To be eligible to receive RPS program funding as a Maintenance Resource, generators are required to demonstrate financial hardship through a formal request to the PSC. The PSC determines the existence and degree of hardship and makes a determination as to the eligibility of the facility for Maintenance Resource treatment. The PSC may or may not grant Maintenance Resource status. If granted, the PSC determines the form and magnitude of support to be offered to the resource.

In an order dated August 31, 2005<sup>7</sup>, the PSC granted Maintenance Resource status to the Lyonsdale Biomass Plant located in Lyons Falls, New York, and offered Lyonsdale two options: accept a long-term contract for RPS Attributes under PSC-prescribed rates, or forego such compensation in exchange for the right to compete for program contracts in the 2<sup>nd</sup> Main Tier competitive solicitation. Lyonsdale elected the latter option and was awarded a contract under

<sup>&</sup>lt;sup>5</sup> Order Authorizing Additional Main Tier Solicitation, and Directing Program Modifications, Case 03-E-0188.

<sup>&</sup>lt;sup>6</sup> Order Authorizing Solicitation Methods, and Consideration of Bid Evaluation Criteria and Denying Request for Clarification, Case 03-E-0188.

<sup>&</sup>lt;sup>7</sup> Order Approving Request for RPS Program Funding as a Maintenance Tier Resource, Case 03-E-0188

the second Main Tier solicitation, RFP 1037. Under this contract, NYSERDA is to provide Lyonsdale production incentives for up to 137,800 MWh per year for seven years beginning January 1, 2008.

A second operating biomass power plant, Boralex, located in Chateaugay, New York, requested and was granted Maintenance Resource status by the PSC in an order<sup>8</sup> dated February 16, 2006. Boralex accepted the terms offered by the PSC. NYSERDA entered into a 10-year contract to provide production incentives in exchange for the RPS Attributes associated with 128,000 MWh of production per year.

In combination, the Lyonsdale and Boralex Maintenance Resource 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 contracts is approximately \$33.7 million. These maintenance resource quantities are not accounted for in terms of satisfying Main Tier incremental energy targets.

# New Renewable Capacity under Contract with NYSERDA

NYSERDA has conducted two competitive Main Tier solicitations in pursuit of the procurement targets set forth by the PSC. From these solicitations, NYSERDA has contracts with a total of 837 MW of new renewable capacity at twenty-three facilities, which are under contract to produce 2,775,764 MWh of renewable energy per year.

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 target of having 1,121,247 MWh per year available to serve New York electric retail customers by the end of the 2006 program year. 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 target of 3,549,026 MWh per year available to serve New York electric retail customers by the end of the 2008 target of 3,549,026 MWh per year available to serve New York electric retail customers by the end of the 2008 program year.

#### First Main Tier Solicitation Results

The first competitive Main Tier solicitation was issued as a sealed bid pay-as-bid Request for Proposal (RFP). In this solicitation, bidders were awarded contracts based on price 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 NYSERDA awarding contracts to provide production incentives to seven new or upgraded facilities, three of which were located out-of-state. Two out-of-state facilities failed to perform and as a consequence, the contracts have been terminated. Under the remaining five contracts, contractors were expected to build 254 MW of new renewable capacity from which NYSERDA would provide production incentives to 865,582 MWh per year. Of the 254 MW, 232 MW was constructed in New York and 22 MW was built out-of-state. Under the first solicitation, facilities were expected to be operating by January 1,

<sup>&</sup>lt;sup>8</sup> Order Approving Request for RPS Program Funding as a Maintenance Tier Resource, Case 03-E-0188.

2006. Due to a delay of one facility coming online, NYSERDA only provided production incentives for approximately 582,000 MWh in 2006, or approximately 52% of that year's target. The total solicitation funding commitment associated with the first Main Tier solicitation is approximately \$178 million. The weighted average production incentive from the first Main Tier solicitation is \$22.90 per MWh.

#### Second Main Tier Solicitation

NYSERDA's 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) 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%. 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.

Forty-four facilities submitted Step 1 applications for qualification to submit a bid proposal, six of which were located outside of New York. Upon completion of the qualification process, a total of thirty-eight facilities (19 wind, 8 biomass, and 11 hydroelectric), all located in New York State, were ultimately determined to be qualified to participate in step 2. On January 5, 2007, bidders representing thirty-four of the thirty-eight qualified facilities submitted 61 bid proposals (alternate proposals were submitted for some facilities).

After the completion of the evaluation process, NYSERDA awarded contracts to bidders representing twenty new or upgraded facilities. The diverse award group includes ten hydroelectric facility upgrades including two facilities, Higley and Browns Falls, that had one-year contracts under the first solicitation that expired and became eligible for and successfully secured new contracts, nine new wind facilities, and one biomass facility. Under these contracts, contractors are expected to build 583 MW of new renewable capacity for which NYSERDA will provide production incentives for the first 1,921,562 MWh generated each year. Facilities are expected to be operating by January 1, 2008. The weighted average price that NYSERDA will pay for RPS Attributes produced by the facilities awarded contracts from this solicitation is approximately \$15 per Megawatt hour.

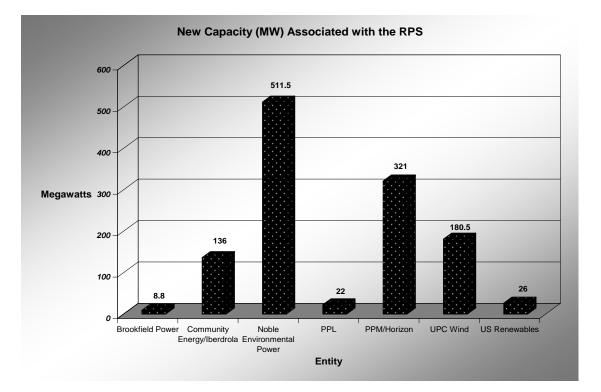
# Additional Renewable Capacity Associated with NY RPS

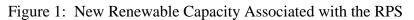
As encouraged in both Main Tier solicitations, several contractors have offered NYSERDA only a portion of the output expected from their facilities. As a result, 369 MW of new capacity has been constructed or is planned to be constructed using financial arrangements other than a NYSERDA contract (*i.e.*, Merchant Capacity). It's estimated that this Merchant Capacity will produce 792,000 MWh each year which may be available for sales to retail customers in New York or elsewhere. Should the RPS Attributes associated with this additional capacity be sold to the voluntary markets in New York, the contribution from voluntary sales of this renewable energy to retail consumers would be 115 % of the Voluntary Market target in 2008. If these sales were combined with purchases of RPS Attributes pursuant to NYSERDA contracts, 85% of

the combined target for the Main Tier and Voluntary Market components of the program for 2008 will have been satisfied. However, there is no requirement that generators sell the attributes from this merchant generation into retail markets in New York. RPS program compliance markets outside of New York currently offer generators a higher value market for attributes so it unclear how many of the attributes made available from this Merchant Capacity will contribute to overall New York RPS program targets.

Based on the combination of capacity under contract with NYSERDA and the Merchant Capacity, the total new renewable capacity planned to be installed by the end of 2008 is 1,206 MW, of which 1,184 will be located in New York.

The 1,206 MW of new renewable capacity associated with the RPS is owned or affiliated with six different entities: Brookfield Power, which owns all the hydroelectric facilities under contract; Community Energy/Iberdrola, which owns or is affiliated with the Jordanville Wind Farm under contract; Noble Environmental Power, which owns or is affiliated with several wind farms under contract; PPL Energy Plus, which is affiliated with the Bear Creek Wind Farm; PPM Energy and Horizon Wind, who are co-owners of the Maple Ridge Wind Farm; UPC Wind, which owns or is affiliated with three wind farms under contract; and US Renewables, which owns the Niagara Generating Station that is under contract. The graph below displays the new renewable capacity associated with the RPS as well as the organizations affiliated with this capacity.





Specific details of each Main Tier facility participating in the RPS can be found in Table 2 below.

			New Renewable	<b>a</b> , , ,	Annual	<b>a</b>
	n			Contract	Contract	Contract
<b>T</b> 11/	Resource	<b>•</b>	Capacity	Capacity	Quantity	Duration
Facility	Туре	Location	( <b>MW</b> )	(MW)	(MWh)	(years)
1st Main Tier Solicitation (RFP 916)						
Spier Falls	Hydro	New York	0.8	0.8	3,582	10
Higley Falls*	Hydro	New York			10,255	1
Browns Falls*	Hydro	New York			1,125	1
Maple Ridge	Wind	New York	321	231	781,916	10
Bear Creek	Wind	Pennsylvania	22	22	68,704	4
Totals for RFP 916			343.8	253.8	865,582	
2nd Main Tier Solicitation (RFP 1037)**						
Niagara Generating Facility	Biomass	New York	26.0	26.0	189,525	10
Allens Falls	Hydro	New York	0.3	0.3	1.675	10
Browns Falls	Hydro	New York	0.3	0.3	1,073	10
Colton	Hydro	New York	0.4	0.4	4,851	10
Eagle	Hydro	New York	0.7	0.7	3.181	10
East Norfolk	Hydro	New York	0.9	0.9	6,207	10
Higley Falls	Hydro	New York	1.9	1.9	11.648	10
Norfolk	Hydro	New York	1.5	1.5	10,154	10
Norwood	Hydro	New York	0.5	0.5	4,628	10
Oswego Falls	Hydro	New York	0.6	0.6	4.049	10
Raymondville	Hydro	New York	0.7	0.7	5,044	10
Cohocton Wind Farm	Wind	New York	82.5	8.3	23,372	10
Dutch Hill Wind Farm	Wind	New York	42.5	4.3	12,818	10
Jordanville Wind Farm	Wind	New York	136.0	45.0	121,414	10
Noble Altona Windpark	Wind	New York	102.0	96.9	270,782	10
Noble Bliss Windpark	Wind	New York	100.5	95.5	294,400	10
Noble Chateaugay Windpark	Wind	New York	127.5	121.1	385,163	10
Noble Clinton Windpark I	Wind	New York	100.5	95.5	303,599	10
Noble Ellenburg Windpark	Wind	New York	81.0	77.0	252,107	10
Windfarm Prattsburgh	Wind	New York	55.5	5.6	15,670	10
Totals for RFP 1037			862.0	583.0	1,921,562	
Totals for RFP 916 and RFP 1037			1,205.8	836.8	2,787,144	

#### Table 2: Main Tier Contract Details

\* Higley and Browns Falls had 1 year agreements thus enabling 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 Biomass was authorized by the PSC to participate as a Maintenance Resource, therefore it is not inlcuded with "new renewables"

## **Economic and Environmental Impacts**

It is estimated that by the end of program year 2008, project developers will have invested approximately \$1.9 billion to construct the 1,184 MW of in-state renewable capacity associated with the RPS program. The estimated economic benefits that could accrue to New York as a result of in-state investment could exceed \$720 million over the next 20 years, excluding 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 benefits to local governments and schools, and energy revenue royalty payments to landowners.

The twenty-six in-state renewable electric generating facilities under contract, inclusive of the Maintenance Tier resources, Boralex and Lyonsdale, will provide added environmental benefits, with potential reductions of 2,200 tons of Nitrogen Oxides, 4,900 tons of Sulfur Oxides, and 1.5 million tons of carbon dioxide per year.

### **Customer-Sited Tier Program Development**

The September 24, 2004 Order established a Customer-Sited Tier to ensure that specified technologies continue to play a role in diversifying the State's energy mix, help avoid distribution system upgrades, stimulate economic development opportunities in the State, and improve the State's environment.

Eligibility requirements for the Customer-Sited Tier were defined in the September 24, 2004 PSC order to include only generation facilities located in New York that have been placed into service on or after January 1, 2003. Technologies identified in the Order as eligible for support are fuel cells (solid-oxide, molten carbonate, proton exchange membrane, and phosphoric acid), solar photovoltaics, and wind turbines rated at 300 kW or less. Anaerobic digestion of animal manure, food wastes, and municipal/industrial wastewater was added as a result of a November 2005 PSC Order<sup>9</sup>.

In its June 28, 2006 Order<sup>10</sup>, the Commission authorized incentive funding for the Customer-Sited Tier through 2009 at \$45 million, directed the development of a Customer-Sited Tier Operating Plan ("CST Plan") for solicitation of customer-sited renewable resources, and included parameters and principles that NYSERDA should use in developing the CST Plan. The Order also established funding allocations among resource categories and eliminated the 300 KW cap on the size of eligible small wind facilities. The June 2006 Order authorized NYSERDA, after consultation with the DPS, to implement the Customer-Sited Tier program pursuant to the allocated funding levels for eligible resources. Comments on a draft version of the CST Plan were received in response to a notice soliciting comments issued by the DPS on December 14, 2006.

The CST Plan can be found at http://www.dps.state.ny.us/CST\_OP\_02-12-07.pdf . The CST Plan reflects the experience NYSERDA has gained through implementation of similar programs funded by the Systems Benefit Charge (SBC) from 1998 through 2006.

In general, each Customer-Sited Tier solicitation will offer funding support through an open enrollment, first-come, first-served process. Solicitations for each resource category will be issued in 2007. Subsequent competitive solicitations may be issued at NYSERDA's discretion to reach underserved customers, stimulate adoption of new technologies, and build and support markets. The design of the individual program solicitations and the amount of funding to be provided for individual projects will be tailored to the targeted technologies and markets.

<sup>&</sup>lt;sup>9</sup> Order Approving Request For Inclusion of Methane Digester Systems as Eligible Technologies in the Customer Sited Tier, Case 03-E-0188.

<sup>&</sup>lt;sup>10</sup> Order on Customer–Sited Tier Implementation, Case 03-E-0188.

## **Progress and Results**<sup>11</sup>

Under the first Main Tier solicitation, NYSERDA entered contracts for 865,582 RPS Attributes per year beginning January 1, 2006. Due to the delay of the Maple Ridge wind farm entering commercial operation, NYSERDA only purchased 582,000 RPS Attributes in 2006, or approximately 52% of the 2006 Main Tier energy target. NYSERDA did not conduct a solicitation requiring facilities to be operating and delivering RPS attributes by January 1, 2007 so the only progress toward the 2007 energy targets would be that which was secured in the first solicitation, or approximately 865,582 RPS Attributes. The second Main Tier solicitation was completed in early 2007 and requires facilities to be operating and delivering approximately 1,921,562 RPS Attributes per year beginning January 1, 2008.

Combined, the two competitive Main Tier solicitations conducted through the first quarter of 2007 have resulted in contracts for NYSERDA to provide production incentives for up to 2,775,564 MWh per year from 837 MW of new renewable capacity. As displayed in Table 3, this combined contract quantity of 2,775,564 MWh per year puts New York at 78% of the 2008 Main Tier target, and 28% of the 2013 Main Tier target.

	2006	2007	2008	2013
Main Tier Targets	1,121	2,326	3,549	9,854
Results (1st & 2nd				
Main Tier				
Solicitations)	582	866	2,776	2,776
Results as % of				
Target	52%	37%	78%	28%

 Table 3: Main Tier Targets and Results (000s MWh)

#### Voluntary Market Activity and Executive Order 111 Purchases

About a dozen competitive energy service providers currently offer clean energy products for sale to retail consumers in New York. While annual data on voluntary market activity is unavailable, Department of Public Service (DPS) staff estimates that in 2006 more than 500,000 customers are participating in green marketing programs and active in voluntary market purchases.

At the close of program year 2006, the NYS Office of General Services has reported that state agency purchases of clean energy pursuant to Executive Order 111 were estimated to be 97,000 MWh or 34% of the 2006 target.

<sup>&</sup>lt;sup>11</sup> Customer-Sited Tier program solicitations are set to begin in 2007.

## **Program Funding**

Based on a comprehensive cost study conducted in 2003, the PSC, in the September 24, 2004 Order, specified an escalating annual collection schedule lasting through 2013 and totaling approximately \$741.3 million<sup>12</sup>. This collection schedule was designed to only fund NYSERDA's estimated annual expenditures through 2013 that would be required to obtain the incremental annual energy targets for the Main Tier and Customer Tier, and the resulting 2013 targets.<sup>13</sup>

Recognizing that under the Main Tier, NYSERDA would be entering into long-term contracts requiring payments past 2013, the PSC approved post-2013 collections but deferred to specify those collections until the program was underway and the costs were better known.<sup>14</sup> NYSERDA is currently engaged in an assessment to estimate the costs to achieve the balance of current program targets. This estimate will provide a basis for PSC authorization of necessary funding and associated collections.

## **Funding Commitments and Expenses**

Combined with estimated interest earnings of approximately \$40.7 million, total specified collections and estimated interest is approximately \$782 million. To date, approximately \$572.5 million of the currently specified collections and estimated interest has been committed. This includes approximately \$458.0 million for the 1<sup>st</sup> and 2<sup>nd</sup> Main Tier solicitations, \$45 million for the Customer-Sited Tier (through 2009), \$33.7 million for Maintenance Tier contracts, \$25.6 million for NYSERDA administration, and \$12.2 million for NYS fees<sup>15</sup>. Based on these commitments and estimated interest earnings, approximately \$209.5 million of the currently specified collections is available for future program activity. As discussed above, total program funding of \$741.3 million is not expected to be sufficient in terms of achieving current program targets and additional funding will be required.

Funding commitments made to date along with available specified collections is displayed in Figure 2 (in millions of dollars). Complete program budget details can be found in Appendix A.

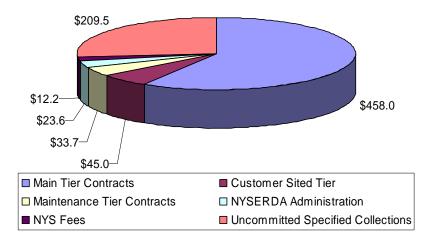
<sup>&</sup>lt;sup>12</sup> Order Regarding Retail Renewable Portfolio Standard, Case 03-E-0188.

<sup>&</sup>lt;sup>13</sup> The collection schedule did not include costs associated with program administration or maintenance tier contracts

<sup>&</sup>lt;sup>14</sup> Order Regarding Petitions for Clarification and Reconsideration, Case 03-E-0188.

<sup>&</sup>lt;sup>15</sup> NYS fees are assessed to NYSERDA as cost recovery for staff time at various state agencies involved in NYSERDA programs.





Program expenditures on a cumulative basis through the first quarter 2007 are shown in Table 4.

Expenditure	Through 1 <sup>st</sup> Qtr 2007
NYSERDA Program Administration Costs*:	
Salaries and Overhead	\$ 1,962,595
Consulting Support	\$ 692,170
Evaluation – staff overhead and consultant support	\$ 83,384
NYS Fees	\$ 567,925
Main Tier Contracts Expenditures	\$ 14,142,230
Maintenance Resource Expenditures**	0
Customer-Sited Tier Expenditures***	0
Total Expenditures	\$ 17,448,304

#### Table 4. Program Expenditures

\* Includes estimated overhead.

\*\* Due to invoicing delays, NYSERDA has not paid for Maintenance Resource RPS Attributes during the reporting period.

\*\*\* Customer-Sited Tier expenditures associated with RPS program begin in 2007.

## Appendix A

## **RPS Program Budget and Funding Through 2013** (in Million \$)

Program Collections 2006-2013	\$741.3
Estimated Interest on Collections	\$40.7
Total Program Collections and Estimated Interest	\$782.0
Program Administration Budget	
NYSERDA salaries, benefits, overhead, and consulting	(\$25.6)
NYS PAL Cost Recovery Fees	(\$12.2)
Total Administrative Budget	(\$37.8)
Main Tier Committed Funds	
Maintenance Tier Contracts	(\$33.7)
Main Tier Contracts (1 <sup>st</sup> & 2 <sup>nd</sup> Solicitations)	(\$458.0)
Total Committed Main Tier Funds	(\$491.7)
Customer-Sited Tier Committed Funds	
Photovoltaic (PV) Program	(\$13.8)
Small Wind Program	(\$4.5)
Anaerobic Digestion Program	(\$11.0)
Fuel Cell Program	(\$11.2)
Discretionary Program	(\$4.5)
Total Committed Customer-Sited Tier Funds	(\$45.0)
Total Committed Program Funds	(\$574.5)
Remaining Uncommitted Program Funds	\$207.5