STATE OF NEW YORK
DEPARTMENT OF PUBLIC SERVICE

August 9, 2007

TO: THE COMMISSION

FROM: JAMES T. GALLAGHER, Director, Office of Electricity & Environment
By: RPS Staff Team

SUBJECT: CASE 03-E-0188 – Proceeding on Motion of the Commission Regarding a Retail Renewable Portfolio Standard

Status Report on Implementation of the Renewable Portfolio Standard Program. For Information Only. No Commission Action is Required.

SUMMARY

The purpose of this memorandum is to report on the implementation status of the Renewable Portfolio Standard (RPS) Program following two solicitations for renewable generation, which resulted in contracts for approximately 3 million megawatt hours (MWh) of renewable energy from 26 projects, totaling more than 800 megawatts (MW). A third solicitation, previously authorized by the Commission (in January and again in October 2006), is being planned for later this year.[1] The memorandum also addresses RPS Program costs. Later this year Staff will provide an assessment of whether changes in amounts collected from electric ratepayers will be necessary to achieve RPS Program goals. Finally, the memorandum describes several related developments that may affect implementation of the RPS Program.

BACKGROUND

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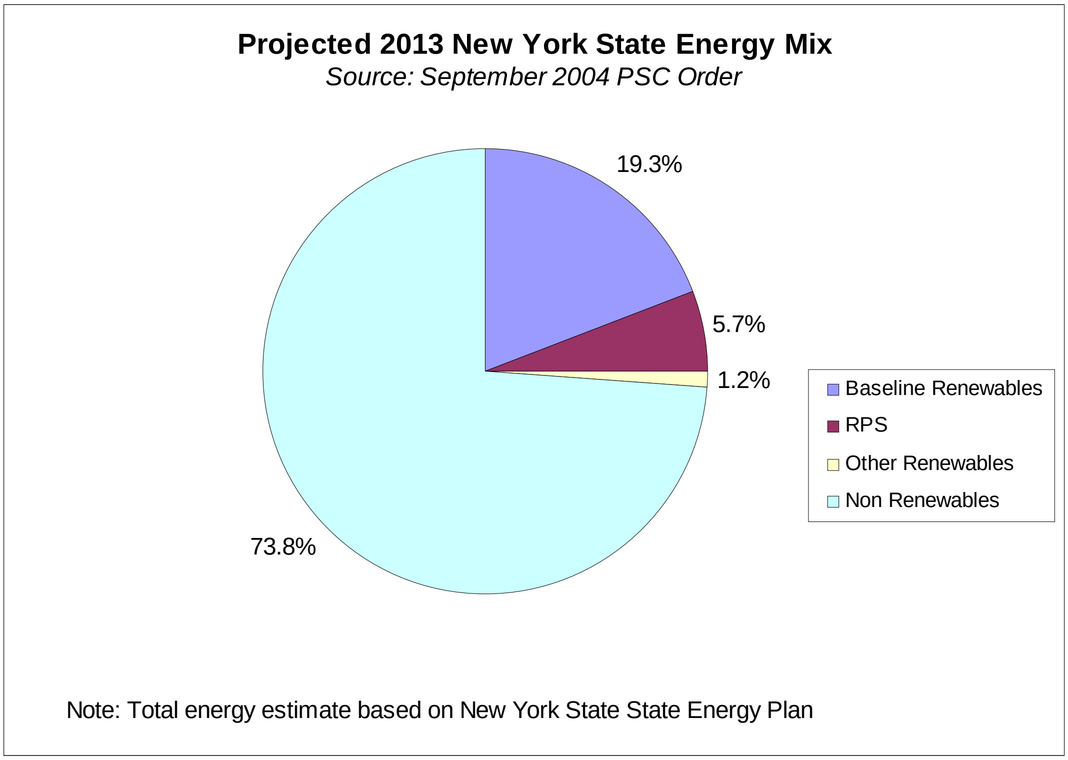
[1] Case 03-E-0188, supra, Order Authorizing Additional Main Tier Solicitations and Directing Program Modifications (issued January 26, 2006). Case 03-E-0188, supra, Order Authorizing Methods and Consideration of Bid Evaluation Criteria and Denying Request for Clarification (issued October 19, 2006). The attached appendix lists all the orders issued in this proceeding.

The Commission instituted the RPS Proceeding in February of 2003 to explore measures that could be taken to ensure that, by 2013, at least 25 percent of electric energy used in New York State would be produced by renewable resources.[2] As seen in the chart below, as of 2004, renewable generation, primarily hydro, accounted for production of about 19.3 percent of New York's retail electric energy. The goal established in the proceeding called for achievement, by 2013, of an additional 5.7 percent of retail energy used in New York to be derived from renewable resources.



The program was designed to help meet the growing demand for electricity and also provide additional benefits such as increasing fuel diversity, reducing exposure to fossil fuel price spikes and supply interruptions, increasing economic development activity from a growing renewable energy industry, and improving the environment. The Commission's decision was based on a detailed examination of the costs, benefits, and

[2] Case 03-E-0188, supra, Order Instituting Proceeding (issued February 19, 2003).

potential impacts on system reliability of implementing a renewable energy policy for New York State. The Commission determined that to meet the 25 percent renewable energy target, New York State will need to add approximately 3,500 MW of renewable resource generation capacity and about 9.5 million MWh of new renewable energy (net of the Long Island Power Authority's share).[3]

In addition to establishing the 25 percent goal, the Commission adopted a framework that defined the types of facilities eligible for participation and the model for procurement of the resources necessary to achieve the goal. Other key policy decisions included: identification of eligible resources; recognition of the importance of the State's existing green marketing program; and a commitment to a review of the RPS in 2009.

The RPS Program has two tiers of eligible resources: a "Main Tier" consisting of medium-to-large-scale electric generation facilities and a "Customer-Sited Tier" consisting of smaller, on-site – or "behind-the-meter" – technologies. Renewable resources eligible to participate in the Main Tier include wind, hydroelectric, biomass, photovoltaics, fuel cells, liquid biofuel, and ocean or tidal power facilities. Eligible resources in the Customer-Sited Tier include fuel cells, photovoltaic, methane digesters (added in a subsequent Commission Order),[4] and small wind technologies. It is expected that the Customer-Site Tier technology will generate 190,000 MWh of the 9 million needed to meet the RPS goal.

Recognizing the rapid pace of change, including the potential for development of a new generation technologies, the Commission directed Staff to develop a mechanism for the addition of appropriate renewable resources to the RPS Program's eligibility list. The Commission also called for the development of a method to provide

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[3] Case 03-E-0188, supra, Order Regarding Retail Renewable Portfolio Standard (issued September 24, 2004) (September 2004 Order). The Commission invited participation by the Long Island Power Authority (LIPA). However, the Commission noted that LIPA could choose an alternative approach, which it has. LIPA is responsible for its own MWh targets and program costs.

[4] Case 03-E-0188, supra, Order Approval Inclusion Methane Digester Systems in the Customer-Sited Tier (issued November 2, 2005).

RPS funding in the future for certain renewable generators that were in operation prior to the start of the RPS Program and that could demonstrate a financial need for RPS incentives to remain operational (defined as “maintenance resources”).

The RPS Program facilitates the development of eligible renewable resources by using revenues derived from a non-bypassable, volumetric charge on the delivery portion of ratepayers’ electric bills. Collection of this charge began in the fourth quarter of 2005 and was based initially on the estimated market price to acquire the renewable resources needed to meet the RPS Program’s goal. This charge is subject to review and adjustment to reflect actual costs.

RPS Program funds collected by the State’s regulated, investor-owned electric transmission and distribution companies are transferred to the New York State Energy Research and Development Authority (NYSERDA), which is responsible for administering an incentive-based central procurement program. Under this central procurement model, Staff and NYSERDA developed an implementation plan,[5] approved by the Commission, that specifies the details of NYSERDA’s role as procurement administrator as well as the process for soliciting and selecting projects. When authorizing the RPS Program, the Commission also affirmed that system reliability was of paramount importance and directed Staff to include in the implementation plan a process for additional review and analysis of potential reliability impacts associated with intermittent resources, such as wind power, and any modification that may be necessary to protect system reliability.

As approved by the Commission, customer bill impacts for the RPS are modest. For residential ratepayers, over the life of the program, cumulative bill impacts are forecast to range from a reduction[6] of a 0.9 percent to an increase of 1.68 percent; for

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[5] Case 03-E-0188, supra, Order Approving Implementation Plan, Adopting Clarifications, and Modifying Environmental Disclosure Program (issued April 14, 2005).

[6] Some ratepayers may see bill reductions as a result of lower energy costs from operation of renewable generators.

commercial ratepayers from a 0.78 percent reduction to a 1.79 percent increase; and for industrial ratepayers from a reduction of 1.54 percent to an increase of 2.2 percent.

A major Commission objective in the Order establishing the program was to sustain a market for renewables without perpetual dependence upon government-mandated subsidies. The Commission determined that an approach incorporating and supporting the growth of competitive retail markets for renewable resources and customer choice for renewables could produce a self-sustaining renewable energy industry. Therefore, the RPS Program was designed to incorporate a successful voluntary green power market. As a result, the Commission encouraged voluntary market participants to provide at least one percent of the 25 percent.

PROGRAM RESULTS

NYSERDA and Staff have conducted two Main Tier solicitations; the first was completed in January 2006 and the second in March 2007. These solicitations resulted in contracts for 26 renewable generation facilities totaling more than 800 MW with an expected output that will reach almost 2.9 million MWh in 2008.[7] NYSERDA did not purchase the energy from the projects. Instead it purchased the rights to renewable attributes in the first solicitation (before unbundling was authorized)[8] and the actual renewable attributes[9] the second time. The energy from the projects are generally sold into the New York wholesale market. NYSERDA estimates that the total new

[7] This accounts for about 28 percent of the 9 million MWh necessary to meet the 2013 goal.

[8] Case 03-E-0188, supra, Order Recognizing Environmental Attributes and Allowing Participation of Projects with Physical Bilateral Contacts (issued June 28, 2006) (June 2006 Order).

[9] Renewable energy attributes or certificates represent the commodity formed by unbundling the environmental attributes of a unit of renewable energy from the underlying electricity. One attribute is equal to one MWh of renewable energy.

renewable capacity associated with New York's RPS Program could exceed 1,213 MW[10] 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.[11] NYSERDA further estimates that more than $1.9 billion will be invested to construct the New York-based renewable generation facilities awarded contracts under the RPS. According to NYSERDA, 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 could result in potential reductions of 2,000 tons of nitrogen oxides, 4,400 tons of sulfur dioxides, and 1.3 million tons of carbon dioxide per year.

PROGRAM COSTS

As part of the RPS proceeding, Staff and NYSERDA prepared a cost study[12] where the cost to reach the RPS goal was estimated at $762 million in 2003 dollars. NYSERDA will be collecting from the utilities, through 2013, a total of $741 million in nominal dollars, not including LIPA's costs.

Since the Commission only authorized revenue collection through 2013, NYSERDA sought clarification that it would be able to honor its obligations contained in long term contracts with terms beyond 2013. The Commission provided such assurance, but again did not specify the program's expected funding needs beyond 2013.[13]

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[10] The RPS Program is not supporting 100% of each project's output. Some developers have chosen to sell their attributes in other markets.

[11] Interest among developers is continuing with over 6,000 MW of renewable energy projects in the New York State Independent System Operator's (NYISO) interconnection process.

[12] Case 03-E-0188, supra, New York Renewable Portfolio Standard Cost Study Report II.

[13] Case 03-E-0188, supra, Order Regarding Petitions for Clarification and Reconsideration (issued December 15, 2007).

Consequently, Staff will need to update the cost study and make recommendations to the Commission to address this matter. The dollars already committed for the Main and Customer-Sited Tiers and NYSERDA's administrative costs total $573 million. Of this total, $363 million has been committed for the purchase of attributes from new renewable generation and to support Customer-Sited Tier obligations through 2013.

RPS Program Finances

	Collections*	Renewable Attributes	Maintenance Resources	NYSERDA Admin	Commitments
2013	**$741,475,122**	**$363,100,000**	$27,900,000	$35,800,000	$426,800,000
Post-2013		$140,700,000	$5,800,000		$146,500,000
Total	$741,475,122	$503,800,000	$33,700,000	$35,800,000	**$573,300,000**

* NYSERDA estimates that cash flow will provide approximately $40.7 million of interest earnings through 2017. The projected interest earnings are not shown here.

In addition to the matter of post-2013 costs, there are other reasons why it will be necessary for Staff to update the RPS Program Cost Study. When implementing the RPS Program, Staff and NYSERDA departed from two Cost Study assumptions: use of contracts for differences (CFDs are financial instruments that allow buyers and sellers to hedge risk) and 15-year or longer contract terms. CFDs were not employed for several reasons, including the difficulty of accurately forecasting long-term energy prices and for the adverse effect they would impose on NYSERDA's ability to budget for solicitations from year to year. As for contract terms, although contracts longer than 10 years may have resulted in lower annual program costs, a 10-year contract limits the ratepayers' long-term commitment to a duration that still provides developers with an opportunity to obtain reasonable financing, while also expediting the transition from a government to a more market based program.

The initial cost estimates also did not include the 9 percent of the program budget assigned to NYSERDA for administration, monitoring, and evaluation. Nor did it consider the funds necessary to help support pre-RPS program renewable generators or maintenance resources. The Cost Study also assumed the importation of over 30 percent of the renewable generation needed to meet the State's goal, primarily from low cost Canadian hydro. A small amount of wind resources located in New Jersey and Pennsylvania received contracts following our first solicitation, but no Canadian hydro facility entered a bid. To ensure that the energy produced by out-of-state projects supported by RPS Program funds was scheduled into the New York energy market the Commission tightened the energy delivery requirement. This change made it more expensive for out-of-state projects to schedule their energy into the New York. Also, to recognize the benefits from the construction of in-state projects, the Commission authorized the consideration of in-state benefits in the bid evaluation criteria. As local developers are more effectively able to claim creation of benefits in New York State (taxes and jobs), these changes may have had the effect of reducing bidder participation by potentially lower cost out-of-state resources. (There were no bids from out-of-state projects in the second solicitation.)

Further, since preparation of the Cost Study, significant increases occurred in the prices of raw materials needed for the production of wind turbines. In addition, because some of the manufacturing of wind turbine components occurs abroad, the decline in the value of the dollar compared to the Euro has negatively affected bid prices. Finally, the dramatically increased demand for wind turbines caused by growing interest in renewable generation world-wide, and a desire to commence operations in this country before expiration of the Production Tax Credit in December 2006 exerted upward pressure on prices.

In light of these developments, it is encouraging that the second solicitation produced prices more than 30 percent lower than the first solicitation ($15 per MWh compared with $22.90 per MWh). Part of the decrease may be attributable to the Commission's decision in its 2006 Order to allow generators with physical bilateral contracts to participate in the RPS Program. This action formally recognized renewable energy and attributes as two separate and distinct commodities.[14] While New York

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[14] During the initial months of program implementation, several developers told Staff and NYSERDA that the bundling requirement would serve to drive up bid prices (continued…)

State's price for a renewable attribute was higher than anticipated, especially in the initial solicitation, it is important to note that the $17 weighted average price is well below attribute prices in Massachusetts.[15]

THIRD SOLICITATION

The authorized third solicitation, now being planned for the fall of 2007, will result in the commitment to additional contracts at additional expense, bringing the level of committed funds much closer to the amount the Commission initially authorized for collection from electric ratepayers. As a result, Staff will evaluate whether changes are needed in the revenues collected necessary to achieve the RPS Program goal. Staff will report its findings to the Commission later this year.

RELATED DEVELOPMENTS

Energy Efficiency Portfolio Standard

In June, the Commission adopted the Energy Efficiency Portfolio Standard (EPS) Proceeding to consider the feasibility and cost-effectiveness of adopting a long-term energy efficiency goal that would result in a 15 percent decrease in New York State's electricity consumption when compared to forecasted demand for 2015. Staff will need to analyze the ramifications of such a significant initiative on the 2013 RPS Program goal, and recommend changes as appropriate. (Please see the following bar graph for an illustration of the impacts.)

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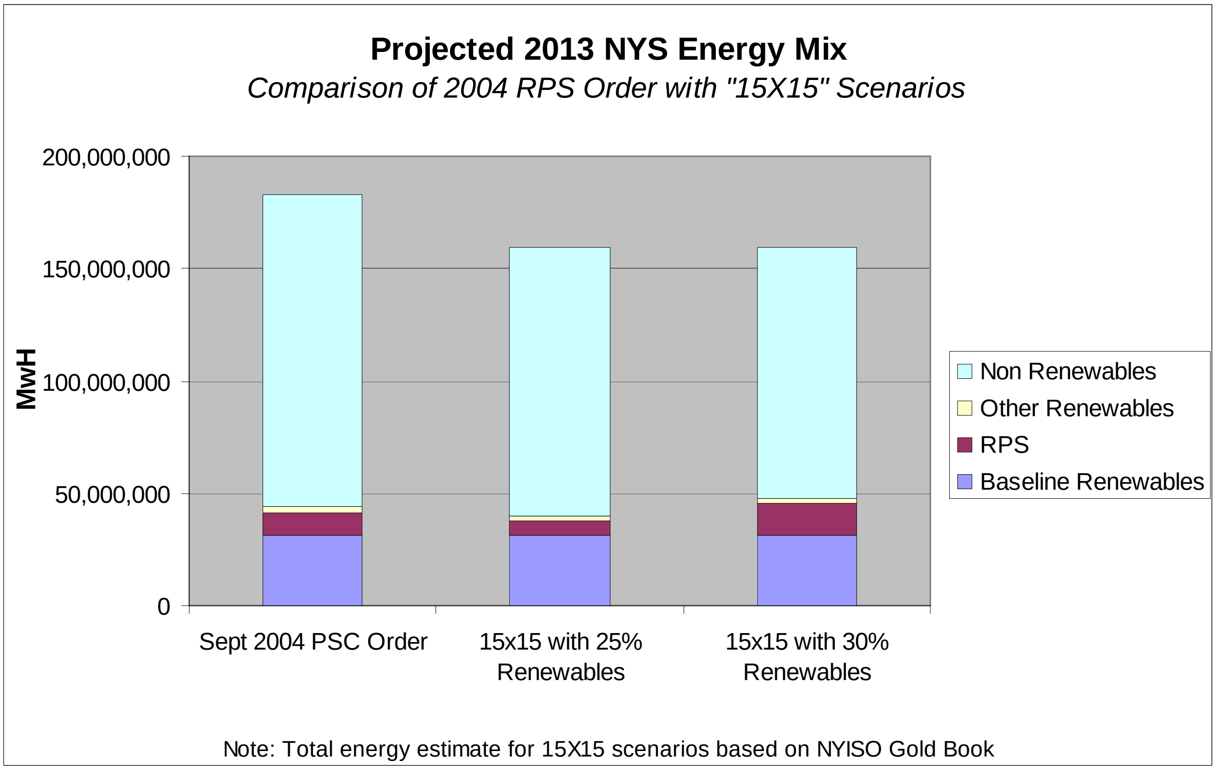
because they could not enter into separate long-term energy contracts. Instead, developers were required to sell their energy into the NYISO spot market in order to participate in the RPS process. NYISO spot market prices fluctuate from day to day, increasing a developer's risk, and the first solicitation bid prices reflected the increased risk. NYSERDA conducted a bidders' survey following the second solicitation, and those surveyed continue to support the contract flexibility provided by unbundling.

[15] In January 2007, Evolution Markets, a broker of environmental products, conducted an auction for the sale of renewable energy certificates for the Massachusetts Technology Collaborative, the state agency that manages the Massachusetts Renewable Energy Trust. The average winning bid price was $54.04.



Environmental Attributes

The NYISO has agreed to work with Staff, NYSERDA and a contractor, using SBC funds already allocated, to develop and implement a tracking system for environmental attributes. The system will be compatible with similar systems in PJM and in New England. The system will track the attributes related to the RPS Program, support the Regional Greenhouse Gas Initiative (RGGI), and generate data necessary to comply with the Department's Environmental Disclosure Program. To move forward on this initiative, Staff will address issues such as: (1) governance of tracking system operations; (2) use of reports or other data derived from the system for purposes of regulating activities subject to Commission jurisdiction, including administration of the environmental disclosure program; and (3) billing and payment mechanisms necessary to compensate the NYISO. Staff, NYSERDA, and the NYISO will develop recommendations on these issues over the coming months and Staff will report its recommendations to the Commission later this year.

FUTURE PLANS

As noted above, Staff and NYSERDA are preparing for a third RPS solicitation scheduled for this fall. Considering the large number of wind projects under development, a significant number of potential bidders are expected. Consequently, reasonably priced bids are anticipated.

Second, also as noted above, we are working on a new RPS Cost Study. The results of the third solicitation and this new cost study are expected to provide additional information to allow for informed decisions regarding the future direction of the RPS Program and funding needs for the future. Based on the results of the third solicitation and the updated Cost Study, we expect to be in a much better position to evaluate the future costs of the program and to recommend future spending levels. Staff expects to report its findings by the end of the year.

Third, Staff will continue working with NYSERDA and the NYISO on development of the environmental attributes tracking system and provide any necessary recommendations to the Commission for its consideration. This initiative is a critical component of the continuing efforts of both the RGGI and the RPS programs.

We will report on the status of these initiatives and the RPS program as the need arises.

Respectfully submitted:

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Key Orders in the Case 03-E-0188
Since Establishment of an Renewable Portfolio Standard

2/19/03	Order Instituting Proceeding.
9/24/04	Order Regarding Retail Renewable Portfolio Standard.
12/15/04	Order Regarding Petitions for Clarification and Reconsideration.
12/16/04	Order Authorizing Fast Track Certification and Procurement.
12/22/04	Order One Commissioner Order by William M. Flynn, Chairman, Order on RPS Bill Formats.
1/12/05	Order Confirming Order Made in this Proceeding on December 22, 2004.
3/16/05	Order Adopting Emergency Rule as Permanent Rule.
4/14/05	Order Approving Implementation Plan, Adopting Clarifications, and Modifying Environmental Disclosure Program.
8/31/05	Order Approving Request for RPS Program Funding as a Maintenance Resource.
10/27/05	Retail Renewable Portfolio Standard and Lyonsdale Biomass, LLC, Order granting Petition for Clarification.
10/31/05	Order Approving Modifications to Maintenance Resource Category. 10/31/05
11/02/05	Order Approving Request for Inclusion of Methane Digester Systems as Eligible Technologies in Customer-Sited Tier.
1/26/06	Order Authorizing Additional Main Tier Solicitations and Directing Program Modifications.
2/16/06	Order Approving Request for RPS Program Funding as a Maintenance Resource.
6/28/06	Order on Delivery Requirements for Imports from Intermittent Generators.

Key Orders in the Case 03-E-0188
Since Establishment of an Renewable Portfolio Standard

6/28/06	Order Recognizing Environmental Attributes and Allowing Participation of Projects with Physical Bilateral Contracts.
6/28/06	Order on Customer Sited Tier Implementation.
10/19/06	Order Authorizing Solicitation Methods and Consideration of Bid Evaluation Criteria Denying Request for Clarification.
2/12/07	Summary of Comments on Draft Operating Plan for Customer-Sited Tier
2/12/07	Operating Plan for Customer-Sited Tier Program