# STATE OF NEW YORK PUBLIC SERVICE COMMISSION

CASE 03-E-0188 - Proceeding on Motion of the Commission Regarding Retail Renewable Portfolio Standard.

# ORDER AUTHORIZING ADDITIONAL MAIN TIER SOLICITATIONS AND DIRECTING PROGRAM MODIFICATIONS

Issued and Effective: January 26, 2006

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# STATE OF NEW YORK PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on January 18, 2006

COMMISSIONERS PRESENT:

William M. Flynn, Chairman Thomas J. Dunleavy Leonard A. Weiss Neal N. Galvin Patricia L. Acampora

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

# ORDER AUTHORIZING ADDITIONAL MAIN TIER SOLICITATIONS AND DIRECTING PROGRAM MODIFICATIONS

(Issued and Effective January 26, 2006)

BY THE COMMISSION:

# I. INTRODUCTION

By Order issued September 24, 2004,<sup>1</sup> we adopted a policy of increasing to at least 25 percent the proportion of electricity derived from renewable resources used by retail consumers in New York State. Consistent with this policy, we also adopted a Renewable Portfolio Standard (RPS) Program. In a subsequent Order, we approved an Implementation Plan to

<sup>&</sup>lt;sup>1</sup> Case 03-E-0188, <u>supra</u>, Order Regarding Retail Renewable Portfolio Standard (issued September 24, 2004) (September Order).

effectuate the RPS Program.<sup>3</sup> The Order required Department of Public Service staff (Staff) to seek our authorization for at least the next two solicitations and to hold workshops with parties and stakeholders on a variety of topics, such as methodologies for the next solicitation, approaches to support development of the voluntary green market in a central procurement environment, measurement of incremental biomass, participation by generators with physical bilateral contracts in the RPS Program, and development of a regionally compatible environmental attributes tracking system.

In this Order, we authorize additional Main Tier solicitations, provide guidance on solicitation methods, and decide several RPS Program modification issues pertaining to the voluntary green market, biomass issues, physical bilateral contracts and the unbundling of environmental attributes from energy. Our Staff will also investigate specific changes that may be need for the Environmental Disclosure Program (EDP) and take steps to develop a regionally compatible environmental attributes tracking system.

# II. BACKGROUND

In the September Order, the Commission, *inter alia:* established two tiers of eligible renewable resources (Main Tier<sup>4</sup> and Customer-Sited Tier); set annual, incremental megawatt hour (MWh) renewable energy targets for the years 2006-2013; required the use of financial incentives to encourage the development and operation of eligible renewable generation facilities; directed

<sup>&</sup>lt;sup>3</sup> Case 03-E-0188, <u>supra</u>, Order Approving Implementation Plan, Adopting Clarifications, and Modifying the Environmental Disclosure Program (issued April 14, 2005) (April Order).

<sup>&</sup>lt;sup>4</sup> In the September Order, we also established a category of "maintenance resources" for facilities placed in service before January 1, 2003 that, based upon certain criteria, may be deemed eligible for RPS Program support.

the use of a non-bypassable wires surcharge on certain delivery customers of each of the State's investor-owned utilities to raise the revenue necessary to support the program; and adopted a central procurement model to be administered by the New York State Energy Research and Development Authority (NYSERDA).<sup>5</sup>

The April Order required Staff, in conjunction with NYSERDA and in consultation with the parties, to make recommendations to us for our consideration regarding several specific procurement-related issues. These issues included:

- funding levels and procurement targets for at least the next two solicitations;
- methods for meeting Main Tier RPS Program targets;
- proposals for supporting growth in the voluntary green markets in a centralized procurement environment;
- pricing methodology and criteria to be used for the evaluation of proposals submitted under the models;
- delivery terms of contracts; and
- requirements for accounting for biomass co-firing at existing facilities and criteria that govern the use of adulterated biomass.

In the April Order, we also required Staff, in consultation with NYSERDA and the New York Independent System Operator, Inc. (NYISO), to examine all aspects of "unbundling" renewable attributes from its associated energy and transitioning the EDP to a certificate-based environmental attributes tracking system. In addition to such an examination, we requested Staff, after consultation with NYSERDA and the NYISO, to provide recommendations with regard to RPS Program

<sup>&</sup>lt;sup>5</sup> Under this model, NYSERDA contractually commits itself to provide RPS Program funds to eligible generators that sell electricity in New York State and bases those payments to the generators on the quantity of energy delivered for sale.

participation of renewable generators with physical bilateral contracts for the sale of energy separate from the RPS Program environmental attributes to which such energy is associated.<sup>6</sup>

Two notices of proposals pertinent to these issues (the Solicitation Notice and the Program Modifications Notice) were published pursuant to State Administrative Procedure Act (SAPA) §202(1) in the <u>State Register</u> on September 21, 2005. Twenty-nine parties submitted comments: AES-NY, LLC (AES); Airtricity, Inc. (Airtricity); BQ Energy, LLC (BQ); Brascan Power Corp. (Brascan); Catalyst Renewables Corporation (Catalyst); Citizens Campaign for the Environment (CCE); Community Energy, Inc. (Community); Conservation Services Group Inc. (CSG); Constellation Companies (Constellation);<sup>7</sup> Farm Bureau New York (Farm Bureau); FPL Energy, LLC (FPL); Greenlight Energy, LLC (Greenlight); Horizon Wind Energy, LLC (Horizon); IBEW Locals 97 & 503 (IBEW); Independent Power Producers of New York, Inc. (IPPNY);<sup>8</sup> Joint Utilities;<sup>9</sup> Madison County Board of

- <sup>7</sup> The Constellation Companies include Constellation NewEnergy, Inc., Constellation Energy Commodities Group, Inc., and Constellation Generation Group, LLC.
- <sup>8</sup> IPPNY is a trade association representing the independent power industry in New York State. Its members include more than 100 companies involved in the development, operation and ownership of electric generators and the marketing and sale of electric power in New York.
- <sup>9</sup> Joint Utilities consists of Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation, Orange and Rockland Utilities, Inc. and Rochester Gas and Electric Corporation.

<sup>&</sup>lt;sup>6</sup> The April Order also directed Staff and NYSERDA to explore funding allocations among eligible technologies within the Customer Sited Tier; this matter is the subject of a separate SAPA Notice and will be decided in a separate order.

Supervisors (Madison County); Multiple Intervenors (MI);<sup>10</sup> Natsource Transaction Services, LLC (Natsource); NYISO; Noble Environmental Power, LLC (Noble); Natural Resources Defense Council, Pace Energy Project, Association for the Protection of the Adirondacks, and New York Public Interest Research Group (NRDC, <u>et al.</u>); Plug Power, Inc. (Plug Power); PJM EIS, Inc. (PJM); PPM Energy (PPM); RETEC;<sup>11</sup> Taylor Recycling Facility (Taylor); UPC Wind Management (UPC); and UTC Power (UTC).

# III. <u>FUNDING LEVELS AND SOLICITATION TARGETS</u> Proposal

The Solicitation Notice requested comment on the proposal to maintain funding levels and incremental renewable energy targets established in our September Order at least for the period 2006 through 2008, subject to limitations of program funding and analysis of the cumulative results of prior solicitations.

#### Comments

The commenting parties uniformly agreed that the funding levels and targets should be maintained at least for the next two years. Joint Utilities stated that funding levels should not be increased even if necessary to meet the target megawatt-hours (MWh) established in our September 2004 Order. It said that, given the established funding level, market

<sup>&</sup>lt;sup>10</sup> MI is an unincorporated association of approximately 55 large commercial and industrial energy consumers with manufacturing and other facilities located throughout New York State.

<sup>&</sup>lt;sup>11</sup> RETEC members include: American Lung Association of New York State; American Wind Energy Association; Community Energy, Inc.; Environmental Advocates; Hudson River Sloop Clearwater; Natural Resources Defense Council; New York Public Interest Research Group; Pace Energy Project; Plug Power; PowerLight; Public Utility Law Project; Renewable Energy Long Island; Riverkeeper; Sierra Club Atlantic Chapter; Solar Energy Industries Association; and, Sustainable Energy Development, Inc.

development should dictate the actual MWh encumbered. RETEC and CSG asserted that uncertainty is the key barrier to the development of a renewable energy industry in New York State. CSG further stated that unclear program targets and commitment levels give mixed market signals, which may discourage further investment in renewable energy projects. RETEC explained that, especially for wind projects, significant expenditures in the collection and evaluation of data and locating and obtaining rights to appropriate sites occur well in advance of a secure contract for power or renewable energy attributes. Taylor said that the longer the target schedule is maintained, the greater is the benefit for long lead-time projects to procure financing.

Greenlight stated that any decision made to modify the program might consider the ramifications it would have on the depth of the market. It explained that it is critical to achieve RPS Program targets as economically as possible and that competition remains robust. Central to ensuring robustness, it asserted, RPS Program design must encourage the participation of as many credible companies as possible.

# Discussion

We concur with the parties with respect to the importance of maintaining the overall funding levels and targets established in our September Order, subject to limitations of program funding and analysis of the cumulative results of prior solicitations. They are also correct in asserting that uncertainty in the marketplace may retard the development of a renewable energy industry in New York State. Therefore, we will continue the overall funding levels and targets for the program. Staff and NYSERDA will recommend any appropriate changes as part of the 2009 Review.

Staff and NYSERDA have considered the budget, targets, and cash flows available. Staff recommends that NYSERDA be authorized to conduct, as appropriate, Main Tier RPS Program

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solicitations in 2006 and 2007, with payments beginning on or after July 1, 2007, for projects that will be on-line the second half of 2007. We see several advantages to adopting this recommendation and, accordingly, do so. First, confirming the funding levels and targets established in the September Order provides developers with certainty about the program. Second, the time before the second half of 2007 gives them adequate time to develop proposals and projects to meet the December 31, 2007 Production Tax Credit deadline for commencement of operations. Finally, it provides time to develop the solicitation process and to obtain more information on the width and depth of the renewable energy market.

# IV. <u>SOLICITATION METHODOLOGIES FOR MAIN TIER RESOURCES</u> Proposal

The Solicitation Notice asked parties to comment on the methods for the next Main Tier solicitation, specifically: a "sealed bid, pay-as-bid" approach (also known as a "sealed bid auction" or "Request for Proposals" (RFP)); a "clearing price auction" approach (which included the possible use of a "declining clock" format<sup>12</sup>); and a "standard offer" approach.<sup>13</sup> As stated in the Solicitation Notice and in our April Order, our goals, in designing an efficient and transparent model, in addition to cost minimization, are to:

<sup>&</sup>lt;sup>12</sup> A declining clock auction (also called a descending clock or clock auction) is a process whereby the auction's initial bidding level is lowered in increments until the amount of the product offered equals the amount sought.

<sup>&</sup>lt;sup>13</sup> A standard offer approach is one that establishes a set price to be paid to any party that applies for funding and satisfies the solicitation guidelines. Typically, a standard offer would be on a first-come basis for eligible proposals.

- maximize the opportunity to contract with projects that have a high probability of achieving operation;
- identify market conditions that should be present in order to justify a particular approach;
- establish a process for determining the presence of such market conditions and aligning the use of a particular model appropriately; and
- establish a procurement process that will ensure sufficient resources to meet annual program targets.

# Comments

Most of the commenting parties, particularly developers and potential sellers of renewable energy, expressed support for use of the RFP approach. The RFP method was used for the initial Fast Track Main Tier solicitation in January 2005. Some parties argued for use of a clearing price auction, including use of the declining clock format. Community supported the clearing price auction but suggested that, rather than auctioning opportunities for contracts related to attributes from specific facilities, NYSERDA should auction opportunities for contracts related to transferable attribute delivery rights, without any requirement to identify specific facilities. Several parties suggested that a standard offer might be appropriate, especially for small projects.

The Solicitation Notice suggested that use of a clearing price auction might depend on the depth and extent of the market, and parties were asked for comments specifically on that issue. The commenting parties in favor of the clearing price auction approach (Joint Utilities, AES, IPPNY, and Brascan) responded that the necessary market conditions will likely exist at the time of the second solicitation. One noted that over 5,000 MW of renewable energy projects have recently been added to the NYISO's interconnection queue. The NYISO, in

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its comments, indicated that it had no objection to the use of a clearing price auction.

The proponents of a clearing price auction assert that it would provide the best means to minimize costs for the purchaser, while also ensuring that bidders are evaluated fairly and transparently. They argued that participants in an RFP solicitation would generally try to build premiums into their bids in attempts to anticipate the premiums associated with the marginal resources chosen. This, they said, would increase the likelihood that the most efficient resource might not be selected because the more efficient resource might overestimate its competitors' bids and therefore submit a bid that is too high.

A clearing price auction, the proponents argued, encourages bidders to bid at the lowest price they would accept (the point at which they are indifferent to winning or not winning the bid) because that bidding strategy should maximize their profits. They maintained that a declining clock format for a clearing price auction might be particularly efficient because bidders would be given multiple chances to reevaluate their bids downward. In addition, the proponents said that a clearing price auction ensures that awards will not discriminate among technologies.

The proponents of the clearing price auction said that bidding is likely to be more competitive if bidders know that their bids will be evaluated objectively. (Contracts are bid and paid based on a fixed price and terms, conditions are standardized, and transparency is provided. Thus, the bidders would obtain the information they need for any future bidding rounds). Bidders would then not be concerned that NYSERDA will use subjective factors in weighing competing bids.

Other commenting parties (RETEC, UPC, Noble, PPM, Horizon, FPL, Airtricity, Greenlight, BQ, Catalyst, and IBEW)

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acknowledged that a clearing price auction, especially a declining clock format, might eventually minimize costs. They stated that the conditions necessary for use of this method do not exist. They explained that there may not be sufficient competitors or a sufficiently transparent and liquid market to avoid market power risk and to support the additional costs necessary for use of this solicitation method.

Airtricity pointed out that a recent New Jersey energy procurement auction, using a declining clock auction format, only resulted in awards to existing facilities. It questioned whether a declining clock auction would actually yield new, capital intensive renewable projects. RETEC noted that a declining clock auction process could be problematic if a bidder is a winner for only a small portion of its expected output because the balance of its output could be at risk causing the project to no longer be viable. Taylor stated that use of a declining clock auction format would add uncertainty to the market place, which would add to the cost of financing.

These parties favored use of the RFP approach. They reasoned generally that an RFP is the most effective, easily administered solicitation method in the near term, and it would ensure competitive pricing and financial prudence. They said that, to ensure confidence in the RPS Program process, we should keep solicitations as simple as possible and use proven methods that have worked in the past and with which NYSERDA has the most familiarity. In addition, they suggested that an RFP can be structured to require bidders to supply supplemental information about their proposals and the benefits provided. This, they maintained, would allow NYSERDA to use its experience and knowledge to exclude non-viable projects and include any economic development benefits analysis.

CSG proposed use of both clearing price auctions and RFPs. It said that a clearing price auction might be suitable

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for mid-term contracts of two to three years for developers who have already developed sites and need access to RPS Program funds, and for "balance of current year" contracts for existing generators with excess capacity remaining at the end of the year. An RFP process, it said, would be appropriate for creditworthy developers that need long-term contracts to attract reasonable financing rates for new, capital intensive construction. CSG would allocate 50% of the procurement for long-term contracts, 30% for two- to three-year contracts, and 20% to current-year contracts.

MI argued that solicitations should be based on a "cost of service" model. We rejected that proposal in our September Order, and it will not be reconsidered here. MI noted that, if we do not select a cost of service solicitation model, we should require NYSERDA to use an RFP for the 2006-2008 solicitations. It said that there is no reason to believe that market conditions have changed enough to ensure that there is sufficient market depth to allow for a clearing price auction. Based on the experience with the 2006-2008 solicitations, we would then have more information to consider, in 2009, use of a different solicitation method.

Several commenting parties (RETEC, Horizon, Airtricity, Greenlight, BQ, and CSG) indicated that standard offers might be suitable for small projects, perhaps in the 20 MW or less size. Airtricity said the option should be open for all size projects; and, Taylor, a biomass generator, proposed a one MW size limit. The NYISO expressed no objections to standard offers, but it suggested limiting such offers to projects connected to the distribution system and operated outside the NYISO wholesale market.

MI and Joint Utilities opposed use of standard offers. MI said that standard offers have shortcomings similar to the ones associated with clearing price auctions and could result in

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consumers paying substantially more than is necessary to ensure the development of RPS Program resources. Joint Utilities said that the use of standard offers would simply promote the development of higher cost projects that cannot compete in the Main Tier solicitations. It claimed that, because the price is made public, market participants bidding in any competitive solicitation will know the price NYSERDA is willing to pay, which may drive prices higher.

#### Discussion

A majority of the commenting parties suggested that a clearing price auction, using a declining clock format, would likely be the most efficient, transparent, and cost effective solicitation tool for the Main Tier. Parties disagreed about whether current market conditions were right for its use. The commenting parties preferring use of an RFP process raise valid points that need to be considered carefully before the next solicitation is finalized because, at the time of the solicitation, conditions might not exist for a successful clearing price auction. Airtricity and Taylor are also correct that such a process, if not designed properly, could be problematic and add uncertainty to the market place that would increase the cost of financing. Although conditions may not exist now to support implementation of the clearing price auction for solicitation of Main Tier resources, it appears from the number of projects currently in the NYISO's interconnection queue that conditions may exist in the near future. Accordingly, NYSERDA and Staff should proceed with development of a clearing price auction process using a declining clock format.<sup>14</sup>

<sup>&</sup>lt;sup>14</sup> Staff should report back to us if it appears that market conditions are not ripe or that the model is not ready for use in time for the next solicitation.

As noted above, Community suggested that NYSERDA auction opportunities for contracts related to transferable attribute delivery rights, without any requirement to identify specific facilities. We authorized "system contracts" in our September Order; that authorization allows project sponsors to submit proposals that identify multiple facilities without identification of the specific facilities that will operate at any given time.

Our decision here does not preclude us from modifying the solicitation methods authorized in this Order as needed. We will reevaluate the need for our reviews of the solicitation processes as part of the planned overall 2009 Review.

#### V. PRICING CRITERIA

#### Proposal

The Solicitation Notice indicated that we were considering continuation of a fixed price method (set payments per MWh); parties had an opportunity to submit comments on any other pricing methods.

#### Comments

Most of the commenting parties supported use of the fixed price method. The NYISO stated that locational-based market prices (LBMP) for energy and locational-based installed capacity (ICAP) markets influence projects to locate in areas where they will be of the most value to the system. It suggested that use of an alternative pricing scheme could mask or dilute these market signals. Joint Utilities and the NRDC agreed, citing the necessity of proper market signals to ensure that resources are sited in the best locations. RETEC and CSG said that the fixed price method is the easiest to administer. FPL agreed, stating that this method identifies for consumers the payments that will be made under the RPS Program and provides a definitive cost for budgeting purposes. CSG asserted

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that the fixed price method is the most straightforward to use in evaluating bids.

MI and some RETEC members supported use of Contracts for Differences (CFDs).<sup>15</sup> They argued that, to prevent overpayments by consumers, the CFD pricing option must be used with a customized subsidy based on the cost of development for its particular project. MI asserted that any revenues received by the project in excess of the amount needed to cover the developer's cost of service and a reasonable rate of return on equity must be returned to consumers. MI argued that, by shifting the risk of low energy prices from developers to consumers, the CFD approach would reduce financing risk, which would, in turn, reduce the price of bids. According to the RETEC members, in the absence of a CFD, wind energy projects may have difficulty obtaining financing.

The majority of commenting parties addressing the CFD option objected to its use. Some asserted that the CFD approach shifts too much risk from developers to the RPS Program. Others were concerned about distorting market signals. According to the opponents, several negative results may ensue from CFDs: insulation of renewable resources from market prices resulting in severely depressed prices during hours when renewable resources are most available; failure to provide market-based economic signals to site renewable resources in geographical areas most in need of new generation; improper insulation of RPS Program resources from the normal market incentives to produce electricity when LBMPs are higher than the resource's incremental production costs; and, forcing existing generators to

<sup>&</sup>lt;sup>15</sup> Contracts for Differences are agreements for payment of the difference between the spot market price and an agreed-upon price to provide a consistent revenue stream.

pay load serving entities to take power to remain at least at minimum generation load.

IPPNY agreed that some of the problems associated with CFDs could be ameliorated if NYSERDA and NYISO forecasts of energy prices were used to determine the premiums implicit in each of the total price bids and rank the bids based upon minimizing the premium. It noted, though, that such forecasts are prone to errors and the affect of these errors would entirely be borne by ratepayers. According to IPPNY, the CFD method cannot be applied to out-of-state resources because of the delivery requirements imposed in our September Order. It would also be difficult to determine the difference associated with imports, IPPNY asserted, because the NYISO does not estimate a price for the resources' location. IPPNY asserted that the CFD approach would greatly complicate NYSERDA's bid evaluation process.

IPPNY stated that it is possible to design a CFD approach that protects ratepayers and does not compromise the market. It proposed payment of a renewable energy credit price that is inversely indexed to annual average zonal LBMPs. According to IPPNY, this method is simpler to implement than a CFD. IPPNY maintained that this is so because NYSERDA would not have to estimate the timing and value of the energy deliveries and would capture broad market changes in the price of energy, without making resources immune to timing of deliveries.

IPPNY explained that, as the annual average zonal LBMP rises, the price NYSERDA would have to pay would be reduced. Because the adjustment to the RPS Program incentive payment would be based on the annual average change in LBMP, according to IPPNY, it would preserve the incentive to produce energy when it is most valuable, while protecting consumers from paying for renewable attributes if energy prices rise to levels where that payment is no longer necessary. IPPNY maintained that, because

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RPS Program payments would not vary with short-term fluctuations in energy prices, renewable resources would be encouraged to respond to market prices in the same manner as would any other competitive resources.

#### Discussion

We are persuaded that use of CFDs could cause unintended negative consequences when used in the markets administered by the NYISO regardless of the design. Use of the fixed price method would support the NYISO markets and influence the siting of projects in areas where they will be of most value.

We also agree that it would be contrary to the concept of a deregulated market for us to forecast future energy prices to determine premiums. It is far more appropriate for developers and the financial community to perform that exercise and take those risks. The fixed price method avoids the need for NYSERDA to forecast future energy prices and will make bid evaluation easier to perform. Fixed prices enable easier administration of the RPS Program and provide consumers and administrators with definitive costs expected under the contracts.

Although IPPNY's proposal would work, it would complicate administration of the procurement process because of the need to develop LBMP charges for in- and out-of-state resources. Accordingly, we authorize continued use of the fixed price method.

### VI. SECURITY AND MILESTONES

#### Proposal

The Solicitation Notice indicated that we were considering, as we did for the 2005 Fast Track solicitation, a security requirement in the form of cash, a letter of credit, or the equivalent that selected bidders would post at the time of entering into an RPS Program contract. The

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Solicitation Notice asked for comments on the advisability and feasibility of employing contractual, post-selection mechanisms to allow close monitoring of the progress of development of the facility.

# Comments

Many commenting parties supported a reasonable monetary payment or letter of credit security. Some commenting parties suggested that, in addition to posting of security, post-selection mechanisms or milestones, at least to a limited degree, could also be employed. CSG indicated that milestones might be suitable for existing projects that are to be upgraded, while security might be the best requirement for projects that are not under construction. Taylor, on the other hand, objected to the use of any project monitoring mechanisms or milestones because, it said, we are not qualified by experience to second-guess developers and the underlying premise of the RPS Program is to encourage development, not direct it.

#### Discussion

Security and project milestones will encourage selection of projects that have a high probability of achieving operation and performing under RPS Program contracts. Accordingly, we agree with NYSERDA's requiring reasonable security in the form of cash, or a letter of credit, or the equivalent. This amount should be set at a level sufficient to discourage speculative bidding and participation by owners of facilities with little or no probability of achieving commercial operation; it should not be so high as to discourage bids from viable projects. The security should be refundable in its entirety upon project performance in accordance with the contract. In setting the level of security, NYSERDA should consider the comments and concerns of the parties; and, in particular, it may take into consideration the developmental

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stage of particular projects. For example, CSG proposed a smaller security requirement for upgrade projects close to completion than for projects in a pre-construction stage.

We recognize the importance of project development milestones and NYSERDA's need for flexibility to disencumber funds for projects' failure to accomplish defined milestones. Accordingly, we also agree with the use of reasonable developmental milestones. These would include, but not be limited to, progress in the NYISO's interconnection queue and major equipment purchases. NYSERDA and Staff will develop a post-selection system, including, as appropriate, the options identified by the commenting parties, which can be employed in addition to a requirement for security posted at contract award time. We are confident that NYSERDA and Staff have the expertise to monitor project status and will not interfere with project development or with the market, as Taylor warns.

#### VII. CONTRACT DURATION

#### Proposal

In the 2005 Fast Track solicitation, NYSERDA offered bidders a contract duration of up to ten years. The Solicitation Notice proposed contracts of ten years and alternative contract durations, including terms up to 15 years.

#### Comments

BQ, FPL, Greenlight, Horizon, IPPNY, Noble, and Taylor supported a ten year term and argued that an increase to 15-year and even 20-year terms would lower financing costs. Natsource stated that contracts of 10 to 12 years duration should be adequate to attract reasonable financing. Brascan preferred flexible contracts with mixed duration terms rather than a ten-year minimum contract duration. RETEC stated that developers should have the choice of 10year or 15-year contracts. CSG urged a comprehensive

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portfolio management strategy consisting of 10-15 year longterm contracts (50% of the portfolio), 2-3 year short-term contracts (30%), and current year contracts (20%). The Joint Utilities and MI asserted that contracts should be no longer than ten years in duration to avoid the necessity to extend the RPS surcharge and interference with the transition to a market-based system. Other commenting parties (AES, for example), due to the need to develop eligible biogas, biomass, and liquid bio-fuel resources (fuel-based eligible resources), indicated that a set bid price for a 10-year term could result in unreasonable long-term fuel supply risk. These parties suggested that a contract of shorter duration, such as three years, would balance the need for certainty with the realities of the fuel supply.

# Discussion

We recognize the difficulties of securing long-term fuel supplies for some types of resources. Therefore, we authorize NYSERDA, where necessary to consider the ability of resources to obtain fuel supplies and where the solicitation method allows, to offer fuel-based eligible resources contracts based on minimum terms of three years and maximum terms of ten years. Fuel-based resources would have the option, but not the obligation, to commit to contracts with durations of less than the maximum term of ten years. Any fuel-based resource awarded a contract of less than 10 years duration would be allowed to bid again in a subsequent competitive procurement if otherwise eligible. The cumulative terms of RPS contracts for fuel-based resources may not exceed ten years.

With respect to all other eligible resources, we will authorize a contract term of ten years. While we understand that financing might be easier for some capital intensive projects, if contract terms of even longer duration

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are permitted, we are reluctant to transfer to ratepayers the added cost for longer contract durations. In the event that a resource suspends its deliveries pursuant to an RPS Program contract, in order to make sales into the New York voluntary green market, the suspension period shall not extend the maximum ten year term.

#### VIII. BIOMASS ISSUES

# Proposal

The Solicitation Notice asked for comments on three specific biomass issues: (1) procedures for measurement and accounting to ensure that only the eligible portions of multifueled power generation facilities are considered in the RPS Program; (2) a methodology for determining the eligibility of generation from facilities that will use biomass as a fuel for new or increased output; and (3) use of adulterated biomass as a fuel for renewable generation. NYSERDA published a draft Biomass Guidebook to promote understanding of biomass policies. The Solicitation Notice invited parties to comment on the draft Biomass Guidebook and, particularly, on the three specific biomass issues described above.<sup>16</sup> This Order generally addresses comments pertinent to the three issues identified in the Solicitation Notice.

# A. <u>Biomass Fuel Measurement and Accounting Issues</u> Proposal

The Solicitation Notice asked for comments about procedures used to determine the renewable contributions derived in biomass/biogas co-firing with fossil fuels proposals. The Notice also asked for comments related to the measurement of fuel mass flow rates and heat input/output data and procedures

<sup>&</sup>lt;sup>16</sup> NYSERDA and Staff will review, analyze, and take into consideration comments on the draft Biomass Guidebook prior to its issuance by NYSERDA.

for measuring eligible versus ineligible biogas delivered through a common carrier pipeline.

# Comments

CSG recommended that an independent third-party or the State provide monitoring and verification for the separation of eligible biomass fuels from non-eligible biomass. It supported use of measurement and accounting procedures NYSERDA included in its draft Biomass Guidebook.

With regard to the procedures when biogas is transported over a common carrier, CSG stated that, even with the best intentions to verify that double counting would not occur, the administrative requirements to track the biogas is an onerous task and cannot adequately protect against the risk of double counting. Accordingly, it opposed eligibility for biogas transported over a common carrier.

# Discussion

With respect to CSG's comment regarding monitoring and verification for the separation of eligible biomass from noneligible biomass, for direct combustion applications with fossil fuels, only source-separated unadulterated and uncontaminated biomass is allowed. The most stringent requirements for nondirect combustion eligibility for biomass recovered from mixed waste streams is that the facilities must demonstrate that all non-source separated feed stocks come from permitted solid waste facilities in compliance with all New York State Department of Environmental Conservation (NYSDEC) standards for operation. The facility must have a regular independent monitoring program that pays for NYSDEC-approved third party monitors to ensure that its biomass processing is consistent with the facility's permits and conditions. NYSERDA will include provisions in its contracts for verification of fuel supplier and fuel source information, among other information necessary to ensure

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compliance.<sup>17</sup> Thus, a requirement by us specifically for third party verification to ensure use only of eligible biomass material is not required.

With regard to eligibility of renewable pipeline quality gas delivered over a common carrier pipeline (e.g., natural gas pipelines), we require metering at the renewable gas collection/processing facility to track RPS Program eligible fuel, and to allow accurate accounting of the renewable gas collected, upgraded, and injected as renewable gas into the common carrier pipeline. The generator must also keep and provide sufficient records to NYSERDA concerning its physical deliveries from common carriers, specifically, its gas consumption and the quality of the gas taken from the pipeline. This information can then be used to pro-rate the facility's monthly electrical generation based on the ratio of the total renewable contract gas energy and the total gas energy used. Common carrier renewable gas will be considered eligible only if derived in the same state where it is used to generate power delivered to New York.<sup>18</sup>

# B. <u>Biomass Generation Measurement Issues</u> Proposal

The Solicitation Notice sought comments on the methodologies for determining eligible biomass generation output from both existing and new facilities.

# Comments

Referring to NYSERDA's draft Biomass Guidebook, AES took exception to language in one of the methodologies used for

<sup>&</sup>lt;sup>17</sup> We note that these provisions are included in NYSERDA's draft Biomass Guidebook (Section 2, Eligible Technology and Feedstock Combinations, and Section 6, Validation and Verification Procedures).

<sup>&</sup>lt;sup>18</sup> This provision is set forth in NYSERDA's draft Biomass Guidelines in Section 4, <u>Multifuel Power Generation</u> Technologies, Offsite Conversions.

calculating the incremental renewable generation eligible for RPS Program participation at facilities operating prior to January 1, 2003. Section 5, <u>Incremental Capacity Additions</u>, states:

[f]or purposes of determining a baseline, simply switching from ineligible biomass to eligible biomass does not constitute an increase in biomass capacity, since all biomass that has been permitted for power production is included in the baseline calculation.

AES contends that we determined that not all types of biomass qualify for RPS Program support, and, if we are to meet our objective of maximizing the amount of energy generated from clean renewable resources at least cost, we should encourage renewable resources to switch from ineligible biomass fuels to eligible ones.

CSG recommended use of a fixed time period of 5 years of historical generation, calendar years 1998 through 2003, or, the first five years after the commercial operation date, if that date is after December 31, 2000, for determining incremental generation. It further stated, that a five-year historical generation average baseline will provide a solid basis for comparison with increased incremental generation. This, it asserted, would minimize any windfall profits created by averaging over too few generation years. For facilities making a substantial investment in new processing or conversion equipment, CSG suggested use of the same calculation procedure for existing renewable biomass capacity, as referenced above. Discussion

For purpose of determining incremental capacity additions of existing biomass facilities, the baseline generation of existing biomass plants should not include energy generated from ineligible biomass. In our September Order, we

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decided to provide a prescriptive list of eligible biomass fuels instead of a broad definition of biomass. In developing the RPS Program, it was our intent to promote an increase in the renewable energy available for use in New York. To accomplish this, we decided to establish a list of eligible renewable fuels, to promote, among other things, sustainable biomass energy feedstocks that have notable environmental and economic development benefits for the State of New York. If we are to meet the RPS Program objectives to maximize the amount of energy generated from eligible biomass resources at least cost, it is important to encourage biomass facilities to switch from ineligible to eligible feed-stocks, thus enabling them to produce renewable energy. Therefore, NYSERDA shall discount ineligible fuels for the purposes of determining a baseline for incremental generation capacity. To ensure that our intent is achieved, NYSERDA shall require existing biomass facilities to supply it with supporting information about operating histories, including fuel-stocks, at the time of applications to the RPS Program.

With respect to CSG's comments on the averaging period for calculating the baseline, we will require facilities to provide the annual production figures for the five most recent years, and NYSERDA will then average the production for the two highest years. We believe this is an effective basis for comparison with increased incremental generation.

# C. Adulterated Biomass Emissions Issues

#### Proposal

The Solicitation Notice requested comments on use of advanced power generating technologies to convert adulterated biomass fuel into energy, subject to compliance with our approved testing methodologies and emissions criteria. Under the proposed criteria set forth in NYSERDA's draft Biomass Guidebook, facilities would conduct detailed fuel screening to

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identify the presence of precursor elements for specific pollutants. Developers would be required to conduct analyses comparing emissions of these targeted pollutants, assuming the use of both unadulterated biomass fuel and adulterated biomass fuels, for the selected facility conversion technology. As a condition for allowing the use of adulterated biomass fuel, we indicated in the Solicitation Notice that we are considering a cap on the measured level of emissions for targeted pollutants of concern using adulterated biomass: no more than 1% higher that the measured level of emissions for the same pollutants using unadulterated biomass.

# Comments

CSG asserted that all adulterated biomass, to be eligible, must have a feedstock conversion to produce clean liquid or gaseous fuel prior to energy generation. CSG suggested that an independent third party conduct the fuels screening analysis. This, it said, would ensure the quality and the integrity of the fuel data. CSG maintained that it is acceptable for biomass facilities to draft emission test plans as long as they are submitted for approval to NYSERDA, and NYSERDA sends a test monitor, contractor or state agent, to observe the tests and report any deviations from the test plan.

CSG stated that a 1% emissions variation from unadulterated biomass is acceptable and that, if the emissions deviate for varying pollutants above and below the 1% standard, an independent statistical analysis for significance is an acceptable quality control. CSG stated that, if the unadulterated emission standards used as the basis for comparison for adulterated biomass are not stringent enough on their own, a 1% above standard is not acceptable. It maintained that emissions from adulterated biomass must meet air quality standards before they can be an acceptable threshold of comparison.

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NRDC recommended establishment of clear guidelines regarding allowable levels of emissions from the use of adulterated biomass to ensure that the adulterated biomass remains consistent. It noted that because emissions from adulterated biomass can vary widely from day to day based on the varied source of the feedstock,<sup>19</sup> it is necessary to use actual emission rates to assess the eligibility of fuel from adulterated biomass, and testing should include conditions when non-standard adulterated biomass is used.

In addition, NRDC said that the definition of RPS Program eligible adulterated biomass must include numeric maximum emission rates for specific pollutants, including: NOx, SOx, PM, mercury, dioxins, furans and other criteria pollutants and toxics. It stated that any requirement that emissions be less than or equal to that of emissions produced by unadulterated biomass should apply to each; and, the standard should not be based on an average across different types of emissions. It proposed that the following issues be addressed: measurement of emissions; unit of measurement; absolute minimum list of emissions for adulterated biomass; and maintenance and monitoring over time of the consistency of adulterated biomass. It asserted that there is an inconsistency between a requirement that adulterated biomass emissions be less than or equal to emissions from unadulterated biomass and a testing and analysis standard that allows correction of emissions in excess of unadulterated biomass by less than 1%. NRDC proposes that emissions from adulterated biomass should not be allowed to exceed those of unadulterated biomass even by a fraction of a percent. This is necessary, it stated, to ensure that the allowance of adulterated biomass as a feedstock accomplishes the fundamental environmental goals of the RPS Program.

<sup>&</sup>lt;sup>19</sup> For example, fuel may one day be produced from leather waste, while the next day the feedstock may be construction debris.

Taylor supports overall goal of maintaining emissions that are equal to or less than emissions from unadulterated biomass. It proposes that NYSDEC assume responsibility for emissions comparisons of adulterated versus unadulterated feedstock. Taylor stated that the NYSDEC needs to specify the qualifications and provide the certification for the fuels and technology designated as a renewable source. It indicated that NYSERDA's draft Biomass Guidebook should be modified in this regard.

#### Discussion

Several requirements established in previous Orders in this case pertain to limits on, and monitoring of, emissions associated with the use of adulterated biomass. All adulterated biomass, to be eligible, must have a feedstock conversion process to produce liquid or gaseous fuel prior to energy generation. The facility also must have a permit by NYSDEC, or a comparable environmental regulatory agency if energy is imported from another state, that requires the facility to comply with air emissions regulations, including specific limits on criteria pollutants and other air toxins, for all the fuels used. The facility must also meet the additional RPS Program test standard of generating no more pollutants when using adulterated biomass than when using unadulterated biomass.

NRDC opposes the 1% tolerance band for emissions resulting from adulterated biomass and proposes maintaining the requirement in that September 2004 Order that adulterated biomass be equal to or less than emissions from unadulterated biomass. NRDC's arguments convince us that our September 2004 standard will limit emissions adequately to promote the clean air objectives of the RPS. Thus, the 1% tolerance band in the Solicitation Notice is not adopted.

To apply the emissions requirements effectively for adulterated biomass, NYSERDA will require a project developer

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proposing use of this type of biomass to provide its air permit, listing fuels that the facility is permitted to convert. In addition, the facility owner's test plan, which was required in our September 2004 Order for meeting adulterated biomass emissions requirements, should specifically describe the facility's fuel variability. This information would permit NYSERDA to evaluate the full range of permitted fuel compositions. NYSERDA may require developers of biomass facilities to seek air permits, and undertake associated testing for a full range of fuels (this would involve collecting data on criteria pollutants and other air toxins). These steps will allow the collection of the data needed to enforce requirements applicable to using adulterated biomass in the RPS Program.

Evaluation of the seven pollutants listed in the Great Lakes Compact and the Clean Air Act criteria pollutants in the fuel screening analysis would improve the emissions screening process for these resources. Further, any air toxins tested for the facility's air permits, and any air pollutants that appear in the emissions testing in significant concentrations, may be added by NYSERDA to the screening list for comparative testing. These procedures should alleviate concern about lax enforcement.

# IX. VOLUNTARY MARKET GROWTH

#### Proposal

The Solicitation Notice indicated that we are considering a limit on the output that a facility is allowed to nominate in an RPS Program solicitation. The rationale for this limitation is to encourage the development and growth of the voluntary green market in the presence of a central procurement process. This would be accomplished by setting aside renewable resources for the voluntary green market.

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# Comments

A number of parties provided comments on implementation of a set aside; maximum percentage of each facility's output set aside; and, the financial implications.

Noble, Catalyst, MI, Brascan, and Greenlight opposed implementation of a set aside percentage. Although not expressly stating opposition, CCE, BQ, and others provided comments that conflict with establishment a set aside provision. Community, Horizon, PPM and RETEC expressed a willingness to accept a limited set aside provision.

Airtricity commented overall that, in evaluating policy options to promote the Green Market, we need to ensure that the fundamental purpose of the RPS Program, construction of new renewable energy generating facilities, is not inadvertently undermined. Airtricity and others pointed out that security of long term green power contracts is needed to finance projects and that very few voluntary green marketers have the financial capability to enter into long-term purchase contracts. BQ noted that few marketers would have a level of credit worthiness comparable to NYSERDA. Thus, to obtain financing for projects, these marketers would need to raise the price of bids to NYSERDA for the portion of their output not covered by the RPS Program contract. The additional funds, BQ stated, are needed to compensate for the uncertainty of green market sales and financial risk. BQ stated that the uncertainty of the sales into the voluntary green market might weaken the financial viability of a developer and discourage construction of new generation.

Catalyst concurred with BQ, asserting that the financial risk of new renewable generators will be increased due to the lack of firm commitments for the voluntary green market portion of their output. Catalyst stated that the resulting higher financing costs would be passed on to NYSERDA through

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higher prices for the residual portion of the output, and ultimately to consumers in the form of higher RPS Program premiums. According to Catalyst, the set aside would result in no value because the levels of renewable resources in New York State and surrounding control areas are insufficient at this time to meet the needs of the voluntary green market.

RETEC stated that the set aside would provide support for a project development with RPS Program resources while at the same time providing a stream of renewable energy resources for sale into the voluntary green market.<sup>20</sup> Community asserted that implementing a set aside provision is the only way to support the development of the voluntary green market. It proposed that suppliers should also be permitted to suspend deliveries to NYSERDA under the RPS Program, if that supply is sold into the New York State voluntary green market. Horizon, PPM, and RETEC argued that the set aside should be no higher than 5% of the facility's output; Community stated that it should be no higher than 10% of the level bid to NYSERDA. Both RETEC and PPM advocated setting a floor price for the voluntary green market set aside and obligating NYSERDA to purchase the attributes at the floor price, if the developer cannot sell the attributes into the voluntary green market.<sup>21</sup>

Taylor urged us to establish a proceeding to investigate ways to transition away from RPS Program central procurement. It says that, once firmly established and entrenched and without a defined exit strategy in place, the RPS Program and central procurement will continue for decades and the voluntary green market will die.

<sup>&</sup>lt;sup>20</sup> RETEC also advocated imposition of a mandatory purchase requirement on the load serving entities.

<sup>&</sup>lt;sup>21</sup> PPM proposed that the floor price be set at 80% of the RPS attribute price.

# Discussion

We will adopt a set aside provision of 5% of a facility's output. Project sponsors must demonstrate that at least 5% of their project is available for voluntary green market sales outside the RPS Program. NYSERDA will pay incentives for only 95% of a project's actual monthly output up to the contract amount. If the project developer enters into a system contract, the project sponsor must demonstrate that sufficient output is available from the nominated project to ensure that a 5% set aside for the voluntary green market. We will continue to monitor the operation of the set aside provision to ensure that it complements RPS Program goals.

Fostering growth of the voluntary market is an integral component of our renewable policy, with the eventual transition from RPS Program support to a fully voluntary green market the ultimate goal. Providing a more assured source of renewable energy supply for the voluntary market may assist in reaching that goal and may result in an earlier transition. Providing set asides for the voluntary green market may also result in the availability of additional resources at a reasonable cost to satisfy the requirements of Executive Order 111. Limiting the required set aside to 5% of a facility's output should provide sufficient incentive for projects to obtain financing and increase the likelihood that additional renewable energy projects will be built.

In the event that on-going monitoring of set asides indicate that they inhibit green market growth or do not result in an increase in renewable energy resources, as some commenting parties warn, we will take corrective action. The Implementation Plan calls for NYSERDA to provide, as part of the 2009 Review, a transition plan for moving away from central procurement to a fully functioning voluntary renewable energy

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market. This process will achieve the objective, suggested by Taylor, to investigate an exit strategy for the RPS Program.

We will not adopt at this time a provision requiring NYSERDA to provide back-up support in the event that set asides cannot be sold into the voluntary market. We are concerned that establishing a set aside price, or floor price, would result in NYSERDA influencing voluntary market pricing, as suggested by Noble, and that such action would conflict with NYSERDA's role as the RPS Program administrator.

#### X. ECONOMIC DEVELOPMENT ISSUES

#### Proposal

In our September Order, we indicated that one of several RPS Program goals is the achievement of economic development benefits. In doing so, it is necessary to strike a balance between that goal and the other program goals. One aspect of economic development is related to the siting of new renewable projects in New York State and the economic activity that results from the jobs, taxes, and rents that follow. We asked for comments on this topic.

#### Overall Comments

The commenting parties identified three primary methods of increasing the number of projects located within New York State: 1) give added weight in the evaluation of bids to projects located within New York; 2) impose reciprocity conditions (<u>i.e.</u>, adopt the same import restrictions on projects located in another state or country as would exist for New York State projects that export to that other state or country); and 3) alter the current delivery requirements for imports.

# A. Economic Development Benefits

#### Comments

Joint Utilities agreed with the principle of supporting economic development and encouraging greater in-state development of renewable energy generation, but said that the RPS Program's primary objective should be promoting renewable energy resource development in the most economic way possible; in-state development is secondary. MI commented that consideration of economic benefits must recognize the harm caused by high electricity prices, especially to energyintensive businesses. According to MI, imports, as assumed in the September Order, will reduce the cost of the RPS Program and, therefore should be permitted to participate in the RPS Program. The exclusion of out-of-state renewable resources, it asserted, could raise constitutional issues.

Community suggested the integration of economic development benefits, derived from New York projects to the New York economy on a dollar per MWh basis, into the NYSERDA evaluation process. Noble maintained that New York-based projects will provide the maximum economic and environmental benefits to the residents of New York, as well as the maximum reduction in energy prices for New York ratepayers. Noble said that the significantly lower project development costs in other states create a perverse incentive that directs New York RPS Program-related development capital to renewable energy projects outside New York. Noble agreed with proposals by others to revisit the implementation order to ensure that the economic development advantages of in-state renewable energy projects are fully accounted for in the bid evaluation project. Greenlight stated that the decision about the level of imports to allow is directly related to the extent of the economic development that the State intends to capture. According to Greenlight, this would avoid the risk of losing domestic development and open us to criticism that New York ratepayers are paying a premium for development that primarily benefits other states.

IBEW stated that RPS Program resources should be located in New York to the extent possible, so that the benefits of jobs, income, and additional tax revenue remain in New York

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with a focus on the economically depressed areas. To achieve this result, it suggested that we consider applying a discount, relative to the cost of procuring resource projects, to the facilities operated within New York. The Farm Bureau supported use of the RPS Program to enhance the State's economic development and asserted that this objective is one of the most important aspects of the RPS Program policy initiative. It supported awards of RPS Program funds based on the overall economic benefit to New York. It suggested that we review the benefits provided to local communities by the RPS Program, including direct economic factors, such as New York employment, and consider all externalities, such as open space preservation, to the degree these benefits are quantifiable. These factors, the Farm Bureau maintained, should provide a preference in the bidding process to New York sources of renewable power.

RETEC noted that, at the expiration of the contract for renewable energy attributes, an in-state project will continue to provide stable-priced power within New York and income to the local community, while an out-of-state project will provide neither. In addition, in-state projects also provide significant job and tax benefits to local communities. RETEC, as well as FPL, strongly encouraged us to revisit our implementation order to determine how best to achieve the balance between deriving economic development benefits for New York State and promoting regional and national renewable development and the resultant environmental benefits. Discussion

The RPS Program has the potential to provide economic development benefits through the building of generation projects in New York State. Many commenting parties proposed adoption of rules that would favor in-state facilities. Because rules

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adjusting the bids of generators for that purpose could be viewed as economic protectionism, we will not do so. $^{22}$ 

We expect Staff and NYSERDA to continue to evaluate economic benefits of the RPS Program and include in the 2009 review described in the September Order an analysis of the impacts of imports on New York State.

# B. Reciprocity

# Comments

RETEC asserted that RPS Program implementation should support in-state projects, while simultaneously building a regional market through the use of reciprocal relationships. One mechanism, it suggested, would be to allow imports of renewable power under the same rules applicable to New York exports of renewable power. Several commenting parties (the Farm Bureau, PPM, FPL, UPC, and CSG) supported allowing imports from exporting states with reciprocal rules in place and state policies in support of renewable energy.

# Discussion

The parties' proposed reciprocity requirements are not substantively different from the proposal RETEC submitted prior to our September Order. In that Order, we found:

RETEC's proposed reciprocity requirement would create a cumbersome barrier against imports, particularly from Canada, which would diminish New York's ability to acquire resources sufficient to meet our goals at least cost.

We do not see a reason to modify that earlier decision. Our Staff will work with NYSERDA, the NYISO, and officials from the surrounding states and provinces on ways to reduce restrictions

<sup>&</sup>lt;sup>22</sup> NYSERDA, however, may include in its RPS Program solicitation rules and contracts appropriate provisions to subtract from RPS Program payments any unique costs imposed on NYSERDA to verify an out-of-state generator's production (<u>e.g.</u>, the cost of participating in another state or Canada's renewable tracking system).

on the flow of renewable resources throughout the region and ensure the development of a regional market.

# C. Delivery Requirements

## Comments

RETEC claimed that the monthly matching requirement for imports is unlikely to ensure that New Yorkers receive the environmental, energy security, price stabilization, and economic benefits that justify the investment in the program. Community Energy recommended modification of the import rules to ensure real value or eliminate the rule and focus on other means of providing value to the New York economy from imported supply. It stated that we could require delivery from the specific renewable source to the New York wholesale market, a rule adopted in Massachusetts. Horizon suggested that NYSERDA require scheduling of renewable energy imports satisfying RPS Program contracts on an hourly basis, similar to the requirements also established in the Massachusetts RPS Program.

PPM stated that out-of-state resources have an advantage over New York resources in the regional renewable energy market because of the RPS Program delivery requirement. It said that, if a New York resource delivers power for compliance with a renewable energy programs in other states, those states' rules require the New York resource to schedule its energy hourly with those states' ISOs in order to acquire environmental attributes. PPM maintains that, if a resource from outside New York participates in the New York RPS Program, a far less stringent monthly "matching" requirement is imposed. Consequently, PPM urged us to require out-of-state resources to match their eligible attributes and energy on a daily basis. Discussion

In our September Order, we established a relaxed delivery requirement for non-New York State intermittent resources. This requirement allows the resources to sell their

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energy into the spot market of their control area without simultaneous transmission into the New York Control Area (NYCA). This is permitted so long as an equal quantity of energy is transmitted out of the affected spot market into the NYCA during the same calendar month (monthly matching). Monthly matching was incorporated in the NYSERDA contracts resulting from the initial Program solicitation.

The September Order called for an analysis of the monthly matching requirement as part of the 2009 Review. However, as a result of the comments suggesting that the monthly matching requirement may give out-of-state resources an opportunity to avoid costs relating to transmission, congestion, and losses on their power transactions, Staff is conducting an expedited review of the delivery issue and will report its findings to us.

#### XI. PHYSICAL BILATERAL CONTRACTS

#### Proposal

The Program Modification Notice requested comments on a proposal to allow generators that enter into physical bilateral contracts to participate in the RPS Program. Under our current requirements, generators must sell their energy into the wholesale spot market. Effecting this change in the RPS Program, however, might require a change to the EDP. Comments

The commenting parties supported this proposal. Greenlight, BQ, Joint Utilities, MI, and RETEC stated that it would allow developers to enter into long-term, firm contracts, rather than forcing them to face the uncertainties of the spot market, thereby reducing their risk. This, they suggested, might increase the revenue their energy sales would generate and make lower RPS Program incentives more acceptable or attractive.

Greenlight and IPPNY stated that allowing the use of long term power contracts in the RPS Program would greatly

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increase the potential for developers to negotiate third party finance arrangements successfully. Greenlight asserted that this is one of the most important changes under consideration. BQ stated that true renewable generators have an inherent ability to sell power at fixed prices for long terms and the prohibition increases the risk to renewable projects, resulting in increased costs. RETEC agreed, stating that the prohibition unnecessarily restricts contractual arrangements developers may enter into, thereby increasing risks and costs. IPPNY claimed that the market for financial hedges is not well developed in New York State, and that allowing physical bilateral contracts will greatly expand the options available to resources for executing long-term hedges.

# Discussion

We are persuaded by the parties' comments that allowing physical bilateral contracts could result in lower RPS Program costs. Accordingly, we find that participants in RPS Program solicitations should be allowed to enter into physical bilateral contracts that result in retail energy sales to New York State consumers. We will not implement this change to the RPS Program, however, until we have evaluated the potential impacts and changes needed to the EDP and make any necessary modifications. Staff will conduct such an investigation into the needed EDP changes and will report back to us expeditiously.

### Proposal

#### XII. UNBUNDLING

The Program Modification Notice included a proposed to recognize the unbundling of energy from its other attributes. Such an action would enable the energy output of a facility, subject to an RPS Program contract, at least two parts, its energy component and its attribute component. As with physical bilateral contracts, discussed above, effecting this change could also require a change to the EDP.

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# Comments

CSG stated that unbundling will provide generators greater market access and improve market liquidity while decreasing financial risks. IPPNY claimed it will further the development of an efficient and broad-based market for renewable energy resources. Madison County stated that unbundling would lower risk for New York State renewable energy producers, thereby lowering the bid prices offered in the RPS Program. Madison County asserted that out-of-state generators should not be allowed to unbundle because they will only provide green tags and not contribute any additional energy to the New York grid. Discussion

The RPS Program imposes contractual restrictions on generators; they may not sell or transfer the attributes associated with the energy produced. It does not provide for NYSERDA to acquire the actual attributes associated with the energy that is produced by the facilities under RPS Program contracts. NYSERDA simply has contractual rights with regard to the attributes. The attributes associated with the energy produced are then allocated by the EDP Administrator on a prorata basis to the load serving entities (LSEs) whose customers are funding the RPS Program.

We concur that unbundling of energy from its environmental attributes could provide generators greater market access and improve market liquidity while decreasing financial risks. Unbundling would allow NYSERDA to acquire environmental attributes from generators instead of just the rights that prevent the generators from selling or transferring their environmental attributes. Increased control of the attributes can provide more assurance that double counting of attributes is avoided. If a certificate-based tracking system is developed, then the title to the environmental attributes could be in the form of renewable energy certificates (RECs), which would be

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easily transferred to NYSERDA as proof of its acquisition of renewable attributes. With respect to any changes to the EDP that may be necessary as a result of this decision, Staff is, as previously noted, addressing those matters and will report to us on any further actions required.<sup>23</sup>

Accordingly, we find that unbundling of renewable energy from environmental attributes is appropriate in the RPS Program and that NYSERDA should be allowed to acquire environmental attributes. As with physical bilateral contracts discussed above, we will not implement this change to the RPS Program until we have evaluated the potential impacts and changes needed to the EDP and make any necessary modifications.

# XIII. ATTRIBUTE TRACKING

# Proposal

The Program Modifications Notice proposed that Staff, in consultation with NYSERDA and the NYISO, develop and implement a comprehensive attributes tracking system, compatible with tracking systems in place in neighboring control areas. The tracking system would apply to underlying electricity transactions recorded by the NYISO, including imports and exports, and either supplement or replace the system used in New York.

We previously required in the EDP that New York retail electricity suppliers provide customers with an environmental disclosure label showing the characteristics of their

<sup>&</sup>lt;sup>23</sup> With regard to Madison County's point that unbundling for outof-state generators would not ensure delivery of energy to New York State, we note that the RPS Program currently requires delivery of energy to New York State.

electricity mix.<sup>24</sup> The Department of Public Service staff administers this program and is responsible for developing the disclosure labels, based on information provided by the NYISO, NYSDEC, and the U.S. Department of Energy's Energy Information Administration. The EDP tracks energy and associated attributes generated or used in New York, whether made through a bilateral contract or through the wholesale spot market. Staff tracks the energy source, and associated attributes, for each LSE in the State and provides each with a label that reflects its specific fuel mix.

Many other states and voluntary initiatives also employ tracking systems to verify information related to retail electricity sales. There are two primary types of retail tracking systems, contract path (used in New York) and certificate-based.

The New York system provides a special feature known as a "Conversion Transaction" (CT). CTs allow an entity that sold energy into the spot market and an entity that purchased a like amount of energy out of the spot market during the same settlement period, to jointly identify the energy for the program administrator so that it can be disaggregated, for environmental disclosure purposes, from the residual spot market energy. That energy, bundled with its attributes, is then assigned to the LSE's label and accounted for, as if purchased through a bilateral contract. The administrator evaluates the details of the conversion transactions to ensure matches between reports from generators and reports from LSEs and notifies the parties to the transactions of any inconsistencies that need

<sup>&</sup>lt;sup>24</sup> Case 94-E-0952, <u>Competitive Opportunities Regarding Electric</u> <u>Service</u>, Opinion and Order Adopting Environmental Disclosure Requirements and Establishing a Tracking Mechanism (issued December 15, 1998).

resolution in advance of a final settlement. This review avoids double counting of environmental attributes.

In certificate systems, the certificate is proof of unique ownership and that attributes are not claimed elsewhere in the market. Certificate-based tracking systems usually rely on the electronic transfer of generation data into a central database as proof of output and production of certificates, usually identified by unique serial numbers or other identifiers, for each increment of renewable or other generation that is recorded. Generally, tracking certificates is part of an automated system that verifies proof of energy purchases by establishing unique ownership or title to renewable certificates.

#### Comments

The commenting parties supported development of a certificate-based attribute tracking system. CSG claimed that the system would create a reliable and robust market, support the voluntary green market, and provide consistency for future markets. It, along with IPPNY, Joint Utilities, RETEC and UTC, proposed that any such system should be compatible with other certificate-based tracking systems in adjacent control areas. IPPNY asserted that such a system would reduce unnecessary barriers to trading of energy and attributes between New York and its neighbors and encourage other states to allow renewable resources sited in New York to sell unbundled attributes in their states.

IBEW stated that a certificate-based tracking system will increase market activity. It proposed that the initial plan include attributes tracked by the New England tracking system, with a potential for inclusion of any new attributes identified in the future. The Joint Utilities recommended evaluation of systems in neighboring control areas and adoption of the one most likely to keep development costs low and enable

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greater standardization of renewable energy credits. It asserted that the system should support: disclosure of renewable energy information, including emissions, to retail customers; facilitation of renewable energy standards for procurement; voluntary green markets; implementation of emission standards; and external resources.

RETEC claimed that attribute tracking has sufficiently evolved in neighboring control areas, and elsewhere in the United States, to have widespread acceptance in, and suitability to, today's markets. Coupled with unbundling, it will make the renewable energy market more flexible, efficient, and easier to administer. RETEC proposed that any system that tracks renewable energy attributes under the RPS Program should track the attributes of customer-sited generation. It claimed that the long-term integration of these resources into the same tracking and verification systems as the Main Tier is a desirable future capability.

UPC asserted that technology is now available to track renewable energy attributes across the State and that development of such a system is consistent with our policy goals. It asserted that the system would allow for more efficient transactions for buyers and sellers of renewable energy. UTC maintains that a tracking system will improve the liquidity of renewable energy markets and advance development of the voluntary green market. It asserted that the trading platforms in surrounding areas should help expedite system development in New York.

# Discussion

In our September Order, we asked NYSERDA to evaluate options for developing a regionally compatible certificate tracking system and to include a plan in its 2009 review.

The commenting parties expressed compelling reasons to transition away from reliance on the current system to a

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certificate-based attribute accounting system similar to other systems deployed in the market region. This change should result in benefits for New York ratepayers supporting the RPS Program and lower costs for developers through risk mitigation, market liquidity and increased financing opportunities. We conclude that such a system should be pursued expeditiously for the following reasons:

- An automated system that recognizes attributes separate from commodity energy can facilitate direct bilateral sale transactions of attributes, which the growing voluntary green power market is demanding. Green power marketers typically do not conduct transactions in energy commodities and are successful in marketing certificates to consumers in many regions of the country. An electronic tracking system can facilitate these types of transactions and maintain the integrity of the environmental disclosure process. The result may be increased liquidity in the market and promotion of more renewable resource development in the region.
- Adequately recording and disclosing the growing number of renewable energy transactions, including those from resources outside the New York Control Area, under the RPS Program will likely necessitate an automated system that is synchronized to systems in operation or under development in neighboring market areas.<sup>25</sup>
- New policy initiatives will likely demand an automated tracking system that is integrated with and recognized by neighboring control area systems.

Joint Utilities is correct in recommending the study of the certificate-based systems in surrounding control areas, and adoption of a New York program that is compatible with the programs in those control areas. Accordingly, Staff will work with NYSERDA and interested parties to develop a certificatebased tracking system for implementation in New York and report back to us of its findings.

<sup>&</sup>lt;sup>25</sup> New England (ISO-NE), Pennsylvania-Jersey-Maryland (PJM), and Ontario (IM)

# XIV. CONCLUSION

This Order reaffirms the funding levels and MWH targets of the RPS Program established in our September Order. Ιt establishes methods for the next solicitations and addresses biomass issues. It enables developers and other potential participants to continue planning for future solicitations. Use of physical bilateral contracts and allowing unbundling of energy from environmental attributes, after changes to the EDP, will improve the efficiency and effectiveness of the RPS Program. Taking steps to implement a regionally compatible tracking system that can fully support environmental disclosure to customers not only compliments our efforts to eliminate seams between neighboring control areas but also improves the efficiency and effectiveness of the RPS Program and more easily accommodates future initiatives.

# The Commission orders:

1. Additional solicitations in 2006 and 2007 are authorized for Main Tier Resources in the RPS Program, subject to the discussion in the body of this Order.

2. The RPS Program is modified as described in the discussion in the body of this Order.

3. This proceeding is continued.

By the Commission,

(SIGNED)

JACLYN A. BRILLING Secretary