



NEW YORK RENEWABLE PORTFOLIO STANDARD SUMMARY

A. SUMMARY: In contrast to most renewable portfolio standards (RPS), New York's RPS is, at least initially, based on a centralized management and procurement mechanism. The New York Public Service Commission (PSC) issued an order adopting a RPS on September 24, 2004. The RPS requires the amount of electricity available to consumers in NY that is generated from renewable resources to increase to at least 24 percent by the end of 2013, with an additional one percent coming from voluntary efforts by green marketers in the New York's competitive retail markets. The RPS requires that the state's investor-owned utilities collect revenues from their delivery customers to fund the central procurement program. Approximately 19 percent of the electricity currently consumed in New York is from renewable sources—mostly from large-scale hydroelectric facilities. By 2013, the RPS will require 6.56 percent of total sales to come from new renewable energy sources, or the equivalent of an additional 3,700 MW of renewable resource generation capacity.

B. APPLICABLE AUTHORIZING LEGISLATION/REGULATION

1. Part of Broader Energy Package? No

2. **Legislative/Regulatory Intent:** In its order establishing an RPS, the PSC adopted the following objectives:

“Renewable Resources: institute an RPS to increase New York State's supply of renewable resources with the ultimate aim of establishing a viable, self-sustaining competitive renewable generation market.

Generation Diversity for Security and Independence: diversify the generation resource mix of energy retailed in New York State to improve energy security and independence, while ensuring protection of system reliability;

Economic Benefits: develop renewable resources and advance renewable resource technologies in, and attract renewable resource generators, manufacturers, and installers to New York State;

New York's Environment: improve New York's environment by reducing air emissions, including greenhouse gas emissions, and other adverse environmental impacts on New York State, including upon underserved communities, of electricity generation;

Equity and Economic Efficiency: develop an economically efficient RPS requirement that minimizes adverse impact on energy costs, allocates costs equitably among ratepayers, and affords opportunities for recovery of utility investment; and

Administrative Fairness and Efficiency: develop an RPS that is administratively transparent, efficient, and verifiable.

Competitive Neutrality: develop an RPS compatible with competition in energy markets in New York State.”

3. Applicable Legislation/Regulation:

9/04 – PSC issues [Order Regarding Retail Renewable Portfolio Standard](#), Case 03-E-0188

4. Date Enacted: 9/24/04

5. Date Effective: 9/24/04

C. RULEMAKING

1. Implementing/Rulemaking Authority: State of New York Public Service Commission (PSC)

2. Rulemaking Completed to Date:

9/04 – PSC issues [order regarding retail RPS](#), Case 03-E-0188

12/04 – PSC issues [order authorizing fast track procurement and certification](#), Case 03-E-0188

4/05 – PSC issues [order approving RPS implementation plan](#), Case 03-E-0188

10/05 – PSC issues [order approves modifications to the maintenance resource category](#), Case 03-E-0188

11/05 – PSC issues [order approving methane digester systems as eligible under customer-sited tier](#), Case 03-E-0188

1/06 – PSC issues [order authorizing additional main tier solicitations and further modifications to the RPS](#), Case 03-E-0188

6/06 – PSC issues three orders regarding RPS, Case 03-E-0188:

[Order on delivery requirements for imports from intermittent generators](#)

[Order recognizing environmental attributes and allowing participation of projects with physical bilateral contracts](#)

[Order on Customer-Sited Tier Implementation](#)

2/07 – New York State Energy Research and Development Authority and PSC issue
[Operating Plan for Customer-Sited Tier](#)

D. TARGETS AND TIMETABLES

1. Overview: The PSC’s order establishing an RPS requires load-serving entities in the state to gradually increase the amount of renewable electricity generation from 19.45 percent in 2003 to 25 percent by 2013. In 2013, the PSC has set targets of 17.25 percent for baseline renewable energy resources, 6.56 percent for incremental new renewable energy resources, 0.19 percent from a state purchase requirement (adopted by Executive Order 111), and one percent from voluntary green power markets. The incremental RPS requirement is broken up into two tiers: a main tier and a customer-sited tier. The customer-sited tier is set at two percent of the total annual incremental RPS requirement.

2. Schedule:

Year	Baseline Renewable Energy Percentage	State Purchase Requirement	Green Marketing Target	Incremental RPS Requirement*	Total Percentage of Renewables
2006	18.81 %	0.17 %	0.14 %	0.81 %	19.93 %
2007	18.54 %	0.18 %	0.27 %	1.66 %	20.65 %
2008	18.28 %	0.20 %	0.40 %	2.50 %	21.38 %
2009	18.05 %	0.22 %	0.52 %	3.31 %	22.10 %
2010	17.82 %	0.23 %	0.65 %	4.13 %	22.83 %
2011	17.61 %	0.22 %	0.77 %	4.95 %	23.55 %
2012	17.43 %	0.22 %	0.88 %	5.75 %	24.28 %
2013	17.25 %	0.19 %	1.00 %	6.56 %	25.00 %

* The incremental RPS requirement is comprised of 98 percent main tier resources and two percent customer-sited resources.

Source: PSC Order Regarding Retail Renewable Portfolio Standard, Appendix D, Table 1. September 24, 2004.

3. Treatment of Existing Capacity: To be eligible to meet the statewide RPS target, facilities must have commenced generation on or after January 1, 2003. In addition, a limited vintage exception shall be provided for certain hydroelectric, wind, and biomass resources ("maintenance resources") that demonstrate the need to receive RPS financial support to continue operations.

4. Sunset Provision: None. A review of the RPS by the PSC in 2009 will help determine how the policy will support renewable energy development beyond 2013.

E. DEFINITION OF ELIGIBLE RESOURCES AND TECHNOLOGIES

1. Eligible Resources: The RPS has two tiers of eligible generation: a main tier and a customer-sited tier. There is also a maintenance tier for specific existing resources.

a. Main Tier:

- Wind

- Solar photovoltaic
- Ocean thermal, tides, or waves
- Hydroelectric upgrades or new low-impact run-of-the-river hydroelectric (limited to 30 MW capacity or less)
- Biogas, including:
 - Landfill Gas (methane);
 - Sewage gas (methane);
 - Manure digestion (methane) If required to have a SPDES permit by NYSDEC regulations, a Concentrated Animal Feeding Operation (CAFO) providing the manure must have and be in compliance with its current Agricultural Waste Management Plan (AWMP) developed by a duly qualified Agricultural Environmental Management (AEM) Planner and must be operating in compliance with any applicable SPDES permit. If not required to have a SPDES permit, the CAFO must be operating in compliance with the best management practices for a facility of its size set forth in the Principles and Water Quality Protection Standards specified in the Agricultural Environmental Management (AEM) Framework & Resource Guide developed by the NYS Department of Agriculture and Markets and the NYS Soil and Water Conservation Committee;
 - Anaerobic digestion (other biogas digestion using agricultural or food processing residues and by-products);
 - Biomass thermochemical gasification (syngas);
 - Biogas (from eligible sources of biomass feedstock) combined heat & power;
 - Biogas (from eligible sources of biomass feedstock) co-fired with existing fossil-fuel combustion (only the electricity generated from the biomass portion of the fuel is eligible).
- Biomass, including:
 - Direct combustion;
 - Biomass combined heat & power;
 - Biomass co-fired with existing fossil-fuel combustion (only the electricity generated from the biomass portion of the fuel is eligible)
- Liquid Biofuel, including:
 - Biomass liquification through acid or enzymatic hydrolysis (ethanol);
 - Biomass esterification (biodiesel, methanol);
 - Biomass thermochemical pyrolysis (bio-oil);
 - Biomass hydrothermal liquefaction;
 - Liquid biofuel (from eligible sources of biomass feedstock) combined heat & power;
 - Liquid biofuel (from eligible sources of biomass feedstock) co-fired with existing fossil fuel combustion (only the electricity generated from the biomass portion of the fuel is eligible).
- Eligible sources of biomass, include:
 - Agricultural Residue:* Woody or herbaceous matter remaining after the harvesting of crops or the thinning or pruning of orchard trees on agricultural lands. Agricultural by-products such as leather and offal and food processing residues that are converted into a biogas or liquid biofuel.
 - Harvested Wood:* Wood harvested during commercial harvesting. The supplier

must have and be in compliance with a current Forest Management Plan prepared by a professional forester that includes (a) standards and guidelines for sustainable forest management that require adherence to management practices which conserve biological diversity, maintain productive capacity of forest ecosystems, maintain forest ecosystem health and vitality, and conserve and maintain soil and water resources; (b) a harvest plan following production and harvest standards based on best management practices set forth in guides developed, tested and peer reviewed for USDA and USDOE; (c) the monitoring of harvest operations by a professional forester; (d) the reporting of harvest operations by a professional forester; and (e) periodic inspections of harvesting operations by state authorities or approved non-governmental forest certification bodies to assure that harvest operations conform to the standards.

Mill Residue Wood: Hogged bark, trim slabs, planer shavings, sawdust, sander dust and pulverized scraps from sawmills, millworks and secondary wood products industries.

Pallet Waste: Unadulterated wood collected from portable platforms used for storing or moving cargo or freight.

Refuse Derived Fuel: The source-separated, combustible, untreated and unadulterated wood portion of municipal solid waste or construction and demolition debris generally prepared by a densification process resulting in a uniformly sized, easy to handle fuel pellet or briquette.

Site Conversion Waste Wood: Wood harvested when forestland is cleared for the development of buildings, roads or other improvements.

Silvicultural Waste Wood: Wood harvested during timber stand improvement and other forest management activities conducted to improve the health and productivity of the forest. The supplier must have and be in compliance with a current Forest Management Plan prepared by a professional forester that includes (a) standards and guidelines for sustainable forest management that require adherence to management practices which conserve biological diversity, maintain productive capacity of forest ecosystems, maintain forest ecosystem health and vitality, and conserve and maintain soil and water resources; (b) a harvest plan following production and harvest standards based on best management practices set forth in guides developed, tested and peer reviewed for USDA and USDOE; (c) the monitoring of harvest operations by a professional forester; (d) the reporting of harvest operations by a professional forester; and (e) periodic inspections of harvesting operations by state authorities or approved nongovernmental forest certification bodies to assure that harvest operations conform to the standards.

Sustainable Yield Wood (woody or herbaceous): Woody or herbaceous crops grown specifically for the purpose of being consumed as an energy feedstock (energy crops).

Urban Wood Waste: The source-separated, combustible untreated and uncontaminated wood portion of municipal solid waste or construction and demolition debris. Adulterated forms of wood, such as plywood and particle board, may be used as a feedstock for biogas or liquid biofuel conversion technologies if it can be demonstrated that the technology employed would

produce power with emissions comparable to that of biogas or liquid biofuel using only unadulterated sources as feedstock.

- Fuel cells

b. Customer-Sited Tier:

- Fuel cells
- Solar photovoltaic
- Wind
- Biogas, including manure and agricultural anaerobic digestion

Customer-sited facilities may be as large as necessary to meet the load at the customer's meter.

c. Maintenance Resources:

- Run-of-the-river hydroelectric less than five MW
- Wind
- Biomass, direct combustion

2. Treatment of Self-Generation: The RPS encourages self-generation by establishing a customer-sited tier. With respect to net metering, assuming the quantity of energy is sufficient to be scheduled into a market administered by the New York Independent System Operator, Inc. (NYISO), net electricity produced from customer-sited generation facilities (that amount produced above the amount used by the customer) is eligible so long as such net electricity is not sold to the local distribution utility under a mandatory net-metering regime.

3. Special Incentives/Exclusions: The RPS provides an incentive for customer-sited renewable energy technologies (wind, solar PV, biogas, and fuel cells) by creating a set-aside requirement of two percent of the state's total annual RPS target, and by allocating RPS funds to support their development. A June 2006 PSC order establishing a funding target of \$45 million through 2009, with funding allocation set at 30.7 percent for solar PV, 10 percent for small wind, 24.9 percent for fuel cells, 24.4 percent for biogas, and 10 percent for discretionary purposes.

Nuclear power and mass incineration of municipal solid waste are explicitly excluded as eligible resources under the RPS.

4. Rules Governing Location of Generating Facilities: To be eligible, "it must be demonstrated to the satisfaction of the PSC or its designee that the electrical output of the generation facility either originated in New York State or was contractually delivered into New York State, and was sold to consumers in New York State in a retail sale." In addition, for electricity to be eligible, it must be demonstrated to the satisfaction of the PSC or its designee that the electrical output of the generation facility was scheduled into a market administered by the New York Independent System Operator, Inc. (NYISO).

The original RPS rule determined that imports into the New York Control Area

would also be eligible subject to a calendar-month matching requirement between generation and delivery. However, a June 2006 PSC order changed this requirement from monthly matching to hourly matching. Specifically, it determined that “out-of-state intermittent renewable generators that participate in future [RPS] Main Tier solicitations may sell and transmit energy as it is generated into the spot market of the control area of its location without simultaneous transmission into the New York Control Area, so long as an equal quantity of energy is transmitted out of the affected spot market into the New York Control Area for end-use during the same hour as the renewable generation is produced (hourly matching).”

Due to the evolving nature of regional, national and international markets for renewable resources, the import delivery requirement will be evaluated as part of the 2009 Review of the RPS program.

- 5. Eligibility of Green Pricing Programs:** Renewable energy generation counting towards green pricing programs is not eligible to meet the 24 percent RPS requirement. The PSC is expecting voluntary green pricing programs to provide an additional one percent of total state power sales so that the state will achieve 25 percent renewable generation by 2013.

In a January 2006 order, the PSC determined that for a renewable energy project to be eligible to receive RPS incentives from NYSERDA, it must demonstrate that at least five percent of their project is available for voluntary green market sales outside the RPS. The intent of this ruling is to ensure that a sufficient renewable energy supply is available for voluntary green markets.

F. COVERED UTILITIES

- 1. Classes of Retailers Covered:** The RPS applies to investor-owned utilities, requiring them to collect revenues from their customers to fund the central procurement program. Those customers exempt from paying into the System Benefit Program are also exempt from paying into the RPS program. Municipal-owned utilities, the New York Power Authority, and the Long Island Power Authority do not fall under the jurisdiction of the RPS, but are strongly encouraged by the PSC to adopt similar programs.
- 2. Share of state sales/capacity/delivered power covered:** ~ 82 percent of 2004 total retail electric sales in the state are covered by the RPS.
- 3. Apportionment of obligation among utilities:** Under the central procurement model of RPS implementation, the PSC has established individual contribution assessments, by utility, for each year of the RPS program. The allocation is based on each affected utility's share of total state retail electric sales.
- 4. Provisions for leaving/joining covered group:** None

- 5. Any exemptions by customer or other category?** Customers who are not obliged to pay into the state's System Benefit Fund are also exempt from paying into RPS program.

G. COST PROVISIONS

- 1. Cost Cap for Retailers:** None
- 2. Cost Cap for Consumer:** Consumer costs are capped at the rate payer surcharge, as determined by the PSC.
- 3. Cost Recovery Mechanisms:** The PSC adopted a central procurement system for implementing the RPS, administered by NYSERDA. Under this system, a surcharge is imposed electric consumers to fund above-market costs of developing enough renewable energy sources to meet the annual requirements. Revenue is collected through a non-bypassable volumetric (\$/kWh) charge on utility bills, and passed on to NYSERDA, which then administers these funds to provide RPS incentives.
- 4. Supply Contract Requirements:** Contracts are established between renewable electricity providers and the central authority, NYSERDA, to provide incentives to meet the annual renewable generation requirements. In a January 2006 order, the PSC authorized NYSERDA to offer fuel-based eligible resources contracts based on minimum terms of three years and maximum terms of 10 years. With respect to all other eligible resources, the PSC authorized a contract term of 10 years.

In addition, NYSERDA is expected to include contract requirements, which would provide confidence that a project "has a high likelihood of achieving certain milestones during the year...NYSERDA should also consider including in its RPS Program contracts a condition that provides that failure to satisfy these requirements could result in loss of some or the entire amount of the security."

- 5. Special Funds:** In addition to the funds collected by the customer surcharge under the RPS central procurement, New York has implemented a systems benefits fund. The state's six IOUs collect funds from a customer surcharge, and NYSERDA administers the SBC program as the New York Energy Smart Program. Although SBC funds may be used to support renewable-energy infrastructure, the program does not provide financial incentives for renewable-energy systems.

H. COMPLIANCE AND ENFORCEMENT

- 1. Certification, tracking, and trading mechanism[s]:** Under the RPS' central procurement system, NYSERDA receives all funds collected by the utilities from electric customers. NYSERDA administers the funds through contracts in a competitively neutral manner by providing financial incentives in the form of premium payment to renewable energy supplies in amounts that will secure enough renewable generation to meet the annual renewable energy generation requirements.

By participating in the RPS program, a renewable energy generator receives financial incentive under contract from NYSERDA, thereby conveying the attributes associated with the generation to NYSERDA.

The PSC ordered the initial procurement of renewable energy to be completed through a request for proposal process, using a fixed-price method. In its January 2006 order, the PSC instructed NYSERDA to switch procurement strategies and proceed with the development of a clearing price auction process using a declining clock format (“a process whereby the initial bidding level is lowered in increments until the amount of the product offered equals the amount sought”).

In addition, a June 2006 PSC order permits renewable energy generators to enter into physical bilateral contracts with load-serving entities and/or direct customers under the RPS. Under the original PSC regulations, generators were required to sell their energy into the wholesale spot market. This allows for the unbundling of renewable energy from its environmental attributes.

A renewable energy certificate attribute accounting system is not currently a component of the New York RPS. However, the PSC—in its January 2006 ruling—found that such a system would help facilitate the RPS more efficiently and effectively. The PSC instructed NYSERDA, PSC staff, and interested parties to develop a certificate based tracking system and to report back to the PSC with its recommendations.

2. **Flexibility Mechanisms:** Not applicable
3. **Penalties, Procedures, Powers and Sanctions:** Because the procurement of renewable energy is the responsibility of NYSERDA, a penalty provision is not required under the NY RPS.
4. **Treatment of emission allowance or reduction credits:** Not specified
5. **Escape Clauses:** None specified

I. ADMINISTRATION

1. **Administering Entities, Duties, Powers, and Contact Information:** The New York Public Service Commission is responsible for developing and implementing the RPS rules, and the New York State Energy Research and Development Authority is responsible for administering the RPS, and procuring renewable energy resources. Contact information for each of these agencies is as follows:

New York Public Service Commission
William M. Flynn, Chairman
Three Empire State Plaza

Albany, NY 12223
Phone:(518) 474-7080
Web site: <http://www.dps.state.ny.us>

New York State Energy Research and Development Authority
17 Columbia Circle
Albany, NY 12203-6399
Phone: 1-866-NYSERDA
Web site: <http://www.nyserdera.org>

J. REPORTING REQUIREMENTS and PROGRAM STATUS

1. Reporting Requirements for Retailers: None

- 2. Reporting Requirements for Administering Entities:** A review of the RPS will be performed in 2009, which will include a review of the costs and benefits of the program, consideration for any needed modifications to the list of eligible resources, consideration of the appropriateness of continuing the delivery requirement outlined in the PSC's initial RPS order, and how best to transition to a more market-based system.

In August 2007, the New York Department of Public Service issued a [Status Report on Implementation of the Renewable Portfolio Standard Program](#).

- 3. Cost Information:** As part of the RPS design process, an RPS cost study report ("[New York Renewable Portfolio Standard Cost Study Report II](#)") was prepared by the PSC staff, NYSERDA, Sustainable Energy Advantage, LLC and La Capra Associates.