



NEW JERSEY RENEWABLE ENERGY PORTFOLIO STANDARD SUMMARY

A. SUMMARY: New Jersey's renewable energy portfolio standard (RPS) grew out of that state's restructuring law passed in 1999 and amended by regulation 2004, and again in 2006. The standard calls for three tiers of renewable energy requirements with a total renewable generation requirement that begins at 3.0 percent on 2001 and ramps up to 22.5 percent in June 2021 and beyond, including a 2.12 percent solar set-aside requirement. Compliance and verification is to be based the acquisition of renewable energy credits, which are tracked and traded under the PJM Interconnection's Generation Attributes Tracking System.

B. APPLICABLE AUTHORIZING LEGISLATION/REGULATION

1. Part of Broader Energy Package? Yes, New Jersey's RPS program was adopted as part of the state's restructuring legislation.

2/99 – P.L. 1999, Chapter 23, [N.J.S.A. 48:3-87](#), The Electric Discount And Energy Competition Act

2. Legislative/Regulatory Intent: To encourage the development of renewable sources of electricity and new, cleaner generation technology; minimize the environmental impact of air pollutant emissions from electric generation; reduce possible transport of emissions and minimize any adverse environmental impact from deregulation of energy generation.

3. Applicable Legislation/Regulations:

2/99 – The Electric Discount and Energy Competition Act
P.L. 1999, Chapter 23, [N.J.S.A. 48:3-87](#)

4. Date Enacted: February 1999

5. Date Effective: September 1, 2001

C. RULEMAKING

1. Implementing/rulemaking Authority: New Jersey Board of Public Utilities (BPU)

2. Rulemaking Completed to Date:

6/01 – BPU issues interim RPS regulations, Subchapter 8, N.J.A.C. 14:4-8

4/04 – BPU adopts final RPS regulations, N.J.A.C. 14:4-8

3/05 – BPU makes minor changes to RPS regulations, N.J.A.C. 14:4-8

4/06 – BPU issues RPS Rules Adoption, N.J.A.C. 14:8-2

RPS regulations encoded as [N.J.A.C. 14:8-2](#)

D. TARGETS AND TIMETABLES

1. Brief Overview: Initially, 4 percent of the electricity sales in New Jersey of covered retailers were to be derived from Class I renewable resources plus another 2.5 percent from Class I or II by 2012. However, in May 2004, the BPU approved a revised rule requiring 4 percent of retail generation from Class I and an additional 2.5 percent from Class I or Class II resources by May 31, 2008. The 2004 rule also required that 0.16% come from solar electricity as part of the 4% Class I requirement. In April 2006, the BPU revised the requirements once again, this time increasing them to a combined 22.5 percent by 2020, of which 2.12% is to come from solar electricity. Percentages beyond 2020 shall be adopted by the BPU in a future rulemaking at least 2 years in advance of that date.

2. Schedule:

Year	% Generation from Class I Sources	% Solar Electric Generation	% Generation from Class I or II Sources	Total Renewable Generation
2001	0.5%	NA	2.5%	3.0%
2002	0.5%	NA	2.5%	3.0%
2003	0.75%	NA	2.5%	3.25%
2004	0.74%	0.01%	2.5%	3.25%
2005	0.983%	0.017%	2.5%	3.50%
2006	2.037%	0.0393%	2.5%	4.5763%
2007	2.924%	0.0817%	2.5%	5.5057%
2008	3.840%	0.16%	2.5%	6.5%
2009	4.685%	0.221%	2.5%	7.406%
2010	5.492%	0.305%	2.5%	8.297%
2011	6.320%	0.394%	2.5%	9.214%
2012	7.143%	0.497%	2.5%	10.14%
2013	7.977%	0.621%	2.5%	11.098%
2014	8.807%	0.765%	2.5%	12.072%
2015	9.649%	0.928%	2.5%	13.077%
2016	10.485%	1.118%	2.5%	14.103%
2017	12.325%	1.333%	2.5%	16.158%
2018	14.175%	1.572%	2.5%	18.247%
2019	16.029%	1.836%	2.5%	20.365%

2020	17.880%	2.120%	2.5%	22.5%
2021 and following:	The BPU shall determine minimum amounts of classes I and II eligible resources that will be required. They must be at or above 2020 levels.			

3. **Treatment of Existing Capacity:** Existing renewable energy resources in New Jersey are eligible to meet the RPS requirements. If class I or class II renewable energy is generated outside of the PJM region, but is delivered into the PJM region, the energy may be used to meet the requirements of this subchapter only if the energy was generated at a facility that commenced construction on or after January 1, 2003.
4. **Sunset Clause:** None. Percentages beyond 2020 will be adopted in a future rulemaking at least 2 years in advance of that date.

E. DEFINITION AND CERTIFICATION OF ELIGIBLE RESOURCES AND TECHNOLOGIES

1. Eligible Resources:

Class I Technologies and Resources

- Solar electric generation
- Wind energy
- Fuel cells powered by methanol, ethanol, landfill gas, digester gas, biomass gas, or other renewable fuel
- Geothermal energy
- Wave or tidal action
- Combustion of gas from the anaerobic digestion of food waste and sewage sludge at a biomass generating facility
- Biomass, defined as “any organic matter that is available on a renewable or recurring basis (excluding old -growth timber), including dedicated energy crops and trees, agricultural food and feed crop residues, aquatic plants, wood and wood residues, animal wastes, and other waste materials.” Electric energy produced from biomass, either by the burning of captured methane gas derived from biomass or the direct firing of biomass, provided that the biomass is cultivated and harvested in a sustainable manner. the following types of biomass shall qualify as class I renewable energy:
 - i. A bioenergy crop, including wood produced at a biomass energy plantation;
 - ii. Wood from the thinning or trimming of trees and/or from a forest floor, provided that the wood is not old-growth timber, and that the wood is unadulterated by non-cellulose substances or material;
 - iii. Gas generated by anaerobic digestion of biomass fuels other than food waste and sewage sludge, including bioenergy crops and agricultural waste; and

- iv. Either of the following types of wood, provided that the wood is unadulterated by non-cellulose substances or material: (a) ground or shredded pallets or other scrap wood, with all nails and other metal removed, produced at a facility that is classified as a Class B recycling facility by the New Jersey Department of Environmental Protection's Bureau of Landfill and Recycling Management, or at an equivalent recycling facility approved by the state environmental agency in which the facility is located; or (b) wood shavings and/or scrap from a lumberyard or a paper mill, excluding black liquor.

Electricity produced through combustion of a type of biomass not described above may qualify as class I renewable energy, provided that the NJDEP provides BPU staff with a biomass sustainability determination for the biomass in accordance with the requirement below.

- i. To support a biomass sustainability determination, a supplier/provider or biomass facility operator shall demonstrate all of the following: 1. The generation facility meets NJDEP requirements for state of the art (SOTA) air pollution control at N.J.A.C. 7:27-8; 2. The generation facility's ash management practices comply with NJDEP requirements; and 3. All plant matter used directly as biomass fuel was cultivated and harvested in a sustainable manner, in accordance with a management plan approved by the state environmental agency or agricultural agency in the state in which the plant was grown. If the plant matter is not used directly as biomass fuel, but is subject to alteration after its harvest and before its use as biomass fuel, this determination is not required.
- Co-firing of biomass with non-renewable fuels is allowed, with generation credited on a pro-rated output basis.
 - Electricity generated from Class I renewable energy projects funded by the societal benefits charge (SBC) shall qualify as Class I renewable energy that can be used to meet the RPS.
 - Electricity produced through combustion of the following substances shall not qualify as class I renewable energy:
 1. Treated, painted or chemically coated wood;
 2. Municipal solid waste;
 3. Tires;
 4. Sewage sludge;
 5. Wood waste, including demolition waste and construction waste;
 6. Old-growth timber; and
 7. Wood harvested from a standing forest, except for a forest that is part of a bioenergy plantation.

Class II Technologies and Resources

- Hydroelectric facility that has a maximum design capacity of 30

- megawatts or less from all generating units combined; and
 - **Resource recovery facility located in New Jersey, covered by all required NJDEP approvals, and operating in compliance with all applicable New Jersey environmental laws.** A resource recovery facility located outside of New Jersey qualifies as class II renewable energy if both of the following criteria are met: 1. The facility is located in a state with retail competition; and 2. NJDEP makes an environmental compliance determination, stating that the facility meets or exceeds all NJDEP requirements that would apply to the facility if it were located in New Jersey, or meets equivalent environmental requirements.
2. **Special Incentives:** Projects funded by the BPU's Clean Energy Program or the NJ Societal Benefits Charge qualify for RPS compliance.
 3. **Exclusions:** Electricity produced through combustion of the following substances shall not qualify as class I renewable energy: treated, painted or chemically coated wood; municipal solid waste; tires; sewage sludge; wood waste, including demolition waste and construction waste; old-growth timber; and wood harvested from a standing forest, except for a forest that is part of a bioenergy plantation. Electricity generated by a fuel cell powered by a fossil fuel will also not qualify as class I renewable energy.
 4. **Treatment of Self Generation:** Any renewable energy from a customer-generator on the customer-generator's premises may be used to meet the solar or Class I RPS requirements, subject to provisions detailed in the BPU regulations. A supplier/provider shall not use a REC that is based on electricity generated on a customer-generator's premises to comply with this subchapter unless the customer generator facility is eligible for net metering.
 5. **Rules governing Location of Generating Facilities:** To qualify as class I or class II renewable energy, energy must be generated within or delivered into the PJM region. Energy shall be considered delivered into the PJM region if it complies with the energy delivery rules established by PJM Interconnection. If class I or class II renewable energy is generated outside of the PJM region, but is delivered into the PJM region, the energy may be used to meet the requirements of this subchapter only if the energy was generated at a facility that commenced construction on or after January 1, 2003. Solar and distributed electric generation shall be produced by a generating facility that is interconnected with an electric distribution system that supplies New Jersey.
 6. **Eligibility of Green Pricing:** The same renewable energy shall not be used for more than one of the following: 1. creation of a solar REC; 2. creation of a REC; or 3. creation of a REC, or of any other type of attribute or credit, under authority such as another state's renewable energy standards or any voluntary clean electricity market or voluntary clean electricity program. Therefore, RECs generated for the purpose of fulfilling green pricing programs may not be used for RPS compliance.

F. COVERED UTILITIES

- 1. Classes of Covered Retailers:** The RPS requirements apply to all retail providers and basic generation service providers. They do not apply to public power agencies.
- 2. Share of state sales/capacity/delivered power covered?** ~ 98 percent of total state electric sales
- 3. Apportionment of obligation among utilities:** The RPS is applied separately to each affected utility.
- 4. Exemptions by Customer Class?** None

G. COST PROVISIONS

- 1. Cost Cap for Retailers:** None, though the Alternative Compliance Payment (ACP) mechanism serves as de facto cost cap.
- 2. Cost Caps for Consumers:** None for Class I or Class II resources. For solar electric generation, the percentage required for a given reporting year will carry forward to the next year if the total estimated cost of solar incentives exceeds two percent of the total retail cost of electricity for that year. The solar schedule resumes when the BPU determines that policy costs are below the two percent threshold.
- 3. Cost Recovery Mechanisms:** Costs, if they are determined to be reasonable and prudent, may be recovered through the rate base. In addition, electricity generated from Class I renewable energy projects may be funded by the societal benefits charge.
- 4. Supply Contract Requirements:** None specified
- 5. Special Funds:** In addition to creating the RPS, New Jersey's 1999 electric-utility restructuring legislation included a public benefits fund (PBF) to support investments in renewable energy and energy efficiency. The fund is supported by a surcharge imposed on all customers of the state's seven investor-owned electric and gas public utilities. The PBF funds New Jersey's Clean Energy Program (CEP), and is administered by the Board of Public Utilities. At least 25 percent of the funding is required to support the development of Class I renewable energy sources.

Monies collected through the RPS alternative compliance payment (ACP) and solar alternative compliance payment (SACP) mechanisms are also to be used to support renewable energy through the CEP, with SACP monies earmarked strictly for solar energy projects.

H. COMPLIANCE AND ENFORCEMENT

- 1. Certification, tracking, and trading mechanism[s]:** The PJM Interconnection's Generation Attribute Tracking System (GATS) is responsible for managing the certification and tracking process. A supplier/provider must demonstrate RPS compliance using RECs, which can be bought, sold, or traded. Solar RECs and class I RECs based on electricity generated by a customer-generator on the customer-generator's premises shall be issued by the BPU or its designee.

A REC represents the environmental benefits or attributes of one megawatt-hour of generation from a generating facility. The BPU has ruled that RECs are owned by the generator of the renewable energy unless the generator is a qualifying facility, as defined by the federal Public Utility Regulatory Policies Act of 1978, under existing BPU-approved contracts. In this case the RECs are owned by the purchaser of the renewable energy for the duration of those contracts. In addition, a customer-generator that is eligible for net metering owns the renewable attributes of the energy it generates on or after October 4, 2004, unless there is a contract with an express provision that assigns ownership of the renewable attributes.

- 2. Flexibility Mechanisms:** The BPU has established an alternative compliance system based on alternative compliance permits (ACP and SACP) which can be purchased by retailers and used as RECs and solar RECs. The BPU is responsible for setting the prices for ACPs and SACP, based on the recommendations from a BPU appointed advisory committee. The Board shall review the amount of ACPs at least once per year, in consultation with the ACP advisory committee, and shall adjust these amounts as needed to reflect changing market conditions. Starting on June 1, 2008, SACP will be set according to the following schedule:

Reporting Year	SACP
June 1, 2008 - May 31, 2009	\$ 711
June 1, 2009 - May 31, 2010	\$ 693
June 1, 2010 - May 31, 2011	\$ 675
June 1, 2011 - May 31, 2012	\$ 658
June 1, 2012 - May 31, 2013	\$ 641
June 1, 2013 - May 31, 2014	\$ 625
June 1, 2014 - May 31, 2015	\$ 609
June 1, 2015 - May 31, 2016	\$ 594

After May 31, 2016, the BPU will review the SACP annually in consultation with an advisory committee.

The BPU has set the ACP and SACP prices through May 31, 2008 at \$50/MWh and \$300/MWh respectively. Monies collected from the sale of ACPs and SACP will be used to support renewable energy through the CEP, with SACP monies earmarked strictly for solar energy projects. Solar RECs that are generated starting on or after June 1, 2009 shall

have a life of two years. Solar electric systems generate solar RECs for fifteen years starting from the date of interconnection. After 15 years, solar generators may earn Class I RECs.

During each compliance period, a 3-month "true-up" period is also allowed.

3. Penalties, Procedures, Powers, and Sanctions: Failure to comply with any provision of this subchapter shall subject the violator to the following penalties in accordance with the BPU's regulatory and statutory authority:

- Suspension or revocation of the electric power supplier's license;
- Financial penalties;
- Disallowance of recovery of costs in rates; and
- Prohibition on accepting new customers.

In determining the appropriate sanction, the BPU shall consider the following criteria and any other factors deemed appropriate and material to the electric power supplier's or basic generation service provider's failure to comply:

- The good faith efforts, if any, of the entity charged in attempting to achieve compliance;
The gravity of the violation or failure to comply with the requirements;
- The number of past violations by the entity charged regarding the RPS and other standards adopted by the BPU; and
- The appropriateness of the sanction or fine to the size of the company charged.

4. Escape Clauses: Holders of 34-month BGS contracts can meet lower RPS levels until May 2006, but RPS percentages for BGS increase after 2006 to make up for lost generation. The solar electric generation requirement will also be considered in compliance if the amount of solar electric capacity exceeds 1,700 MW, or if the combination of solar RECs and SACPs reaches 1.7 million megawatt-hours.

I. ADMINISTRATION

1. Administering Entities, Duties, Powers, and Contact Information: The New Jersey Board of Public Utilities administers the RPS. The PJM-EIS is responsible for administering the Class I and II REC trading system.

New Jersey Board of Public Utilities
44 South Clinton Avenue (7th Floor)
Trenton, NJ 08625
Phone: (609) 777-3314
Web site: <http://www.state.nj.us/bpu>

PJM Environmental Information Services
Web site: <http://www.pjm-eis.com/>

J. REPORTING REQUIREMENTS and PROGRAM STATUS

- 1. Reporting Requirements for Retailers:** By September 1st of each year, each supplier/provider shall file an annual report with the BPU, demonstrating that the supplier/provider has met the percentage requirements for Class I and Class II renewable energy for the preceding reporting year (ending May 1st of the same calendar year).
- 2. Reporting Requirements for Administering Entities:** None specified. However, a Governor appointed Renewable Energy Task Force released a renewable energy [assessment report in April, 2003](#).
- 3. Cost Information:** No comprehensive study on the actual costs of the RPS has been completed. However, Evolution Markets reports that RECs have been consistently selling for less than 1 ¢/kWh in the first years of compliance, with solar RECs selling for 17.5 - 20 ¢/kWh. In addition, Rutgers University released a report on of the potential costs and benefits of increasing the New Jersey RPS in December 2004. The report is entitled, "[Economic Impact Analysis of New Jersey's Proposed 20% Renewable Portfolio Standard](#)". In 2007, Summit Blue Consulting released a report on the potential rate impacts of the proposed solar market transition entitled, "[An Analysis of Potential Ratepayer Impact of Alternatives for Transitioning the New Jersey Solar Market from Rebates to Market-Based Incentives](#)."

K. STATUS AND SPECIAL NOTES

According to the BPU's [New Jersey Clean Energy Program 2005 Annual Report](#), more than 20 MW of renewable energy (including 5.5 MW of solar capacity) have been installed in the state. According to the New Jersey Clean Energy Program's [New Jersey REC Market Update](#) as of December 31, 2007, 47.5 MW of solar energy had been installed in the state, but there was as shortage of Class I RECs.