PUBLIC SERVICE COMMISSION OF MARYLAND

RENEWABLE ENERGY PORTFOLIO STANDARD REPORT OF 2009

With Data for Compliance Year 2007

In compliance with Section 7-712 of
the Public Utility Companies Article,
Annotated Code of Maryland

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I. Introduction and Summary

A. Report Contents

This document constitutes the 2009 annual report of the Public Service Commission of Maryland ("Commission") regarding the Maryland Renewable Energy Portfolio Standard ("RPS Program"). This Report is submitted in compliance with § 7-712 of the Public Utility Companies Article, *Annotated Code of Maryland* ("PUC Article"). Section 7-712 of the PUC Article requires that, on or before February 1 of each year, the Commission shall report to the General Assembly on the status of the implementation of the RPS program. The electric suppliers are not required to file an RPS compliance report with the Commission for the prior calendar year until April 1 of the current year. Consequently, this Report highlights data from electric suppliers' 2007 compliance reports and relevant 2008 data such as the renewable facilities certified by the State of Maryland.

In compliance with § 7-712 of the PUC Article, topics addressed in this report include the availability of Tier 1 and Tier 2 renewable sources, renewable compliance fees collected to support in-state renewable projects, and other pertinent information. The report also provides historical information, accomplishments over the past year, and more recent actions including forthcoming milestones.

B. Objectives of the Program

The objective of §7-701 *et seq.* of the PUC Article ("RPS Statute") is to recognize and develop the benefits associated with a diverse collection of renewable energy supplies to serve Maryland. The Commission's RPS Program does this by recognizing the environmental and consumer benefits associated with renewable energy and requiring that a set proportion be included in all retail electricity sales. This recognition is demonstrated through the creation, sale and transfer of Renewable Energy Credits ("RECs"). The RPS Program is a policy that requires retail suppliers of electricity to meet a portion of their energy supply needs with various renewable energy sources, which have been classified within the RPS Statute as Tier 1 and Tier 2 renewable sources. The development of renewable energy sources is further promoted by requiring electricity suppliers to pay a financial penalty for failing to acquire sufficient RECs to satisfy the RPS as set forth in §7-703 of the PUC Article. The penalty is used to support the creation of new Tier 1 renewable sources in the State.

C. Overview of the Maryland RPS Program

Under the RPS Program, electricity suppliers are required to meet a renewable energy portfolio standard. More specifically, the RPS Program requires that a portion of all retail electricity sales in the State be supplied by renewable sources. The RPS Program is an annual requirement placed upon Maryland Load Serving Entities ("LSEs"), which include electricity suppliers and the utilities that provide Standard Offer Service.[1] LSEs file compliance reports with the Commission verifying that the renewable requirement for each entity is satisfied.

[1] Standard Offer Service is an electricity service provided by the utilities for residential and commercial customers that cannot or choose not to transact with a competitive supplier operating in the retail market.

A REC is equal to the renewable attributes associated with one megawatt-hour ("MWh") of electricity generated using specified renewable sources. As such, a REC is a tradable commodity equal to one MWh of electricity generated or obtained from a renewable energy generation resource. Each supplier must present, on an annual basis, RECs equal to the percentage specified by the RPS Statute,[2] or pay compliance fees equal to shortfalls. Generators and suppliers are allowed to trade RECs using a Commission-approved system known as the Generation Attributes Tracking System ("GATS"). The Commission approved the use of GATS, which is provided and maintained by PJM Interconnection, LLC ("PJM") Environmental Information Services ("PJM-EIS"). GATS tracks the ownership and trading of the generation attributes. A REC has a three-year life during which it may be transferred, sold or redeemed.

Suppliers that do not meet the annual RPS requirement are required to pay compliance fees. Compliance fees are deposited into the Maryland Strategic Energy Investment Fund ("SEIF" or "Energy Fund") as dedicated funds to provide for loans and grants that can indirectly spur the creation of new renewable energy sources in the State.[3] As a special, non-lapsing fund, the SEIF is also the depository of revenues generated through the sale of carbon allowances under the Regional Greenhouse Gas Initiative ("RGGI"). Indeed, the majority of the SEIF funds result from the RGGI carbon dioxide allowance auctions. Auctions are quarterly; combined, the 2008 September and December auctions generated nearly $34.4 million in revenues. Up to 10.5% of the funds are to be allocated to renewable and clean energy, climate change, and energy related public education and outreach programs. Responsibility for developing renewable energy sources has been vested with the Maryland Energy Administration ("MEA"). MEA has proposed a variety of renewable grants and loans in fiscal years 2009 and 2010.[4] To date, no renewable projects have been supported by the Energy Fund either through dedicated funds (i.e., RPS compliance fees) or RGGI auction revenues.

1. Registration of Renewable Energy Facilities

Facilities eligible for the Maryland RPS Program must be located in PJM (*i.e.,* the wholesale bulk power control area in which Maryland resides),[5] or in a control area that is adjacent to the PJM region, so long as the electricity is delivered into the PJM region. To certify a Renewable Energy Facility ("REF"), Commission Staff must determine whether the facility meets the standards set forth by the Maryland RPS Program. Applicants potentially qualifying under Maryland's RPS Program initially work with Commission Staff and complete the appropriate application for renewable energy facility certification posted on the Commission's

[2] Using the Tier 2 RPS requirement as an example, assume a hypothetical load serving entity operating in the State had 100,000 MWh in retail electricity sales for 2008. In 2008 the Tier 2 requirement was 2.5%. Thus, the company would have to verify the purchase of 2,500 Tier 2 RECs in satisfaction of the Tier 2 RPS obligation, or pay in whole or in part, compliance fees for deficits. Similar requirements apply to Tier 1 and Tier 1 solar: the additional RPS tiers provided for in Maryland's RPS Statute.

[3] Chapters 127 and 128 of the Laws of 2008 repealed the Maryland Renewable Energy Fund and redirected compliance fees paid into that fund into the Maryland Strategic Energy Investment Fund.

[4] Maryland Energy Administration, Regional Greenhouse Gas Initiative (RGGI) Information, Available: http://www.energy.state.md.us/rggi.asp

[5] The PJM wholesale market includes all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia.

RPS website.[6] Maryland maintains solar and standard REF applications. Applicants determine if the facility is geographically eligible to participate in the Maryland RPS Program. Applicants must also meet the fuel source requirements associated with Tier 1 and Tier 2 REC creation. Verification of the fuel source is usually completed with the aid of Energy Information Administration Form 860 (EIA-860) to validate each facility's rated nameplate capacity, fuel source(s), location and commercial operation start date.[7]

Facilities must register with GATS to transact business and to have RECs recognized and created. The GATS account will be established with the State facility certification number issued by the Commission upon approval of the application. Facilities that co-fire a REC-eligible renewable fuel source with non-eligible fuel sources must submit a formula or method to account for the proportion of total electricity generation that will be credited with RECs. A comprehensive listing of REFs currently certified with the Maryland RPS Program can be found in Appendix A. Eligible fuel sources for Tier 1 RECs and Tier 2 RECs are listed in Table 1.

Table 1: Eligible Tier 1 and Tier 2 Resources

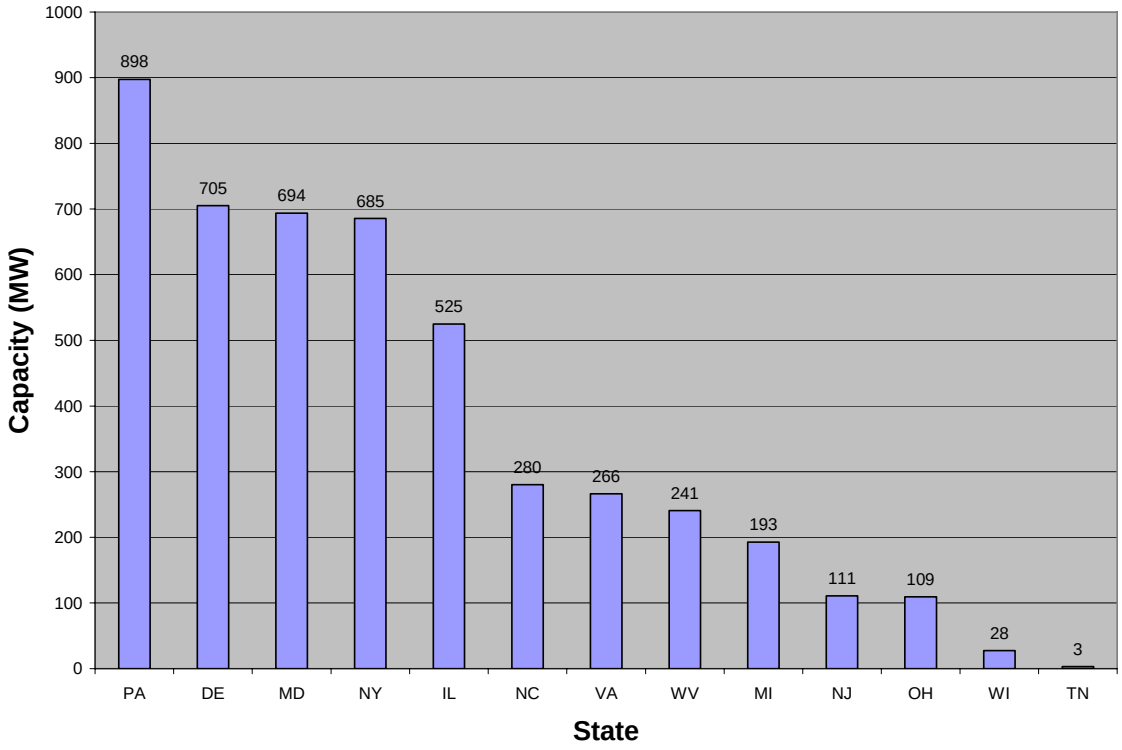
Tier 1 Renewable Sources	Tier 2 Renewable Sources
• Solar ("Tier 1 solar") • Wind • Qualifying Biomass • Methane from a landfill or wastewater treatment plant • Geothermal • Ocean • Fuel Cell that produces electricity from a Tier 1 Source • Hydroelectric power plant less than 30 MW Capacity • Poultry litter-to-energy	• Hydroelectric power other than pump storage generation • Waste-to-energy *Note: Tier 1 RECs may be used to satisfy Tier 2 obligations.*

The amount of rated capacity that is currently registered with the Maryland RPS Program and the geographical location of the renewable facilities creating RECs are presented in Chart 1. The majority of the facilities currently registered are found in the Mid-Atlantic region. As of October 1, 2008, the Commission had certified 4,738 MW of capacity. Sixty-three percent of the power plant capacity certified to provide RECs in Maryland is located in four states: Pennsylvania, 19%; Delaware, 15%; Maryland, 15%; and New York, 14%.

[6] Maryland Public Service Commission, Renewable Portfolio Standard Documents, Available: http://webapp.psc.state.md.us/intranet/ElectricInfo/home_new.cfm

[7] Submitting Form EIA-860 is a requirement under Section 13(b) of the Federal Energy Administration Act of 1974 (FEAA) (Public Law 93-275) for generating plants, regulated and unregulated, which have a nameplate rating of 1 MW or more, are operating or plan to operate within 5 years, and are connected to the transmission grid.

Chart 1: MD RPS Certified Rated Capacity by State (as of 10/1/2008)



2. Successful Operation of PJM GATS

The Commission utilizes the GATS system pursuant to § 7-708 of the PUC Article, which requires the Commission to use, to the extent practicable, a trading system that is consistent with and operates in conjunction with a trading system developed by PJM. GATS is a system that is used to create, record and track RECs. GATS monitors the generation of participating units and creates monthly RECs based upon actual renewable electricity output. A GATS certificate from a Commission-certified renewable energy facility is identified as a Maryland eligible Tier 1, Tier 1 solar, or Tier 2 REC.

The GATS system collects generation data for facilities certified for RPS programs in various states. After a facility is certified as a Maryland REF, it must open a GATS account to participate in the Maryland RPS Program. Facilities are often eligible for participation in numerous states' RPS programs, and, as a result, they will be certified with multiple states and be issued multiple state certification numbers. A facility that is interconnected with PJM will have its electricity generation data automatically uploaded into the GATS system.

GATS creates RECs at the end of each month. The number of RECs created is based upon electricity generation from renewable sources. RECs are time stamped on a monthly basis which ensures that the REC expiration date is clear. Facilities that utilize more than one fuel source to generate electricity will have a formula on file with GATS to determine the percentage of electricity that comes from each renewable fuel source.

A GATS account is required for a REF's RECs to be eligible to participate in Maryland's RPS Program.[8] GATS accounts may also be created by facilities that are not interconnected with PJM. GATS accounts are required of both generators and suppliers in order to undertake REC transactions. To comply with state RPS requirements, suppliers retire RECs by state and by product subaccount. LSEs are charged an annual fee of $2,000 for the maintenance of the GATS account. Non-LSEs and REC traders are charged an annual fee of $1,000. RECs retired for voluntary purposes are charged $0.008 per MWh. A $0.25 per MWh charge is applied to RECs that are transferred into a reserve subaccount.[9] Each REC tracked in GATS has a unique serial number that aids in ensuring against the double counting of RECs and helps distinguish RECs that are created by a particular facility in a given month. Renewable energy facilities that are not interconnected with PJM submit their generation figures to GATS on a monthly basis.

Facilities that have a rated capacity of 10 MW or less are not charged a fee to create a GATS account. Solar REFs are unique because the amount of electricity generated and the associated RECs produced can be relatively small compared to other REF operations within GATS. Hence the no fee GATS account standard.

3. Other Aspects of the Maryland RPS Program

The Commission's RPS website contains forms that target other aspects of the Maryland RPS Program, such as an application to be certified for Industrial Process Load status[10] and an application to waive compliance fees due to extreme economic hardship.

The compliance fee associated with a Commission designated Industrial Process Load customer is reduced in the event of a REC shortfall. Furthermore, a load serving entity that serves Industrial Process Load may be exempt from the RPS compliance obligation for all electricity sales to a single customer in excess of 300,000,000 kilowatt-Hours ("kWh") per year, if the load is certified as Industrial Process Load. As of December 31, 2008, two facilities have received Industrial Process Load status: Severalstal Sparrows Points in the BGE service territory (approved September 10, 2008); and Luke Paper Company in the Allegheny Power service territory (approved April 12, 2006).

The Commission may waive the recovery of all or part of the compliance fee on the load of a particular industrial or nonretail commercial customer, based on a demonstration of an extreme economic hardship that significantly impairs the continued operation of the LSE applicant.[11] The Commission may find extreme economic hardship based on the following:

- The initiation or involvement of an applicant filing for an extreme economic hardship in bankruptcy proceedings under 11 U.S.C § 101;
- An applicant filing for an extreme economic hardship having a credit rating of C (or equivalent designation) or lower by a nationally recognized credit rating agency;
- Designation of extreme financial hardship by a federal or other state program; or

[8] *See* COMAR 20.61.02.
[9] The reserve subaccount was established to track certificates that are reserved by the account holder, exported from GATS, or retired.
[10] *See* COMAR 20.61.01.05E.
[11] *See* COMAR 20.61.01.05F.(2).

- Any other documentation that an applicant seeking extreme economic hardship status may present in order to make its case and to assist the Commission in reaching a decision on the matter.

As of December 31, 2008, the Commission has not waived the recovery of all or part of a compliance fee due to extreme economic hardship for any LSE.

II. History of the RPS Program

A. Years 2004 and 2005

The Maryland Renewable Energy Portfolio Standard Program was through legislation enacted during the 2004 Session of the Maryland General Assembly.[12] Pursuant to the directives in that legislation, the Commission considered certain threshold policy and administrative issues in Case No. 9019. With Case No. 9019 as a foundation, Staff convened the RPS Working Group which was composed of representatives from electric utilities, electricity suppliers, renewable energy providers, REC traders, industry specialists, environmentalists, the Maryland Office of People's Counsel, and other interested parties.

On April 13, 2005, Staff filed recommended proposed RPS regulations, and the Commission opened Rulemaking No. 12. The Commission received comments and held open meetings concerning the regulations. On May 25, 2005, the Commission voted to publish the proposed RPS Regulations as Section 20.61 of the Code of Maryland Regulations (COMAR). COMAR 20.61 was adopted as final and became effective November 24, 2005.

The Commission created the forms and procedures necessary to begin program administration. The Commission also established a portion of its website dedicated to the RPS Program. Program forms, reference documents, RPS related links and a Frequently Asked Questions page are all available at the website. In addition, appropriate applications (e.g., retroactive RECs, industrial process load) are obtainable at the website.

B. Year 2006

The first RPS compliance year began on January 1, 2006, and concluded on December 31, 2006. In addition to initiating the Tier 1 and Tier 2 REC requirements for retail electricity sales, the issuance of retroactive RECs concluded during 2006 and changes were made to the RPS regulations through Rulemaking No. 25.

1. Registration of Retroactive Renewable Energy Credits

RECs created on or after January 1, 2004 and before final regulations were adopted on November 24, 2005 are known as retroactive RECs. A retroactive REC application was required to be filed within the six-month period immediately after the effective date of the final regulations. These retroactive RECs were partitioned into two categories: one category to

[12] Chapters 487 & 488 of the Acts of the MD General Assembly, 2004 Session.

account for generation that occurred during calendar year 2004 and the second category to cover the period spanning January 1, 2005, through November 24, 2005.

The deadline for filing applications requesting credit for 2004 and 2005 retroactive RECs was May 29, 2006. When available, retroactive RECs were identical to RECs except for a common generation date of December 31 for the year they were generated, as opposed to a generation date consisting of the actual month and year that the renewable electricity was created. Like normal RECs, retroactive RECs were bankable for a period of three years.

The Commission approved 2,768,537 Tier 1 RECs and 3,972,563 Tier 2 RECs generated during the year 2004. For 2005, the Commission approved 762,520 Tier 1 RECs, and 339,627 Tier 2 RECs. These 2004 and 2005 RECs were deemed to be retroactive RECs for RPS compliance purposes.

2. Rulemaking No. 25

Rulemaking No. 25 was an ongoing proceeding designed to accommodate additions and revisions to the RPS regulations contained in COMAR 20.61. Proposed revisions to COMAR 20.61 were adopted on December 6, 2006. The due date for supplier annual compliance forms was brought forward from June 1, 2007, to April 1, 2007. In some cases, REC creation cannot be verified by the operator of the control area. Rulemaking 25 developed a procedure to issue RECs for a facility when the control area operator is unable to certify the total number of MWh generated by the facility. Facilities unable to obtain REC authentication can include those that operated behind the meter, delivered electricity directly to an interconnecting utility, or operated in an RTO that could not verify electricity generation over a given time period.[13]

C. Year 2007

The first compliance year concluded on December 31, 2006. With the conclusion of the first compliance year, the annual reports for Compliance Year 2006 were due from electricity suppliers and load serving entities on April 1, 2007. Other notable events in 2007 included changes that were made to the RPS Statute. These changes included the creation of a Tier 1 solar carve out for Maryland and the commensurate adoption for publication of proposed regulations addressing the implementation of the revised solar RPS. (Rulemaking No. 32)

1. Statutory Changes

In legislation adopted during the 2007 Session of the Maryland General Assembly, the RPS Statute was amended to add a solar carve out to the Maryland RPS Program.[14] The solar carve out mandated that a specified additional percentage of the RPS obligation must come from attributes associated with electricity generated from a solar source. This requirement is a supplement to the previous Tier 1 requirement and became effective on January 1, 2008. The initial solar RPS percentage is 0.005% in 2008. The solar requirement increases each year and peaks in year 2022, at which time, and for each year thereafter, 2% of Maryland retail electricity

[13] COMAR 20.61.03.
[14] *See* PUC Article §7-703.

sales must be represented by a solar source. The legislation also eliminated a double credit for RECs derived from solar sources.

Solar RECs purchased by an electricity supplier directly from a solar on-site generator require a contract with a term of not less than 15 years.[15] The price level of the solar RECs may vary throughout the life of the 15 year contract. For a solar on-site generator that is rated 10 kW or less, RECs are purchased through a single initial payment that represents the full estimated output of the system for the life of the contract. On or before December 31, 2011, solar RECs from resources not connected with the electric distribution grid serving Maryland may be used for compliance only if offers made for the sale of solar RECs by Maryland solar facilities are not sufficient to satisfy the solar requirement. Effective January 1, 2012, all solar RECs must be sourced from solar renewable energy facilities that are interconnected with the electricity distribution grid serving Maryland.[16] Solar RECs eligible for the Maryland RPS must be generated by a Commission-certified REF, meaning that an out-of-state solar REF must be approved by the Commission for the creation of Tier 1 solar RECs to be eligible for compliance with the solar portion of Maryland's RPS. Also, a solar REF located within Maryland, that chooses to sell its solar RECs, must first offer to sell those RECs to an electricity company or electricity supplier that would retire the RECs to comply with Maryland's RPS Program.[17]

If the offer is not accepted by an electricity company or electricity supplier, then the solar RECs may be sold for a purpose other than for compliance with the Maryland solar RPS. If a supplier's cost incurred to purchase solar RECs is equal to 1 percent of the supplier's total annual electricity sales revenue in Maryland, then the supplier may request that the Commission delay the solar requirement for one year. The solar compliance fee began at $450 per MWh (45 cents per kilowatt-hour) deficiency in 2008 and then starting in 2009, gradually reduces by $50 per MWh (5 cents per kilowatt-hour) every other year until 2023, at which time the compliance fee is $50 per MWh (5 cents per kilowatt-hour).

Electricity suppliers for a designated Industrial Process Load are not likely to apply Tier 1 solar RECs towards Maryland RPS Program compliance. The RPS Program uses a separate compliance fee schedule for Industrial Process Load. The entire Tier 1 Industrial Process Load obligation, including the solar portion, is subject to a compliance fee rate of $8 per MWh.

2. Rulemaking No. 32

On October 19, 2007, a Solar Technical Conference was held at the Commission. The purpose of this conference was to convene a number of solar energy market participants to share information and ideas regarding a number of issues that may relate to the solar RPS. Topics discussed during the Solar Technical Conference included an overall background on the solar market, previous experiences within other state's solar RPS programs, available REC trading platforms, and methods for metering and verifying renewable solar energy generation.

Rulemaking 32 proposed regulations for COMAR 20.61 to address issues created by the solar statutory changes. The regulations were adopted on September 4, 2008.

[15] *See* PUC Article §7-709.
[16] *See* PUC Article §7-704.
[17] *See* PUC Article §7-704(a)(2).

3. Supplier Annual Reports filed for Compliance Year 2006

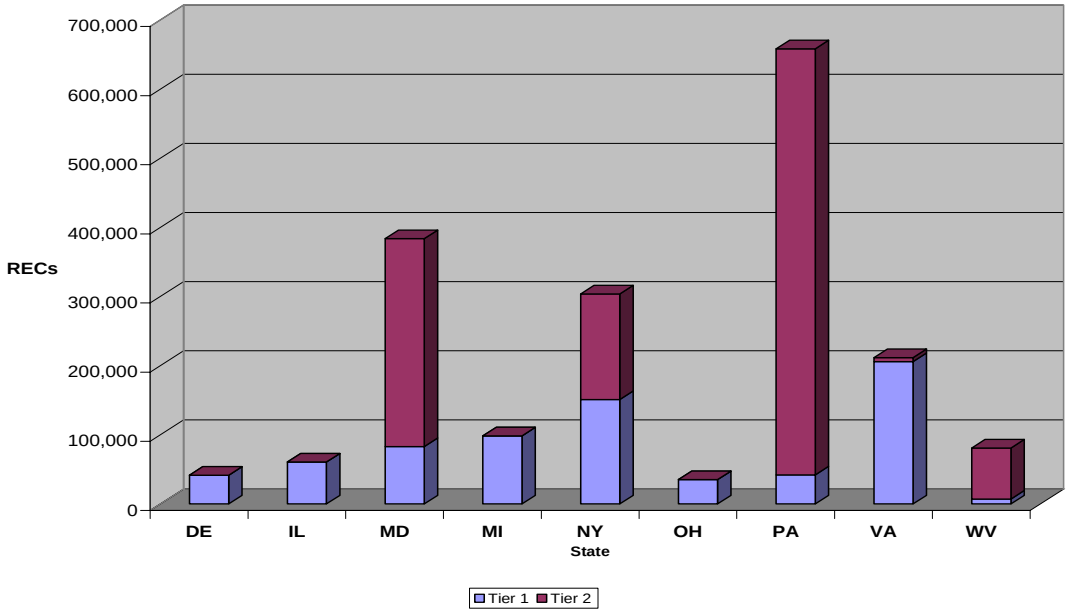
Calendar Year 2006 marked the first compliance year for Maryland's RPS Program. The Annual reports for Compliance Year 2006 were due from electricity suppliers and load serving entities on April 1, 2007. The Commission received reports from 67 electric entities as presented in Table 2. Based upon data provided within the reports, 552,874 Tier 1 RECs were used to meet Tier 1 RPS obligations and 1,322,069 Tier 1 and Tier 2 RECs were used to meet Tier 2 obligations for all licensed electricity suppliers, brokers and utilities. The total of all compliance fees paid was $38,209.

Table 2: 2006 RPS Supplier Annual Report Results

Electricity Broker/Supplier Utility	RPS Obligation		RPS Compliance Method		
	Tier 1	Tier 2	Tier 1 RECs	Tier 2 RECs	Compliance Fee
Total for Compliance Year 2006	520,073	1,300,201	552,874	1,322,069	$38,209

Chart 2 below allocates the RECs used in 2006 to satisfy Maryland's RPS requirements according to the specific states in which the renewable facilities generated power. Maryland was the source for approximately 20% of the overall RECs used for compliance in 2006. A sizable share of the RECs used by electric companies and suppliers to comply with the Maryland requirements also included out-of-state resources, notably New York, 16%; Pennsylvania, 35%; and Virginia, 11%.

Chart 2: 2006 Compliance RECs by Facility Location



Total Maryland energy sales for 2006 were approximately 63 million MWhs. Section 7-703 of the PUC Article provides for RPS exclusion for excess Industrial Process Load, sales under rate cap, and sales by cooperatives with supply contracts prior to October 1, 2004. For compliance year 2006, after accounting for exclusions, suppliers filed 1,874,943 RECs for compliance.

III. Current Status of the RPS Program

A. Statutory Changes

During the 2008 Maryland Legislative Session, three bills were enacted to modify the RPS Program. The changes included: increasing the percentage requirements of the RPS program; increasing Tier 1 compliance fees; restricting the geographic location of eligible renewable resources; establishing a Maryland Strategic Energy Investment Fund and a Maryland Strategic Energy Investment Program; repealing the Maryland Renewable Energy Fund; and removing poultry litter as a qualifying Tier 2 resource and including poultry litter-to-energy as a qualifying Tier 1 resource.

- Senate Bill 209 / House Bill 375 of 2008 (both enacted) increased the RPS percentage requirements in years 2011 through 2021, and, for the years 2022 and beyond, set the Tier 1 percentage requirement at 20%, as shown in Table 3. Effective January 1, 2011, the Tier 1 compliance fee for REC shortfalls increased from 2 cents to 4 cents per kilowatt-hour, as shown in Table 4. Moreover, the legislation restricts acceptable renewable energy sources to those within the PJM region or in a control area that is adjacent to the PJM region, if the electricity is delivered in the PJM region.[18] For an eight-year period that ends December 31, 2018, the legislation allows the PSC to delay electric suppliers' scheduled RPS requirements for Tier 1 (non-solar) requirements.

- Senate Bill 268 / House Bill 368 of 2008 (both enacted**)** established a Maryland Strategic Energy Investment Program and related special fund within MEA to be funded primarily with proceeds from the sale of Maryland's carbon allowances under the Regional Greenhouse Gas Initiative (RGGI). The first RGGI auction was held in September 2008, and generated $16.3 million for Maryland; the second auction held December 2008 generated approximately $18.0 million. The SEIF will allocate up to 10.5% of the RGGI proceeds to renewable and clean energy, climate change, and energy related public education and outreach. The legislation also repeals the Maryland Renewable Energy Fund into which RPS compliance fees were previously paid; compliance fees are redirected into the new SEIF as dedicated funds for renewable loans and grants overseen by MEA.

- Senate Bill 348 / House Bill 1166 of 2008 (both enacted) removed the incineration of poultry litter from the list of eligible Tier 2 renewable energy sources and elevated poultry litter-to-energy as a qualifying Tier 1 renewable energy source. Poultry litter-to-energy is an eligible resource only if the source is connected with the electric distribution grid serving Maryland.

[18] The bill removes the provision that acceptable facilities may be merely located in a state adjacent to the PJM region without underlying energy deliveries.

Table 3: RPS Tier Requirements

Compliance Year	Previous RPS Requirement			2009 RPS Requirement		
	Tier 1	Tier 1 Solar	Tier 2	Tier 1	Tier 1 Solar	Tier 2
2007	1.0%	NA	2.50%			
2008	2.005%	0.005%	2.50%	2.005%	0.005%	2.50%
2009	2.010%	0.010%	2.50%	2.010%	0.010%	2.50%
2010	3.025%	0.025%	2.50%	3.025%	0.025%	2.50%
2011	3.040%	0.040%	2.50%	5.000%	0.040%	2.50%
2012	4.060%	0.040%	2.50%	6.500%	0.040%	2.50%
2013	4.100%	0.100%	2.50%	8.200%	0.100%	2.50%
2014	5.150%	0.150%	2.50%	10.300%	0.150%	2.50%
2015	5.250%	0.250%	2.50%	10.500%	0.250%	2.50%
2016	6.350%	0.350%	2.50%	12.700%	0.350%	2.50%
2017	6.550%	0.550%	2.50%	13.100%	0.550%	2.50%
2018	7.900%	0.900%	2.50%	15.800%	0.900%	2.50%
2019	8.700%	1.200%	0.00%	17.400%	1.200%	0.00%
2020	9.000%	1.500%	0.00%	18.000%	1.500%	0.00%
2021	9.350%	1.850%	0.00%	18.700%	1.850%	0.00%
2022	9.500%	2.000%	0.00%	20.000%	2.000%	0.00%
2023 +	9.500%	2.000%	0.00%	20.000%	2.000%	0.00%

Table 4: Compliance Fee Schedule ($/MWh)

Compliance Year	Previous RPS Requirement				2009 RPS Requirement			
	Tier 1	Tier 1 Solar	Tier 2	IPL* Tier 1	Tier 1	Tier 1 Solar	Tier 2	IPL* Tier 1
2007	$20	NA	$15	$8				
2008	$20	$450	$15	$8	$20	$450	$15	$8
2009	$20	$400	$15	$5	$20	$400	$15	$5
2010	$20	$400	$15	$5	$20	$400	$15	$5
2011	$20	$350	$15	$4	$40	$350	$15	$4
2012	$20	$350	$15	$4	$40	$350	$15	$4
2013	$20	$300	$15	$3	$40	$300	$15	$3
2014	$20	$300	$15	$3	$40	$300	$15	$3
2015	$20	$250	$15	$2.5	$40	$250	$15	$2.5
2016	$20	$250	$15	$2.5	$40	$250	$15	$2.5
2017	$20	$200	$15	$2	$40	$200	$15	$2
2018	$20	$200	$15	$2	$40	$200	$15	$2
2019	$20	$150	$15	$2	$40	$150	$15	$2
2020	$20	$150	$15	$2	$40	$150	$15	$2
2021	$20	$100	$15	$2	$40	$100	$15	$2
2022	$20	$100	$15	$2	$40	$100	$15	$2
2023 +	$20	$50	$15	$2	$40	$50	$15	$2

* Industrial Process Load. For IPL there is no compliance fee for Tier 2 shortfall.

B. Supplier Annual Reports filed for Compliance Year 2007

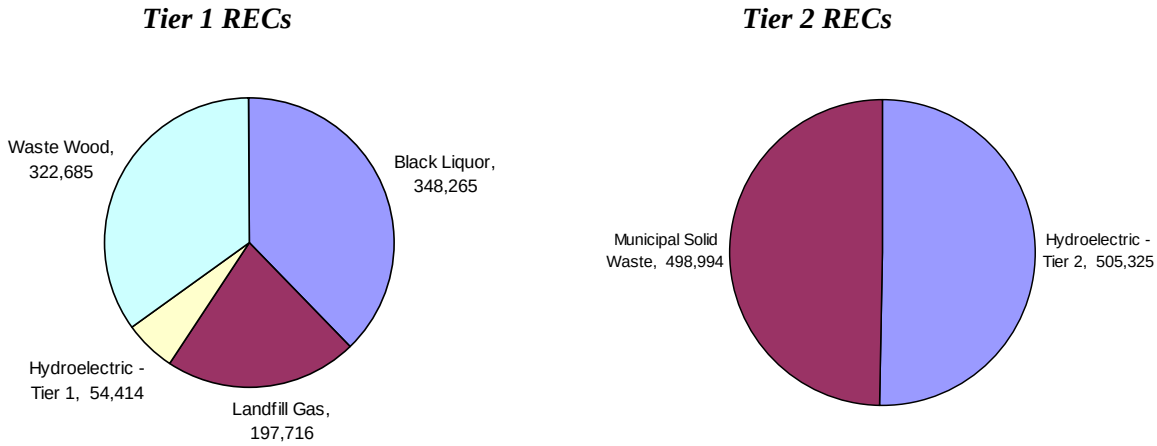
Calendar Year 2007 marked the second compliance year for Maryland's RPS Program. The annual reports for compliance year 2007 were due from electricity suppliers and load serving entities on April 1, 2008. As of December 31, 2008, the Commission received reports from 60 electric entities, including utilities, electricity suppliers and electricity brokers. The total Maryland retail energy sales for 2007 were approximately 65 million MWhs. For compliance year 2007, suppliers filed 1,936,248 RECs for compliance.[19] Based upon information received from the reports, 553,374 Tier 1 RECs were used to meet Tier 1 RPS obligations and 1,382,874 Tier 1 and Tier 2 RECs were used to meet Tier 2 obligations. The compliance fees totaled $36,374.

Table 5: 2007 RPS Supplier Annual Report Results

Electricity Broker/Supplier Utility	RPS Obligation		RPS Compliance Method		
	Tier 1	Tier 2	Tier 1 RECs	Tier 2 RECs	Compliance Fee
Total for Compliance Year 2007	553,612	1,384,029	553,374	1,382,874	$36,374

Chart 3 illustrates the number of RECs used for Compliance Year 2007 according to Tier and by fuel source. The Tier 1 resources used by electric suppliers and utilities to comply with Maryland's RPS requirement were black liquor, 37.7%; waste wood, 35.0%; landfill gas, 21.4%; and small-scale hydro, 5.95%. Almost equal portions of hydroelectric and municipal solid waste were used to comply with 2007 Tier 2 requirements: 50.3% and 49.7%, respectively.

Chart 3: 2007 Tier 1 & Tier 2 RECs Retired by Fuel Source



[19] As previously stated, §7-703 of the PUC Article provides for RPS exclusion for excess Industrial Process Load, sales under rate cap, and sales by cooperatives with supply contracts prior to October 1, 2004.

Chart 4: 2007 Compliance RECs by Facility Location

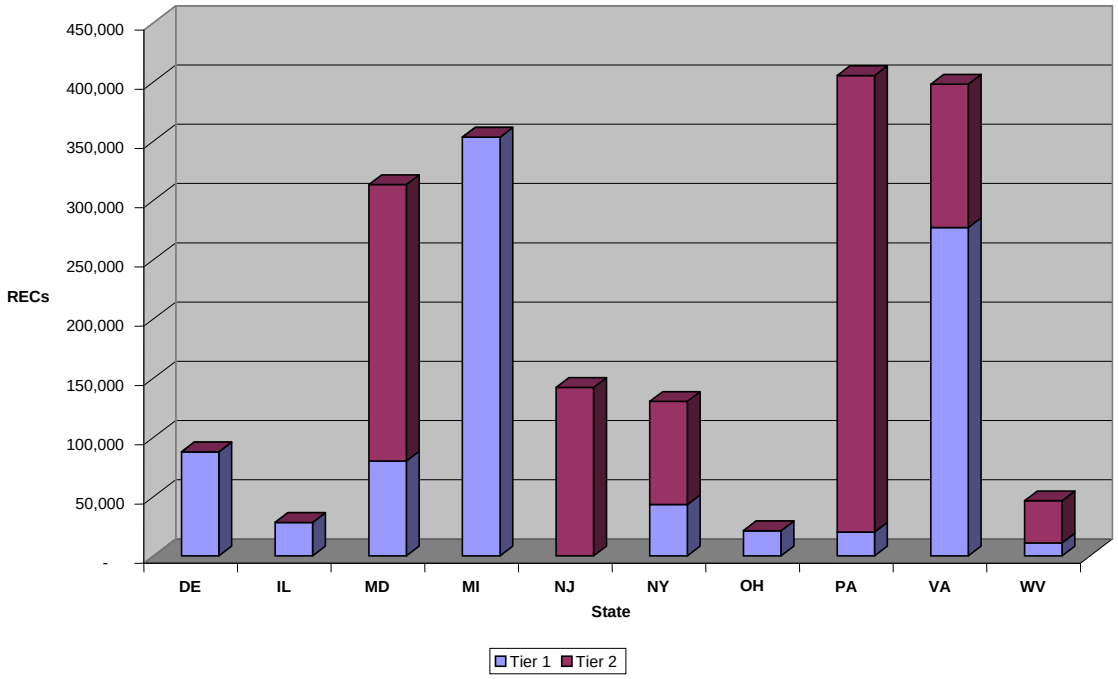


Chart 4 displays the proportion of RECs created by state of generation, which were utilized by electric companies and suppliers to fulfill Maryland's RPS compliance in 2007. Without regard to tier, three states provide 60.0% of the RECs used by electric suppliers to meet Maryland's RPS requirements: Pennsylvania, 21.0%; Virginia, 20.7%; and Michigan, 18.3%. Maryland was the source for 16.3% of the RECs used for compliance in 2007.

Michigan was the largest supplier of Tier 1 resources composed of three resources: waste wood, 76.1%; landfill gas, 19.7%; and black liquor, 4.2%.[20] Pennsylvania was the largest supplier of Tier 2 resources provided by hydroelectric facilities. Virginia provided large amounts of municipal solid waste as a Tier 2 resource; black liquor and waste wood resources provided for Tier 1 requirements. Maryland resources were comprised of municipal solid waste and black liquor for the Tier 1 requirement; large-scale hydroelectric facilities provided Tier 2 resources.

IV. Upcoming Milestones

Calendar Year 2008 marks the third compliance year for the RPS Program. Information concerning year 2008 will be available in April 2009, when RPS Compliance Reports are filed with the Commission. These annual reports will provide another year's worth of data showing the amount of RECs needed and purchased for the supplier's RPS Tier 1 and Tier 2 compliance, as well as the payment of compliance fees associated with any RPS obligation shortfalls. Year 2008 also represents the first year that load serving entities are subject to the solar RPS requirement.

[20] Black liquor is a wood byproduct created during the production of paper pulp.

V. Conclusions and Observations

Over time, the Maryland RPS Program is designed to create a stable and predictable market for energy generated from renewables, and foster additional development and growth in the renewable industry. Implementation of the RPS Program assists in overcoming market barriers seen as impediments for the development of the industry; moreover, increasing reliance upon renewable energy technologies to satisfy electric power requirements is expected to provide a broad range of benefits including reductions in emissions of pollutants, increases in fuel diversity, and economic and employment benefits to the State.

The electric supplier compliance reports of 2007, verified by Commission Staff, indicate that the State of Maryland RPS obligations were satisfied through submission of the appropriate level of Tier 1 and Tier 2 RECs or via alternative compliance payments. Market participants use a strategy that identifies and incorporates the use of the least-cost, predominant renewable technologies to meet the State's tiered requirements. For the 2007 RPS requirements, suppliers used substantial amounts of qualifying biomass (e.g., waste wood and the mill residue known as black liquor), as well as, methane from the anaerobic decomposition of organic materials in landfills.

Three states provided 60% of the Tier 1 and Tier 2 RECs retired by electric companies and suppliers in 2007: Michigan, Pennsylvania and Virginia. Michigan was the largest supplier of Tier 1 RECs (biomass and landfill gas) and Pennsylvania was the largest supplier of Tier 2 RECs (hydroelectric). Maryland renewable energy facilities supplying RECs retired in 2007 were black liquor resources for the Tier 1 RPS requirement; municipal solid waste and large-scale hydroelectric facilities provided for Tier 2 resources. Maryland renewable energy facilities can register in multiple states to meet and comply with various policy objectives – and sell additional RECs that support clean, green, or renewable products offered by retail suppliers.

In 2008, Maryland enacted several changes to the Maryland Renewable Energy Portfolio Standard to increase the contribution of renewable energy to electricity supply: the RPS percentage requirements were accelerated and the geographic scope in which renewable resources can be obtained for compliance restricted. The effect is an increase in demand while reducing supply; thereby, providing upward price pressure for RECs. Moreover, an increase in the Tier 1 compliance fees will take effect in 2011 to assist in fostering additional development and growth in the industry. Maryland's adoption of a Tier 1 solar requirement in 2007, in addition to Tier 1 and Tier 2 requirements, will ensure that a wider variety of technologies are developed as a result of RPS implementation.

In addition to the RPS Program, suppliers of electric power in the State also offer retail products using renewable or other environmentally preferable energy sources for which end-users typically pay a premium above the cost of power generated from conventional sources. Moreover, Regional Greenhouse Gas Initiative funds provided for within the newly established Strategic Energy Investment Fund Program have the potential to significantly contribute to the realization of new renewable facilities in the State.

The Commission will continue to review applications from facilities requesting certification as a Maryland renewable energy facility, oversee the Renewable Portfolio Standard

Program, and verify that the suppliers providing electricity products in the State of Maryland procure adequate renewable resources. As RPS program results are received and reviewed, further refinements to the program may be made to ensure that the objectives of the Maryland RPS Program are met.

Appendix A

Maryland Certified Renewable Energy Facilities (as of 11/1/2008)

Certification Date	Facility Name	Fuel	Tier	Facility Location	Rated Capacity
11/23/2005	Mallard Lake Electric	LFG	1	IL	25.0
11/23/2005	Rockford Electric	LFG	1	IL	2.0
11/23/2005	South Barrington Electric	LFG	1	IL	1.6
11/23/2005	Quad Cities	LFG	1	IL	2.0
11/23/2005	Luke Paper Company	BLQ	1	MD	65.0
11/23/2005	Arbor Hills	LFG	1	MI	25.0
11/23/2005	C&C Electric	LFG	1	MI	3.0
11/23/2005	Lyon Development	LFG	1	MI	5.0
11/23/2005	Charlotte Motor Speedway	LFG	1	NC	5.3
11/23/2005	MeadWestVaco	BLQ	1	VA	27.6
11/23/2005	Richmond Electric	LFG	1	VA	3.0
11/23/2005	MeadWestVaco	WDS	1	VA	4.2
12/14/2005	Primary Power International	WDS	1	MI	18.0
1/4/2006	Cadillac Renewable Energy	WDS	1	MI	39.6
1/25/2006	Northeast Maryland Waste Disposal Authority	MSW	2	MD	10.0
1/25/2006	Northeast Maryland Waste Disposal Authority	MSW	2	MD	68.0
3/8/2006	Lake Gas Recovery Facility	LFG	1	IL	9.3
3/8/2006	Wheelabrator Balt LP Gen Facility	MSW	2	MD	60.2
3/8/2006	Escanaba	BLQ	1	MI	39.1
3/8/2006	Escanaba	WDS	1	MI	23.7
3/8/2006	"Middlesex Generating Company, LLC"	LFG	1	NJ	22.3
3/8/2006	"Middlesex Generating Company, LLC"	LFG	1	NJ	22.3
3/8/2006	"Wheelabrator Gloucester Co., Inc."	MSW	2	NJ	14.0
3/8/2006	"Wheelabrator Falls, Inc."	MSW	2	PA	52.6
3/8/2006	Safe Harbor Water Corp Facility	WAT	2	PA	352.1
3/8/2006	Chestnut Ridge Gas Recovery Facility	LFG	1	TN	3.2
3/8/2006	Lake Lynn Power Station	WAT	2	WV	51.2
3/8/2006	PE Hydro (AP Misc Hydro H-1)	WAT	1	WV	6.0
3/15/2006	Edge Moor Unit 3	LFG	1	DE	75.0
3/15/2006	Edge Moor Unit 4	LFG	1	DE	177.0
3/15/2006	Edge Moor Unit 5	LFG	1	DE	446.0
3/15/2006	Greene Valley Gas Recovery Facility	LFG	1	IL	9.3
3/15/2006	Fairless Hills Facility	LFG	1	PA	60.0
3/15/2006	Montenay Montgomery LP Facility	MSW	2	PA	32.1
3/29/2006	Deep Creek	WAT	1	MD	9.6
3/29/2006	Allens Falls	WAT	1	NY	3.9
3/29/2006	Baldwinsville	WAT	1	NY	0.6
3/29/2006	Beardslee	WAT	1	NY	16.9
3/29/2006	Beebee Island	WAT	1	NY	8.8
3/29/2006	Belfort	WAT	1	NY	2.1
3/29/2006	Bennetts Bridge	WAT	1	NY	28.9
3/29/2006	Black River	WAT	1	NY	6.8
3/29/2006	Blake	WAT	1	NY	14.4
3/29/2006	Browns Falls	WAT	1	NY	15.8
3/29/2006	Chasm Falls	WAT	1	NY	3.8
3/29/2006	Colton	WAT	1	NY	29.1
3/29/2006	Deferiet	WAT	1	NY	10.6
3/29/2006	E.J. West	WAT	1	NY	20.6
3/29/2006	Eagle	WAT	1	NY	5.5

Note: The rated capacity is for the facility as a whole, and does not partition out the amount solely attributable to the renewable fuel sources.

Maryland Certified Renewable Energy Facilities (as of 11/1/2008) Cont'd.

Certification Date	Facility Name	Fuel	Tier	Facility Location	Rated Capacity
3/29/2006	East Norfolk	WAT	1	NY	3.6
3/29/2006	Eel Weir	WAT	1	NY	1.9
3/29/2006	Effley	WAT	1	NY	2.9
3/29/2006	Elmer	WAT	1	NY	1.8
3/29/2006	Ephratah	WAT	1	NY	1.2
3/29/2006	Feeder Dam	WAT	1	NY	24.6
3/29/2006	Five Falls	WAT	1	NY	22.9
3/29/2006	Flat Rock	WAT	1	NY	5.3
3/29/2006	Franklin Falls	WAT	1	NY	2.1
3/29/2006	Fulton	WAT	1	NY	1.0
3/29/2006	Glenwood	WAT	1	NY	1.0
3/29/2006	Granby	WAT	1	NY	9.9
3/29/2006	Hannawa	WAT	1	NY	7.5
3/29/2006	Herrings	WAT	1	NY	4.6
3/29/2006	Heuvelton	WAT	1	NY	0.9
3/29/2006	High Falls	WAT	1	NY	5.6
3/29/2006	Higley	WAT	1	NY	6.3
3/29/2006	Hogansburg	WAT	1	NY	0.3
3/29/2006	Hydraulic Race	WAT	1	NY	2.8
3/29/2006	Inghams	WAT	1	NY	6.3
3/29/2006	Johnsonville	WAT	1	NY	2.5
3/29/2006	Kamargo	WAT	1	NY	5.3
3/29/2006	Lighthouse Hill	WAT	1	NY	8.2
3/29/2006	Macomb	WAT	1	NY	0.9
3/29/2006	Minetto	WAT	1	NY	6.0
3/29/2006	Moshier	WAT	1	NY	8.2
3/29/2006	Newton Falls	WAT	1	NY	2.0
3/29/2006	Norfolk	WAT	1	NY	4.3
3/29/2006	Norwood	WAT	1	NY	2.2
3/29/2006	Oak Orchard	WAT	1	NY	0.3
3/29/2006	Oswegatchie	WAT	1	NY	1.8
3/29/2006	Oswego Falls East	WAT	1	NY	4.1
3/29/2006	Oswego Falls West	WAT	1	NY	1.7
3/29/2006	Parishville	WAT	1	NY	2.3
3/29/2006	Piercefield	WAT	1	NY	2.9
3/29/2006	Prospect	WAT	1	NY	18.1
3/29/2006	Rainbow	WAT	1	NY	23.7
3/29/2006	Raymondville	WAT	1	NY	2.1
3/29/2006	Schaghticoke	WAT	1	NY	12.5
3/29/2006	Schuylerville	WAT	1	NY	1.6
3/29/2006	Sewalls	WAT	1	NY	2.3
3/29/2006	Soft Maple	WAT	1	NY	10.9
3/29/2006	South Colton	WAT	1	NY	19.8
3/29/2006	South Edwards	WAT	1	NY	3.2
3/29/2006	Stark	WAT	1	NY	24.2
3/29/2006	Sugar Island	WAT	1	NY	4.1
3/29/2006	Talcville	WAT	1	NY	0.4
3/29/2006	Taylorville	WAT	1	NY	4.3
3/29/2006	Trenton	WAT	1	NY	18.9

Note: The rated capacity is for the facility as a whole, and does not partition out the amount solely attributable to the renewable fuel sources.

Maryland Certified Renewable Energy Facilities (as of 11/1/2008) Cont'd.

Certification Date	Facility Name	Fuel	Tier	Facility Location	Rated Capacity
3/29/2006	Varick	WAT	1	NY	5.7
3/29/2006	Waterport	WAT	1	NY	2.0
3/29/2006	West Delaware	WAT	1	NY	7.6
3/29/2006	Yaleville	WAT	1	NY	0.6
3/29/2006	School Street	WAT	2	NY	34.8
3/29/2006	Sherman Island	WAT	2	NY	30.8
3/29/2006	Spiers falls	WAT	2	NY	54.0
3/29/2006	Stewarts Bridge	WAT	2	NY	31.3
3/29/2006	Piney	WAT	1	PA	9.6
4/12/2006	Conowingo facility	WAT	2	MD	474.0
4/12/2006	Viking Energy of Northumberland	WDS	1	PA	16.2
4/12/2006	I-95 Landfill Phase II Units 1-4 facility	LFG	1	VA	3.2
4/12/2006	I-95 Landfill Phase I Units 1-4 facility	LFG	1	VA	3.2
4/12/2006	Fries Hydroelectric Project	WAT	1	VA	5.4
4/12/2006	Gualey River Power Partners LP	WAT	2	WV	80.0
4/19/2006	Hannibal Hydroelectric facility	WAT	2	WV	37.6
4/26/2006	Coshocton Mill	WDS	1	OH	16.5
4/26/2006	Hopewell Mill	BLQ	1	VA	25.9
4/26/2006	Hopewell Mill	WDS	1	VA	7.7
5/10/2006	Franklin Mill Facility	BLQ	1	VA	36.1
6/7/2006	Mendota Hills	WND	1	IL	50.4
6/7/2006	Allegheny No. 5	WAT	1	PA	9.5
6/7/2006	Allegheny No. 6	WAT	1	PA	8.6
6/28/2006	Chillecothe Paper Mill	BLQ	1	OH	92.8
7/26/2006	Peoples Generating Station	LFG	1	MI	2.4
7/26/2006	Venice Park Generating Facility	LFG	1	MI	0.8
8/9/2006	Westchester	LFG	1	IL	3.5
8/9/2006	Des Plaines	LFG	1	IL	3.5
9/6/2006	Big Shoals Hydro	WAT	1	VA	0.5
9/6/2006	Coleman Falls Hydro	WAT	1	VA	0.5
9/6/2006	Holcomb Rock Hydro	WAT	1	VA	0.6
9/6/2006	Snowden Falls Hydro Site	WAT	1	VA	0.5
9/13/2006	Conemaugh Hydro	WAT	1	PA	15.0
10/18/2006	DSWA Central Solid Waste Management Center Facility	LFG	1	DE	3.0
10/18/2006	DSWA Southern Solid Waste Management Center Facility	LFG	1	DE	4.0
10/25/2006	Somerset Windpower LLC	WND	1	PA	9.0
10/25/2006	Mill Run Windpower LLC Facility	WND	1	PA	15.0
10/25/2006	Waymart Wind Farm LP	WND	1	PA	64.5
10/25/2006	Backbone Mountain Windpower LLC Facility	WND	1	WV	66.0
11/1/2006	SPSA Waste to Energy Facility	MSW	2	VA	60.0
11/22/2006	Craven County Wood Energy LP	WDS	1	NC	50.0
11/22/2006	Pittsylvania Power Station	WDS	1	VA	83.0
2/21/2007	"Meyersdale Windpower, LLC"	WND	1	PA	30.0
3/28/2007	Union County Resource Recovery	MSW	2	NJ	45.0
4/11/2007	Archbold Power Station REF Cert	LFG	1	PA	20.0
4/25/2007	CID Gas Recovery	LFG	1	IL	6.0
4/25/2007	Kankakee Gas Recovery	LFG	1	IL	1.6
4/25/2007	Milam Gas Recovery	LFG	1	IL	2.4
4/25/2007	Settlers Hill Gas Recovery	LFG	1	IL	6.0

Note: The rated capacity is for the facility as a whole, and does not partition out the amount solely attributable to the renewable fuel sources.

Maryland Certified Renewable Energy Facilities (as of 11/1/2008) Cont'd.

Certification Date	Facility Name	Fuel	Tier	Facility Location	Rated Capacity
4/25/2007	Tazewell Gas Recovery	LFG	1	IL	2.4
4/25/2007	"Woodland Gas Recovery, LLC"	LFG	1	IL	1.6
4/25/2007	Stowe Power Production Plant	LFG	1	PA	6.0
4/25/2007	Lake View Gas Recovery	LFG	1	PA	6.0
4/25/2007	Metro Gas Recovery	LFG	1	WI	9.6
4/25/2007	Pheasant Run Gas Recovery	LFG	1	WI	8.8
4/25/2007	Omega Hills Gas Recovery	LFG	1	WI	9.3
8/15/2007	"Allegheny Ridge Wind Farm, LLC"	WND	1	PA	80.0
8/29/2007	"High Trail Wind, LLC"	WND	1	IL	198.0
12/5/2007	"Senecca Energy II, LLC - Ontario"	LFG	1	NY	5.6
12/5/2007	"Model City Energy, LLC"	LFG	1	NY	5.6
12/12/2007	"Innovative Energy Systems, Inc."	LFG	1	NY	4.8
1/2/2008	"Modern Innovative Energy, LLC"	LFG	1	NY	6.4
1/23/2008	"Senecca Energy II, LLC - Seneca Falls"	LFG	1	NY	17.6
2/13/2008	"Genesee Power Station, LP"	WDS	1	MI	36.0
3/5/2008	"Old Trail Wind Farm, LLC"	WND	1	IL	198.0
4/2/2008	Carolina Power & Light - Walters	WAT	2	NC	112.0
4/2/2008	Carolina Power & Light - Marshall	WAT	1	NC	5.0
4/2/2008	Carolina Power & Light - Tillery	WAT	2	NC	86.0
4/2/2008	Carolina Power & Light - Blewett	WAT	1	NC	22.0
6/25/2008	Spring Grove	BLQ	1	PA	109.7
7/2/2008	"WM Renewable Energy, LLC"	LFG	1	VA	4.8
9/24/2008	"Monmouth Energy, Inc"	LFG	1	NJ	7.4
10/1/2008	SECCRA Community Landfill facility	LFG	1	PA	1.8
10/8/2008	Prince George's Corrections Generation Facility	LFG	1	MD	2.2
10/8/2008	Brown Station Road Sanitary Landfill	LFG	1	MD	4.5
10/29/2008	Beecher	LFG	1	IL	2.1

Note: The rated capacity is for the facility as a whole, and does not partition out the amount solely attributable to the renewable fuel sources.

Fuel Source Key:
BLQ – Black Liquor
LFG – Landfill Gas
MSW – Municipal Solid Waste
WAT – Hydroelectric
WDS – Wood/Wood Waste Solids
WND – Wind