

SENATE BILL 684

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By: **Senators Garagiola, Ferguson, Klausmeier, Montgomery, Pinsky,
Ramirez, Raskin, and Young**

Introduced and read first time: February 1, 2013

Assigned to: Finance

A BILL ENTITLED

1 AN ACT concerning

2 **Renewable Energy Portfolio Standard – Qualifying Biomass**

3 FOR the purpose of limiting the eligibility of qualifying biomass as a Tier 1 renewable
4 source for the purposes of the renewable energy portfolio standard to qualifying
5 biomass used at a generation unit that started commercial operation on or after
6 a certain date and that achieves a certain total system efficiency; providing that
7 qualifying biomass used at a certain generation unit that started commercial
8 operation on or before a certain date or that achieves not more than a certain
9 percentage of total system efficiency is eligible as a Tier 2 renewable source;
10 providing for the application of this Act; defining certain terms; and generally
11 relating to the renewable portfolio standard for qualifying biomass.

12 BY repealing and reenacting, with amendments,
13 Article – Public Utilities
14 Section 7–701 and 7–704(a)
15 Annotated Code of Maryland
16 (2010 Replacement Volume and 2012 Supplement)

17 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF
18 MARYLAND, That the Laws of Maryland read as follows:

19 **Article – Public Utilities**

20 7–701.

21 (a) In this subtitle the following words have the meanings indicated.

22 (b) “Administration” means the Maryland Energy Administration.

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



1 **(B-1) “FUEL INPUT” MEANS THE HIGHER HEATING VALUE OF THE INPUT**
2 **FUEL TYPE, MEASURED IN BTU/LB, BASED ON THE STANDARDIZED HEATING**
3 **VALUE OF THE FUEL TYPE, MULTIPLIED BY THE ANNUAL FUEL USED IN**
4 **AS-DELIVERED TONS, MULTIPLIED BY 2,000.**

5 (c) “Fund” means the Maryland Strategic Energy Investment Fund
6 established under § 9-20B-05 of the State Government Article.

7 (c-1) “Geothermal heating and cooling system” means a system that:

8 (1) exchanges thermal energy from groundwater or a shallow ground
9 source to generate thermal energy through a geothermal heat pump or a system of
10 geothermal heat pumps interconnected with any geothermal extraction facility that is:

11 (i) a closed loop or a series of closed loop systems in which fluid
12 is permanently confined within a pipe or tubing and does not come in contact with the
13 outside environment; or

14 (ii) an open loop system in which ground or surface water is
15 circulated in an environmentally safe manner directly into the facility and returned to
16 the same aquifer or surface water source;

17 (2) meets or exceeds the current federal Energy Star product
18 specification standards;

19 (3) replaces or displaces inefficient space or water heating systems
20 whose primary fuel is electricity or a nonnatural gas fuel source;

21 (4) replaces or displaces inefficient space cooling systems that do not
22 meet federal Energy Star product specification standards;

23 (5) is manufactured, installed, and operated in accordance with
24 applicable government and industry standards; and

25 (6) does not feed electricity back to the grid.

26 (d) “Industrial process load” means the consumption of electricity by a
27 manufacturing process at an establishment classified in the manufacturing sector
28 under the North American Industry Classification System, Codes 31 through 33.

29 (e) “Old growth timber” means timber from a forest:

30 (1) at least 5 acres in size with a preponderance of old trees, of which
31 the oldest exceed at least half the projected maximum attainable age for the species;
32 and

33 (2) that exhibits several of the following characteristics:

1 (i) shade-tolerant species are present in all age and size
2 classes;

3 (ii) randomly distributed canopy gaps are present;

4 (iii) a high degree of structural diversity characterized by
5 multiple growth layers reflecting a broad spectrum of ages is present;

6 (iv) an accumulation of dead wood of varying sizes and stages of
7 decomposition accompanied by decadence in live dominant trees is present; and

8 (v) pit and mound topography can be observed.

9 (f) "PJM region" means the control area administered by the PJM
10 Interconnection, Inc., as the area may change from time to time.

11 (g) "Poultry litter" means the fecal and urinary excretions of poultry,
12 including wood shavings, sawdust, straw, rice hulls, and other bedding material for
13 the disposition of manure.

14 (h) (1) "Qualifying biomass" means a nonhazardous, organic material that
15 is available on a renewable or recurring basis, and is:

16 (i) waste material that is segregated from inorganic waste
17 material and is derived from sources including:

18 1. except for old growth timber, any of the following
19 forest-related resources:

20 A. mill residue, except sawdust and wood shavings;

21 B. precommercial soft wood thinning;

22 C. slash;

23 D. brush; or

24 E. yard waste;

25 2. a pallet, crate, or dunnage;

26 3. agricultural and silvicultural sources, including tree
27 crops, vineyard materials, grain, legumes, sugar, and other crop by-products or
28 residues; or

1 4. gas produced from the anaerobic decomposition of
2 animal waste or poultry waste; or

3 (ii) a plant that is cultivated exclusively for purposes of being
4 used at a Tier 1 renewable source or a Tier 2 renewable source to produce electricity.

5 (2) “Qualifying biomass” includes biomass listed in paragraph (1) of
6 this subsection that is used for co-firing, subject to § 7-704(d) of this subtitle.

7 (3) “Qualifying biomass” does not include:

8 (i) unsegregated solid waste or postconsumer wastepaper; or

9 (ii) an invasive exotic plant species.

10 (h-1) “Thermal biomass system” means a system that:

11 (1) uses:

12 (i) primarily animal manure, including poultry litter, and
13 associated bedding to generate thermal energy; and

14 (ii) food waste or qualifying biomass for the remainder of the
15 feedstock;

16 (2) is used in the State; and

17 (3) complies with all applicable State and federal statutes and
18 regulations, as determined by the appropriate regulatory authority.

19 (i) “Renewable energy credit” or “credit” means a credit equal to the
20 generation attributes of 1 megawatt-hour of electricity that is derived from a Tier 1
21 renewable source or a Tier 2 renewable source that is located:

22 (1) in the PJM region; or

23 (2) outside the area described in item (1) of this subsection but in a
24 control area that is adjacent to the PJM region, if the electricity is delivered into the
25 PJM region.

26 (j) “Renewable energy portfolio standard” or “standard” means the
27 percentage of electricity sales at retail in the State that is to be derived from Tier 1
28 renewable sources and Tier 2 renewable sources in accordance with § 7-703(b) of this
29 subtitle.

1 (k) “Renewable on-site generator” means a person who generates electricity
2 on site from a Tier 1 renewable source or a Tier 2 renewable source for the person’s
3 own use.

4 (k-1) (1) “Solar water heating system” means a system that:

5 (i) is comprised of glazed liquid-type flat-plate or tubular solar
6 collectors as defined and certified to the OG-100 standard of the Solar Ratings and
7 Certification Corporation;

8 (ii) generates energy using solar radiation for the purpose of
9 heating water; and

10 (iii) does not feed electricity back to the electric grid.

11 (2) “Solar water heating system” does not include a system that
12 generates energy using solar radiation for the sole purpose of heating a hot tub or
13 swimming pool.

14 (l) “Tier 1 renewable source” means one or more of the following types of
15 energy sources:

16 (1) solar energy, including energy from photovoltaic technologies and
17 solar water heating systems;

18 (2) wind;

19 (3) qualifying biomass **USED AT A GENERATION UNIT THAT:**

20 **(I) STARTED COMMERCIAL OPERATION ON OR AFTER**
21 **JANUARY 1, 2005; AND**

22 **(II) ACHIEVES A TOTAL SYSTEM EFFICIENCY OF 65% OR**
23 **MORE;**

24 (4) methane from the anaerobic decomposition of organic materials in
25 a landfill or wastewater treatment plant;

26 (5) geothermal, including energy generated through geothermal
27 exchange from or thermal energy avoided by, groundwater or a shallow ground source;

28 (6) ocean, including energy from waves, tides, currents, and thermal
29 differences;

30 (7) a fuel cell that produces electricity from a Tier 1 renewable source
31 under item (3) or (4) of this subsection;

1 (8) a small hydroelectric power plant of less than 30 megawatts in
2 capacity that is licensed or exempt from licensing by the Federal Energy Regulatory
3 Commission;

4 (9) poultry litter-to-energy;

5 (10) waste-to-energy;

6 (11) refuse-derived fuel; and

7 (12) thermal energy from a thermal biomass system.

8 (m) “Tier 2 renewable source” means **ONE OR MORE OF THE FOLLOWING**
9 **TYPES OF ENERGY SOURCES:**

10 **(1) hydroelectric power other than pump storage generation; AND**

11 **(2) QUALIFYING BIOMASS USED AT A GENERATION UNIT THAT:**

12 **(I) STARTED COMMERCIAL OPERATION ON OR BEFORE**
13 **DECEMBER 31, 2004; OR**

14 **(II) ACHIEVES A TOTAL SYSTEM EFFICIENCY OF NOT MORE**
15 **THAN 65%.**

16 **(N) “TOTAL SYSTEM EFFICIENCY” MEANS THE SUM OF THE NET USEFUL**
17 **POWER OUTPUT AND THE NET USEFUL THERMAL OUTPUT DIVIDED BY THE**
18 **TOTAL FUEL INPUT.**

19 **(O) (1) “USEFUL THERMAL OUTPUT” MEANS ENERGY:**

20 **(I) IN THE FORM OF DIRECT HEAT, STEAM, HOT WATER, OR**
21 **OTHER THERMAL FORM THAT IS USED IN PRODUCTION AND BENEFICIAL**
22 **MEASURES FOR HEATING, COOLING, HUMIDITY CONTROL, PROCESS USE, OR**
23 **OTHER VALID THERMAL END USE ENERGY REQUIREMENTS; AND**

24 **(II) FOR WHICH FUEL OR ELECTRICITY WOULD OTHERWISE**
25 **BE CONSUMED.**

26 **(2) “USEFUL THERMAL OUTPUT” DOES NOT INCLUDE THERMAL**
27 **ENERGY USED FOR THE PURPOSE OF DRYING OR REFINING BIOMASS FUEL.**

28 7-704.

1 (a) (1) Energy from a Tier 1 renewable source:

2 (i) **EXCEPT FOR QUALIFYING BIOMASS**, is eligible for
3 inclusion in meeting the renewable energy portfolio standard regardless of when the
4 generating system or facility was placed in service; and

5 (ii) may be applied to the percentage requirements of the
6 standard for either Tier 1 renewable sources or Tier 2 renewable sources.

7 (2) (i) 1. Except as provided in subparagraph 2 of this
8 subparagraph, energy from a Tier 1 renewable source under § 7-701(l)(1), (5), (9), (10),
9 or (11) of this subtitle is eligible for inclusion in meeting the renewable energy
10 portfolio standard only if the source is connected with the electric distribution grid
11 serving Maryland.

12 2. On or before December 31, 2011, energy from a Tier 1
13 renewable source under § 7-701(l)(1) of this subtitle that is not connected with the
14 electric distribution grid serving Maryland is eligible for inclusion in meeting the
15 renewable energy portfolio standard only if offers for solar credits from Maryland grid
16 sources are not made to the electricity supplier that would satisfy requirements under
17 the standard and only to the extent that such offers are not made.

18 (ii) If the owner of a solar generating system in this State
19 chooses to sell solar renewable energy credits from that system, the owner must first
20 offer the credits for sale to an electricity supplier or electric company that shall apply
21 them toward compliance with the renewable energy portfolio standard under § 7-703
22 of this subtitle.

23 (3) Energy from a Tier 1 renewable source under § 7-701(l)(8) of this
24 subtitle is eligible for inclusion in meeting the renewable energy portfolio standard if it
25 is generated at a dam that existed as of January 1, 2004, even if a system or facility
26 that is capable of generating electricity did not exist on that date.

27 (4) Energy from a Tier 2 renewable source under **[§ 7-701(m)] §**
28 **7-701(M)(1)** of this subtitle is eligible for inclusion in meeting the renewable energy
29 portfolio standard through 2018 if it is generated at a system or facility that existed
30 and was operational as of January 1, 2004, even if the facility or system was not
31 capable of generating electricity on that date.

32 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall be
33 construed to apply only prospectively and may not be applied or interpreted to have
34 any effect on or application to the following:

35 (1) contracts entered into for the purchase of renewable energy credits
36 before the effective date of this Act; and

1 (2) renewable energy credits included in PJM's Generator Attributes
2 Tracking system that were generated by a facility that qualified as a Tier 1 energy
3 source before the effective date of this Act.

4 SECTION 3. AND BE IT FURTHER ENACTED, That this Act shall take effect
5 October 1, 2013.