

SENATE BILL 976

C5

3lr3025

By: **Senator Pipkin**

Introduced and read first time: February 15, 2013

Assigned to: Rules

A BILL ENTITLED

1 AN ACT concerning

2 **Renewable Energy Portfolio Standard – Tier 1 Renewable Sources –**
3 **Qualifying Natural Gas**

4 FOR the purpose of expanding the definition of a Tier 1 renewable source to include
5 qualifying natural gas; making technical changes; defining a certain term;
6 providing for a delayed effective date; and generally relating to natural gas and
7 Tier 1 renewable sources applied to the renewable energy portfolio standard.

8 BY repealing and reenacting, with amendments,
9 Article – Public Utilities
10 Section 7–701 and 7–704(a)(2) through (4) and (c)(3)
11 Annotated Code of Maryland
12 (2010 Replacement Volume and 2012 Supplement)

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

15 **Article – Public Utilities**

16 7–701.

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

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

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

21 [(c–1)] (D) “Geothermal heating and cooling system” means a system that:

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



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

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

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

10 (2) meets or exceeds the current federal Energy Star product
11 specification standards;

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

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

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

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

19 **[(d)] (E)** “Industrial process load” means the consumption of electricity by a
20 manufacturing process at an establishment classified in the manufacturing sector
21 under the North American Industry Classification System, Codes 31 through 33.

22 **[(e)] (F)** “Old growth timber” means timber from a forest:

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

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

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

29 (ii) randomly distributed canopy gaps are present;

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

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

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

4 **[(f)] (G)** “PJM region” means the control area administered by the PJM
5 Interconnection, Inc., as the area may change from time to time.

6 **[(g)] (H)** “Poultry litter” means the fecal and urinary excretions of poultry,
7 including wood shavings, sawdust, straw, rice hulls, and other bedding material for
8 the disposition of manure.

9 **[(h)] (I)** (1) “Qualifying biomass” means a nonhazardous, organic
10 material that is available on a renewable or recurring basis, and is:

11 (i) waste material that is segregated from inorganic waste
12 material and is derived from sources including:

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

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

16 B. precommercial soft wood thinning;

17 C. slash;

18 D. brush; or

19 E. yard waste;

20 2. a pallet, crate, or dunnage;

21 3. agricultural and silvicultural sources, including tree
22 crops, vineyard materials, grain, legumes, sugar, and other crop by-products or
23 residues; or

24 4. gas produced from the anaerobic decomposition of
25 animal waste or poultry waste; or

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

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

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

- 1 (i) unsegregated solid waste or postconsumer wastepaper; or
2 (ii) an invasive exotic plant species.

3 **(J) “QUALIFYING NATURAL GAS” MEANS NATURAL GAS THAT POWERS**
4 **AN ELECTRIC GENERATION FACILITY THAT:**

5 **(1) WAS PREVIOUSLY POWERED BY COAL COMBUSTION; OR**

6 **(2) REPLACES AN ELECTRIC GENERATION FACILITY POWERED BY**
7 **COAL COMBUSTION.**

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

9 (1) uses:

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

12 (ii) food waste or qualifying biomass for the remainder of the
13 feedstock;

14 (2) is used in the State; and

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

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

20 (1) in the PJM region; or

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

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

28 [(k)] **(M) “Renewable on-site generator” means a person who generates**
29 **electricity on site from a Tier 1 renewable source or a Tier 2 renewable source for the**
30 **person’s own use.**

1 [(k-1)] (N) (1) “Solar water heating system” means a system that:

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

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

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

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

11 (O) **“THERMAL BIOMASS SYSTEM” MEANS A SYSTEM THAT:**

12 (1) **USES:**

13 (I) **PRIMARILY ANIMAL MANURE, INCLUDING POULTRY**
14 **LITTER, AND ASSOCIATED BEDDING TO GENERATE THERMAL ENERGY; AND**

15 (II) **FOOD WASTE OR QUALIFYING BIOMASS FOR THE**
16 **REMAINDER OF THE FEEDSTOCK;**

17 (2) **IS USED IN THE STATE; AND**

18 (3) **COMPLIES WITH ALL APPLICABLE STATE AND FEDERAL**
19 **STATUTES AND REGULATIONS, AS DETERMINED BY THE APPROPRIATE**
20 **REGULATORY AUTHORITY.**

21 [(l)] (P) “Tier 1 renewable source” means one or more of the following types
22 of energy sources:

23 (1) solar energy, including energy from photovoltaic technologies and
24 solar water heating systems;

25 (2) wind;

26 (3) qualifying biomass;

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

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

3 (6) ocean, including energy from waves, tides, currents, and thermal
4 differences;

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

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

10 (9) poultry litter-to-energy;

11 (10) waste-to-energy;

12 (11) refuse-derived fuel; [and]

13 (12) thermal energy from a thermal biomass system; **AND**

14 **(13) QUALIFYING NATURAL GAS.**

15 **[(m)] (Q)** “Tier 2 renewable source” means hydroelectric power other than
16 pump storage generation.

17 7-704.

18 (a) (2) (i) 1. Except as provided in subparagraph 2 of this
19 subparagraph, energy from a Tier 1 renewable source under **[\$ 7-701(l)(1)] §**
20 **7-701(P)(1)**, (5), (9), (10), or (11) of this subtitle is eligible for inclusion in meeting the
21 renewable energy portfolio standard only if the source is connected with the electric
22 distribution grid serving Maryland.

23 2. On or before December 31, 2011, energy from a Tier 1
24 renewable source under **[\$ 7-701(l)(1)] § 7-701(P)(1)** of this subtitle that is not
25 connected with the electric distribution grid serving Maryland is eligible for inclusion
26 in meeting the renewable energy portfolio standard only if offers for solar credits from
27 Maryland grid sources are not made to the electricity supplier that would satisfy
28 requirements under the standard and only to the extent that such offers are not made.

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

1 (3) Energy from a Tier 1 renewable source under [§ 7-701(l)(8)] §
2 **7-701(P)(8)** of this subtitle is eligible for inclusion in meeting the renewable energy
3 portfolio standard if it is generated at a dam that existed as of January 1, 2004, even if
4 a system or facility that is capable of generating electricity did not exist on that date.

5 (4) Energy from a Tier 2 renewable source under [§ 7-701(m)] §
6 **7-701(Q)** of this subtitle is eligible for inclusion in meeting the renewable energy
7 portfolio standard through 2018 if it is generated at a system or facility that existed
8 and was operational as of January 1, 2004, even if the facility or system was not
9 capable of generating electricity on that date.

10 (c) (3) On or before December 31, 2008, an electricity supplier shall
11 receive 110% credit toward meeting the renewable energy portfolio standard for
12 energy derived from methane under [§ 7-701(l)(4)] **§ 7-701(P)(4)** of this subtitle.

13 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect
14 January 1, 2014.