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#### DELAWARE STATE SENATE

## 142nd GENERAL ASSEMBLY

## SENATE SUBSTITUTE NO. 1

FOR

## SENATE BILL NO. 161

## AN ACT TO AMEND TITLE 26 OF THE DELAWARE CODE RELATING TO RENEWABLE ENERGY PORTFOLIO STANDARDS.

## BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF DELAWARE (Three-fifths of all members elected to each house thereof concurring therein):

1	Section 1. Amend Chapter 1, Title 26 of the Delaware Code, by inserting therein, between subchapters III and IV thereof,
2	the following new subchapter:

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"Subchapter III-A. Renewable Energy Portfolio Standards.

- 4 § 351. Short title; declaration of policy.
  - (a) This subchapter shall be known and may be cited as the Renewable Energy Portfolio Standards Act.
- 6 (b) The General Assembly finds and declares that the benefits of electricity from renewable energy resources 7 accrue to the public at large and electric suppliers and consumers share an obligation to develop a minimum 8 level of these resources in the electricity supply portfolio of the state. These benefits include improved 9 regional and local air quality, improved public health, increased electric supply diversity, increased 10 protection against price volatility and supply disruption, improved transmission and distribution performance, 11 and new economic development opportunities.
- (c) It is therefore the purpose and intent of the General Assembly in enacting the Renewable Energy Portfolio
   Standards Act to establish a market for electricity from these resources in Delaware, and to lower the cost to
   consumers of electricity from these resources.
- 15 § 352. Definitions.
  - As used in this subchapter:

- (1) "Alternative Compliance Payment" means a payment of a certain dollar amount per megawatt hour,
   which a Retail Electricity Provider may submit in lieu of supplying the minimum percentage of Eligible
   Energy Resources required under Schedule I in § 354 of this title.
  - (2) "Dedicated energy crop" means plants cultivated and harvested specifically for use as a fuel for the purpose of generating electricity.
    - (3) "DNREC" means Delaware Department of Natural Resources and Environmental Conservation.
      - (4) "Commission" means the Delaware Public Service Commission.
  - (5) "Compliance Year" means a calendar year beginning January 1 and ending December 31, for which a Retail Electricity Supplier must demonstrate that it has met the requirements of this subchapter.
    - (6) "Customer-Sited Generation" means a generation unit that is interconnected on the End-Use Customer's side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the End-Use Customer
- 29 (7) "Eligible Energy Resources" means energy sources located within the PJM region that produce electric 30 energy from solar electric technologies; wind energy technologies; geothermal technologies; ocean 31 energy technologies including energy from waves, tides, currents, and thermal differences; hydropower 32 from facilities less than 30 MW in capacity that meet appropriate environmental standards established by 33 DNREC; methane gas from the anaerobic decomposition of organic materials in a landfill or other 34 anaerobic digestion technologies; fuel cells powered by renewable fuels; or biomass facilities; provided, 35 however, that the biomass is cultivated and harvested in a sustainable manner and that the biomass 36 facility is not an "incinerator" as that term is defined elsewhere in this title. "Eligible Energy Resources" 37 include those energy sources set forth in § 354(e) of this title.
- (8) "End-Use Customer" means a person or entity in Delaware that purchases electrical energy at retail from
   a Retail Electricity Supplier.
  - (9) "Fund" means the Delaware Green Energy Fund.
- 41 (10) "GATS" means the Generation Attribution Tracking System that, as of (the effective date of these rules),
  42 is under development by PJM.
- (11) "Generation Attribute" means a non-price characteristic of the electrical energy output of a Generation
   Unit including, but not limited to, the Unit's fuel type, geographic location, emissions, vintage, and RPS
   eligibility.

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- (12) "Generation Unit" means a facility that converts a fuel or an energy resource into electrical energy.
- 47 (13) "New Renewable Generation" means Eligible Energy Resources first going into commercial operation
   48 after December 31, 1997.
- 49 (14) "PJM" or "PJM Interconnection" means the regional transmission organization (RTO) that coordinates
   50 the movement of wholesale electricity in the PJM region, or its successors at law.
- (15) "PJM region" means the area within which the movement of wholesale electricity is coordinated by PJM
   Interconnection. The PJM region shall be as described in the Amended and Restated Operating
   Agreement of PJM and may include all or parts of Delaware, Maryland, New Jersey, Ohio,
   Pennsylvania, Virginia, West Virginia, and the District of Columbia and such other territories as the
   Amended and Restated Operating Agreement of PJM may provide.
- (16) "Renewable Energy Credit" means a tradable instrument, equal to 1 megawatt-hour of retail electricity
  in the state that is derived from Eligible Energy Resources, that is used to track and verify compliance
  with the provisions of this subchapter.
- (17) "Renewable fuel" means a fuel that is naturally regenerated over a short time scale and is either derived
  from the sun (such as thermal, photochemical or photoelectric), or from other natural sources such as
  wind, hydropower, geothermal and ocean energy, or photosynthetic energy stored in biomass sources
  like dedicated energy crops. This term does not include a fossil fuel, a waste product from a fossil fuel
  source, or a waste product from an inorganic source.
- 64 (18) "RPS" and "Renewable Energy Portfolio Standard" means the percentage of electricity sales at retail in
  65 the state that is to be derived from Eligible Energy Resources.
- (19) "Retail Electricity Product" means an electrical energy offering that is distinguished by its Generation
   Attributes and that is offered for sale by a Retail Electricity Supplier to End-Use Customers.
- (20) "Retail Electricity Supplier" means a person or entity that sells electrical energy to End-Use Customers
   in Delaware, including but not limited to non-regulated power producers, municipal utilities, electric
   utility distribution companies supplying standard offer, default service, or any successor service to End-Use Customers.
- 72 § 353. Renewable Energy Portfolio Standards Administration.
- The Delaware Public Service Commission shall determine, verify, and assure compliance with this
   Renewable Energy Portfolio Standard pursuant to this subchapter that apply to all retail electricity sales in the State.

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- § 354. Renewable Energy Portfolio Standards and Eligible Energy Resources
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(a) The total annual sales of each Retail Electricity Product sold to Delaware end-use customers by a Retail Electricity Supplier during any given compliance year shall include a minimum percentage of electrical energy sales with Eligible Energy Resources as follows:

SCHEDULE I		
Compliance Year	Cumulative Minimum Percentage	
2006	1%	
2007	1.5%	
2008	2%	
2009	2.75%	
2010	3.5%	
2011	4.25%	
2012	5%	
2013	5.75%	
2014	6.5%	
2015	7.25%	
2016	8%	
2017	9%	
2018	10%	

(b) Cumulative minimum percentage requirements for of Eligible Energy Resources shall be established by
Commission rules for Compliance Year 2019 and each subsequent year. In no case shall the minimum
percentages established by Commission rules be lower than those required for Compliance Year 2018 in
Schedule I, subsection (a) of this section. Each of the rules setting such minimum percentage shall be
adopted at least two years prior to the minimum percentage being required.
(c) Beginning in Compliance Year 2009, and in each Compliance Year thereafter, the Commission may review

the status of Schedule I and report to the legislature on the status of the pace of the scheduled percentage increases toward the goal of 10%. If the Commission concludes at this time that the schedule either needs to

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be accelerated or decelerated, it may also make recommendations to the General Assembly for legislative changes to the RPS.

- 90 (d) Beginning in Compliance Year 2014, and in each Compliance Year thereafter, the Commission may, in the 91 event of circumstances specified in this subsection and after conducting hearings, accelerate or slow the 92 scheduled percentage increases towards meeting the goal of 10%. The Commission may only slow the 93 increases if the Commission finds that at least 30% of RPS compliance has been met through the alternative 94 compliance payment for three (3) consecutive years, despite adequate planning by the Retail Electricity Suppliers. The Commission may only accelerate the scheduled percentage increases after finding that the 95 96 average price for renewable energy credits eligible for RPS compliance has, for two (2) consecutive years, 97 been below a predetermined market-based price threshold to be established by the Commission. The 98 Commission shall establish the predetermined market-based price threshold in consultation with the 99 Delaware Energy Office. Rules that would alter the percentage targets shall be promulgated at least two 100 years before the percentage change takes effect. In no event shall the Commission reduce the percentage 101 target below any level reached to that point.
- 102 (e) The following energy sources qualify as Eligible Energy Resources for the purposes of this Act:
  - Solar energy technologies that employ solar radiation to produce electricity that powers electricity generators;
- 105 (2) Electricity derived from wind energy;
  106 (3) Electricity derived from ocean energy including wave or tidal action, currents, or thermal
- 107 differences;
- 108(4) Geothermal energy technologies that generate electricity with a steam turbine, driven by hot water109or steam extracted from geothermal reservoirs in the earth's crust.
- 110 (5) Electricity generated by a fuel cell powered by Renewable Fuels;
- 111 (6) Electricity generated by the combustion of methane gas captured from landfill gas recovery systems
  112 installed before January 1, 2006;
- (7) Electricity generated by the combustion of methane gas captured from a landfill gas recovery system
  installed after January 1, 2006, provided that the system is equipped with state of the art pollution
  controls;

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(8) Electricity generated by the combustion of gas from the anaerobic digestion of organic material;

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- 117 (9) Electricity generated from the combustion of biomass that has been cultivated and harvested in a
  118 sustainable manner as determined by DNREC, where the biomass facility is not an "incinerator" as
  119 defined elsewhere in this title; and
- (10) Electricity generated by a hydroelectric facility that has a maximum design capacity of 30
   megawatts or less from all generating units combined that meet appropriate environmental standards
   as determined by DNREC.
- (f) For each Retail Electricity Supplier, no more than 0.5% of each year's total retail sales may be met from
  Eligible Energy Resources that are not New Renewable Generation resources.
- (g) A Retail Electricity Supplier shall not use energy used to satisfy another state's renewable energy portfolio
   requirements for compliance with Schedule I of subsection (a) of this section.
- (h) An applicant's compliance with Schedule I of subsection (a) of this section shall be based on historical data,
   collected in a manner consistent with industry standard and Commission regulations. An electric supplier
   shall meet the renewable energy portfolio standards by accumulating the equivalent amount of renewable
   energy credits that equal the percentage required under this section.
- 131 § 355. Renewable Energy Credits.

# (a) Energy sold on or after January 1, 2006 may be used to create and accumulate renewable energy credits for the purposes of calculating compliance with the Renewable Energy Portfolio Standards established pursuant to this subchapter.

- (b) Energy production from customer-sited Eligible Energy Resource may also be used to demonstrate
   compliance, provided that the facilities are physically located in Delaware.
- (c) Aggregate generation from small eligible energy sources, 100 kilowatts of capacity or less, may be used to
   meet the requirements of Schedule I, provided that the generators or their agents document the level of
   generation, as recorded by appropriate metering and power sales, on an annual basis.
- 140 § 356. Multiple credits for specific energy sources.
- (a) An electric supplier shall receive 300% credit toward meeting the Renewable Energy Portfolio Standards
  established pursuant to this subchapter for energy derived from the following sources installed on or before
  December 31, 2014:
- 144 (1) Solar electric; or
- 145 (2) Renewable fuel that is used in a fuel cell.

- (b) An electric supplier shall receive 150% credit toward meeting the Renewable Energy Portfolio Standards
  established pursuant to this subchapter for energy derived from offshore wind located at least 3 miles from
  the shoreline and installed on or before December 31, 2011.
- 149 § 357. Proportional credit for qualifying biomass.
- An electric supplier shall receive credit toward meeting Renewable Energy Portfolio Standards established pursuant to this subchapter for electricity derived from the qualifying biomass fraction of biomass combined with other fuels.
- 153 § 358. Issuance of Renewable Energy Credits; Reporting requirement; Alternative Compliance Payment.
- (a) The Commission, or its designee, shall issue renewable energy credits (RECs) for use in complying with this
  subchapter, in accordance with this section. Once the GATS system is operational and PJM Interconnection
  begins issuing RECs, the Board may issue an order approving the use of RECs issued by PJM
  Interconnection for compliance with this Act.
- (b) Beginning January 1, 2006 each electric supplier shall submit an annual report to the Commission, on a form
  and by a date specified by the Commission, that:
- 160 (1) Demonstrates that the electric supplier has complied with the Renewable Energy Portfolio Standards
   161 established pursuant to this subchapter and includes the submission of the required amount of
   162 renewable energy credits; or
- 163 (2) Demonstrates the amount of electricity sales by which the electric supplier failed to meet the164 applicable renewable energy portfolio standard.
- (c) In lieu of standard means of compliance with this statute, a retail electric supplier may pay into the Fund an
   alternative compliance payment of \$50 for each megawatt-hour. Money from alternative compliance
   payments shall be utilized by the Fund solely to support or implement projects that will increase the amount
   of electric energy generated from Eligible Energy Resources.
- (d) The Commission shall establish sanctions for those retail electricity suppliers that fail to comply with the
  Commission's regulations. Such sanction shall be designed to ensure compliance and may include retail
  electricity license suspension or revocation; requirements for retail electricity suppliers once deemed noncompliant to file compliance plans in subsequent years; denial of new rate increases and a return to rate
  levels previous to last rate increase; and financial penalties that, for distribution companies supplying

- 174 standard offer service, last resort service, or any successor service to End-Use Customers, shall not be 175 recoverable in rates.
- 176 § 359. Renewable Energy Trading System.
- 177 (a) The Commission shall establish, maintain or participate in a market-based renewable energy tracking system 178 to facilitate the creation, and transfer of renewable energy credits among electric suppliers.
- 179 (b) The Commission may contract with a for-profit or a nonprofit entity to administer, or assist in the 180 administration of, the electricity trading system required pursuant to this section.
- 181 (c) The renewable energy trading system shall include a registry of pertinent information regarding all:
- 182 (1) Available renewable energy credits; and
  - (2) Renewable energy credit transactions among electric suppliers in the state, including:
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- a. The creation and application of renewable energy credits; and
- b. The number of renewable energy credits sold or transferred.
- 186 (d) The renewable energy trading system registry shall provide current information to electric suppliers and the 187 public on the status of renewable energy credits created, sold, or transferred in the state. Information 188 contained in the renewable energy trading system registry shall be available by computer network access through the Internet. 189
- 190 § 360. Renewable Energy Trading.
- 191 (a) An electric supplier may use accumulated renewable energy credits to meet the Renewable Energy Portfolio 192 Standard established pursuant to this subchapter, and may sell or transfer any renewable energy credit not 193 needed to meet said standards.
- 194 (b) The Commission shall establish rules for flexibility mechanisms that allow Retail Electricity Suppliers to 195 allow New Renewable Generation generated during 2005 to be banked as early compliance, usable towards 196 meeting the 2006 requirement.
- 197 (c) A renewable energy credit shall exist for 2 years from the date created unless diminished or extinguished 198 before the expiration of 2 years by:
- 199 (1) The electric supplier that created the credit; or
- 200 (2) A nonaffiliated entity of the electric supplier:
- 201 That purchased the credit from the electric supplier creating the credit; or a.
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- b. To whom the electric supplier otherwise transferred the credit.

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- 203 § 361. Renewable Energy Credit Transaction Fee.
- The Commission may impose an administrative fee on a renewable energy credit transaction, but the amount of the fee may not exceed the Commission's actual direct cost of processing the transaction.
- 206 § 362. Rules and Regulations.
- 207 The Delaware Public Service Commission shall adopt rules and regulations necessary to implement the
- 208 provisions of this subchapter. The Commission shall make its regulations as consistent as possible with those of other
- states in the region with similar requirements in order to minimize the compliance burdens imposed by this statute and
- 210 in order to avoid duplication of effort."
- 211 Section 2. The Delaware Public Service Commission shall adopt rules and regulations necessary to implement the
- 212 provisions of this Act no later than July 1, 2005.
- 213 Section 3. Nothing in this Act shall be construed to interfere with the execution of any contracts to purchase electricity in
- 214 effect on the day this Act is enacted into law.
- 215 Section 4. If any provision of this Act or the application thereof to any person or circumstance is held invalid, such
- 216 invalidity shall not affect other provisions or applications of this Act which can be given effect without the invalid provisions
- 217 or application, and to this end the provisions of this Act are severable.

#### **SYNOPSIS**

This Act establishes Renewable Energy Portfolio Standards for electricity suppliers in the State of Delaware so that those suppliers, their consumers, and the public at large might realize the benefits of electricity produced from renewable energy resources. These benefits include improved regional and local air quality, improved public health, increased electric supply diversity, increased protection against price volatility and supply disruption, improved transmission and distribution performance, and new economic development opportunities.

The Renewable Energy Portfolio Standards established in this Act require electricity suppliers to supply a percentage of their total annual electricity sales in the State from renewable energy resources. This percentage incrementally increases from 1% in 2006 to 10% by 2018. Eligible renewable energy resources include solar electric power, wind energy, geothermal energy, ocean energy, fuel cells, small hydropower, and sustainable biomass.

This Act also establishes a market-based renewable energy credit trading system to allow electric suppliers compliance flexibility by encouraging the regional exchange of electricity from renewable sources.

This Act also establishes an alternative compliance payment based on a per kilowatt-hour fee. The Public Service Commission is charged with administering the Portfolio Standards in harmony with others in the region.

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