

SENATE BILL NO. _____ HOUSE BILL NO. _____

1 A BILL to amend the Code of Virginia by adding in Title 56 a chapter numbered 24, consisting of
2 sections numbered 56-597 through 56-609, relating to the acquisition of electric energy
3 generated from renewable and environmentally beneficial sources by electric energy suppliers.

4 **Be it enacted by the General Assembly of Virginia:**

5 **1. That the Code of Virginia is amended by adding in Title 56 a chapter numbered 24, consisting**
6 **of sections numbered 56-597 through 56-609, as follows:**

7 CHAPTER 24.

8 RENEWABLE ENERGY PORTFOLIO STANDARDS.

9 § 56-597. Definitions.

10 As used in this chapter:

11 "Biomass sources" means technologies that produce electricity utilizing closed-loop biomass or
12 open-loop biomass.

13 "Category 1 energy sources" means the following sources of energy: (i) solar photovoltaic
14 technology having a capacity of no more than 500 kilowatts; (ii) wind power technology having a
15 capacity of no more than 500 kilowatts; (iii) hydropower having a capacity of no more than 500
16 kilowatts; (iv) the electricity generated by a customer-generator as determined pursuant to the program
17 established pursuant to § 56-594; or (v) solar water heating that is not used for heating pools.

18 "Category 2 energy sources" means the following sources of energy: (i) wind power having a
19 capacity greater than 500 kilowatts; (ii) hydropower having a capacity greater than 500 kilowatts if it
20 does not use a dam or is low-impact hydropower; (iii) incremental hydropower having a capacity greater
21 than 500 kilowatts but less than 30 megawatts; (iv) non-incremental hydropower that is developed
22 coincident with the construction of a new dam whose primary purpose is something other than power
23 production; (v) geothermal sources; (vi) ocean energy; (vii) combustible gases recovered from landfills;
24 (viii) closed-loop biomass sources; (ix) combustible gases recovered from the anaerobic digestion of

25 organic materials, including yard waste, such as grass clippings and leaves, food waste, animal waste,
26 and sewage sludge; or (x) solar water heating for pools.

27 "Category 3 energy sources" means the following sources of energy: (i) municipal solid waste;
28 (ii) open-loop biomass sources; or (iii) combustion of animal manure and animal bedding materials,
29 such as poultry litter, that contain manure.

30 "Category 4 energy source" means electric energy savings from energy efficiency programs.

31 "Closed-loop biomass" means organic material from a plant that is grown for the purpose of
32 being used to produce electricity or is protected by the federal Conservation Reserve Program (CRP)
33 and provided further that crop production on CRP lands does not prevent achievement of the water
34 quality protection, soil erosion prevention, or wildlife enhancement purposes for which the land was
35 primarily set aside.

36 "Commission" means the State Corporation Commission.

37 "Cooperative" has the same meaning ascribed to it in § 56-576.

38 "Cost recovery period" means the longer of (i) the period during which wires charges may be
39 assessed pursuant to § 56-583 or (ii) the period during which capped rates are in effect, but in no case
40 shall the cost recovery period under this chapter extend beyond December 31, 2010.

41 "Customer-generator" means an eligible customer-generator as defined in subsection B of § 56-
42 594.

43 "Department" means the Department of Environmental Quality.

44 "Distributor" has same meaning ascribed to it in § 56-576.

45 "Energy efficiency programs" means programs that manage the consumption or the demand for
46 electricity through energy efficiency technologies, management practices, or other strategies
47 implemented by residential, commercial, institutional, or government customers that reduce electricity
48 consumption by those customers.

49 "Generator" has same meaning ascribed to it in § 56-576.

50 "Geothermal sources" means technologies that produce electricity by extracting heat from
51 geothermal reserves in the earth's crust.

52 "Incremental hydropower" means new hydroelectric generating capacity added to existing
53 hydroelectric generation stations or added to existing dams and impoundments that:

54 a. Does not adversely change existing impacts to aquatic systems;

55 b. Provides an adequate water flow for protection of aquatic life and for safe and effective fish
56 passage;

57 c. Protects against erosion; and

58 d. Protects cultural and historic resources

59 "Landfill gas" means methane and other combustible gases recovered from the anaerobic
60 decomposition of organic materials in a landfill.

61 "Low-impact hydropower" means hydroelectric generating capacity that meets the certification
62 standards established by the Low Impact Hydropower Institute or American Rivers, Inc., or one of their
63 successors.

64 "Municipal solid waste" includes energy from existing waste-to-energy facilities that the
65 Department has determined are in compliance with current environmental standards, including, but not
66 limited to, all applicable requirements of the Clean Air Act (69 Stat. 322, 42 U.S.C. § 7401 et seq.) and
67 associated permit restrictions, and all applicable requirements of the act of July 7, 1980 (P.L. 380, No.
68 97), known as the Solid Waste Management Act.

69 "Net metering" has the same meaning ascribed to it in § 56-594.

70 "Ocean energy" means electricity derived from ocean energy including wave or tidal action,
71 currents, or thermal differences.

72 "Open-loop biomass" means any solid nonhazardous, cellulosic waste material, such as forestry
73 residues; waste pallets; crates; landscape, right-of-way, or agricultural tree trimmings and cullings,
74 including trimmings and cullings from orchards and vineyards; and by-products or residues from the
75 production and processing of grains, legumes, sugars, and other crops, that is segregated from other
76 waste materials.

77 "Recoverable costs" means:

78 1. All costs of electricity that is voluntarily acquired by a distributor during the cost recovery
79 period on behalf of its customers and generated from renewable energy sources, including the costs of
80 the regional transmission organization, in excess of the regional transmission organization real-time
81 locational marginal pricing, or its successor, at the delivery point of the renewable energy source for the
82 electrical production of the renewable energy; and

83 2. All payments for renewable energy credits that are voluntarily acquired by a distributor during
84 the cost recovery period on behalf of its customers.

85 "Regional transmission organization" means an entity approved by the Federal Energy
86 Regulatory Commission (FERC) that is created to operate and manage the electrical transmission grids
87 of the member electric transmission utilities as required under FERC Order 2000, Docket No. RM99-2-
88 000, FERC Chapter 31.089 (1999) or any successor organization approved by the FERC.

89 "Renewable energy credit" means a tradable instrument that is used to establish, verify, and
90 monitor compliance with this act. One renewable energy credit shall represent one Megawatt hour of
91 electricity from a renewable energy source, whether self-generated or purchased with the electric
92 commodity or separately through a tradable instrument, that complies with the requirements of the
93 program administrator and of Commission regulations pursuant to § 56-600.

94 "Renewable energy" means the energy from sources included in the definitions of Category 1,
95 Category 2, Category 3, and Category 4 energy sources.

96 "Renewable energy system" means a facility or energy system that uses a form of renewable
97 energy to generate electricity.

98 "Reporting year" means the 12-month period from June 1 through May 31. A reporting year shall
99 be numbered according to the calendar years in which it begins and ends.

100 "Retail customer" has the same meaning ascribed to it in § 56-576.

101 "Solar energy technologies" means technologies that employ solar radiation to produce
102 electricity, heat, or both.

103 "Supplier" has the same meaning ascribed to it in § 56-576.

104 "True-up period" means the period each year from the end of the reporting year until the next
105 following September 1.

106 "Wind energy" means electricity derived from wind.

107 § 56-598. Renewable energy portfolio standards; electric energy generation requirements by
108 class; cost recovery.

109 A. During each reporting year commencing on or after July 1, 2006, the electric energy sold by a
110 supplier to retail customers in the Commonwealth shall be comprised of electricity generated from
111 renewable energy sources in the percentage amounts specified for such year, as set forth in subsection B.

112 B. By reporting year 2015/2016, 20% of the electric energy sold by a supplier to retail customers
113 in the Commonwealth shall be generated from renewable energy sources, as follows:

114 1. The minimum percentage of electric energy sold by a supplier to retail customers in this
115 Commonwealth that shall be generated from Category 1 energy sources by specific dates is as follows:

116 a. By reporting year 2006/2007, 0.010%.

117 b. By reporting year 2007/2008, 0.025%.

118 c. By reporting year 2008/2009, 0.050%.

119 d. By reporting year 2009/2010, 0.075%.

120 e. By reporting year 2010/2011, 0.100%.

121 f. By reporting year 2011/2012, 0.130%.

122 g. By reporting year 2012/2013, 0.170%.

123 h. By reporting year 2013/2014, 0.200%.

124 i. By reporting year 2014/2015, 0.250%.

125 j. By reporting year 2015/2016 and in subsequent reporting years, 0.300%.

126 2. The minimum percentage of the electric energy sold by a supplier to retail customers in the
127 Commonwealth that shall be generated from Category 2 energy sources by specific dates is as follows:

128 a. By reporting year 2006/2007, 1.0%.

129 b. By reporting year 2007/2008, 1.5%.

130 c. By reporting year 2008/2009, 1.8%.

- 131 d. By reporting year 2009/2010, 3.0%.
- 132 e. By reporting year 2010/2011, 4.25%.
- 133 f. By reporting year 2011/2012, 5.5%.
- 134 g. By reporting year 2012/2013, 6.9%.
- 135 h. By reporting year 2013/2014, 8.3%.
- 136 i. By reporting year 2014/2015, 9.7%.
- 137 j. By reporting year 2015/2016 and in subsequent reporting years, 11.2%.
- 138 3. The minimum percentage of electric energy sold by a supplier to retail customers in this
- 139 Commonwealth that shall be generated from Category 3 energy sources by specific dates is as follows:
- 140 a. By reporting year 2006/2007, 2.33%.
- 141 b. By reporting year 2007/2008, 2.43%.
- 142 c. By reporting year 2008/2009, 2.63%.
- 143 d. By reporting year 2009/2010, 2.90%.
- 144 e. By reporting year 2010/2011, 3.16%.
- 145 f. By reporting year 2011/2012, 3.34%.
- 146 g. By reporting year 2012/2013, 3.43%.
- 147 h. By reporting year 2013/2104, 3.50%.
- 148 i. By reporting year 2014/2015, 3.50%.
- 149 j. By reporting year 2015/2016 and in subsequent reporting years, 3.50%.
- 150 4. The minimum percentage of electric energy sold by a supplier to retail customers in this
- 151 Commonwealth that shall be generated from the Category 4 energy source by specific dates is as
- 152 follows:
- 153 a. By reporting year 2006/2007, 0.5%.
- 154 b. By reporting year 2007/2008, 1.0%.
- 155 c. By reporting year 2008/2009, 1.5%.
- 156 d. By reporting year 2009/2010, 2.0%.
- 157 e. By reporting year 2010/2011, 2.5%.

158 f. By reporting year 2011/2012, 3.0%.

159 g. By reporting year 2012/2013, 3.5%.

160 h. By reporting year 2013/2014, 4.0%.

161 i. By reporting year 2014/2015, 4.5%.

162 j. By reporting year 2015/2016 and in subsequent reporting years, 5.0%.

163 C. Notwithstanding any provision of this section to the contrary, a supplier shall be excused from
164 its obligations under this section to the extent that the Commission determines pursuant to § 56-606 that
165 renewable energy resources are not reasonably available in sufficient quantities in the marketplace for
166 the suppliers to meet their obligations under this chapter.

167 D. All recoverable costs shall be deferred as a regulatory asset by the distributor and fully
168 recovered, with a return on the unamortized balance, pursuant to the procedure for recovery of the costs
169 of power purchases set forth in § 56-249.6, in the first year after the expiration of its cost recovery
170 period. After the cost recovery period, any direct or indirect costs for the purchase by distributors of
171 resources to comply with this section, including, but not limited to, recoverable costs, cost of credits
172 banked, payments to any third-party administrators for performance under this chapter, and costs levied
173 by a regional transmission organization to ensure that renewable energy sources are reliable, shall be
174 recovered on a full and current basis pursuant to the procedure for recovery of the costs of power
175 purchases set forth in § 56-249.6.

176 § 56-599. Exemption during capped rate period.

177 Compliance with § 56-598 shall not be required for any distributor that has not reached the end
178 of its capped rate period pursuant to § 56-582 or for any sales by a generator in the service territory of a
179 distributor that has not reached the end of its capped rate period. At the conclusion of a distributor's
180 capped rate period, this exception shall no longer apply, and compliance shall be required at the
181 percentages in effect at that time. Suppliers whose sales are exempted under this subsection and who
182 voluntarily sell electricity generated from Category 1, Category 2, Category 3, and Category 4 energy
183 sources during the capped rate period may bank credits consistent with subsection I of § 56-600.

184 § 56-600. Renewable energy credits.

185 A. The Commission shall establish a renewable energy credits program and shall appoint a
186 renewable energy credits program administrator as needed to implement this chapter.

187 B. Generators seeking to participate in the renewable energy credits program may apply to the
188 Commission for qualification either directly or through designated agents.

189 C. The Commission shall establish a procedure to determine whether generator applicants
190 qualify for renewable energy credits.

191 D. For all other renewable energy credit program functions, the Commission shall appoint an
192 independent entity to provide the renewable energy credits tracking and reporting services. The
193 provisions of the Virginia Public Procurement Act (§ 2.2-4300 et seq.) shall not apply to the approval by
194 the Commission of such a renewable energy credits service provider.

195 E. The administrator and service provider shall have those powers and duties assigned by
196 Commission regulations. Such powers and duties shall include, but not be limited to, the following:

197 1. To create and administer a renewable energy credits certification, tracking, and reporting
198 program. This program should include, at a minimum, a process for qualifying renewable energy
199 systems, including systems that use qualifying renewable energy resources as co-fuels, and determining
200 when and how renewable energy credits shall be created, accounted for, transferred, and retired; and

201 2. To submit reports to the Commission at such times and in such manner as the Commission
202 shall direct.

203 F. The Commission shall establish procedures for verifying the production of renewable energy
204 credits by qualifying systems.

205 G. A supplier shall comply with the requirements of § 56-598 by self-generating or purchasing
206 sufficient renewable energy credits and submitting documentation of such compliance to the program
207 administrator.

208 H. The renewable energy credits program shall include a true-up period during which suppliers
209 may obtain the required number of renewable energy credits in the marketplace to make up for any
210 shortfall of renewable energy credits they might otherwise experience. The true-up period provisions
211 shall also include a provision for modification of the underlying obligation of the supplier upon a finding

212 by the Commission pursuant to § 56-606 that renewable energy credits are not reasonably available in
213 sufficient quantities in the marketplace for suppliers to meet their obligations under this chapter.

214 I. A supplier may bank or place in reserve renewable energy credits produced in one reporting
215 year for compliance in the next reporting year, subject to the limitations set forth in this subsection and
216 provided that such supplier is in compliance for all previous reporting years. In addition, the supplier
217 shall demonstrate to the satisfaction of the Commission that such credits:

218 1. Were in excess of the renewable energy credits needed by the supplier for compliance in the
219 year in which they were generated and that such excess credits have not previously been used for
220 compliance under this chapter; and

221 2. Have not otherwise been nor will be sold, retired, claimed, or represented as part of satisfying
222 compliance with alternative or renewable energy portfolio standards in other states.

223 J. The Commission or its designee shall develop a registry of pertinent information regarding all
224 available renewable energy credits and the number of renewable energy credits sold or transferred. The
225 registry shall be available to the general public, but shall not include nor disclose any competitively
226 sensitive information such as the names of parties to specific transactions, the number of renewable
227 energy credits created, purchased, or owned by any specific party, or the price received or paid for
228 renewable energy credits by any specific party, unless the party so-named agrees to inclusion or
229 disclosure, or both, of such information, except as the inclusion or disclosure, or both, of such
230 information may be necessary to demonstrate compliance with other portions of this chapter or to
231 compute the cost of service for cost-based rate tariffs.

232 K. The Commission shall establish a procedure to determine how to recover the actual costs of
233 administering the renewable energy credits program in a way that achieves a reasonable balance
234 between equitable cost apportionment and cost efficiency.

235 L. The Commission shall establish regulations governing the verification and tracking of energy
236 efficiency programs pursuant to this chapter, which shall include benefits to each utility customer class.

237 All verified energy efficiency improvements shall accrue credits beginning on July 1, 2006.

238 M. The Commission shall, no later than January 1, 2007, develop a depreciation schedule for
239 renewable energy credits created through energy efficiency measures and shall develop standards for
240 tracking and verifying savings from energy efficiency measures. The Commission shall allow for a 60-
241 day public comment period and shall issue final standards for the depreciation schedule within 60 days
242 of the close of the public comment period.

243 § 56-601. Virginia Sustainable Energy Fund established.

244 There is hereby established a special fund in the state treasury to be known as the Virginia
245 Sustainable Energy Fund (the Fund), which shall be administered by the Commission. The Fund shall
246 include all alternative compliance payments collected by the Commission pursuant to § 56-602 and such
247 moneys as may be appropriated by the General Assembly from time to time and designated for the Fund.
248 The Fund shall be used solely for the payment of grants for projects that will increase the amount of
249 electric energy generated from renewable energy resources in the Commonwealth. Unallocated moneys
250 in the Fund in any year shall remain in the Fund and be available for allocation for grants under this
251 article in ensuing fiscal years.

252 § 56-602. Alternative compliance payment.

253 A. At the end of each program year, the program administrator shall provide a report to the
254 Commission and to each covered supplier showing their status level of renewable energy acquisition.

255 B. The Commission shall conduct a review of each determination made under § 56-598. If, after
256 notice and hearing, the Commission determines that a supplier has failed to comply with § 56-598, the
257 Commission shall order the supplier to make an alternative compliance payment.

258 C. Subject to the provisions of subsection D, the alternative compliance payment to be paid:

259 1. For failing to comply with the requirements of subdivision B 1 of § 56-598 regarding the
260 purchase of electric energy generated from Category 1 energy sources shall be \$0.30 for every kilowatt
261 hour of electricity less than the required amount;

262 2. For failing to comply with the requirements of subdivision B 2 of § 56-598 regarding the
263 purchase of electric energy generated from Category 2 energy sources shall be \$0.02 for every kilowatt
264 hour of electricity less than the required amount;

265 3. For failing to comply with the requirements of subdivision B 3 of § 56-598 regarding the
266 purchase of electric energy generated from Category 3 energy sources shall be \$0.01 for every kilowatt
267 hour of electricity less than the required amount; and

268 4. For failing to comply with the requirements of subdivision B 4 of § 56-598 regarding the
269 purchase of electric energy generated from the Category 4 energy source shall be \$0.01 for every
270 kilowatt hour of electricity less than the required amount.

271 D. Notwithstanding the provisions of subsection C, in determining the liability of a supplier for
272 an alternative compliance payment, the Commission shall:

273 1. Count any excess energy generated from Category 1 energy sources toward the requirements
274 of subdivisions B 2 or B 3 of § 56-598 regarding the purchase of electric energy generated from
275 Category 2 or Category 3 energy sources;

276 2. Not count any energy generated from Category 3 energy sources in excess of the 3%
277 maximum required toward the requirements of subdivisions B 1 or B 2 of § 56-598 regarding the
278 purchase of electric energy generated from Category 1 or Category 2 energy sources; and

279 3. Count any excess energy generated from Category 2 energy sources toward the requirement
280 that 15% of the electric energy purchased in 2015 and thereafter be from renewable energy sources, less
281 the amount required to be generated from Category 3 energy sources up to its cap of 3% in 2015.

282 E. Alternative compliance payments imposed pursuant to this section shall be paid into the
283 Virginia Sustainable Energy Fund created pursuant to § 56-601.

284 F. The Commission shall establish a process to provide for, at least annually, a review of the
285 renewable energy credit market within the Commonwealth and the service territories of the regional
286 transmission organizations that manage the transmission system in any part of this Commonwealth. The
287 Commission shall use the results of this study to identify any changes to the alternative compliance
288 payment program amounts needed to induce suppliers to self-generate or purchase renewable energy
289 credits rather than submit alternative compliance payments. If the Commission finds that the alternative
290 compliance payment program needs to be changed to have the intended effect, the Commission shall
291 present these findings to the General Assembly with a recommendation for legislative enactment.

292 § 56-603. Portfolio requirements in other states.

293 If a supplier sells electricity in any other state and is subject to renewable energy portfolio
294 requirements in that state, it shall list any such requirement and shall indicate how it satisfied those
295 renewable energy portfolio requirements in its annual report to the Commission demonstrating
296 compliance with this chapter. To prevent double-counting, suppliers shall not satisfy Virginia's
297 renewable energy portfolio requirements using renewable energy or renewable energy credits used to
298 satisfy another state's portfolio requirements. Renewable energy credits derived only from renewable
299 energy sources inside the geographical boundaries of this Commonwealth or within the service territory
300 of any regional transmission organization that manages the transmission system in any part of the
301 Commonwealth shall be eligible to meet the compliance requirements under this act. Suppliers shall
302 document that this energy was not used to satisfy another state's renewable energy portfolio standards.

303 § 56-604. Interagency responsibilities.

304 A. The Commission will carry out the responsibilities delineated within this chapter. The
305 Commission also shall, in cooperation with the Department, conduct an ongoing renewable energy
306 resources planning assessment for this Commonwealth. This assessment shall, at a minimum, identify
307 current and operating qualifying renewable energy facilities, the potential to add future qualifying
308 renewable energy generating capacity, including the potential for air or water permitting or other
309 regulatory approval processes to affect the construction or operation, or both, of qualifying renewable
310 energy facilities within the Commonwealth, or the availability of renewable energy credits generated by
311 qualifying renewable energy facilities located within the Commonwealth, and the conditions of the
312 renewable energy credits marketplace. The assessment shall identify whether and how to maintain or
313 increase the competitiveness of the renewable energy credits market within the Commonwealth.

314 B. The Department shall ensure that all qualified renewable energy sources meet all applicable
315 environmental standards and shall verify that a renewable energy source meets the standards set forth in
316 § 56-598.

317 C. The Commission and the Department shall work cooperatively to monitor the performance of
318 all aspects of this chapter and will provide an annual report to the chairmen of the Senate Committee on

319 Agriculture, Conservation and Natural Resources, the Senate Committee on Commerce and Labor, the
320 House Committee on Agriculture, Chesapeake and Natural Resources, and the House Committee on
321 Commerce and Labor. The report shall include at a minimum:

- 322 1. The status of compliance with the provisions of this act by suppliers;
- 323 2. Current costs of renewable energy credits on a per kilowatt hour basis for all renewable energy
324 technology types;
- 325 3. Costs associated with the renewable energy credits program under this chapter, including the
326 number and amount of alternative compliance payments;
- 327 4. The status of the renewable energy credits marketplace within the Commonwealth; and
- 328 5. Recommendations for program improvements.

329 § 56-605. Cooperatives.

330 Each cooperative operating within the Commonwealth shall offer to its retail customers a
331 voluntary program of energy efficiency programs, as a means to comply with the requirements of this
332 chapter.

333 § 56-606. Unavailability of renewable energy resources.

334 Upon its own initiative or upon a request of a supplier, the Commission, within 60 days, shall
335 determine if renewable energy credits are reasonably available in the marketplace in sufficient quantities
336 for the suppliers to meet their obligations for that reporting year under this chapter. If the Commission
337 determines that renewable energy credits are not reasonably available in sufficient quantities in the
338 marketplace for a supplier to meet its obligations under this chapter, then the Commission shall modify
339 the underlying obligation of the supplier or recommend to the General Assembly that the underlying
340 obligation be eliminated.

341 § 56-607. Compliance review; report to General Assembly.

342 Upon commencement of reporting year 2012/2013, the Commission shall undertake a review of
343 compliance by suppliers with the requirements of this chapter. The review shall include the status of
344 renewable energy technologies within this Commonwealth and the capacity to add additional renewable
345 energy resources. The Commission shall use the results of this review to recommend to the General

346 Assembly additional compliance goals beyond reporting year 2015/2016. The Commission shall work
347 with the Department in evaluating the future renewable energy resource potential.

348 **2. That the provision of this act adding § 56-598 to the Code of Virginia shall not be severable**
349 **from the other provisions of this act, and that if such any provision of such section is held to be**
350 **invalid, the remaining provisions of this act shall be void.**

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