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SENATE BILL NO. 175
AMENDMENT IN THE NATURE OF A SUBSTITUTE
(Proposed by the Senate Committee on Commerce and Labor
on _____)
(Patron Prior to Substitute—Senator VanValkenburg)

A BILL to amend and reenact §§ 56-585.5 and 56-594.02 of the Code of Virginia, relating to electric utilities; renewable energy portfolio standard program requirements; power purchase agreements.

Be it enacted by the General Assembly of Virginia:

1. That §§ 56-585.5 and 56-594.02 of the Code of Virginia are amended and reenacted as follows:

§ 56-585.5. Generation of electricity from renewable and zero-carbon sources.

A. As used in this section:

"Accelerated renewable energy buyer" means a commercial or industrial customer of a Phase I or Phase II Utility, irrespective of generation supplier, with an aggregate load over 25 megawatts in the prior calendar year, that enters into arrangements pursuant to subsection G, as certified by the Commission.

"Aggregate load" means the combined electrical load associated with selected accounts of an accelerated renewable energy buyer with the same legal entity name as, or in the names of affiliated entities that control, are controlled by, or are under common control of, such legal entity or are the names of affiliated entities under a common parent.

"Control" has the same meaning as provided in § 56-585.1:11.

"Elementary or secondary" has the same meaning as provided in § 22.1-1.

"Falling water" means hydroelectric resources, including run-of-river generation from a combined pumped-storage and run-of-river facility. "Falling water" does not include electricity generated from pumped-storage facilities.

"Low-income qualifying projects" means a project that provides a minimum of 50 percent of the respective electric output to low-income utility customers as that term is defined in § 56-576.

"Phase I Utility" has the same meaning as provided in subdivision A 1 of § 56-585.1.

"Phase II Utility" has the same meaning as provided in subdivision A 1 of § 56-585.1.

"Previously developed project site" means any property, including related buffer areas, if any, that has been previously disturbed or developed for non-single-family residential, nonagricultural, or nonsilvicultural use, regardless of whether such property currently is being used for any purpose. "Previously developed project site" includes a brownfield as defined in § 10.1-1230 or any parcel that has been previously used (i)

32 for a retail, commercial, or industrial purpose; (ii) as a parking lot; (iii) as the site of a parking lot canopy or
33 structure; (iv) for mining, which is any lands affected by coal mining that took place before August 3, 1977,
34 or any lands upon which extraction activities have been permitted by the Department of Energy under Title
35 45.2; (v) for quarrying; or (vi) as a landfill.

36 "Total electric energy" means total electric energy sold to retail customers in the Commonwealth service
37 territory of a Phase I or Phase II Utility, other than accelerated renewable energy buyers, by the incumbent
38 electric utility or other retail supplier of electric energy in the previous calendar year, excluding an amount
39 equivalent to the annual percentages of the electric energy that was supplied to such customer from nuclear
40 generating plants located within the Commonwealth in the previous calendar year, provided such nuclear
41 units were operating by July 1, 2020, or from any zero-carbon electric generating facilities not otherwise RPS
42 eligible sources and placed into service in the Commonwealth after July 1, 2030.

43 "Zero-carbon electricity" means electricity generated by any generating unit that does not emit carbon
44 dioxide as a by-product of combusting fuel to generate electricity.

45 B. 1. By December 31, 2024, except for any coal-fired electric generating units (i) jointly owned with a
46 cooperative utility or (ii) owned and operated by a Phase II Utility located in the coalfield region of the
47 Commonwealth that co-fires with biomass, any Phase I and Phase II Utility shall retire all generating units
48 principally fueled by oil with a rated capacity in excess of 500 megawatts and all coal-fired electric
49 generating units operating in the Commonwealth.

50 2. By December 31, 2045, except for biomass-fired electric generating units that do not co-fire with coal,
51 each Phase I and II Utility shall retire all other electric generating units located in the Commonwealth that
52 emit carbon as a by-product of combusting fuel to generate electricity.

53 3. A Phase I or Phase II Utility may petition the Commission for relief from the requirements of this
54 subsection on the basis that the requirement would threaten the reliability or security of electric service to
55 customers. The Commission shall consider in-state and regional transmission entity resources and shall
56 evaluate the reliability of each proposed retirement on a case-by-case basis in ruling upon any such petition.

57 C. Each Phase I and Phase II Utility shall participate in a renewable energy portfolio standard program
58 (RPS Program) that establishes annual goals for the sale of renewable energy to all retail customers in the
59 utility's service territory, other than accelerated renewable energy buyers pursuant to subsection G, regardless
60 of whether such customers purchase electric supply service from the utility or from suppliers other than the
61 utility. To comply with the RPS Program, each Phase I and Phase II Utility shall procure and retire

62 Renewable Energy Certificates (RECs) originating from renewable energy *portfolio* standard eligible sources
63 (RPS eligible sources). For purposes of complying with the RPS Program from 2021 to 2024, a Phase I and
64 Phase II Utility may use RECs from any renewable energy facility, as defined in § 56-576, provided that such
65 facilities are located in the Commonwealth or are physically located within the PJM Interconnection, LLC
66 (PJM) region. However, at no time during this period or thereafter may any Phase I or Phase II Utility use
67 RECs from (i) renewable thermal energy, (ii) renewable thermal energy equivalent, or (iii) biomass-fired
68 facilities that are outside the Commonwealth. From compliance year 2025 and all years after, each Phase I
69 and Phase II Utility may only use RECs from RPS eligible sources for compliance with the RPS Program.

70 In order to qualify as RPS eligible sources, such sources must be (a) electric-generating resources that
71 generate electric energy derived from solar or wind located in the Commonwealth or off the Commonwealth's
72 Atlantic shoreline or in federal waters and interconnected directly into the Commonwealth or physically
73 located within the PJM region; (b) falling water resources located in the Commonwealth or physically located
74 within the PJM region that were in operation as of January 1, 2020, that are owned by a Phase I or Phase II
75 Utility or for which a Phase I or Phase II Utility has entered into a contract prior to January 1, 2020, to
76 purchase the energy, capacity, and renewable attributes of such falling water resources; (c) non-utility-owned
77 resources from falling water that (1) are less than 65 megawatts, (2) began commercial operation after
78 December 31, 1979, or (3) added incremental generation representing greater than 50 percent of the original
79 nameplate capacity after December 31, 1979, provided that such resources are located in the Commonwealth
80 or are physically located within the PJM region; (d) waste-to-energy or landfill gas-fired generating resources
81 located in the Commonwealth and in operation as of January 1, 2020, provided that such resources do not use
82 waste heat from fossil fuel combustion; (e) geothermal heating and cooling systems located in the
83 Commonwealth; (f) geothermal electric generating resources located in the Commonwealth or physically
84 located within the PJM region; or (g) biomass-fired facilities in operation in the Commonwealth and in
85 operation as of January 1, 2023, that (1) supply no more than 10 percent of their annual net electrical
86 generation to the electric grid or no more than 15 percent of their annual total useful energy to any entity
87 other than the manufacturing facility to which the generating source is interconnected and are fueled by
88 forest-product manufacturing residuals, including pulping liquor, bark, paper recycling residuals, biowastes,
89 or biomass, as described in subdivisions A 1, 2, and 4 of § 10.1-1308.1, provided that biomass as described in
90 subdivision A 1 of § 10.1-1308.1 results from harvesting in accordance with best management practices for
91 the sustainable harvesting of biomass developed and enforced by the State Forester pursuant to § 10.1-1105,
92 or (2) are owned by a Phase I or Phase II Utility, have less than 52 megawatts capacity, and are fueled by

93 forest-product manufacturing residuals, biowastes, or biomass, as described in subdivisions A 1, 2, and 4 of
 94 § 10.1-1308.1, provided that biomass as described in subdivision A 1 of § 10.1-1308.1 results from
 95 harvesting in accordance with best management practices for the sustainable harvesting of biomass developed
 96 and enforced by the State Forester pursuant to § 10.1-1105. Regardless of any future maintenance, expansion,
 97 or refurbishment activities, the total amount of RECs that may be sold by any RPS eligible source using
 98 biomass in any year shall be no more than the number of megawatt hours of electricity produced by that
 99 facility in 2022; however, in no year may any RPS eligible source using biomass sell RECs in excess of the
 100 actual megawatt-hours of electricity generated by such facility that year. In order to comply with the RPS
 101 Program, each Phase I and Phase II Utility may use and retire the environmental attributes associated with
 102 any existing owned or contracted solar, wind, falling water, or biomass electric generating resources in
 103 operation, or proposed for operation, in the Commonwealth or solar, wind, or falling water resources
 104 physically located within the PJM region, with such resource qualifying as a Commonwealth-located
 105 resource for purposes of this subsection, as of January 1, 2020, provided that such renewable attributes are
 106 verified as RECs consistent with the PJM-EIS Generation Attribute Tracking System.

107 1. The RPS Program requirements shall be a percentage of the total electric energy sold in the previous
 108 calendar year and shall be implemented in accordance with the following schedule:

	Phase I Utilities		Phase II Utilities		
	Year	RPS Program Requirement	Year	RPS Program Requirement	
109	a				
110	a				
111	b	2021	6%	2021	14%
112	c	2022	7%	2022	17%
113	d	2023	8%	2023	20%
114	e	2024	10%	2024	23%
115	f	2025	14%	2025	26%
116	g	2026	17%	2026	29%
117	h	2027	20%	2027	32%
118	i	2028	24%	2028	35%
119	j	2029	27%	2029	38%
120	k	2030	30%	2030	41%
121	l	2031	33%	2031	45%
122	m	2032	36%	2032	49%
123	n	2033	39%	2033	52%
124	o	2034	42%	2034	55%
125	p	2035	45%	2035	59%
126	q	2036	53%	2036	63%
127	r	2037	53%	2037	67%
128	s	2038	57%	2038	71%
129	t	2039	61%	2039	75%
130	u	2040	65%	2040	79%
131	v	2041	68%	2041	83%
132	w	2042	71%	2042	87%
133	x	2043	74%	2043	91%
134	y	2044	77%	2044	95%
135	z	2045	80%	2045 and	100%
136				thereafter	
137	aa	2046	84%		
138	ab	2047	88%		
139	ac	2048	92%		

140 ad 2049 96%
141 ae 2050 and 100%
142 thereafter

143 2. A Phase II Utility shall meet ~~one percent~~ of the RPS Program requirements in any given compliance
144 year with solar, wind, or anaerobic digestion resources of one megawatt or less located in the
145 Commonwealth, ~~with not~~ *measured as a percentage of the Phase II Utility's RPS program requirements: (i)*
146 *4.5 percent for the 2026 through 2030 compliance years and (ii) five percent for the 2031 through 2045*
147 *compliance years. No more than 3,000 kilowatts of any such solar, wind, or anaerobic digestion resources*
148 *may be located* at any single location or at contiguous locations owned by the same entity or affiliated
149 entities, and, to the extent that low-income qualifying projects are available, ~~then~~ no less than 25 percent of
150 such ~~one percent~~ *required percentage* shall be composed of low-income qualifying projects. To the extent
151 that low-income qualifying projects are not available and projects located on or adjacent to public elementary
152 or secondary schools are available, the remainder of no less than 25 percent of such ~~one percent~~ *required*
153 *percentage* shall be composed of projects located on or adjacent to public elementary or secondary schools. A
154 project located on or adjacent to a public elementary or secondary school shall have a contractual relationship
155 with such school in order to qualify for the provisions of this section.

156 3. Beginning with the ~~2025~~ 2027 compliance year and thereafter, at least 75 percent of all RECs used by a
157 Phase II Utility in a compliance period shall come from RPS eligible resources located in the
158 Commonwealth.

159 4. Any Phase I or Phase II Utility may apply renewable energy sales achieved or RECs acquired in excess
160 of the sales requirement for that RPS Program to the sales requirements for RPS Program requirements in the
161 year in which it was generated and the five calendar years after the renewable energy was generated or the
162 RECs were created. To the extent that a Phase I or Phase II Utility procures RECs for RPS Program
163 compliance from resources the utility does not own, the utility shall be entitled to recover the costs of such
164 certificates at its election pursuant to § 56-249.6 or subdivision A 5 d of § 56-585.1.

165 5. Energy from a geothermal heating and cooling system is eligible for inclusion in meeting the
166 requirements of the RPS Program. RECs from a geothermal heating and cooling system are created based on
167 the amount of energy, converted from BTUs to kilowatt-hours, that is generated by a geothermal heating and
168 cooling system for space heating and cooling or water heating. The Commission shall determine the form and
169 manner in which such RECs are verified.

170 D. Each Phase I or Phase II Utility shall petition the Commission for necessary approvals to procure
171 zero-carbon electricity generating capacity as set forth in this subsection and energy storage resources as set

172 forth in subsection E. To the extent that a Phase I or Phase II Utility constructs or acquires new zero-carbon
173 generating facilities or energy storage resources, the utility shall petition the Commission for the recovery of
174 the costs of such facilities, at the utility's election, either through its rates for generation and distribution
175 services or through a rate adjustment clause pursuant to subdivision A 6 of § 56-585.1. All costs not sought
176 for recovery through a rate adjustment clause pursuant to subdivision A 6 of § 56-585.1 associated with
177 generating facilities provided by sunlight or onshore or offshore wind are also eligible to be applied by the
178 utility as a customer credit reinvestment offset as provided in subdivision A 8 of § 56-585.1. Costs associated
179 with the purchase of energy, capacity, or environmental attributes from facilities owned by the persons other
180 than the utility required by this subsection shall be recovered by the utility either through its rates for
181 generation and distribution services or pursuant to § 56-249.6.

182 1. Each Phase I Utility shall petition the Commission for necessary approvals to construct, acquire, or
183 enter into agreements to purchase the energy, capacity, and environmental attributes of 600 megawatts of
184 generating capacity using energy derived from sunlight or onshore wind.

185 a. By December 31, 2023, each Phase I Utility shall petition the Commission for necessary approvals to
186 construct, acquire, or enter into agreements to purchase the energy, capacity, and environmental attributes of
187 at least 200 megawatts of generating capacity located in the Commonwealth using energy derived from
188 sunlight or onshore wind, and 35 percent of such generating capacity procured shall be from the purchase of
189 energy, capacity, and environmental attributes from solar or onshore wind facilities owned by persons other
190 than the utility, with the remainder, in the aggregate, being from construction or acquisition by such Phase I
191 Utility.

192 b. By December 31, 2027, each Phase I Utility shall petition the Commission for necessary approvals to
193 construct, acquire, or enter into agreements to purchase the energy, capacity, and environmental attributes of
194 at least 200 megawatts of additional generating capacity located in the Commonwealth using energy derived
195 from sunlight or onshore wind, and 35 percent of such generating capacity procured shall be from the
196 purchase of energy, capacity, and environmental attributes from solar or onshore wind facilities owned by
197 persons other than the utility, with the remainder, in the aggregate, being from construction or acquisition by
198 such Phase I Utility.

199 c. By December 31, 2030, each Phase I Utility shall petition the Commission for necessary approvals to
200 construct, acquire, or enter into agreements to purchase the energy, capacity, and environmental attributes of
201 at least 200 megawatts of additional generating capacity located in the Commonwealth using energy derived

202 from sunlight or onshore wind, and 35 percent of such generating capacity procured shall be from the
203 purchase of energy, capacity, and environmental attributes from solar or onshore wind facilities owned by
204 persons other than the utility, with the remainder, in the aggregate, being from construction or acquisition by
205 such Phase I Utility.

206 d. Nothing in this subdivision 1 shall prohibit such Phase I Utility from constructing, acquiring, or
207 entering into agreements to purchase the energy, capacity, and environmental attributes of more than 600
208 megawatts of generating capacity located in the Commonwealth using energy derived from sunlight or
209 onshore wind, provided the utility receives approval from the Commission pursuant to §§ 56-580 and
210 56-585.1.

211 2. By December 31, 2035, each Phase II Utility shall petition the Commission for necessary approvals to
212 (i) construct, acquire, or enter into agreements to purchase the energy, capacity, and environmental attributes
213 of 16,100 megawatts of generating capacity located in the Commonwealth using energy derived from
214 sunlight or onshore wind, ~~which shall include 1,100 megawatts of solar generation of a nameplate capacity~~
215 ~~not to exceed three megawatts per individual project and 35 percent of such~~ *which* generating capacity
216 ~~procured~~ shall be from the purchase of energy, capacity, and environmental attributes from solar facilities
217 owned by persons other than a utility, including utility affiliates and deregulated affiliates, and (ii) pursuant to
218 § 56-585.1:11, construct or purchase one or more offshore wind generation facilities located off the
219 Commonwealth's Atlantic shoreline or in federal waters and interconnected directly into the Commonwealth
220 with an aggregate capacity of up to 5,200 megawatts. At least ~~200~~ *1,000* megawatts of the 16,100 megawatts
221 shall be placed on previously developed project sites. *Thirty-five percent of such generating capacity on*
222 *previously developed project sites shall be procured from the purchase of energy, capacity, and*
223 *environmental attributes from solar facilities owned by persons other than a utility, including utility affiliates*
224 *and deregulated affiliates. The 16,100 megawatts of generating capacity located in the Commonwealth using*
225 *energy derived from sunlight or onshore wind shall include 1,100 megawatts of solar generation of a*
226 *nameplate capacity not to exceed three megawatts per individual project, and 65 percent of such generation*
227 *capacity procured shall be from the purchase of energy, capacity, and environmental attributes from solar*
228 *facilities owned by persons other than a utility, including utility affiliates and deregulated affiliates.*

229 a. By December 31, 2024, each Phase II Utility shall petition the Commission for necessary approvals to
230 construct, acquire, or enter into agreements to purchase the energy, capacity, and environmental attributes of
231 at least 3,000 megawatts of generating capacity located in the Commonwealth using energy derived from

232 sunlight or onshore wind, and 35 percent of such generating capacity procured shall be from the purchase of
233 energy, capacity, and environmental attributes from solar or onshore wind facilities owned by persons other
234 than the utility, with the remainder, in the aggregate, being from construction or acquisition by such Phase II
235 Utility.

236 b. By December 31, 2027, each Phase II Utility shall petition the Commission for necessary approvals to
237 construct, acquire, or enter into agreements to purchase the energy, capacity, and environmental attributes of
238 at least 3,000 megawatts of additional generating capacity located in the Commonwealth using energy
239 derived from sunlight or onshore wind, and 35 percent of such generating capacity procured shall be from the
240 purchase of energy, capacity, and environmental attributes from solar or onshore wind facilities owned by
241 persons other than the utility, with the remainder, in the aggregate, being from construction or acquisition by
242 such Phase II Utility.

243 c. By December 31, 2030, each Phase II Utility shall petition the Commission for necessary approvals to
244 construct, acquire, or enter into agreements to purchase the energy, capacity, and environmental attributes of
245 at least 4,000 megawatts of additional generating capacity located in the Commonwealth using energy
246 derived from sunlight or onshore wind, and 35 percent of such generating capacity procured shall be from the
247 purchase of energy, capacity, and environmental attributes from solar or onshore wind facilities owned by
248 persons other than the utility, with the remainder, in the aggregate, being from construction or acquisition by
249 such Phase II Utility.

250 d. By December 31, 2035, each Phase II Utility shall petition the Commission for necessary approvals to
251 construct, acquire, or enter into agreements to purchase the energy, capacity, and environmental attributes of
252 at least 6,100 megawatts of additional generating capacity located in the Commonwealth using energy
253 derived from sunlight or onshore wind, and 35 percent of such generating capacity procured shall be from the
254 purchase of energy, capacity, and environmental attributes from solar or onshore wind facilities owned by
255 persons other than the utility, with the remainder, in the aggregate, being from construction or acquisition by
256 such Phase II Utility.

257 e. Nothing in this subdivision 2 shall prohibit such Phase II Utility from constructing, acquiring, or
258 entering into agreements to purchase the energy, capacity, and environmental attributes of more than 16,100
259 megawatts of generating capacity located in the Commonwealth using energy derived from sunlight or
260 onshore wind, provided the utility receives approval from the Commission pursuant to §§ 56-580 and

261 56-585.1.

262 3. Nothing in this section shall prohibit a utility from petitioning the Commission to construct or acquire
263 zero-carbon electricity or from entering into contracts to procure the energy, capacity, and environmental
264 attributes of zero-carbon electricity generating resources in excess of the requirements in subsection B. The
265 Commission shall determine whether to approve such petitions on a stand-alone basis pursuant to §§ 56-580
266 and 56-585.1, provided that the Commission's review shall also consider whether the proposed generating
267 capacity (i) is necessary to meet the utility's native load, (ii) is likely to lower customer fuel costs, (iii) will
268 provide economic development opportunities in the Commonwealth, and (iv) serves a need that cannot be
269 more affordably met with demand-side or energy storage resources.

270 Each Phase I and Phase II Utility shall, at least once every year, conduct a request for proposals for new
271 solar and wind resources. Such requests shall quantify and describe the utility's need for energy, capacity, or
272 renewable energy certificates. The requests for proposals shall be publicly announced and made available for
273 public review on the utility's website at least 45 days prior to the closing of such request for proposals. The
274 requests for proposals shall provide, at a minimum, the following information: (a) the size, type, and timing
275 of resources for which the utility anticipates contracting; (b) any minimum thresholds that must be met by
276 respondents; (c) major assumptions to be used by the utility in the bid evaluation process, including
277 environmental emission standards; (d) detailed instructions for preparing bids so that bids can be evaluated on
278 a consistent basis; (e) the preferred general location of additional capacity; and (f) specific information
279 concerning the factors involved in determining the price and non-price criteria used for selecting winning
280 bids. A utility may evaluate responses to requests for proposals based on any criteria that it deems reasonable
281 but shall at a minimum consider the following in its selection process: (1) the status of a particular project's
282 development; (2) the age of existing generation facilities; (3) the demonstrated financial viability of a project
283 and the developer; (4) a developer's prior experience in the field; (5) the location and effect on the
284 transmission grid of a generation facility; (6) benefits to the Commonwealth that are associated with
285 particular projects, including regional economic development and the use of goods and services from Virginia
286 businesses; and (7) the environmental impacts of particular resources, including impacts on air quality within
287 the Commonwealth and the carbon intensity of the utility's generation portfolio.

288 4. In connection with the requirements of this subsection, each Phase I and Phase II Utility shall,
289 commencing in 2020 and concluding in 2035, submit annually a plan and petition for approval for the
290 development of new solar and onshore wind generation capacity. Such plan shall reflect, in the aggregate and

291 over its duration, the requirements of subsection D concerning the allocation percentages for construction or
292 purchase of such capacity. Such petition shall contain any request for approval to construct such facilities
293 pursuant to subsection D of § 56-580 and a request for approval or update of a rate adjustment clause
294 pursuant to subdivision A 6 of § 56-585.1 to recover the costs of such facilities. Such plan shall also include
295 the utility's plan to meet the energy storage project targets of subsection E, including the goal of installing at
296 least 10 percent of such energy storage projects behind the meter. In determining whether to approve the
297 utility's plan and any associated petition requests, the Commission shall determine whether they are
298 reasonable and prudent and shall give due consideration to (i) the RPS and carbon dioxide reduction
299 requirements in this section; (ii) the promotion of new renewable generation and energy storage resources
300 within the Commonwealth, and associated economic development, *including those resources not exceeding*
301 *three megawatts or placed on previously developed project sites pursuant to subdivision 2*; and (iii) fuel
302 savings projected to be achieved by the plan. Notwithstanding any other provision of this title, the
303 Commission's final order regarding any such petition and associated requests shall be entered by the
304 Commission not more than six months after the date of the filing of such petition.

305 5. If, in any year, a Phase I or Phase II Utility is unable to meet the compliance obligation of the RPS
306 Program requirements or if the cost of RECs necessary to comply with RPS Program requirements exceeds
307 \$45 per megawatt hour, such supplier shall be obligated to make a deficiency payment equal to \$45 for each
308 megawatt-hour shortfall for the year of noncompliance, except that the deficiency payment for any shortfall
309 in procuring RECs for solar, wind, or anaerobic digesters located in the Commonwealth shall be \$75 per
310 megawatts hour for resources one megawatt and lower. The amount of any deficiency payment shall increase
311 by one percent annually after 2021. A Phase I or Phase II Utility shall be entitled to recover the costs of such
312 payments as a cost of compliance with the requirements of this subsection pursuant to subdivision A 5 d of
313 § 56-585.1. All proceeds from the deficiency payments shall be deposited into an interest-bearing account
314 administered by the Department of Energy. In administering this account, the Department of Energy shall
315 manage the account as follows: (i) 50 percent of total revenue shall be directed to job training programs in
316 historically economically disadvantaged communities; (ii) 16 percent of total revenue shall be directed to
317 energy efficiency measures for public facilities; (iii) 30 percent of total revenue shall be directed to renewable
318 energy programs located in historically economically disadvantaged communities; and (iv) four percent of
319 total revenue shall be directed to administrative costs.

320 For any project constructed pursuant to this subsection or subsection E, a utility shall, subject to a
321 competitive procurement process, procure equipment from a Virginia-based or United States-based

322 manufacturer using materials or product components made in Virginia or the United States, if reasonably
323 available and competitively priced.

324 *No later than July 1, 2033, the Commission shall initiate a proceeding to evaluate the future availability*
325 *of RECs from solar, wind, and anaerobic digestion resources of one megawatt or less located in the*
326 *Commonwealth in order to meet the renewable portfolio standard requirements of subdivision C 2 and may,*
327 *in its sole discretion, increase or decrease by up to one percentage point the percentage of a utility's*
328 *requirements under subdivision C 2 to be met with RECs from such resources in future compliance years.*

329 *6. The provisions of this section are in furtherance of the Commonwealth's interest in the health, safety,*
330 *and welfare of its citizens, including by increasing fuel and resource diversity within the Commonwealth,*
331 *minimizing the risk and exposure to capacity market pricing volatility, enhancing the reliability and*
332 *resilience of the Commonwealth's electric system, minimizing emissions of sulfur dioxide, nitrogen oxide,*
333 *particulate matter, and other pollution that adversely affect public health and the environment in the*
334 *Commonwealth, and meeting goals to limit carbon dioxide emissions under the laws of the Commonwealth.*

335 E. To enhance reliability and performance of the utility's generation and distribution system, each Phase I
336 and Phase II Utility shall petition the Commission for necessary approvals to construct or acquire new,
337 utility-owned energy storage resources.

338 1. By December 31, 2035, each Phase I Utility shall petition the Commission for necessary approvals to
339 construct or acquire 400 megawatts of energy storage capacity. Nothing in this subdivision shall prohibit a
340 Phase I Utility from constructing or acquiring more than 400 megawatts of energy storage, provided that the
341 utility receives approval from the Commission pursuant to §§ 56-580 and 56-585.1.

342 2. By December 31, 2035, each Phase II Utility shall petition the Commission for necessary approvals to
343 construct or acquire 2,700 megawatts of energy storage capacity. Nothing in this subdivision shall prohibit a
344 Phase II Utility from constructing or acquiring more than 2,700 megawatts of energy storage, provided that
345 the utility receives approval from the Commission pursuant to §§ 56-580 and 56-585.1.

346 3. No single energy storage project shall exceed 500 megawatts in size, except that a Phase II Utility may
347 procure a single energy storage project up to 800 megawatts.

348 4. All energy storage projects procured pursuant to this subsection shall meet the competitive procurement
349 protocols established in subdivision D 3.

350 5. After July 1, 2020, at least 35 percent of the energy storage facilities placed into service shall be (i)
351 purchased by the public utility from a party other than the public utility or (ii) owned by a party other than a

352 public utility, with the capacity from such facilities sold to the public utility. By January 1, 2021, the
353 Commission shall adopt regulations to achieve the deployment of energy storage for the Commonwealth
354 required in subdivisions 1 and 2, including regulations that set interim targets and update existing utility
355 planning and procurement rules. The regulations shall include programs and mechanisms to deploy energy
356 storage, including competitive solicitations, behind-the-meter incentives, non-wires alternatives programs,
357 and peak demand reduction programs.

358 F. All costs incurred by a Phase I or Phase II Utility related to compliance with the requirements of this
359 section or pursuant to § 56-585.1:11, including (i) costs of generation facilities powered by sunlight or
360 onshore or offshore wind, or energy storage facilities, that are constructed or acquired by a Phase I or Phase II
361 Utility after July 1, 2020, (ii) costs of capacity, energy, or environmental attributes from generation facilities
362 powered by sunlight or onshore or offshore wind, or falling water, or energy storage facilities purchased by
363 the utility from persons other than the utility through agreements after July 1, 2020, and (iii) all other costs of
364 compliance, including costs associated with the purchase of RECs associated with RPS Program
365 requirements pursuant to this section shall be recovered from all retail customers in the service territory of a
366 Phase I or Phase II Utility as a non-bypassable charge, irrespective of the generation supplier of such
367 customer, except (a) as provided in subsection G for an accelerated renewable energy buyer or (b) as
368 provided in subdivision C 3 of § 56-585.1:11, with respect to the costs of an offshore wind generation
369 facility, for a PIPP eligible utility customer or an advanced clean energy buyer or qualifying large general
370 service customer, as those terms are defined in § 56-585.1:11. If a Phase I or Phase II Utility serves
371 customers in more than one jurisdiction, such utility shall recover all of the costs of compliance with the RPS
372 Program requirements from its Virginia customers through the applicable cost recovery mechanism, and all
373 associated energy, capacity, and environmental attributes shall be assigned to Virginia to the extent that such
374 costs are requested but not recovered from any system customers outside the Commonwealth.

375 By September 1, 2020, the Commission shall direct the initiation of a proceeding for each Phase I and
376 Phase II Utility to review and determine the amount of such costs, net of benefits, that should be allocated to
377 retail customers within the utility's service territory which have elected to receive electric supply service from
378 a supplier of electric energy other than the utility, and shall direct that tariff provisions be implemented to
379 recover those costs from such customers beginning no later than January 1, 2021. Thereafter, such charges
380 and tariff provisions shall be updated and trued up by the utility on an annual basis, subject to continuing
381 review and approval by the Commission.

382 G. 1. An accelerated renewable energy buyer may contract with a Phase I or Phase II Utility, or a person
383 other than a Phase I or Phase II Utility, to obtain (i) RECs from RPS eligible resources or (ii) bundled
384 capacity, energy, and RECs from solar or, wind, or zero-carbon electricity generation resources located
385 within the PJM region and initially placed in commercial operation after January 1, 2015, including any
386 contract with a utility for such generation resources that does not allocate the cost of such resources to or
387 recover the cost of such resources from any other customers of the utility that have not voluntarily agreed to
388 pay such cost. Such an accelerated renewable energy buyer may offset all or a portion of its electric load for
389 purposes of RPS compliance through such arrangements. An accelerated renewable energy buyer shall be
390 exempt from the assignment of non-bypassable RPS compliance costs pursuant to subsection F, with the
391 exception of the costs of an offshore wind generating facility pursuant to § 56-585.1:11, based on the amount
392 of RECs obtained pursuant to this subsection in proportion to the customer's total electric energy
393 consumption, on an annual basis. An accelerated renewable energy buyer may also contract with a Phase I or
394 Phase II Utility, or a person other than a Phase I or Phase II Utility, to obtain capacity from energy storage
395 facilities located within the network service area of the utility pursuant to this subsection, provided that the
396 costs of such resources are not recovered from any of the utility's customers who have not voluntarily agreed
397 to pay for such costs. Such accelerated renewable energy buyer shall be exempt from the assignment of
398 non-bypassable RPS Program compliance costs specifically associated with energy storage facilities pursuant
399 to this subsection in proportion to the customer's total capacity demand on an annual basis. An accelerated
400 renewable energy buyer obtaining RECs only shall not be exempt from costs related to procurement of new
401 solar or onshore wind generation capacity, energy, or environmental attributes, or energy storage facilities, by
402 the utility pursuant to subsections D and E, however, an accelerated renewable energy buyer that is a
403 customer of a Phase II Utility and was subscribed, as of March 1, 2020, to a voluntary companion
404 experimental tariff offering of the utility for the purchase of renewable attributes from renewable energy
405 facilities that requires a renewable facilities agreement and the purchase of a minimum of 2,000 renewable
406 attributes annually, shall be exempt from allocation of the net costs related to procurement of new solar or
407 onshore wind generation capacity, energy, or environmental attributes, or energy storage facilities, by the
408 utility pursuant to subsections D and E, based on the amount of RECs associated with the customer's
409 renewable facilities agreements associated with such tariff offering as of that date in proportion to the
410 customer's total electric energy consumption, on an annual basis. To the extent that an accelerated renewable
411 energy buyer contracts for the capacity of new solar or wind generation resources or energy storage facilities
412 pursuant to this subsection, the aggregate amount of such nameplate capacity shall be offset from the utility's

413 procurement requirements pursuant to subsection D. All RECs associated with contracts entered into by an
414 accelerated renewable energy buyer with the utility, or a person other than the utility, for an RPS Program
415 shall not be credited to the utility's compliance with its RPS requirements, and the calculation of the utility's
416 RPS Program requirements shall not include the electric load covered by customers certified as accelerated
417 renewable energy buyers.

418 2. Each Phase I or Phase II Utility shall certify, and verify as necessary, to the Commission that the
419 accelerated renewable energy buyer has satisfied the exemption requirements of this subsection for each year,
420 or an accelerated renewable energy buyer may choose to certify satisfaction of this exemption by reporting to
421 the Commission individually. The Commission may promulgate such rules and regulations as may be
422 necessary to implement the provisions of this subsection.

423 3. Provided that no incremental costs associated with any contract between a Phase I or Phase II Utility
424 and an accelerated renewable energy buyer is allocated to or recovered from any other customer of the utility,
425 any such contract with an accelerated renewable energy buyer that is a jurisdictional customer of the utility
426 shall not be deemed a special rate or contract requiring Commission approval pursuant to § 56-235.2.

427 4. The State Corporation Commission shall ensure that any distribution and transmission costs associated
428 with new energy generation resources procured pursuant to subsection G of § 56-585.5 of the Code of
429 Virginia, as amended by this act, are justly and reasonably allocated.

430 H. No customer of a Phase II Utility with a peak demand in excess of 100 megawatts in 2019 that elected
431 pursuant to subdivision A 3 of § 56-577 to purchase electric energy from a competitive service provider prior
432 to April 1, 2019, shall be allocated any non-bypassable charges pursuant to subsection F for such period that
433 the customer is not purchasing electric energy from the utility, and such customer's electric load shall not be
434 included in the utility's RPS Program requirements. No customer of a Phase I Utility that elected pursuant to
435 subdivision A 3 of § 56-577 to purchase electric energy from a competitive service provider prior to February
436 1, 2019, shall be allocated any non-bypassable charges pursuant to subsection F for such period that the
437 customer is not purchasing electric energy from the utility, and such customer's electric load shall not be
438 included in the utility's RPS Program requirements.

439 I. In any petition by a Phase I or Phase II Utility for a certificate of public convenience and necessity to
440 construct and operate an electrical generating facility that generates electric energy derived from sunlight
441 submitted pursuant to § 56-580, such utility shall demonstrate that the proposed facility was subject to
442 competitive procurement or solicitation as set forth in subdivision D 3.

443 J. Notwithstanding any contrary provision of law, for the purposes of this section, any falling water

444 generation facility located in the Commonwealth and commencing commercial operations prior to July 1,
445 2024, shall be considered a renewable energy portfolio standard (RPS) eligible source.

446 K. Nothing in this section shall apply to any entity organized under Chapter 9.1 (§ 56-231.15 et seq.).

447 L. The Commission shall adopt such rules and regulations as may be necessary to implement the
448 provisions of this section, including a requirement that participants verify whether the RPS Program
449 requirements are met in accordance with this section.

450 **§ 56-594.02. Solar-powered or wind-powered electricity generation; power purchase agreements;**
451 **pilot programs.**

452 A. The Commission shall conduct pilot programs under which a person that owns or operates a
453 solar-powered or wind-powered electricity generation facility located on premises owned or leased by an
454 eligible customer-generator, as defined in § 56-594, shall be permitted to sell the electricity generated from
455 such facility exclusively to such eligible customer-generator under a power purchase agreement used to
456 provide third party financing of the costs of such a renewable generation facility (third party power purchase
457 agreement), subject to the following terms, conditions, and restrictions:

458 1. Notwithstanding subsection G of § 56-580 or any other provision of law, a pilot program shall be
459 conducted within the certificated service territory of each investor-owned electric utility ("Pilot Utility");

460 2. Except as provided in this subdivision, both jurisdictional and nonjurisdictional customers may
461 participate in such pilot programs on a first-come, first-serve basis. The aggregated capacity of all generation
462 facilities that are subject to such third party power purchase agreements at any time during the pilot program
463 shall not exceed 500 megawatts for Virginia jurisdictional customers and 500 megawatts for Virginia
464 nonjurisdictional customers. Such limitation on the aggregated capacity of such facilities shall constitute a
465 portion of the existing limit of six percent of each Pilot Utility's adjusted Virginia peak-load forecast for the
466 previous year that is available to eligible customer-generators pursuant to subsection E of § 56-594.
467 Notwithstanding any provision of this section that incorporates provisions of § 56-594, the seller and the
468 customer shall elect either to (i) enter into their third party power purchase agreement subject to the
469 conditions and provisions of the Pilot Utility's net energy metering program under § 56-594 or (ii) provide
470 that electricity generated from the generation facilities subject to the third party power purchase agreement
471 will not be net metered under § 56-594, provided that an election not to net meter under § 56-594 shall not
472 exempt the third party power purchase agreement and the parties thereto from the requirements of this section
473 that incorporate provisions of § 56-594;

474 3. A solar-powered or wind-powered generation facility with a capacity of ~~no less than 50 kilowatts and~~

475 no more than three megawatts shall be eligible for a third party power purchase agreement under a pilot
476 program; ~~however, if the customer under such agreement is a low-income utility customer, as defined in~~
477 ~~§ 56-576, or is an entity with tax-exempt status in accordance with § 501(e) of the Internal Revenue Code of~~
478 ~~1954, as amended, then such facility is eligible for the pilot program even if it does not meet the 50 kilowatts~~
479 ~~minimum size requirement.~~ The maximum generation capacity of three megawatts shall not affect the limits
480 on the capacity of electrical generating capacities of 25 kilowatts for residential customers and three
481 megawatts for nonresidential customers set forth in subsection B of § 56-594, which limitations shall
482 continue to apply to net energy metering generation facilities regardless of whether they are the subject of a
483 third party power purchase agreement under the pilot program;

484 4. A generation facility that is the subject of a third party power purchase agreement under the pilot
485 program shall serve only one customer, and a third party power purchase agreement shall not serve multiple
486 customers;

487 5. The customer under a third party power purchase agreement under the pilot program shall be subject to
488 the interconnection and other requirements imposed on eligible customer-generators pursuant to subsection C
489 of § 56-594, including the requirement that the customer bear the reasonable costs, as determined by the
490 Commission, of the items described in clauses (a) and (b) of such subsection;

491 6. A third party power purchase agreement under the pilot program shall not be valid unless it conforms in
492 all respects to the requirements of the pilot program conducted under the provisions of this section and unless
493 the Commission and the Pilot Utility are provided written notice of the parties' intent to enter into a third
494 party power purchase agreement not less than 30 days prior to the agreement's proposed effective date; and

495 7. An affiliate of the Pilot Utility shall be permitted to offer and enter into third party power purchase
496 arrangements on the same basis as may any other person that satisfies the requirements of being a seller under
497 a third party power purchase agreement under the pilot program.

498 B. The Commission shall review the pilot program established pursuant to subsection A in 2015 and every
499 two years thereafter during the pilot program. In its review, the Commission shall determine whether the
500 limitations in subdivisions A 2 and 3 should be expanded, reduced, or continued.

501 C. Any third party power purchase agreement that is not entered into pursuant to the pilot program
502 established pursuant to subsection A is prohibited in the Pilot Utility's service territory, unless such third
503 party power purchase agreement is entered into between a licensed supplier and a retail customer pursuant to
504 § 56-577 where such supplier is responsible for serving 100 percent of the load requirements for each retail

505 customer account it serves.

506 D. If the Commission approves a tariff proposed for electric power provided 100 percent from renewable
507 energy that serves 100 percent of the load requirements for each retail customer account it serves under such
508 tariff, hereafter referred to as a "green tariff," such a green tariff shall not be available to any party to a third
509 party power purchase agreement for the account being served by such power purchase agreement, and such
510 an agreement shall remain in effect notwithstanding the approval of the green tariff.

511 E. Nothing in this section shall be construed as (i) rendering any person, by virtue of its selling electric
512 power to an eligible customer-generator under a third party power purchase agreement entered into pursuant
513 to the pilot program established under this section, a public utility or a competitive service provider, (ii)
514 imposing a requirement that such a person meet 100 percent of the load requirements for each retail customer
515 account it serves, or (iii) affecting third party power purchase agreements in effect prior to July 1, 2013.

516 F. Nothing in this section shall abridge any rights of either party to an agreement between a Pilot Utility
517 and a group purchasing organization acting on behalf of Virginia local governments regarding the purchase of
518 electric service.

519 G. The Commission shall, by December 1, 2013, establish guidelines concerning (i) information to be
520 provided in notices required under subdivision A 6 and (ii) procedures for aggregating and posting to the
521 Commission's web site information derived from the aforesaid notices, including total capacity utilized by
522 pilot projects for which notice has been received and capacity remaining available for future pilot projects. In
523 addition, the Commission may adopt such rules or establish such guidelines as may be necessary for its
524 general administration of the pilot program established under this section.

525 **2. That it is the policy of the Commonwealth to encourage the development of electric generation**
526 **projects on previously developed project sites, as defined in § 56-585.5 of the Code of Virginia, as**
527 **amended by this act, to reduce the land use impacts of solar development.**

528 **3. That a Phase II Utility, as defined in subdivision A 1 of § 56-585.1 of the Code of Virginia, may**
529 **recover costs associated with any petition for cost recovery made pursuant to clause (iv) of subdivision**
530 **A 6 of § 56-585.1 of the Code of Virginia that has been approved by the State Corporation Commission**
531 **as of December 1, 2032, notwithstanding any time limitations on such cost recovery under subdivision**
532 **A 6 of § 56-585.1 of the Code of Virginia.**