

SENATE BILL NO. 1231

AMENDMENT IN THE NATURE OF A SUBSTITUTE

(Proposed by the Senate Committee on Agriculture, Conservation and Natural Resources
on January 31, 2023)

(Patron Prior to Substitute--Senator Lewis)

A BILL to amend and reenact § 56-585.5 of the Code of Virginia, relating to renewable energy; biomass-fired facilities; Department of Forestry advisory panel; report.

Be it enacted by the General Assembly of Virginia:

1. That § 56-585.5 of the Code of Virginia is 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.

"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.

27 "Previously developed project site" means any property, including related buffer areas, if any, that
28 has been previously disturbed or developed for non-single-family residential, nonagricultural, or
29 nonsilvicultural use, regardless of whether such property currently is being used for any purpose.
30 "Previously developed project site" includes a brownfield as defined in § 10.1-1230 or any parcel that has
31 been previously used (i) for a retail, commercial, or industrial purpose; (ii) as a parking lot; (iii) as the site
32 of a parking lot canopy or structure; (iv) for mining, which is any lands affected by coal mining that took
33 place before August 3, 1977, or any lands upon which extraction activities have been permitted by the
34 Department of Energy under Title 45.2; (v) for quarrying; or (vi) as a landfill.

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

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

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

49 ~~2. By December 31, 2028, each Phase I and II Utility shall retire all biomass-fired electric~~
50 ~~generating units that do not co-fire with coal.~~

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

54 4-3. A Phase I or Phase II Utility may petition the Commission for relief from the requirements
55 of this subsection on the basis that the requirement would threaten the reliability or security of electric
56 service to customers. The Commission shall consider in-state and regional transmission entity resources
57 and shall evaluate the reliability of each proposed retirement on a case-by-case basis in ruling upon any
58 such petition.

59 C. Each Phase I and Phase II Utility shall participate in a renewable energy portfolio standard
60 program (RPS Program) that establishes annual goals for the sale of renewable energy to all retail
61 customers in the utility's service territory, other than accelerated renewable energy buyers pursuant to
62 subsection G, regardless of whether such customers purchase electric supply service from the utility or
63 from suppliers other than the utility. To comply with the RPS Program, each Phase I and Phase II Utility
64 shall procure and retire Renewable Energy Certificates (RECs) originating from renewable energy
65 standard eligible sources (RPS eligible sources). For purposes of complying with the RPS Program from
66 2021 to 2024, a Phase I and Phase II Utility may use RECs from any renewable energy facility, as defined
67 in § 56-576, provided that such facilities are located in the Commonwealth or are physically located within
68 the PJM Interconnection, LLC (PJM) region. However, at no time during this period or thereafter may
69 any Phase I or Phase II Utility use RECs from (i) renewable thermal energy, (ii) renewable thermal energy
70 equivalent, or (iii) biomass-fired facilities that are outside the Commonwealth, ~~or (iv) biomass-fired~~
71 ~~facilities operating in the Commonwealth as of January 1, 2020, that supply 10 percent or more of their~~
72 ~~annual net electrical generation to the electric grid or more than 15 percent of their annual total useful~~
73 ~~energy to any entity other than the manufacturing facility to which the generating source is interconnected.~~
74 From compliance year 2025 and all years after, each Phase I and Phase II Utility may only use RECs from
75 RPS eligible sources for compliance with the RPS Program.

76 In order to qualify as RPS eligible sources, such sources must be (a) electric-generating resources
77 that generate electric energy derived from solar or wind located in the Commonwealth or off the
78 Commonwealth's Atlantic shoreline or in federal waters and interconnected directly into the
79 Commonwealth or physically located within the PJM region; (b) falling water resources located in the
80 Commonwealth or physically located within the PJM region that were in operation as of January 1, 2020,

81 that are owned by a Phase I or Phase II Utility or for which a Phase I or Phase II Utility has entered into a
82 contract prior to January 1, 2020, to purchase the energy, capacity, and renewable attributes of such falling
83 water resources; (c) non-utility-owned resources from falling water that (1) are less than 65 megawatts,
84 (2) began commercial operation after December 31, 1979, or (3) added incremental generation
85 representing greater than 50 percent of the original nameplate capacity after December 31, 1979, provided
86 that such resources are located in the Commonwealth or are physically located within the PJM region; (d)
87 waste-to-energy or landfill gas-fired generating resources located in the Commonwealth and in operation
88 as of January 1, 2020, provided that such resources do not use waste heat from fossil fuel combustion ~~or~~
89 ~~forest or woody biomass as fuel~~; or (e) biomass-fired facilities in operation in the Commonwealth and in
90 operation as of January 1, ~~2020~~ 2023, that (1) supply no more than 10 percent of their annual net electrical
91 generation to the electric grid or no more than 15 percent of their annual total useful energy to any entity
92 other than the manufacturing facility to which the generating source is interconnected and are fueled by
93 forest-product manufacturing residuals, including spent pulping liquor, bark logging residues, paper
94 recycling residuals, and biowastes or biomass, as described in subdivisions A 1, 2, and 4 of § 10.1-1308.1,
95 that results from harvesting in accordance with silvicultural best management practices developed and
96 enforced by the State Forester pursuant to § 10.1-1105 or (2) are owned by a Phase I or Phase II utility,
97 have less than 52 megawatts capacity, and are fueled by forest-product manufacturing residuals or
98 biomass, as described in subdivisions A 1, 2, and 4 of § 10.1-1308.1, that results from harvesting in
99 accordance with silvicultural best management practices developed and enforced by the State Forester
100 pursuant to § 10.1-1105. Regardless of any future maintenance, expansion, or refurbishment activities, the
101 total amount of RECs that may be sold by any RPS eligible source using biomass in any year shall be no
102 more than the number of megawatt hours of electricity produced by that facility in ~~2019~~ 2022; however,
103 in no year may any RPS eligible source using biomass sell RECs in excess of the actual megawatt-hours
104 of electricity generated by such facility that year. In order to comply with the RPS Program, each Phase I
105 and Phase II Utility may use and retire the environmental attributes associated with any existing owned
106 or contracted solar, wind, ~~or~~ falling water, or biomass electric generating resources in operation, or
107 proposed for operation, in the Commonwealth or solar, wind, or falling water resources physically located

108 within the PJM region, with such resource qualifying as a Commonwealth-located resource for purposes
 109 of this subsection, as of January 1, 2020, provided such renewable attributes are verified as RECs
 110 consistent with the PJM-EIS Generation Attribute Tracking System.

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

a Phase I Utilities		Phase II Utilities	
b Year	RPS Program Requirement	Year	RPS Program Requirement
c 2021	6%	2021	14%
d 2022	7%	2022	17%
e 2023	8%	2023	20%
f 2024	10%	2024	23%
g 2025	14%	2025	26%
h 2026	17%	2026	29%
i 2027	20%	2027	32%
j 2028	24%	2028	35%
k 2029	27%	2029	38%
l 2030	30%	2030	41%
m 2031	33%	2031	45%
n 2032	36%	2032	49%
o 2033	39%	2033	52%
p 2034	42%	2034	55%
q 2035	45%	2035	59%
r 2036	53%	2036	63%
s 2037	53%	2037	67%
t 2038	57%	2038	71%
u 2039	61%	2039	75%
v 2040	65%	2040	79%
w 2041	68%	2041	83%
x 2042	71%	2042	87%
y 2043	74%	2043	91%
z 2044	77%	2044	95%
aa 2045	80%	2045 and thereafter 100%	
ab 2046	84%		
ac 2047	88%		
ad 2048	92%		
ae 2049	96%		
af 2050 and thereafter	100%		

113 A Phase II Utility shall meet one percent of the RPS Program requirements in any given
 114 compliance year with solar, wind, or anaerobic digestion resources of one megawatt or less located in the

115 Commonwealth, with not more than 3,000 kilowatts at any single location or at contiguous locations
116 owned by the same entity or affiliated entities and, to the extent that low-income qualifying projects are
117 available, then no less than 25 percent of such one percent shall be composed of low-income qualifying
118 projects.

119 Beginning with the 2025 compliance year and thereafter, at least 75 percent of all RECs used by a
120 Phase II Utility in a compliance period shall come from RPS eligible resources located in the
121 Commonwealth.

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

128 D. Each Phase I or Phase II Utility shall petition the Commission for necessary approvals to
129 procure zero-carbon electricity generating capacity as set forth in this subsection and energy storage
130 resources as set forth in subsection E. To the extent that a Phase I or Phase II Utility constructs or acquires
131 new zero-carbon generating facilities or energy storage resources, the utility shall petition the Commission
132 for the recovery of the costs of such facilities, at the utility's election, either through its rates for generation
133 and distribution services or through a rate adjustment clause pursuant to subdivision A 6 of § 56-585.1.
134 All costs not sought for recovery through a rate adjustment clause pursuant to subdivision A 6 of § 56-
135 585.1 associated with generating facilities provided by sunlight or onshore or offshore wind are also
136 eligible to be applied by the utility as a customer credit reinvestment offset as provided in subdivision A
137 8 of § 56-585.1. Costs associated with the purchase of energy, capacity, or environmental attributes from
138 facilities owned by the persons other than the utility required by this subsection shall be recovered by the
139 utility either through its rates for generation and distribution services or pursuant to § 56-249.6.

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

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

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

157 c. By December 31, 2030, each Phase I Utility shall petition the Commission for necessary
158 approvals to construct, acquire, or enter into agreements to purchase the energy, capacity, and
159 environmental attributes of at least 200 megawatts of additional generating capacity located in the
160 Commonwealth using energy derived from sunlight or onshore wind, and 35 percent of such generating
161 capacity procured shall be from the purchase of energy, capacity, and environmental attributes from solar
162 or onshore wind facilities owned by persons other than the utility, with the remainder, in the aggregate,
163 being from construction or acquisition by such Phase I Utility.

164 d. Nothing in this subdivision 1 shall prohibit such Phase I Utility from constructing, acquiring, or
165 entering into agreements to purchase the energy, capacity, and environmental attributes of more than 600
166 megawatts of generating capacity located in the Commonwealth using energy derived from sunlight or

167 onshore wind, provided the utility receives approval from the Commission pursuant to §§ 56-580 and 56-
168 585.1.

169 2. By December 31, 2035, each Phase II Utility shall petition the Commission for necessary
170 approvals to (i) construct, acquire, or enter into agreements to purchase the energy, capacity, and
171 environmental attributes of 16,100 megawatts of generating capacity located in the Commonwealth using
172 energy derived from sunlight or onshore wind, which shall include 1,100 megawatts of solar generation
173 of a nameplate capacity not to exceed three megawatts per individual project and 35 percent of such
174 generating capacity procured shall be from the purchase of energy, capacity, and environmental attributes
175 from solar facilities owned by persons other than a utility, including utility affiliates and deregulated
176 affiliates and (ii) pursuant to § 56-585.1:11, construct or purchase one or more offshore wind generation
177 facilities located off the Commonwealth's Atlantic shoreline or in federal waters and interconnected
178 directly into the Commonwealth with an aggregate capacity of up to 5,200 megawatts. At least 200
179 megawatts of the 16,100 megawatts shall be placed on previously developed project sites.

180 a. By December 31, 2024, each Phase II Utility shall petition the Commission for necessary
181 approvals to construct, acquire, or enter into agreements to purchase the energy, capacity, and
182 environmental attributes of at least 3,000 megawatts of generating capacity located in the Commonwealth
183 using energy derived from sunlight or onshore wind, and 35 percent of such generating capacity procured
184 shall be from the purchase of energy, capacity, and environmental attributes from solar or onshore wind
185 facilities owned by persons other than the utility, with the remainder, in the aggregate, being from
186 construction or acquisition by such Phase II Utility.

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

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

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

208 e. Nothing in this subdivision 2 shall prohibit such Phase II Utility from constructing, acquiring,
209 or entering into agreements to purchase the energy, capacity, and environmental attributes of more than
210 16,100 megawatts of generating capacity located in the Commonwealth using energy derived from
211 sunlight or onshore wind, provided the utility receives approval from the Commission pursuant to §§ 56-
212 580 and 56-585.1.

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

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

240 4. In connection with the requirements of this subsection, each Phase I and Phase II Utility shall,
241 commencing in 2020 and concluding in 2035, submit annually a plan and petition for approval for the
242 development of new solar and onshore wind generation capacity. Such plan shall reflect, in the aggregate
243 and over its duration, the requirements of subsection D concerning the allocation percentages for
244 construction or purchase of such capacity. Such petition shall contain any request for approval to construct
245 such facilities pursuant to subsection D of § 56-580 and a request for approval or update of a rate
246 adjustment clause pursuant to subdivision A 6 of § 56-585.1 to recover the costs of such facilities. Such
247 plan shall also include the utility's plan to meet the energy storage project targets of subsection E, including

248 the goal of installing at least 10 percent of such energy storage projects behind the meter. In determining
249 whether to approve the utility's plan and any associated petition requests, the Commission shall determine
250 whether they are reasonable and prudent and shall give due consideration to (i) the RPS and carbon dioxide
251 reduction requirements in this section, (ii) the promotion of new renewable generation and energy storage
252 resources within the Commonwealth, and associated economic development, and (iii) fuel savings
253 projected to be achieved by the plan. Notwithstanding any other provision of this title, the Commission's
254 final order regarding any such petition and associated requests shall be entered by the Commission not
255 more than six months after the date of the filing of such petition.

256 5. If, in any year, a Phase I or Phase II Utility is unable to meet the compliance obligation of the
257 RPS Program requirements or if the cost of RECs necessary to comply with RPS Program requirements
258 exceeds \$45 per megawatt hour, such supplier shall be obligated to make a deficiency payment equal to
259 \$45 for each megawatt-hour shortfall for the year of noncompliance, except that the deficiency payment
260 for any shortfall in procuring RECs for solar, wind, or anaerobic digesters located in the Commonwealth
261 shall be \$75 per megawatts hour for resources one megawatt and lower. The amount of any deficiency
262 payment shall increase by one percent annually after 2021. A Phase I or Phase II Utility shall be entitled
263 to recover the costs of such payments as a cost of compliance with the requirements of this subsection
264 pursuant to subdivision A 5 d of § 56-585.1. All proceeds from the deficiency payments shall be deposited
265 into an interest-bearing account administered by the Department of Energy. In administering this account,
266 the Department of Energy shall manage the account as follows: (i) 50 percent of total revenue shall be
267 directed to job training programs in historically economically disadvantaged communities; (ii) 16 percent
268 of total revenue shall be directed to energy efficiency measures for public facilities; (iii) 30 percent of
269 total revenue shall be directed to renewable energy programs located in historically economically
270 disadvantaged communities; and (iv) four percent of total revenue shall be directed to administrative costs.

271 For any project constructed pursuant to this subsection or subsection E, a utility shall, subject to a
272 competitive procurement process, procure equipment from a Virginia-based or United States-based
273 manufacturer using materials or product components made in Virginia or the United States, if reasonably
274 available and competitively priced.

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

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

282 2. By December 31, 2035, each Phase II Utility shall petition the Commission for necessary
283 approvals to construct or acquire 2,700 megawatts of energy storage capacity. Nothing in this subdivision
284 shall prohibit a Phase II Utility from constructing or acquiring more than 2,700 megawatts of energy
285 storage, provided that the utility receives approval from the Commission pursuant to §§ 56-580 and 56-
286 585.1.

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

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

291 5. After July 1, 2020, at least 35 percent of the energy storage facilities placed into service shall
292 be (i) purchased by the public utility from a party other than the public utility or (ii) owned by a party
293 other than a public utility, with the capacity from such facilities sold to the public utility. By January 1,
294 2021, the Commission shall adopt regulations to achieve the deployment of energy storage for the
295 Commonwealth required in subdivisions 1 and 2, including regulations that set interim targets and update
296 existing utility planning and procurement rules. The regulations shall include programs and mechanisms
297 to deploy energy storage, including competitive solicitations, behind-the-meter incentives, non-wires
298 alternatives programs, and peak demand reduction programs.

299 F. All costs incurred by a Phase I or Phase II Utility related to compliance with the requirements
300 of this section or pursuant to § 56-585.1:11, including (i) costs of generation facilities powered by sunlight
301 or onshore or offshore wind, or energy storage facilities, that are constructed or acquired by a Phase I or

302 Phase II Utility after July 1, 2020, (ii) costs of capacity, energy, or environmental attributes from
303 generation facilities powered by sunlight or onshore or offshore wind, or falling water, or energy storage
304 facilities purchased by the utility from persons other than the utility through agreements after July 1, 2020,
305 and (iii) all other costs of compliance, including costs associated with the purchase of RECs associated
306 with RPS Program requirements pursuant to this section shall be recovered from all retail customers in
307 the service territory of a Phase I or Phase II Utility as a non-bypassable charge, irrespective of the
308 generation supplier of such customer, except (a) as provided in subsection G for an accelerated renewable
309 energy buyer or (b) as provided in subdivision C 3 of § 56-585.1:11, with respect to the costs of an offshore
310 wind generation facility, for a PIPP eligible utility customer or an advanced clean energy buyer or
311 qualifying large general service customer, as those terms are defined in § 56-585.1:11. If a Phase I or
312 Phase II Utility serves customers in more than one jurisdiction, such utility shall recover all of the costs
313 of compliance with the RPS Program requirements from its Virginia customers through the applicable
314 cost recovery mechanism, and all associated energy, capacity, and environmental attributes shall be
315 assigned to Virginia to the extent that such costs are requested but not recovered from any system
316 customers outside the Commonwealth.

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

324 G. 1. An accelerated renewable energy buyer may contract with a Phase I or Phase II Utility, or a
325 person other than a Phase I or Phase II Utility, to obtain (i) RECs from RPS eligible resources or (ii)
326 bundled capacity, energy, and RECs from solar or wind generation resources located within the PJM
327 region and initially placed in commercial operation after January 1, 2015, including any contract with a
328 utility for such generation resources that does not allocate to or recover from any other customer of the

329 utility the cost of such resources. Such an accelerated renewable energy buyer may offset all or a portion
330 of its electric load for purposes of RPS compliance through such arrangements. An accelerated renewable
331 energy buyer shall be exempt from the assignment of non-bypassable RPS compliance costs pursuant to
332 subsection F, with the exception of the costs of an offshore wind generating facility pursuant to § 56-
333 585.1:11, based on the amount of RECs obtained pursuant to this subsection in proportion to the
334 customer's total electric energy consumption, on an annual basis. An accelerated renewable energy buyer
335 obtaining RECs only shall not be exempt from costs related to procurement of new solar or onshore wind
336 generation capacity, energy, or environmental attributes, or energy storage facilities, by the utility pursuant
337 to subsections D and E, however, an accelerated renewable energy buyer that is a customer of a Phase II
338 Utility and was subscribed, as of March 1, 2020, to a voluntary companion experimental tariff offering of
339 the utility for the purchase of renewable attributes from renewable energy facilities that requires a
340 renewable facilities agreement and the purchase of a minimum of 2,000 renewable attributes annually,
341 shall be exempt from allocation of the net costs related to procurement of new solar or onshore wind
342 generation capacity, energy, or environmental attributes, or energy storage facilities, by the utility pursuant
343 to subsections D and E, based on the amount of RECs associated with the customer's renewable facilities
344 agreements associated with such tariff offering as of that date in proportion to the customer's total electric
345 energy consumption, on an annual basis. To the extent that an accelerated renewable energy buyer
346 contracts for the capacity of new solar or wind generation resources pursuant to this subsection, the
347 aggregate amount of such nameplate capacity shall be offset from the utility's procurement requirements
348 pursuant to subsection D. All RECs associated with contracts entered into by an accelerated renewable
349 energy buyer with the utility, or a person other than the utility, for an RPS Program shall not be credited
350 to the utility's compliance with its RPS requirements, and the calculation of the utility's RPS Program
351 requirements shall not include the electric load covered by customers certified as accelerated renewable
352 energy buyers.

353 2. Each Phase I or Phase II Utility shall certify, and verify as necessary, to the Commission that
354 the accelerated renewable energy buyer has satisfied the exemption requirements of this subsection for
355 each year, or an accelerated renewable energy buyer may choose to certify satisfaction of this exemption

356 by reporting to the Commission individually. The Commission may promulgate such rules and regulations
357 as may be necessary to implement the provisions of this subsection.

358 3. Provided that no incremental costs associated with any contract between a Phase I or Phase II
359 Utility and an accelerated renewable energy buyer is allocated to or recovered from any other customer of
360 the utility, any such contract with an accelerated renewable energy buyer that is a jurisdictional customer
361 of the utility shall not be deemed a special rate or contract requiring Commission approval pursuant to §
362 56-235.2.

363 H. No customer of a Phase II Utility with a peak demand in excess of 100 megawatts in 2019 that
364 elected pursuant to subdivision A 3 of § 56-577 to purchase electric energy from a competitive service
365 provider prior to April 1, 2019, shall be allocated any non-bypassable charges pursuant to subsection F
366 for such period that the customer is not purchasing electric energy from the utility, and such customer's
367 electric load shall not be included in the utility's RPS Program requirements. No customer of a Phase I
368 Utility that elected pursuant to subdivision A 3 of § 56-577 to purchase electric energy from a competitive
369 service provider prior to February 1, 2019, shall be allocated any non-bypassable charges pursuant to
370 subsection F for such period that the customer is not purchasing electric energy from the utility, and such
371 customer's electric load shall not be included in the utility's RPS Program requirements.

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

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

377 **2. That the Department of Forestry (Department) shall convene an advisory panel to examine the**
378 **use of forest-related materials, agricultural-related materials, and solid woody waste materials as**
379 **those terms are described in § 10.1-1308.1 of the Code of Virginia for biomass-fired electric**
380 **generating units. The advisory panel shall consist of representatives of the Department of**
381 **Environmental Quality, Virginia Energy, industry, environmental organizations, and the Virginia**
382 **Cooperative Extension, and other stakeholders as the Department deems appropriate. The advisory**

383 panel shall examine the following factors in examining the use of forest-related materials,
384 agricultural-related materials, and solid woody waste materials for biomass-fired electric
385 generating units: (i) policies in southeastern U.S. states or other states participating in the PJM
386 regional transmission organization interchange as they relate to the use of biomass for electricity
387 generation; (ii) the potential for benefits to the Commonwealth's hardwood forest health as a result
388 of using biomass for electricity generation; (iii) the amount of forest-related materials, agricultural-
389 related materials, and solid woody waste materials that can be sustainably consumed annually
390 without disrupting existing markets; (iv) consideration of technological advances in biomass energy
391 generation; and (v) a lifecycle carbon analysis, developed in coordination with the Virginia
392 Department of Environmental Quality and relevant stakeholders, that includes all carbon
393 emissions, including supply chain emissions, foregone sequestration, and the emissions from
394 burning biomass for electricity generation. The advisory panel may consider other factors as the
395 Department deems necessary. The Department shall submit a report of the advisory panel's findings
396 and any recommendations to the Governor and the Chairmen of the House Committee on
397 Commerce and Energy and the Senate Committee on Agriculture, Conservation and Natural
398 Resources no later than December 1, 2023.

399 3. That the Department of Forestry shall develop sustainable harvesting best management practices
400 with respect to the utilization of forest-related materials, agricultural-related materials, and solid
401 woody waste materials as described in § 10.1-1308.1 of the Code of Virginia for biomass-fired
402 electric generating units, including a lifecycle carbon analysis, developed in coordination with the
403 Virginia Department of Environmental Quality and relevant stakeholders, that includes all carbon
404 emissions, including supply chain emissions, foregone sequestration, and the emissions from
405 burning biomass for electricity generation.

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