

## 1 VIRGINIA ACTS OF ASSEMBLY — CHAPTER

2 *An Act to amend and reenact §§ 56-576 and 56-585.5 of the Code of Virginia, relating to renewable energy*  
 3 *portfolio standard program; geothermal heating and cooling systems; report.*

4 [H 1102]

5 Approved

6 **Be it enacted by the General Assembly of Virginia:**7 **1. That §§ 56-576 and 56-585.5 of the Code of Virginia are amended and reenacted as follows:**8 **§ 56-576. Definitions.**

9 As used in this chapter:

10 "Affiliate" means any person that controls, is controlled by, or is under common control with an electric  
11 utility.

12 "Aggregator" means a person that, as an agent or intermediary, (i) offers to purchase, or purchases,  
 13 electric energy or (ii) offers to arrange for, or arranges for, the purchase of electric energy, for sale to, or on  
 14 behalf of, two or more retail customers not controlled by or under common control with such person. The  
 15 following activities shall not, in and of themselves, make a person an aggregator under this chapter: (i)  
 16 furnishing legal services to two or more retail customers, suppliers or aggregators; (ii) furnishing educational,  
 17 informational, or analytical services to two or more retail customers, unless direct or indirect compensation  
 18 for such services is paid by an aggregator or supplier of electric energy; (iii) furnishing educational,  
 19 informational, or analytical services to two or more suppliers or aggregators; (iv) providing default service  
 20 under § 56-585; (v) engaging in activities of a retail electric energy supplier, licensed pursuant to § 56-587,  
 21 which are authorized by such supplier's license; and (vi) engaging in actions of a retail customer, in common  
 22 with one or more other such retail customers, to issue a request for proposal or to negotiate a purchase of  
 23 electric energy for consumption by such retail customers.

24 "Business park" means a land development containing a minimum of 100 contiguous acres classified as a  
 25 Tier 4 site under the Virginia Economic Development Partnership's Business Ready Sites Program that is  
 26 developed and constructed by a locality, an industrial development authority, or a similar political  
 27 subdivision of the Commonwealth created pursuant to § 15.2-4903 or other act of the General Assembly, in  
 28 order to promote business development.

29 "Combined heat and power" means a method of using waste heat from electrical generation to offset  
 30 traditional processes, space heating, air conditioning, or refrigeration.

31 "Commission" means the State Corporation Commission.

32 "Community in which a majority of the population are people of color" means a U.S. Census tract where  
 33 more than 50 percent of the population comprises individuals who identify as belonging to one or more of the  
 34 following groups: Black, African American, Asian, Pacific Islander, Native American, other non-white race,  
 35 mixed race, Hispanic, Latino, or linguistically isolated.

36 "Cooperative" means a utility formed under or subject to Chapter 9.1 (§ 56-231.15 et seq.).

37 "Covered entity" means a provider in the Commonwealth of an electric service not subject to competition  
 38 but does not include default service providers.

39 "Covered transaction" means an acquisition, merger, or consolidation of, or other transaction involving  
 40 stock, securities, voting interests or assets by which one or more persons obtains control of a covered entity.

41 "Curtailement" means inducing retail customers to reduce load during times of peak demand so as to ease  
 42 the burden on the electrical grid.

43 "Customer choice" means the opportunity for a retail customer in the Commonwealth to purchase electric  
 44 energy from any supplier licensed and seeking to sell electric energy to that customer.

45 "Demand response" means measures aimed at shifting time of use of electricity from peak-use periods to  
 46 times of lower demand by inducing retail customers to curtail electricity usage during periods of congestion  
 47 and higher prices in the electrical grid.

48 "Distribute," "distributing," or "distribution of" electric energy means the transfer of electric energy  
 49 through a retail distribution system to a retail customer.

50 "Distributor" means a person owning, controlling, or operating a retail distribution system to provide  
 51 electric energy directly to retail customers.

52 "Electric distribution grid transformation project" means a project associated with electric distribution  
 53 infrastructure, including related data analytics equipment, that is designed to accommodate or facilitate the  
 54 integration of utility-owned or customer-owned renewable electric generation resources with the utility's  
 55 electric distribution grid or to otherwise enhance electric distribution grid reliability, electric distribution grid  
 56 security, customer service, or energy efficiency and conservation, including advanced metering infrastructure;

57 intelligent grid devices for real time system and asset information; automated control systems for electric  
 58 distribution circuits and substations; communications networks for service meters; intelligent grid devices  
 59 and other distribution equipment; distribution system hardening projects for circuits, other than the  
 60 conversion of overhead tap lines to underground service, and substations designed to reduce service outages  
 61 or service restoration times; physical security measures at key distribution substations; cyber security  
 62 measures; energy storage systems and microgrids that support circuit-level grid stability, power quality,  
 63 reliability, or resiliency or provide temporary backup energy supply; electrical facilities and infrastructure  
 64 necessary to support electric vehicle charging systems; LED street light conversions; and new customer  
 65 information platforms designed to provide improved customer access, greater service options, and expanded  
 66 access to energy usage information.

67 "Electric utility" means any person that generates, transmits, or distributes electric energy for use by retail  
 68 customers in the Commonwealth, including any investor-owned electric utility, cooperative electric utility, or  
 69 electric utility owned or operated by a municipality.

70 "Electrification" means measures that (i) electrify space heating, water heating, cooling, drying, cooking,  
 71 industrial processes, and other building and industrial end uses that would otherwise be served by onsite,  
 72 nonelectric fuels, provided that the electrification measures reduce site energy consumption; (ii) to the  
 73 maximum extent practical, seek to combine with federally authorized customer rebates for heat pump  
 74 technology; and (iii) for those measures that provide measurable and verifiable energy savings to low-income  
 75 customers or elderly customers, to the maximum extent practical, seek to combine with either  
 76 contemporaneously installed measures or previously installed measures that are or were provided under  
 77 federally funded weatherization programs or state-provided, locality-provided, or utility-provided energy  
 78 efficiency programs.

79 "Energy efficiency program" means a program that reduces the total amount of energy that is required for  
 80 the same process or activity implemented after the expiration of capped rates but does not include  
 81 electrification of any process or activity primarily fueled by natural gas. Energy efficiency programs include  
 82 equipment, physical, or program change designed to produce measured and verified reductions in the amount  
 83 of site energy required to perform the same function and produce the same or a similar outcome. Energy  
 84 efficiency programs may include (i) electrification; (ii) programs that result in improvements in lighting  
 85 design, heating, ventilation, and air conditioning systems, appliances, building envelopes, and industrial and  
 86 commercial processes; (iii) measures, such as the installation of advanced meters, implemented or installed  
 87 by utilities, that reduce fuel use or losses of electricity and otherwise improve internal operating efficiency in  
 88 generation, transmission, and distribution systems; and (iv) customer engagement programs that result in  
 89 measurable and verifiable energy savings that lead to efficient use patterns and practices. Energy efficiency  
 90 programs include demand response, combined heat and power and waste heat recovery, curtailment, or other  
 91 programs that are designed to reduce site energy consumption so long as they reduce the total amount of site  
 92 energy that is required for the same process or activity. Utilities shall be authorized to install and operate such  
 93 advanced metering technology and equipment on a customer's premises; however, nothing in this chapter  
 94 establishes a requirement that an energy efficiency program be implemented on a customer's premises and be  
 95 connected to a customer's wiring on the customer's side of the inter-connection without the customer's  
 96 expressed consent. Electricity consumption increases that result from Commission-approved electrification  
 97 measures shall not be considered as a reduction in energy savings under the energy savings requirements set  
 98 forth in subsection B of § 56-596.2. Utilities may apply verified total site energy reductions that are  
 99 attributable to Commission-approved electrification measures to the energy savings requirements set forth in  
 100 subsection B of § 56-596.2, subject to a conversion of British thermal unit-based energy savings to an  
 101 equivalent kilowatt-hour-based energy savings, which conversion shall be subject to Commission approval.

102 "Generate," "generating," or "generation of" electric energy means the production of electric energy.

103 "Generator" means a person owning, controlling, or operating a facility that produces electric energy for  
 104 sale.

105 "Geothermal electric generating resource" means an electric generating unit that is powered by geothermal  
 106 energy as defined in § 45.2-2000.

107 "Geothermal heating and cooling system" means a system that:

- 108 1. Exchanges thermal energy from groundwater or a shallow ground source to generate thermal energy  
 109 through an electric geothermal heat pump or a system of electric geothermal heat pumps interconnected with  
 110 any geothermal extraction facility that is (i) a closed loop or a series of closed loop systems in which fluid is  
 111 permanently confined within a pipe or tubing and does not come in contact with the outside environment or  
 112 (ii) an open loop system in which ground or surface water is circulated in an environmentally safe manner  
 113 directly into the facility and returned to the same aquifer or surface water source;
- 114 2. Meets or exceeds the current federal Energy Star product specification standards;
- 115 3. Replaces or displaces less efficient space or water heating systems, regardless of fuel type;
- 116 4. Replaces or displaces less efficient space cooling systems that do not meet federal Energy Star product  
 117 specification standards; and
- 118 5. Does not feed electricity back to the grid, *as defined at the level of the geothermal heat pump.*

119 "Historically economically disadvantaged community" means (i) a community in which a majority of the  
120 population are people of color or (ii) a low-income geographic area.

121 "Incremental annual savings" means the total combined kilowatt-hour savings achieved by electric utility  
122 energy efficiency and demand response programs and measures in the program year in which they are  
123 installed.

124 "Incumbent electric utility" means each electric utility in the Commonwealth that, prior to July 1, 1999,  
125 supplied electric energy to retail customers located in an exclusive service territory established by the  
126 Commission.

127 "Independent system operator" means a person that may receive or has received, by transfer pursuant to  
128 this chapter, any ownership or control of, or any responsibility to operate, all or part of the transmission  
129 systems in the Commonwealth.

130 "In the public interest," for purposes of assessing energy efficiency programs prior to the 2029 program  
131 year, describes an energy efficiency program if the Commission determines that the net present value of the  
132 benefits exceeds the net present value of the costs as determined by not less than any three of the following  
133 four tests: (i) the Total Resource Cost Test; (ii) the Utility Cost Test (also referred to as the Program  
134 Administrator Test); (iii) the Participant Test; and (iv) the Ratepayer Impact Measure Test. Such  
135 determination shall include an analysis of all four tests, and a program or portfolio of programs shall be  
136 approved if the net present value of the benefits exceeds the net present value of the costs as determined by  
137 not less than any three of the four tests. For programs proposed for the 2029 program year and all subsequent  
138 years, the Commission shall establish targets pursuant to subdivision B 4 of § 56-596.2, and a program shall  
139 be approved if the Commission determines it is cost-effective pursuant to applicable Commission regulations  
140 and that the net present value of the benefits exceeds the net present value of the costs as determined by the  
141 Total Resource Cost Test. If the Commission determines that an energy efficiency program or portfolio of  
142 programs is not in the public interest, its final order shall include all work product and analysis conducted by  
143 the Commission's staff in relation to that program, including testimony relied upon by the Commission's staff,  
144 that has bearing upon the Commission's decision. If the Commission reduces the proposed budget for a  
145 program or portfolio of programs, its final order shall include an analysis of the impact such budget reduction  
146 has upon the cost-effectiveness of such program or portfolio of programs. An order by the Commission (a)  
147 finding that a program or portfolio of programs is not in the public interest or (b) reducing the proposed  
148 budget for any program or portfolio of programs shall adhere to existing protocols for extraordinarily  
149 sensitive information. In addition, an energy efficiency program may be deemed to be "in the public interest"  
150 if the program (1) provides measurable and verifiable energy savings to low-income customers or elderly  
151 customers or (2) is a pilot program of limited scope, cost, and duration, that is intended to determine whether  
152 a new or substantially revised program or technology would be cost-effective.

153 "Low-income geographic area" means any locality, or community within a locality, that has a median  
154 household income that is not greater than 80 percent of the local median household income, or any area in the  
155 Commonwealth designated as a qualified opportunity zone by the U.S. Secretary of the Treasury via his  
156 delegation of authority to the Internal Revenue Service.

157 "Low-income utility customer" means any person or household whose income is no more than 80 percent  
158 of the median income of the locality in which the customer resides. The median income of the locality is  
159 determined by the U.S. Department of Housing and Urban Development.

160 "Measured and verified" means a process determined pursuant to methods accepted for use by utilities and  
161 industries to measure, verify, and validate energy savings and peak demand savings. This may include the  
162 protocol established by the United States Department of Energy, Office of Federal Energy Management  
163 Programs, Measurement and Verification Guidance for Federal Energy Projects, measurement and  
164 verification standards developed by the American Society of Heating, Refrigeration and Air Conditioning  
165 Engineers (ASHRAE), or engineering-based estimates of energy and demand savings associated with specific  
166 energy efficiency measures, as determined by the Commission.

167 "Municipality" means a city, county, town, authority, or other political subdivision of the Commonwealth.

168 "New underground facilities" means facilities to provide underground distribution service. "New  
169 underground facilities" includes underground cables with voltages of 69 kilovolts or less, pad-mounted  
170 devices, connections at customer meters, and transition terminations from existing overhead distribution  
171 sources.

172 "Peak-shaving" means measures aimed solely at shifting time of use of electricity from peak-use periods  
173 to times of lower demand by inducing retail customers to curtail electricity usage during periods of  
174 congestion and higher prices in the electrical grid.

175 "Percentage of Income Payment Program (PIPP) eligible utility customer" means any person or household  
176 whose income does not exceed 150 percent of the federal poverty level.

177 "Person" means any individual, corporation, partnership, association, company, business, trust, joint  
178 venture, or other private legal entity, and the Commonwealth or any municipality.

179 "Previously developed project site" means any property, including related buffer areas, if any, that has  
180 been previously disturbed or developed for non-single-family residential, non-agricultural, or non-

181 silvicultural use, regardless of whether such property currently is being used for any purpose.

182 "Previously developed project site" includes a brownfield as defined in § 10.1-1230 or any parcel that has  
183 been previously used (i) for a retail, commercial, or industrial purpose; (ii) as a parking lot; (iii) as the site of  
184 a parking lot canopy or structure; (iv) for mining, which is any lands affected by coal mining that took place  
185 before August 3, 1977, or any lands upon which extraction activities have been permitted by the Department  
186 of Energy under Title 45.2; (v) for quarrying; or (vi) as a landfill.

187 "Qualified waste heat resource" means (i) exhaust heat or flared gas from an industrial process that does  
188 not have, as its primary purpose, the production of electricity and (ii) a pressure drop in any gas for an  
189 industrial or commercial process.

190 "Renewable energy" means energy derived from sunlight, wind, falling water, biomass, sustainable or  
191 otherwise, (the definitions of which shall be liberally construed), energy from waste, landfill gas, municipal  
192 solid waste, wave motion, tides, geothermal heating and cooling systems, and geothermal electric generating  
193 resources and does not include energy derived from coal, oil, natural gas, or nuclear power. "Renewable  
194 energy" also includes the proportion of the thermal or electric energy from a facility that results from the co-  
195 firing of biomass. "Renewable energy" does not include waste heat from fossil-fired facilities or electricity  
196 generated from pumped storage but includes run-of-river generation from a combined pumped-storage and  
197 run-of-river facility.

198 "Renewable thermal energy" means the thermal energy output from (i) a renewable-fueled combined heat  
199 and power generation facility that is (a) constructed, or renovated and improved, after January 1, 2012, (b)  
200 located in the Commonwealth, and (c) utilized in industrial processes other than the combined heat and power  
201 generation facility or (ii) a solar energy system, certified to the OG-100 standard of the Solar Ratings and  
202 Certification Corporation or an equivalent certification body, that (a) is constructed, or renovated and  
203 improved, after January 1, 2013, (b) is located in the Commonwealth, and (c) heats water or air for  
204 residential, commercial, institutional, or industrial purposes.

205 "Renewable thermal energy equivalent" means the electrical equivalent in megawatt hours of renewable  
206 thermal energy calculated by dividing (i) the heat content, measured in British thermal units (BTUs), of the  
207 renewable thermal energy at the point of transfer to a residential, commercial, institutional, or industrial  
208 process by (ii) the standard conversion factor of 3.413 million BTUs per megawatt hour.

209 "Renovated and improved facility" means a facility the components of which have been upgraded to  
210 enhance its operating efficiency.

211 "Retail customer" means any person that purchases retail electric energy for its own consumption at one  
212 or more metering points or nonmetered points of delivery located in the Commonwealth.

213 "Retail electric energy" means electric energy sold for ultimate consumption to a retail customer.

214 "Revenue reductions related to energy efficiency programs" means reductions in the collection of total  
215 non-fuel revenues, previously authorized by the Commission to be recovered from customers by a utility, that  
216 occur due to measured and verified decreased consumption of electricity caused by energy efficiency  
217 programs approved by the Commission and implemented by the utility, less the amount by which such non-  
218 fuel reductions in total revenues have been mitigated through other program-related factors, including  
219 reductions in variable operating expenses.

220 "Rooftop solar installation" means a distributed electric generation facility, storage facility, or generation  
221 and storage facility utilizing energy derived from sunlight, with a rated capacity of not less than 50 kilowatts,  
222 that is installed on the roof structure of an incumbent electric utility's commercial or industrial class customer,  
223 including host sites on commercial buildings, multifamily residential buildings, school or university  
224 buildings, and buildings of a church or religious body.

225 "Solar energy system" means a system of components that produces heat or electricity, or both, from  
226 sunlight.

227 "Supplier" means any generator, distributor, aggregator, broker, marketer, or other person who offers to  
228 sell or sells electric energy to retail customers and is licensed by the Commission to do so, but it does not  
229 mean a generator that produces electric energy exclusively for its own consumption or the consumption of an  
230 affiliate.

231 "Supply" or "supplying" electric energy means the sale of or the offer to sell electric energy to a retail  
232 customer.

233 "Total annual energy savings" means (i) the total combined kilowatt-hour savings achieved by electric  
234 utility energy efficiency and demand response programs and measures installed in that program year, as well  
235 as savings still being achieved by measures and programs implemented in prior years, or (ii) savings  
236 attributable to newly installed combined heat and power facilities, including waste heat-to-power facilities,  
237 and any associated reduction in transmission line losses, provided that biomass is not a fuel and the total  
238 efficiency, including the use of thermal energy, for eligible combined heat and power facilities must meet or  
239 exceed 65 percent and have a nameplate capacity rating of less than 25 megawatts.

240 "Transmission of," "transmit," or "transmitting" electric energy means the transfer of electric energy  
241 through the Commonwealth's interconnected transmission grid from a generator to either a distributor or a

242 retail customer.

243 "Transmission system" means those facilities and equipment that are required to provide for the  
244 transmission of electric energy.

245 "Waste heat to power" means a system that generates electricity through the recovery of a qualified waste  
246 heat resource.

247 **§ 56-585.5. Generation of electricity from renewable and zero carbon sources.**

248 A. As used in this section:

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

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

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

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

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

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

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

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

265 "Previously developed project site" means any property, including related buffer areas, if any, that has  
266 been previously disturbed or developed for non-single-family residential, nonagricultural, or nonsilvicultural  
267 use, regardless of whether such property currently is being used for any purpose. "Previously developed  
268 project site" includes a brownfield as defined in § 10.1-1230 or any parcel that has been previously used (i)  
269 for a retail, commercial, or industrial purpose; (ii) as a parking lot; (iii) as the site of a parking lot canopy or  
270 structure; (iv) for mining, which is any lands affected by coal mining that took place before August 3, 1977,  
271 or any lands upon which extraction activities have been permitted by the Department of Energy under Title  
272 45.2; (v) for quarrying; or (vi) as a landfill.

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

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

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

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

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

294 C. Each Phase I and Phase II Utility shall participate in a renewable energy portfolio standard program  
295 (RPS Program) that establishes annual goals for the sale of renewable energy to all retail customers in the  
296 utility's service territory, other than accelerated renewable energy buyers pursuant to subsection G, regardless  
297 of whether such customers purchase electric supply service from the utility or from suppliers other than the  
298 utility. To comply with the RPS Program, each Phase I and Phase II Utility shall procure and retire  
299 Renewable Energy Certificates (RECs) originating from renewable energy standard eligible sources (RPS  
300 eligible sources). For purposes of complying with the RPS Program from 2021 to 2024, a Phase I and Phase  
301 II Utility may use RECs from any renewable energy facility, as defined in § 56-576, provided that such  
302 facilities are located in the Commonwealth or are physically located within the PJM Interconnection, LLC  
303 (PJM) region. However, at no time during this period or thereafter may any Phase I or Phase II Utility use

304 RECs from (i) renewable thermal energy, (ii) renewable thermal energy equivalent, or (iii) biomass-fired  
 305 facilities that are outside the Commonwealth. From compliance year 2025 and all years after, each Phase I  
 306 and Phase II Utility may only use RECs from RPS eligible sources for compliance with the RPS Program.

307 In order to qualify as RPS eligible sources, such sources must be (a) electric-generating resources that  
 308 generate electric energy derived from solar or wind located in the Commonwealth or off the Commonwealth's  
 309 Atlantic shoreline or in federal waters and interconnected directly into the Commonwealth or physically  
 310 located within the PJM region; (b) falling water resources located in the Commonwealth or physically located  
 311 within the PJM region that were in operation as of January 1, 2020, that are owned by a Phase I or Phase II  
 312 Utility or for which a Phase I or Phase II Utility has entered into a contract prior to January 1, 2020, to  
 313 purchase the energy, capacity, and renewable attributes of such falling water resources; (c) non-utility-owned  
 314 resources from falling water that (1) are less than 65 megawatts, (2) began commercial operation after  
 315 December 31, 1979, or (3) added incremental generation representing greater than 50 percent of the original  
 316 nameplate capacity after December 31, 1979, provided that such resources are located in the Commonwealth  
 317 or are physically located within the PJM region; (d) waste-to-energy or landfill gas-fired generating resources  
 318 located in the Commonwealth and in operation as of January 1, 2020, provided that such resources do not use  
 319 waste heat from fossil fuel combustion; (e) geothermal heating and cooling systems located in the  
 320 Commonwealth; (f) geothermal electric generating resources located in the Commonwealth or physically  
 321 located within the PJM region; or (g) biomass-fired facilities in operation in the Commonwealth and in  
 322 operation as of January 1, 2023, that (1) supply no more than 10 percent of their annual net electrical  
 323 generation to the electric grid or no more than 15 percent of their annual total useful energy to any entity  
 324 other than the manufacturing facility to which the generating source is interconnected and are fueled by  
 325 forest-product manufacturing residuals, including pulping liquor, bark, paper recycling residuals, biowastes,  
 326 or biomass, as described in subdivisions A 1, 2, and 4 of § 10.1-1308.1, provided that biomass as described in  
 327 subdivision A 1 of § 10.1-1308.1 results from harvesting in accordance with best management practices for  
 328 the sustainable harvesting of biomass developed and enforced by the State Forester pursuant to § 10.1-1105,  
 329 or (2) are owned by a Phase I or Phase II Utility, have less than 52 megawatts capacity, and are fueled by  
 330 forest-product manufacturing residuals, biowastes, or biomass, as described in subdivisions A 1, 2, and 4 of  
 331 § 10.1-1308.1, provided that biomass as described in subdivision A 1 of § 10.1-1308.1 results from  
 332 harvesting in accordance with best management practices for the sustainable harvesting of biomass developed  
 333 and enforced by the State Forester pursuant to § 10.1-1105. Regardless of any future maintenance, expansion,  
 334 or refurbishment activities, the total amount of RECs that may be sold by any RPS eligible source using  
 335 biomass in any year shall be no more than the number of megawatt hours of electricity produced by that  
 336 facility in 2022; however, in no year may any RPS eligible source using biomass sell RECs in excess of the  
 337 actual megawatt-hours of electricity generated by such facility that year. In order to comply with the RPS  
 338 Program, each Phase I and Phase II Utility may use and retire the environmental attributes associated with  
 339 any existing owned or contracted solar, wind, falling water, or biomass electric generating resources in  
 340 operation, or proposed for operation, in the Commonwealth or solar, wind, or falling water resources  
 341 physically located within the PJM region, with such resource qualifying as a Commonwealth-located  
 342 resource for purposes of this subsection, as of January 1, 2020, provided that such renewable attributes are  
 343 verified as RECs consistent with the PJM-EIS Generation Attribute Tracking System.

344 1. *a.* The RPS Program requirements shall be a percentage of the total electric energy sold in the previous  
 345 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
347 2021	6%	2021	14%
348 2022	7%	2022	17%
349 2023	8%	2023	20%
350 2024	10%	2024	23%
351 2025	14%	2025	26%
352 2026	17%	2026	29%
353 2027	20%	2027	32%
354 2028	24%	2028	35%
355 2029	27%	2029	38%
356 2030	30%	2030	41%
357 2031	33%	2031	45%
358 2032	36%	2032	49%
359 2033	39%	2033	52%
360 2034	42%	2034	55%
361 2035	45%	2035	59%
362 2036	53%	2036	63%
363 2037	53%	2037	67%
364 2038	57%	2038	71%
365 2039	61%	2039	75%

367	2040	65%	2040	79%
368	2041	68%	2041	83%
369	2042	71%	2042	87%
370	2043	74%	2043	91%
371	2044	77%	2044	95%
372	2045	80%	2045 and thereafter	100%
373				
374	2046	84%		
375	2047	88%		
376	2048	92%		
377	2049	96%		
378	2050 and thereafter	100%		

380 *b. Beginning with the 2027 compliance year and thereafter, each Phase II Utility shall procure and retire*  
381 *RECs from geothermal heating and cooling systems located in the Commonwealth, as a percentage of the*  
382 *total number of RECs used for RPS program compliance, in the following amounts, at minimum: (i) 0.5*  
383 *percent in 2027, (ii) 0.75 percent in 2028, and (iii) one percent in and after 2029. Beginning with the 2027*  
384 *compliance year and thereafter, each Phase I Utility shall procure and retire RECs from geothermal heating*  
385 *and cooling systems located within its own service territory, as a percentage of the total number of RECs*  
386 *used for RPS program compliance, in the following amounts, at minimum: (a) 0.5 percent in 2027, (b) 0.75*  
387 *percent in 2028, and (c) one percent in and after 2029.*

388 2. A Phase II Utility shall meet one percent of the RPS Program requirements in any given compliance  
389 year with solar, wind, or anaerobic digestion resources of one megawatt or less located in the  
390 Commonwealth, with not more than 3,000 kilowatts at any single location or at contiguous locations owned  
391 by the same entity or affiliated entities and, to the extent that low-income qualifying projects are available,  
392 then no less than 25 percent of such one percent shall be composed of low-income qualifying projects. To the  
393 extent that low-income qualifying projects are not available and projects located on or adjacent to public  
394 elementary or secondary schools are available, the remainder of no less than 25 percent of such one percent  
395 shall be composed of projects located on or adjacent to public elementary or secondary schools. A project  
396 located on or adjacent to a public elementary or secondary school shall have a contractual relationship with  
397 such school in order to qualify for the provisions of this section.

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

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

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

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

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

427 a. By December 31, 2023, each Phase I Utility shall petition the Commission for necessary approvals to  
428 construct, acquire, or enter into agreements to purchase the energy, capacity, and environmental attributes of

429 at least 200 megawatts of generating capacity located in the Commonwealth using energy derived from  
430 sunlight or onshore wind, and 35 percent of such generating capacity procured shall be from the purchase of  
431 energy, capacity, and environmental attributes from solar or onshore wind facilities owned by persons other  
432 than the utility, with the remainder, in the aggregate, being from construction or acquisition by such Phase I  
433 Utility.

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

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

448 d. Nothing in this subdivision 1 shall prohibit such Phase I Utility from constructing, acquiring, or  
449 entering into agreements to purchase the energy, capacity, and environmental attributes of more than 600  
450 megawatts of generating capacity located in the Commonwealth using energy derived from sunlight or  
451 onshore wind, provided the utility receives approval from the Commission pursuant to §§ 56-580 and  
452 56-585.1.

453 2. By December 31, 2035, each Phase II Utility shall petition the Commission for necessary approvals to  
454 (i) construct, acquire, or enter into agreements to purchase the energy, capacity, and environmental attributes  
455 of 16,100 megawatts of generating capacity located in the Commonwealth using energy derived from  
456 sunlight or onshore wind, which shall include 1,100 megawatts of solar generation of a nameplate capacity  
457 not to exceed three megawatts per individual project and 35 percent of such generating capacity procured  
458 shall be from the purchase of energy, capacity, and environmental attributes from solar facilities owned by  
459 persons other than a utility, including utility affiliates and deregulated affiliates and (ii) pursuant to  
460 § 56-585.1:11, construct or purchase one or more offshore wind generation facilities located off the  
461 Commonwealth's Atlantic shoreline or in federal waters and interconnected directly into the Commonwealth  
462 with an aggregate capacity of up to 5,200 megawatts. At least 200 megawatts of the 16,100 megawatts shall  
463 be placed on previously developed project sites.

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

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

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

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



491 such Phase II Utility.

492 e. Nothing in this subdivision 2 shall prohibit such Phase II Utility from constructing, acquiring, or  
 493 entering into agreements to purchase the energy, capacity, and environmental attributes of more than 16,100  
 494 megawatts of generating capacity located in the Commonwealth using energy derived from sunlight or  
 495 onshore wind, provided the utility receives approval from the Commission pursuant to §§ 56-580 and  
 496 56-585.1.

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

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

523 4. In connection with the requirements of this subsection, each Phase I and Phase II Utility shall,  
 524 commencing in 2020 and concluding in 2035, submit annually a plan and petition for approval for the  
 525 development of new solar and onshore wind generation capacity. Such plan shall reflect, in the aggregate and  
 526 over its duration, the requirements of subsection D concerning the allocation percentages for construction or  
 527 purchase of such capacity. Such petition shall contain any request for approval to construct such facilities  
 528 pursuant to subsection D of § 56-580 and a request for approval or update of a rate adjustment clause  
 529 pursuant to subdivision A 6 of § 56-585.1 to recover the costs of such facilities. Such plan shall also include  
 530 the utility's plan to meet the energy storage project targets of subsection E, including the goal of installing at  
 531 least 10 percent of such energy storage projects behind the meter. In determining whether to approve the  
 532 utility's plan and any associated petition requests, the Commission shall determine whether they are  
 533 reasonable and prudent and shall give due consideration to (i) the RPS and carbon dioxide reduction  
 534 requirements in this section; (ii) the promotion of new renewable generation and energy storage resources  
 535 within the Commonwealth, and associated economic development; and (iii) fuel savings projected to be  
 536 achieved by the plan. Notwithstanding any other provision of this title, the Commission's final order  
 537 regarding any such petition and associated requests shall be entered by the Commission not more than six  
 538 months after the date of the filing of such petition.

539 5. If, in any year, a Phase I or Phase II Utility is unable to meet the compliance obligation of the RPS  
 540 Program requirements or if the cost of RECs necessary to comply with RPS Program requirements exceeds  
 541 \$45 per megawatt hour, such supplier shall be obligated to make a deficiency payment equal to \$45 for each  
 542 megawatt-hour shortfall for the year of noncompliance, except that the deficiency payment for any shortfall  
 543 in procuring RECs for solar, wind, or anaerobic digesters located in the Commonwealth shall be \$75 per  
 544 ~~megawatts~~ megawatt hour for resources one megawatt and lower, and the deficiency payment for any  
 545 shortfall in procuring RECs for geothermal heating and cooling systems, as required by subdivision C 1 b,  
 546 shall be \$100 per megawatt hour. A Phase I or Phase II Utility shall issue a quarterly request for proposals  
 547 regarding the procurement of RECs produced by geothermal heating and cooling systems as a portion of its  
 548 efforts to meet the requirements of subdivision C 1 b. A Phase I or Phase II Utility shall be exempt from  
 549 making an annual deficiency payment for the quantity of required RECs produced by geothermal heating and  
 550 cooling systems that are not made available in each request for proposals at a price that is equal to or below  
 551 the price of such deficiency payment in a compliance year. In any year in which a Phase I or Phase II Utility  
 552 is exempted from making a deficiency payment resulting from a lack of available RECs from geothermal

553 *heating and cooling systems, the utility shall, for that compliance year, procure and retire RPS eligible RECs*  
 554 *subject to a \$45 per megawatt hour deficiency payment in an amount equal to the amount of RECs from*  
 555 *geothermal heating and cooling systems that were not made available at a price that was equal to or below*  
 556 *\$100 per megawatt hour in that compliance year pursuant to subdivision C 1 b. The amount of any*  
 557 *deficiency payment shall increase by one percent annually after 2021. A Phase I or Phase II Utility shall be*  
 558 *entitled to recover the costs of such payments as a cost of compliance with the requirements of this*  
 559 *subsection pursuant to subdivision A 5 d of § 56-585.1. All proceeds from the deficiency payments shall be*  
 560 *deposited into an interest-bearing account administered by the Department of Energy. In administering this*  
 561 *account, the Department of Energy shall manage the account as follows: (i) 50 percent of total revenue shall*  
 562 *be directed to job training programs in historically economically disadvantaged communities; (ii) 16 percent*  
 563 *of total revenue shall be directed to energy efficiency measures for public facilities; (iii) 30 percent of total*  
 564 *revenue shall be directed to renewable energy programs located in historically economically disadvantaged*  
 565 *communities; and (iv) four percent of total revenue shall be directed to administrative costs.*

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

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

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

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

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

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

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

593 F. All costs incurred by a Phase I or Phase II Utility related to compliance with the requirements of this  
 594 section or pursuant to § 56-585.1:11, including (i) costs of generation facilities powered by sunlight or  
 595 onshore or offshore wind, or energy storage facilities, that are constructed or acquired by a Phase I or Phase II  
 596 Utility after July 1, 2020, (ii) costs of capacity, energy, or environmental attributes from generation facilities  
 597 powered by sunlight or onshore or offshore wind, or falling water, or energy storage facilities purchased by  
 598 the utility from persons other than the utility through agreements after July 1, 2020, and (iii) all other costs of  
 599 compliance, including costs associated with the purchase of RECs associated with RPS Program  
 600 requirements pursuant to this section shall be recovered from all retail customers in the service territory of a  
 601 Phase I or Phase II Utility as a non-bypassable charge, irrespective of the generation supplier of such  
 602 customer, except (a) as provided in subsection G for an accelerated renewable energy buyer or (b) as  
 603 provided in subdivision C 3 of § 56-585.1:11, with respect to the costs of an offshore wind generation  
 604 facility, for a PIPP eligible utility customer or an advanced clean energy buyer or qualifying large general  
 605 service customer, as those terms are defined in § 56-585.1:11. If a Phase I or Phase II Utility serves  
 606 customers in more than one jurisdiction, such utility shall recover all of the costs of compliance with the RPS  
 607 Program requirements from its Virginia customers through the applicable cost recovery mechanism, and all  
 608 associated energy, capacity, and environmental attributes shall be assigned to Virginia to the extent that such  
 609 costs are requested but not recovered from any system customers outside the Commonwealth.

610 By September 1, 2020, the Commission shall direct the initiation of a proceeding for each Phase I and  
 611 Phase II Utility to review and determine the amount of such costs, net of benefits, that should be allocated to  
 612 retail customers within the utility's service territory which have elected to receive electric supply service from  
 613 a supplier of electric energy other than the utility, and shall direct that tariff provisions be implemented to  
 614 recover those costs from such customers beginning no later than January 1, 2021. Thereafter, such charges

615 and tariff provisions shall be updated and trued up by the utility on an annual basis, subject to continuing  
616 review and approval by the Commission.

617 G. 1. An accelerated renewable energy buyer may contract with a Phase I or Phase II Utility, or a person  
618 other than a Phase I or Phase II Utility, to obtain (i) RECs from RPS eligible resources or (ii) bundled  
619 capacity, energy, and RECs from solar or, wind, or zero-carbon electricity generation resources located  
620 within the PJM region and initially placed in commercial operation after January 1, 2015, including any  
621 contract with a utility for such generation resources that does not allocate the cost of such resources to or  
622 recover the cost of such resources from any other customers of the utility that have not voluntarily agreed to  
623 pay such cost. Such an accelerated renewable energy buyer may offset all or a portion of its electric load for  
624 purposes of RPS compliance through such arrangements. An accelerated renewable energy buyer shall be  
625 exempt from the assignment of non-bypassable RPS compliance costs pursuant to subsection F, with the  
626 exception of the costs of an offshore wind generating facility pursuant to § 56-585.1:11, based on the amount  
627 of RECs obtained pursuant to this subsection in proportion to the customer's total electric energy  
628 consumption, on an annual basis. An accelerated renewable energy buyer may also contract with a Phase I or  
629 Phase II Utility, or a person other than a Phase I or Phase II Utility, to obtain capacity from energy storage  
630 facilities located within the network service area of the utility pursuant to this subsection, provided that the  
631 costs of such resources are not recovered from any of the utility's customers who have not voluntarily agreed  
632 to pay for such costs. Such accelerated renewable energy buyer shall be exempt from the assignment of  
633 non-bypassable RPS Program compliance costs specifically associated with energy storage facilities pursuant  
634 to this subsection in proportion to the customer's total capacity demand on an annual basis. An accelerated  
635 renewable energy buyer obtaining RECs only shall not be exempt from costs related to procurement of new  
636 solar or onshore wind generation capacity, energy, or environmental attributes, or energy storage facilities, by  
637 the utility pursuant to subsections D and E, however, an accelerated renewable energy buyer that is a  
638 customer of a Phase II Utility and was subscribed, as of March 1, 2020, to a voluntary companion  
639 experimental tariff offering of the utility for the purchase of renewable attributes from renewable energy  
640 facilities that requires a renewable facilities agreement and the purchase of a minimum of 2,000 renewable  
641 attributes annually, shall be exempt from allocation of the net costs related to procurement of new solar or  
642 onshore wind generation capacity, energy, or environmental attributes, or energy storage facilities, by the  
643 utility pursuant to subsections D and E, based on the amount of RECs associated with the customer's  
644 renewable facilities agreements associated with such tariff offering as of that date in proportion to the  
645 customer's total electric energy consumption, on an annual basis. To the extent that an accelerated renewable  
646 energy buyer contracts for the capacity of new solar or wind generation resources or energy storage facilities  
647 pursuant to this subsection, the aggregate amount of such nameplate capacity shall be offset from the utility's  
648 procurement requirements pursuant to subsection D. All RECs associated with contracts entered into by an  
649 accelerated renewable energy buyer with the utility, or a person other than the utility, for an RPS Program  
650 shall not be credited to the utility's compliance with its RPS requirements, and the calculation of the utility's  
651 RPS Program requirements shall not include the electric load covered by customers certified as accelerated  
652 renewable energy buyers.

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

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

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

665 H. No customer of a Phase II Utility with a peak demand in excess of 100 megawatts in 2019 that elected  
666 pursuant to subdivision A 3 of § 56-577 to purchase electric energy from a competitive service provider prior  
667 to April 1, 2019, shall be allocated any non-bypassable charges pursuant to subsection F for such period that  
668 the customer is not purchasing electric energy from the utility, and such customer's electric load shall not be  
669 included in the utility's RPS Program requirements. No customer of a Phase I Utility that elected pursuant to  
670 subdivision A 3 of § 56-577 to purchase electric energy from a competitive service provider prior to February  
671 1, 2019, shall be allocated any non-bypassable charges pursuant to subsection F for such period that the  
672 customer is not purchasing electric energy from the utility, and such customer's electric load shall not be  
673 included in the utility's RPS Program requirements.

674 I. In any petition by a Phase I or Phase II Utility for a certificate of public convenience and necessity to  
675 construct and operate an electrical generating facility that generates electric energy derived from sunlight  
676 submitted pursuant to § 56-580, such utility shall demonstrate that the proposed facility was subject to

677 competitive procurement or solicitation as set forth in subdivision D 3.

678 J. Notwithstanding any contrary provision of law, for the purposes of this section, any falling water  
679 generation facility located in the Commonwealth and commencing commercial operations prior to July 1,  
680 2024, shall be considered a renewable energy portfolio standard (RPS) eligible source.

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

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

685 **2. That the State Corporation Commission (the Commission) shall prepare a report evaluating the**  
686 **procurement and retirement of renewable energy certificates from geothermal heating and cooling**  
687 **systems in the Commonwealth pursuant to subdivision C 1 b of § 56-585.5 of the Code of Virginia, as**  
688 **amended by this act. The Commission shall deliver such report to the Chairs of the House Committee**  
689 **on Labor and Commerce and Senate Committee on Commerce and Labor on or before November 1,**  
690 **2028.**

691 **3. That pursuant to § 54.1-2014 of the Code of Virginia, the Real Estate Appraiser Board (the Board)**  
692 **shall promulgate regulations requiring the development of a continuing education curriculum and**  
693 **required training for all licensees that includes how to properly determine the increase in value of real**  
694 **estate created by reductions in building energy costs associated with solar, geothermal, and solar water**  
695 **heating investments for the purposes of real estate appraisals. On or before November 1, 2026, the**  
696 **Board shall report on the implementation of such curriculum and training to the Chairs of the House**  
697 **Committees on Labor and Commerce and General Laws, the Senate Committees on Commerce and**  
698 **Labor and General Laws and Technology, and the Commission on Electric Utility Regulation.**