2023 SESSION

ENROLLED

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VIRGINIA ACTS OF ASSEMBLY - CHAPTER

2 An Act to amend and reenact § 56-585.5 of the Code of Virginia, relating to renewable energy; 3 biomass-fired facilities; Department of Forestry advisory panel; report.

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Approved

6 Be it enacted by the General Assembly of Virginia:

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

8 § 56-585.5. Generation of electricity from renewable and zero carbon sources. 9

A. As used in this section:

10 "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 11 12 prior calendar year, that enters into arrangements pursuant to subsection G, as certified by the 13 Commission.

14 "Aggregate load" means the combined electrical load associated with selected accounts of an 15 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 16 17 names of affiliated entities under a common parent. 18

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

19 "Falling water" means hydroelectric resources, including run-of-river generation from a combined 20 pumped-storage and run-of-river facility. "Falling water" does not include electricity generated from 21 pumped-storage facilities.

22 "Low-income qualifying projects" means a project that provides a minimum of 50 percent of the 23 respective electric output to low-income utility customers as that term is defined in § 56-576. 24

"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.

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

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

42 "Zero-carbon electricity" means electricity generated by any generating unit that does not emit carbon 43 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 of the Commonwealth that co-fires with biomass, any Phase I and Phase II Utility shall retire all 46 generating units principally fueled by oil with a rated capacity in excess of 500 megawatts and all 47 coal-fired electric generating units operating in the Commonwealth. 48

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

3. By December 31, 2045, except for biomass-fired electric generating units that do not co-fire with 51 coal, each Phase I and II Utility shall retire all other electric generating units located in the 52 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 of 55 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

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and shall evaluate the reliability of each proposed retirement on a case-by-case basis in ruling upon anysuch 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 from suppliers other than the utility. To comply with the RPS Program, each Phase I and Phase II 63 64 Utility 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 in § 56-576, provided that such facilities are located in the Commonwealth or are physically 67 located within the PJM Interconnection, LLC (PJM) region. However, at no time during this period or **68** thereafter may any Phase I or Phase II Utility use RECs from (i) renewable thermal energy, (ii) 69 70 renewable thermal energy equivalent, or (iii) biomass-fired facilities that are outside the Commonwealth_{τ} 71 or (iv) biomass-fired facilities operating in the Commonwealth as of January 1, 2020, that supply 10 72 percent or more of their annual net electrical generation to the electric grid or more than 15 percent of 73 their annual total useful energy to any entity other than the manufacturing facility to which the 74 generating source is interconnected. From compliance year 2025 and all years after, each Phase I and 75 Phase II Utility may only use RECs from 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, that are owned by a Phase I or Phase II Utility or for which a Phase I or Phase II Utility has 81 entered into a contract prior to January 1, 2020, to purchase the energy, capacity, and renewable 82 attributes of such falling water resources; (c) non-utility-owned resources from falling water that (1) are 83 less than 65 megawatts, (2) began commercial operation after December 31, 1979, or (3) added 84 85 incremental generation representing greater than 50 percent of the original nameplate capacity after December 31, 1979, provided that such resources are located in the Commonwealth or are physically 86 87 located within the PJM region; (d) waste-to-energy or landfill gas-fired generating resources located in the Commonwealth and in operation as of January 1, 2020, provided that such resources do not use 88 89 waste heat from fossil fuel combustion or forest or woody biomass as fuel; or (e) biomass-fired facilities 90 in operation in the Commonwealth and in operation as of January 1, 2020 2023, that (1) supply no more 91 than 10 percent of their annual net electrical generation to the electric grid or no more than 15 percent 92 of their annual total useful energy to any entity other than the manufacturing facility to which the generating source is interconnected and are fueled by forest-product manufacturing residuals, including 93 pulping liquor, bark, paper recycling residuals, biowastes, or biomass, as described in subdivisions A I, 94 95 2, and 4 of § 10.1-1308.1, provided that biomass as described in subdivision A 1 of § 10.1-1308.1 96 results from harvesting in accordance with best management practices for the sustainable harvesting of 97 biomass developed and enforced by the State Forester pursuant to § 10.1-1105, or (2) are owned by a 98 Phase I or Phase II Utility, have less than 52 megawatts capacity, and are fueled by forest-product 99 manufacturing residuals, biowastes, or biomass, as described in subdivisions A 1, 2, and 4 of 100 § 10.1-1308.1, provided that biomass as described in subdivision A 1 of § 10.1-1308.1 results from 101 harvesting in accordance with best management practices for the sustainable harvesting of biomass 102 developed and enforced by the State Forester pursuant to § 10.1-1105. Regardless of any future maintenance, expansion, or refurbishment activities, the total amount of RECs that may be sold by any 103 104 RPS eligible source using biomass in any year shall be no more than the number of megawatt hours of electricity produced by that facility in $\frac{2019}{2022}$; however, in no year may any RPS eligible source 105 106 using biomass sell RECs in excess of the actual megawatt-hours of electricity generated by such facility 107 that year. In order to comply with the RPS Program, each Phase I and Phase II Utility may use and 108 retire the environmental attributes associated with any existing owned or contracted solar, wind, or 109 falling water, or biomass electric generating resources in operation, or proposed for operation, in the 110 Commonwealth or solar, wind, or falling water resources physically located within the PJM region, with 111 such resource qualifying as a Commonwealth-located resource for purposes of this subsection, as of 112 January 1, 2020, provided *that* such renewable attributes are verified as RECs consistent with the 113 PJM-EIS Generation Attribute Tracking System.

114 The RPS Program requirements shall be a percentage of the total electric energy sold in the previous 115 calendar year and shall be implemented in accordance with the following schedule:

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Phase I Utilities

Phase II Utilities

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118	Year	RPS Program Requirement	Year	RPS Program
119				Requirement
120	2021	6%	2021	14%
121	2022	7%	2022	17%
122	2023	8%	2023	20%
123	2024	10%	2024	23%
124	2025	14%	2025	26%
125	2026	17%	2026	29%
126	2027	20%	2027	32%
127	2028	24%	2028	35%
128	2029	27%	2029	38%
129	2030	30%	2030	41%
130	2031	33%	2031	45%
131	2032	36%	2032	49%
132	2033	39%	2033	52%
133	2034	42%	2034	55%
134	2035	45%	2035	59%
135	2036	53%	2036	63%
136	2037	53%	2037	67%
137	2038	57%	2038	71%
138	2039	61%	2039	75%
139	2040	65%	2040	79%
140	2041	68%	2041	83%
141	2042	71%	2042	87%
142	2043	74%	2043	91%
143	2044	77%	2044	95%
144	2045	80%	2045 and thereafter	100%
145	2046	84%		
146	2047	88%		
147	2048	92%		
148	2049	96%		
149	2050 and thereafter	100%		

2050 and thereafter 100%
A Phase II Utility shall meet one percent of the RPS Program requirements in any given compliance year with solar, wind, or anaerobic digestion resources of one megawatt or less located in the Commonwealth, with not more than 3,000 kilowatts at any single location or at contiguous locations owned by the same entity or affiliated entities and, to the extent that low-income qualifying projects are available, then no less than 25 percent of such one percent shall be composed of low-income qualifying projects.

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

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

166 D. Each Phase I or Phase II Utility shall petition the Commission for necessary approvals to procure 167 zero-carbon electricity generating capacity as set forth in this subsection and energy storage resources as set forth in subsection E. To the extent that a Phase I or Phase II Utility constructs or acquires new 168 169 zero-carbon generating facilities or energy storage resources, the utility shall petition the Commission for 170 the recovery of the costs of such facilities, at the utility's election, either through its rates for generation 171 and distribution services or through a rate adjustment clause pursuant to subdivision A 6 of § 56-585.1. 172 All costs not sought for recovery through a rate adjustment clause pursuant to subdivision A 6 of 173 § 56-585.1 associated with generating facilities provided by sunlight or onshore or offshore wind are 174 also eligible to be applied by the utility as a customer credit reinvestment offset as provided in 175 subdivision A 8 of § 56-585.1. Costs associated with the purchase of energy, capacity, or environmental 176 attributes from facilities owned by the persons other than the utility required by this subsection shall be 177 recovered by the utility either through its rates for generation and distribution services or pursuant to 178 § 56-249.6.

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

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

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

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

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

208 2. By December 31, 2035, each Phase II Utility shall petition the Commission for necessary 209 approvals to (i) construct, acquire, or enter into agreements to purchase the energy, capacity, and 210 environmental attributes of 16,100 megawatts of generating capacity located in the Commonwealth using energy derived from sunlight or onshore wind, which shall include 1,100 megawatts of solar generation 211 212 of a nameplate capacity not to exceed three megawatts per individual project and 35 percent of such 213 generating capacity procured shall be from the purchase of energy, capacity, and environmental attributes 214 from solar facilities owned by persons other than a utility, including utility affiliates and deregulated 215 affiliates and (ii) pursuant to § 56-585.1:11, construct or purchase one or more offshore wind generation 216 facilities located off the Commonwealth's Atlantic shoreline or in federal waters and interconnected 217 directly into the Commonwealth with an aggregate capacity of up to 5,200 megawatts. At least 200 218 megawatts of the 16,100 megawatts shall be placed on previously developed project sites.

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

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

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

d. By December 31, 2035, each Phase II Utility shall petition the Commission for necessary
 approvals to construct, acquire, or enter into agreements to purchase the energy, capacity, and
 environmental attributes of at least 6,100 megawatts of additional generating capacity located in the

243 Commonwealth using energy derived from sunlight or onshore wind, and 35 percent of such generating
244 capacity procured shall be from the purchase of energy, capacity, and environmental attributes from
245 solar or onshore wind facilities owned by persons other than the utility, with the remainder, in the
246 aggregate, being from construction or acquisition by such Phase II Utility.

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

252 3. Nothing in this section shall prohibit a utility from petitioning the Commission to construct or 253 acquire zero-carbon electricity or from entering into contracts to procure the energy, capacity, and 254 environmental attributes of zero-carbon electricity generating resources in excess of the requirements in 255 subsection B. The Commission shall determine whether to approve such petitions on a stand-alone basis 256 pursuant to §§ 56-580 and 56-585.1, provided that the Commission's review shall also consider whether 257 the proposed generating capacity (i) is necessary to meet the utility's native load, (ii) is likely to lower 258 customer fuel costs, (iii) will provide economic development opportunities in the Commonwealth, and 259 (iv) serves a need that cannot be more affordably met with demand-side or energy storage resources.

260 Each Phase I and Phase II Utility shall, at least once every year, conduct a request for proposals for 261 new solar and wind resources. Such requests shall quantify and describe the utility's need for energy, 262 capacity, or renewable energy certificates. The requests for proposals shall be publicly announced and 263 made available for public review on the utility's website at least 45 days prior to the closing of such 264 request for proposals. The requests for proposals shall provide, at a minimum, the following information: 265 (a) the size, type, and timing of resources for which the utility anticipates contracting; (b) any minimum 266 thresholds that must be met by respondents; (c) major assumptions to be used by the utility in the bid 267 evaluation process, including environmental emission standards; (d) detailed instructions for preparing 268 bids so that bids can be evaluated on a consistent basis; (e) the preferred general location of additional 269 capacity; and (f) specific information concerning the factors involved in determining the price and 270 non-price criteria used for selecting winning bids. A utility may evaluate responses to requests for 271 proposals based on any criteria that it deems reasonable but shall at a minimum consider the following 272 in its selection process: (1) the status of a particular project's development; (2) the age of existing 273 generation facilities; (3) the demonstrated financial viability of a project and the developer; (4) a 274 developer's prior experience in the field; (5) the location and effect on the transmission grid of a 275 generation facility; (6) benefits to the Commonwealth that are associated with particular projects, 276 including regional economic development and the use of goods and services from Virginia businesses; 277 and (7) the environmental impacts of particular resources, including impacts on air quality within the 278 Commonwealth and the carbon intensity of the utility's generation portfolio.

279 4. In connection with the requirements of this subsection, each Phase I and Phase II Utility shall, 280 commencing in 2020 and concluding in 2035, submit annually a plan and petition for approval for the 281 development of new solar and onshore wind generation capacity. Such plan shall reflect, in the 282 aggregate and over its duration, the requirements of subsection D concerning the allocation percentages for construction or purchase of such capacity. Such petition shall contain any request for approval to 283 construct such facilities pursuant to subsection D of § 56-580 and a request for approval or update of a 284 rate adjustment clause pursuant to subdivision A 6 of § 56-585.1 to recover the costs of such facilities. 285 286 Such plan shall also include the utility's plan to meet the energy storage project targets of subsection E, 287 including the goal of installing at least 10 percent of such energy storage projects behind the meter. In 288 determining whether to approve the utility's plan and any associated petition requests, the Commission 289 shall determine whether they are reasonable and prudent and shall give due consideration to (i) the RPS 290 and carbon dioxide reduction requirements in this section, (ii) the promotion of new renewable 291 generation and energy storage resources within the Commonwealth, and associated economic 292 development, and (iii) fuel savings projected to be achieved by the plan. Notwithstanding any other 293 provision of this title, the Commission's final order regarding any such petition and associated requests 294 shall be entered by the Commission not more than six months after the date of the filing of such 295 petition.

296 5. If, in any year, a Phase I or Phase II Utility is unable to meet the compliance obligation of the 297 RPS Program requirements or if the cost of RECs necessary to comply with RPS Program requirements 298 exceeds \$45 per megawatt hour, such supplier shall be obligated to make a deficiency payment equal to 299 \$45 for each megawatt-hour shortfall for the year of noncompliance, except that the deficiency payment 300 for any shortfall in procuring RECs for solar, wind, or anaerobic digesters located in the Commonwealth 301 shall be \$75 per megawatts hour for resources one megawatt and lower. The amount of any deficiency payment shall increase by one percent annually after 2021. A Phase I or Phase II Utility shall be entitled 302 303 to recover the costs of such payments as a cost of compliance with the requirements of this subsection

304 pursuant to subdivision A 5 d of § 56-585.1. All proceeds from the deficiency payments shall be 305 deposited into an interest-bearing account administered by the Department of Energy. In administering 306 this account, the Department of Energy shall manage the account as follows: (i) 50 percent of total 307 revenue shall be directed to job training programs in historically economically disadvantaged 308 communities; (ii) 16 percent of total revenue shall be directed to energy efficiency measures for public 309 facilities; (iii) 30 percent of total revenue shall be directed to renewable energy programs located in 310 historically economically disadvantaged communities; and (iv) four percent of total revenue shall be 311 directed to administrative costs.

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

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

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

323 2. By December 31, 2035, each Phase II Utility shall petition the Commission for necessary
324 approvals to construct or acquire 2,700 megawatts of energy storage capacity. Nothing in this
325 subdivision shall prohibit a Phase II Utility from constructing or acquiring more than 2,700 megawatts
326 of energy storage, provided that the utility receives approval from the Commission pursuant to
327 §§ 56-580 and 56-585.1.

328 3. No single energy storage project shall exceed 500 megawatts in size, except that a Phase II Utility329 may procure a single energy storage project up to 800 megawatts.

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

332 5. After July 1, 2020, at least 35 percent of the energy storage facilities placed into service shall be 333 (i) purchased by the public utility from a party other than the public utility or (ii) owned by a party 334 other than a public utility, with the capacity from such facilities sold to the public utility. By January 1, 2021, the Commission shall adopt regulations to achieve the deployment of energy storage for the 335 336 Commonwealth required in subdivisions 1 and 2, including regulations that set interim targets and 337 update existing utility planning and procurement rules. The regulations shall include programs and 338 mechanisms to deploy energy storage, including competitive solicitations, behind-the-meter incentives, 339 non-wires alternatives programs, and peak demand reduction programs.

340 F. All costs incurred by a Phase I or Phase II Utility related to compliance with the requirements of 341 this section or pursuant to § 56-585.1:11, including (i) costs of generation facilities powered by sunlight 342 or onshore or offshore wind, or energy storage facilities, that are constructed or acquired by a Phase I or 343 Phase II Utility after July 1, 2020, (ii) costs of capacity, energy, or environmental attributes from 344 generation facilities powered by sunlight or onshore or offshore wind, or falling water, or energy storage 345 facilities purchased by the utility from persons other than the utility through agreements after July 1, 346 2020, and (iii) all other costs of compliance, including costs associated with the purchase of RECs 347 associated with RPS Program requirements pursuant to this section shall be recovered from all retail 348 customers in the service territory of a Phase I or Phase II Utility as a non-bypassable charge, 349 irrespective of the generation supplier of such customer, except (a) as provided in subsection G for an 350 accelerated renewable energy buyer or (b) as provided in subdivision C 3 of § 56-585.1:11, with respect 351 to the costs of an offshore wind generation facility, for a PIPP eligible utility customer or an advanced 352 clean energy buyer or qualifying large general service customer, as those terms are defined in § 56-585.1:11. If a Phase I or Phase II Utility serves customers in more than one jurisdiction, such 353 354 utility shall recover all of the costs of compliance with the RPS Program requirements from its Virginia 355 customers through the applicable cost recovery mechanism, and all associated energy, capacity, and 356 environmental attributes shall be assigned to Virginia to the extent that such costs are requested but not 357 recovered from any system customers outside the Commonwealth.

358 By September 1, 2020, the Commission shall direct the initiation of a proceeding for each Phase I 359 and Phase II Utility to review and determine the amount of such costs, net of benefits, that should be 360 allocated to retail customers within the utility's service territory which have elected to receive electric 361 supply service from a supplier of electric energy other than the utility, and shall direct that tariff 362 provisions be implemented to recover those costs from such customers beginning no later than January 363 1, 2021. Thereafter, such charges and tariff provisions shall be updated and trued up by the utility on an annual basis, subject to continuing review and approval by the Commission.

365 G. 1. An accelerated renewable energy buyer may contract with a Phase I or Phase II Utility, or a 366 person other than a Phase I or Phase II Utility, to obtain (i) RECs from RPS eligible resources or (ii) 367 bundled capacity, energy, and RECs from solar or wind generation resources located within the PJM region and initially placed in commercial operation after January 1, 2015, including any contract with a 368 369 utility for such generation resources that does not allocate to or recover from any other customer of the 370 utility the cost of such resources. Such an accelerated renewable energy buyer may offset all or a 371 portion of its electric load for purposes of RPS compliance through such arrangements. An accelerated 372 renewable energy buyer shall be exempt from the assignment of non-bypassable RPS compliance costs 373 pursuant to subsection F, with the exception of the costs of an offshore wind generating facility pursuant 374 to § 56-585.1:11, based on the amount of RECs obtained pursuant to this subsection in proportion to the 375 customer's total electric energy consumption, on an annual basis. An accelerated renewable energy buyer 376 obtaining RECs only shall not be exempt from costs related to procurement of new solar or onshore 377 wind generation capacity, energy, or environmental attributes, or energy storage facilities, by the utility pursuant to subsections D and E, however, an accelerated renewable energy buyer that is a customer of 378 379 a Phase II Utility and was subscribed, as of March 1, 2020, to a voluntary companion experimental 380 tariff offering of the utility for the purchase of renewable attributes from renewable energy facilities that 381 requires a renewable facilities agreement and the purchase of a minimum of 2,000 renewable attributes 382 annually, shall be exempt from allocation of the net costs related to procurement of new solar or 383 onshore wind generation capacity, energy, or environmental attributes, or energy storage facilities, by the 384 utility pursuant to subsections D and E, based on the amount of RECs associated with the customer's 385 renewable facilities agreements associated with such tariff offering as of that date in proportion to the 386 customer's total electric energy consumption, on an annual basis. To the extent that an accelerated 387 renewable energy buyer contracts for the capacity of new solar or wind generation resources pursuant to 388 this subsection, the aggregate amount of such nameplate capacity shall be offset from the utility's 389 procurement requirements pursuant to subsection D. All RECs associated with contracts entered into by 390 an accelerated renewable energy buyer with the utility, or a person other than the utility, for an RPS 391 Program shall not be credited to the utility's compliance with its RPS requirements, and the calculation of the utility's RPS Program requirements shall not include the electric load covered by customers 392 393 certified as accelerated renewable energy buyers.

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

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

404 H. No customer of a Phase II Utility with a peak demand in excess of 100 megawatts in 2019 that 405 elected pursuant to subdivision A 3 of § 56-577 to purchase electric energy from a competitive service provider prior to April 1, 2019, shall be allocated any non-bypassable charges pursuant to subsection F 406 for such period that the customer is not purchasing electric energy from the utility, and such customer's 407 408 electric load shall not be included in the utility's RPS Program requirements. No customer of a Phase I 409 Utility that elected pursuant to subdivision A 3 of § 56-577 to purchase electric energy from a 410 competitive service provider prior to February 1, 2019, shall be allocated any non-bypassable charges 411 pursuant to subsection F for such period that the customer is not purchasing electric energy from the 412 utility, and such customer's electric load shall not be included in the utility's RPS Program requirements. 413 I. Nothing in this section shall apply to any entity organized under Chapter 9.1 (§ 56-231.15 et seq.).

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

417 2. That the Department of Forestry (the Department) shall convene an advisory panel to examine 418 the use of forest-related materials, agricultural-related materials, and solid woody waste materials, 419 as those terms are described in § 10.1-1308.1 of the Code of Virginia, for biomass-fired electric 420 generating units in the Commonwealth. The advisory panel shall consist of representatives from 421 the Department of Environmental Quality, the Department of Energy, industry, environmental 422 organizations, and the Virginia Cooperative Extension, and other stakeholders as the Department 423 deems appropriate. The advisory panel shall examine the following factors related to the use of forest-related materials, agricultural-related materials, and solid woody waste materials for 424 425 biomass-fired electric generating units: (i) policies in the southeastern United States and other

426 states participating in the PJM regional transmission organization interchange as they relate to the 427 use of biomass for electricity generation; (ii) potential benefits for the Commonwealth's hardwood forest health as a result of using biomass resources for electricity generation; (iii) the amount of 428 429 forest-related materials, agricultural-related materials, and solid woody waste materials that can be 430 sustainably consumed annually without disrupting existing markets; (iv) consideration of technological advances in biomass energy generation; and (v) a life-cycle carbon analysis, 431 developed in coordination with the Department of Environmental Quality and relevant 432 433 stakeholders, that includes all carbon emissions, including supply chain emissions, forgone sequestration, and the emissions from burning biomass resources for electricity generation. The 434 435 advisory panel may consider other factors as the Department deems necessary. The Department 436 shall submit a report of the advisory panel's findings and any recommendations to the Chairmen 437 of the House Committee on Commerce and Energy and the Senate Committee on Commerce and 438 Labor no later than December 1, 2024.

3. That the Department of Forestry shall develop, no later than December 1, 2023, best 439 **440** management practices for the sustainable harvesting of biomass, as described in subdivision A 1 of 441 § 10.1-1308.1 of the Code of Virginia, for biomass-fired electric generating units that are subject to 442 the provisions of § 56-585.5 of the Code of Virginia, as amended by this act. The best management 443 practices shall include a life-cycle carbon analysis, developed in coordination with the Department 444 of Environmental Quality and relevant stakeholders, that includes all carbon emissions, including 445 supply chain emissions, forgone sequestration, and the emissions from burning biomass resources 446 for electricity generation.