

22102034D

SENATE BILL NO. 659

Offered January 19, 2022

A BILL to amend and reenact §§ 56-585.5 and 56-594.3 of the Code of Virginia, relating to shared solar programs for electric utilities; pilot.

Patrons—Hanger and Edwards

Referred to Committee on Commerce and Labor

Be it enacted by the General Assembly of Virginia:**1. That §§ 56-585.5 and 56-594.3 of the Code of Virginia are amended and reenacted as follows:****§ 56-585.5. Generation of electricity from renewable and zero carbon sources.**

A. As used in this section:

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

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

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

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

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

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

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

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

"Shared solar facility" has the same meaning as provided in § 56-594.3.

"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 *and load served by a shared solar facility*, by the incumbent electric utility or other retail supplier of electric energy in the previous calendar year, excluding an amount equivalent to the annual percentages of the electric energy that was supplied to such customer from nuclear generating plants located within the Commonwealth in the previous calendar year, provided such nuclear units were operating by July 1, 2020, or from any zero-carbon electric generating facilities not otherwise RPS eligible sources and placed into service in the Commonwealth after July 1, 2030.

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

B. 1. By December 31, 2024, except for any coal-fired electric generating units (i) jointly owned 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 generating units principally fueled by oil with a rated capacity in excess of 500 megawatts and all coal-fired electric generating units operating in the Commonwealth.

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

3. By December 31, 2045, each Phase I and II Utility shall retire all other electric generating units located in the Commonwealth that emit carbon as a by-product of combusting fuel to generate electricity.

4. A Phase I or Phase II Utility may petition the Commission for relief from the requirements of this

INTRODUCED

SB659

subsection on the basis that the requirement would threaten the reliability or security of electric service to customers. The Commission shall consider in-state and regional transmission entity resources and shall evaluate the reliability of each proposed retirement on a case-by-case basis in ruling upon any such petition.

C. Each Phase I and Phase II Utility shall participate in a renewable energy portfolio standard program (RPS Program) that establishes annual goals for the sale of renewable energy to all retail customers in the utility's service territory, other than accelerated renewable energy buyers pursuant to 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 Utility shall procure and retire Renewable Energy Certificates (RECs) originating from renewable energy standard eligible sources (RPS eligible sources). For purposes of complying with the RPS Program from 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 located within the PJM Interconnection, LLC (PJM) region. However, at no time during this period or thereafter may any Phase I or Phase II Utility use RECs from (i) renewable thermal energy, (ii) renewable thermal energy equivalent, (iii) biomass-fired facilities that are outside the Commonwealth, or (iv) biomass-fired facilities operating in the Commonwealth as of January 1, 2020, that supply 10 percent or more of their annual net electrical generation to the electric grid or more than 15 percent of their annual total useful energy to any entity other than the manufacturing facility to which the generating source is interconnected. From compliance year 2025 and all years after, each Phase I and Phase II Utility may only use RECs from RPS eligible sources for compliance with the RPS Program.

In order to qualify as RPS eligible sources, such sources must be (a) electric-generating resources that generate electric energy derived from solar or wind located in the Commonwealth or off the Commonwealth's Atlantic shoreline or in federal waters and interconnected directly into the Commonwealth or physically located within the PJM region; (b) falling water resources located in the 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 entered into a contract prior to January 1, 2020, to purchase the energy, capacity, and renewable attributes of such falling water resources; (c) non-utility-owned resources from falling water that (1) are less than 65 megawatts, (2) began commercial operation after December 31, 1979, or (3) added 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 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 waste heat from fossil fuel combustion or forest or woody biomass as fuel; or (e) biomass-fired facilities in operation in the Commonwealth and in operation as of January 1, 2020, that supply no more than 10 percent of their annual net electrical generation to the electric grid or no more than 15 percent of their annual total useful energy to any entity other than the manufacturing facility to which the generating source is interconnected. Regardless of any future maintenance, expansion, or refurbishment activities, the total amount of RECs that may be sold by any 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 2019; however, in no year may any RPS eligible source using biomass sell RECs in excess of the actual megawatt-hours of electricity generated by such facility that year. In order to comply with the RPS Program, each Phase I and Phase II Utility may use and retire the environmental attributes associated with any existing owned or contracted solar, wind, or falling water electric generating resources in operation, or proposed for operation, in the Commonwealth or physically located within the PJM region, with such resource qualifying as a Commonwealth-located resource for purposes of this subsection, as of January 1, 2020, provided such renewable attributes are verified as RECs consistent with the PJM-EIS Generation Attribute Tracking System.

The RPS Program requirements shall be a percentage of the total electric energy sold in the previous 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	
2021	6%		2021	14%	
2022	7%		2022	17%	
2023	8%		2023	20%	
2024	10%		2024	23%	
2025	14%		2025	26%	
2026	17%		2026	29%	
2027	20%		2027	32%	
2028	24%		2028	35%	

122	2029	27%	2029	38%
123	2030	30%	2030	41%
124	2031	33%	2031	45%
125	2032	36%	2032	49%
126	2033	39%	2033	52%
127	2034	42%	2034	55%
128	2035	45%	2035	59%
129	2036	53%	2036	63%
130	2037	53%	2037	67%
131	2038	57%	2038	71%
132	2039	61%	2039	75%
133	2040	65%	2040	79%
134	2041	68%	2041	83%
135	2042	71%	2042	87%
136	2043	74%	2043	91%
137	2044	77%	2044	95%
138	2045	80%	2045 and thereafter	100%
139	2046	84%		
140	2047	88%		
141	2048	92%		
142	2049	96%		
143	2050 and thereafter	100%		

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

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

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

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

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

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

183 b. By December 31, 2027, each Phase I Utility shall petition the Commission for necessary approvals
 184 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.

2. By December 31, 2035, each Phase II Utility shall petition the Commission for necessary approvals to (i) construct, acquire, or enter into agreements to purchase the energy, capacity, and 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 of a nameplate capacity not to exceed three megawatts per individual project and 35 percent of such generating capacity procured shall be from the purchase of energy, capacity, and environmental attributes from solar facilities owned by persons other than a utility, including utility affiliates and deregulated affiliates and (ii) pursuant to § 56-585.1:11, construct or purchase one or more offshore wind generation facilities located off the Commonwealth's Atlantic shoreline or in federal waters and interconnected directly into the Commonwealth with an aggregate capacity of up to 5,200 megawatts. At least 200 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 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.

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.

3. Nothing in this section shall prohibit a utility from petitioning the Commission to construct or

acquire zero-carbon electricity or from entering into contracts to procure the energy, capacity, and environmental attributes of zero-carbon electricity generating resources in excess of the requirements in subsection B. The Commission shall determine whether to approve such petitions on a stand-alone basis pursuant to §§ 56-580 and 56-585.1, provided that the Commission's review shall also consider whether the proposed generating capacity (i) is necessary to meet the utility's native load, (ii) is likely to lower customer fuel costs, (iii) will provide economic development opportunities in the Commonwealth, and (iv) serves a need that cannot be more affordably met with demand-side or energy storage resources.

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

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

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

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

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

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

317 2. By December 31, 2035, each Phase II Utility shall petition the Commission for necessary
318 approvals to construct or acquire 2,700 megawatts of energy storage capacity. Nothing in this
319 subdivision shall prohibit a Phase II Utility from constructing or acquiring more than 2,700 megawatts
320 of energy storage, provided that the utility receives approval from the Commission pursuant to
321 §§ 56-580 and 56-585.1.

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

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

326 5. After July 1, 2020, at least 35 percent of the energy storage facilities placed into service shall be
327 (i) purchased by the public utility from a party other than the public utility or (ii) owned by a party
328 other than a public utility, with the capacity from such facilities sold to the public utility. By January 1,
329 2021, the Commission shall adopt regulations to achieve the deployment of energy storage for the
330 Commonwealth required in subdivisions 1 and 2, including regulations that set interim targets and
331 update existing utility planning and procurement rules. The regulations shall include programs and
332 mechanisms to deploy energy storage, including competitive solicitations, behind-the-meter incentives,
333 non-wires alternatives programs, and peak demand reduction programs.

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

352 By September 1, 2020, the Commission shall direct the initiation of a proceeding for each Phase I
353 and Phase II Utility to review and determine the amount of such costs, net of benefits, that should be
354 allocated to retail customers within the utility's service territory which have elected to receive electric
355 supply service from a supplier of electric energy other than the utility, and shall direct that tariff
356 provisions be implemented to recover those costs from such customers beginning no later than January
357 1, 2021. Thereafter, such charges and tariff provisions shall be updated and trued up by the utility on an
358 annual basis, subject to continuing review and approval by the Commission.

359 G. 1. An accelerated renewable energy buyer may contract with a Phase I or Phase II Utility, or a
360 person other than a Phase I or Phase II Utility, to obtain (i) RECs from RPS eligible resources or (ii)
361 bundled capacity, energy, and RECs from solar or wind generation resources located within the PJM
362 region and initially placed in commercial operation after January 1, 2015, including any contract with a
363 utility for such generation resources that does not allocate to or recover from any other customer of the
364 utility the cost of such resources. Such an accelerated renewable energy buyer may offset all or a
365 portion of its electric load for purposes of RPS compliance through such arrangements. An accelerated
366 renewable energy buyer shall be exempt from the assignment of non-bypassable RPS compliance costs
367 pursuant to subsection F, with the exception of the costs of an offshore wind generating facility pursuant
368 to § 56-585.1:11, based on the amount of RECs obtained pursuant to this subsection in proportion to the
369 customer's total electric energy consumption, on an annual basis. An accelerated renewable energy buyer

obtaining RECs only shall not be exempt from costs related to procurement of new solar or onshore 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 a Phase II Utility and was subscribed, as of March 1, 2020, to a voluntary companion experimental tariff offering of the utility for the purchase of renewable attributes from renewable energy facilities that requires a renewable facilities agreement and the purchase of a minimum of 2,000 renewable attributes annually, shall be exempt from allocation of the net costs related to procurement of new solar or onshore wind generation capacity, energy, or environmental attributes, or energy storage facilities, by the utility pursuant to subsections D and E, based on the amount of RECs associated with the customer's renewable facilities agreements associated with such tariff offering as of that date in proportion to the customer's total electric energy consumption, on an annual basis. To the extent that an accelerated renewable energy buyer contracts for the capacity of new solar or wind generation resources pursuant to this subsection, the aggregate amount of such nameplate capacity shall be offset from the utility's procurement requirements pursuant to subsection D. All RECs associated with contracts entered into by an accelerated renewable energy buyer with the utility, or a person other than the utility, for an RPS 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 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.

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

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

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.

§ 56-594.3. Shared solar programs.

A. As used in this section:

"Applicable bill credit rate" means the dollar-per-kilowatt-hour rate used to calculate the subscriber's bill credit.

"Bill credit" means the monetary value of the electricity, in kilowatt-hours, generated by the shared solar facility allocated to a subscriber to offset that subscriber's electricity bill.

"Electric utility" or "utility" means each investor-owned utility in the Commonwealth. "Utility" does not include any electric cooperative in the Commonwealth.

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

"Low-income service organization" means a nonresidential customer of an investor-owned utility whose primary purpose is to serve low-income individuals and households.

"Low-income shared solar facility" means a shared solar facility at least 30 percent of the capacity of which is subscribed by low-income customers or low-income service organizations.

"Minimum bill" means an amount determined by the Commission under subsection D that subscribers are required to, at a minimum, pay on their utility bill each month after accounting for any bill credits.

"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.

431 *"Pilot program" means a shared solar program conducted by a Phase I Utility as provided in this*
432 *section.*

433 "Shared solar facility" means a facility that:

- 434 1. Generates electricity by means of a solar photovoltaic device with a nameplate capacity rating that
435 does not exceed 5,000 kilowatts of alternating current;
- 436 2. Is located in the service territory of an investor-owned electric utility;
- 437 3. Is connected to the electric distribution grid serving the Commonwealth;
- 438 4. Has at least three subscribers;
- 439 5. Has at least 40 percent of its capacity subscribed by customers with subscriptions of 25 kilowatts
440 or less; and
- 441 6. Is located on a single parcel of land.

442 "Shared solar program" or "program" means the program created through the adoption of rules to
443 allow for the development of shared solar facilities.

444 "Subscriber" means a retail customer of a utility that (i) owns one or more subscriptions of a shared
445 solar facility that is interconnected with the utility and (ii) receives service in the service territory of the
446 same utility in whose service territory the shared solar facility is located.

447 "Subscriber organization" means any for-profit or nonprofit entity that owns or operates one or more
448 shared solar facilities. A subscriber organization shall not be considered a utility solely as a result of its
449 ownership or operation of a shared solar facility.

450 "Subscription" means a contract or other agreement between a subscriber and the owner of a shared
451 solar facility. A subscription shall be sized such that the estimated bill credits do not exceed the
452 subscriber's average annual bill for the customer account to which the subscription is attributed.

453 "Utility" means a Phase II Utility.

454 B. The Commission shall establish by regulation a program that affords customers of a Phase II
455 ~~Utility~~ *each electric utility* the opportunity to participate in shared solar projects. *This shared solar*
456 *program shall include a pilot program that affords customers of a Phase I Utility the opportunity to*
457 *participate in shared solar projects.* Under its shared solar program, a utility shall provide a bill credit
458 for the proportional output of a shared solar facility attributable to that subscriber. *Notwithstanding*
459 *subsection G of § 56-580 or any other provision of law, a shared solar program shall be conducted*
460 *within the certificated territory of an electric utility.* The shared solar program shall be administered as
461 follows:

462 1. The value of the bill credit for the subscriber shall be calculated by multiplying the subscriber's
463 portion of the kilowatt-hour electricity production from the shared solar facility by the applicable bill
464 credit rate for the subscriber. Any amount of the bill credit that exceeds the subscriber's monthly bill,
465 minus the minimum bill, shall be carried over and applied to the next month's bill.

466 2. The utility shall provide bill credits to a shared solar facility's subscribers for not less than 25
467 years from the date the shared solar facility becomes commercially operational.

468 3. The subscriber organization shall, on a monthly basis, in a standardized electronic format, and
469 pursuant to guidelines established by the Commission, provide to the utility a subscriber list indicating
470 the kilowatt-hours of generation attributable to each of the subscribers participating in a shared solar
471 facility in accordance with the subscriber's portion of the output of the shared solar facility.

472 4. Subscriber lists may be updated monthly to reflect canceling subscribers and to add new
473 subscribers. The utility shall apply bill credits to subscriber bills within two billing cycles following the
474 cycle during which the energy was generated by the shared solar facility.

475 5. Each utility shall, on a monthly basis and in a standardized electronic format, provide to the
476 subscriber organization a report indicating the total value of bill credits generated by the shared solar
477 facility in the prior month, as well as the amount of the bill credit applied to each subscriber.

478 6. A subscriber organization may accumulate bill credits in the event that all of the electricity
479 generated by a shared solar facility is not allocated to subscribers in a given month. On an annual basis
480 and pursuant to guidelines established by the Commission, the subscriber organization shall furnish to
481 the utility allocation instructions for distributing excess bill credits to subscribers.

482 7. All environmental attributes associated with a shared solar facility, including renewable energy
483 certificates, shall be considered property of the subscriber organization. At the subscriber organization's
484 discretion, such environmental attributes may be distributed to the subscribers, sold to load-serving
485 entities with compliance obligations or other buyers, accumulated, or retired.

486 C. Each subscriber shall pay a minimum bill, established pursuant to subsection D, and shall receive
487 an applicable bill credit based on the subscriber's customer class of residential, commercial, or industrial.
488 Each class's applicable credit rate shall be calculated by the Commission annually by dividing revenues
489 to the class by sales, measured in kilowatt-hours, to that class to yield a bill credit rate for the class
490 (\$/kWh).

491 D. The Commission shall establish a minimum bill, which shall include the costs of all utility
492 infrastructure and services used to provide electric service and administrative costs of the shared solar

program. The Commission may modify the minimum bill over time. In establishing the minimum bill, the Commission shall (i) consider further costs the Commission deems relevant to ensure subscribing customers pay a fair share of the costs of providing electric services and (ii) minimize the costs shifted to customers not in a shared solar program. Low-income customers shall be exempt from the minimum bill.

E. ~~The~~ For each electric utility, the Commission shall approve a shared solar facility program of, including a pilot program for participation by customers of a Phase I Utility. The Commission may, after notice and opportunity for hearing, establish a maximum amount of shared solar permissible in each utility's territory, except that for each Phase II Utility such cap shall not be less than 150 megawatts with a minimum requirement of 30 percent low-income customers. ~~The~~ For each Phase II Utility, the Commission shall approve an additional 50 megawatts of capacity upon determining that at least 45 megawatts of the aggregated shared solar capacity in the Commonwealth have been subscribed to by low-income customers. For each Phase I Utility, the Commission shall approve a cap for a shared solar program of not less than 50 megawatts with a minimum requirement of 30 percent low-income customers. Notwithstanding subsection G of § 56-580, for each investor-owned utility whose service territory assigned to it by the Commission is located within Dickenson, Lee, Russell, Scott, and Wise Counties, the Commission shall approve a cap for a shared solar program of not less than 15 megawatts with a minimum requirement of 30 percent low-income customers. Subscriber organizations shall be allowed to demonstrate compliance with the low income requirement using either project capacity or project savings methodology. The Commission, in collaboration with the Department of Energy, may adopt mechanisms to ensure low-income customer participation.

F. The Commission shall establish by regulation a shared solar program that complies with the provisions of subsections B, C, D, and E by January 1, 2021, and shall require each utility to file any tariffs, agreements, or forms necessary for implementation of the program within 60 days of the utility's full implementation of a new customer information platform or by July 1, 2023, whichever occurs first. Any rule or utility implementation filings approved by the Commission shall:

1. Reasonably allow for the creation of shared solar facilities;
2. Allow all customer classes to participate in the program;
3. Create a stakeholder working group including low-income community representatives and community solar providers to facilitate low-income customer and low-income service organization participation in the program;
4. Encourage public-private partnerships to further the Commonwealth's clean energy and equity goals, such as state agency and affordable housing provider participation in the program as subscribers of shared solar projects;
5. Not remove a customer from its otherwise applicable customer class in order to participate in a shared solar facility;
6. Reasonably allow for the transferability and portability of subscriptions, including allowing a subscriber to retain a subscription to a shared solar facility if the subscriber moves within the same utility's service territory;
7. Establish standards, fees, and processes for the interconnection of shared solar facilities that allow the utility to recover reasonable interconnection costs for each shared solar facility;
8. Adopt standardized consumer disclosure forms;
9. Allow the utility the opportunity to recover reasonable costs of administering the program;
10. Ensure nondiscriminatory and efficient requirements and utility procedures for interconnecting projects;
11. Address the co-location of two or more shared solar facilities on a single parcel of land and provide guidelines for determining when two or more facilities are co-located;
12. Include a program implementation schedule;
13. Prohibit credit checks as a means of establishing eligibility for residential customers to become subscribers;
14. Require net crediting functionality as part of any new customer information platform approved by the Commission. Under net crediting, the utility shall include the shared solar subscription fee on the customer's utility bill and provide the customer with a net credit equivalent to the total bill credit value for that generation period minus the shared solar subscription fee as set by the subscriber organization. The net crediting fee shall not exceed one percent of the bill credit value. Net crediting shall be optional for subscriber organizations, and any shared solar subscription fees charged via the net crediting model shall be set to ensure that subscribers do not pay more in subscription fees than they receive in bill credits; and
15. Allow the utility to recover as the cost of purchased power pursuant to § 56-249.6 any difference between the bill credit provided to the subscriber and the cost of energy injected into the grid by the subscriber organization.

554 G. Within 180 days of finalization of the Commission's adoption of regulations for the shared solar
555 program, a utility shall, provided that the utility has successfully implemented its customer information
556 platform, begin crediting subscriber accounts of each shared solar facility interconnected in its service
557 territory, subject to the requirements of this section and regulations adopted thereto.

558 *H. Any interconnection costs for shared solar facilities that are associated with system-wide benefits,*
559 *including substation improvements and upgrades to distribution lines, shall be rate-based and subject to*
560 *review by the Commission. There shall be a rebuttable presumption for shared solar facilities, subject to*
561 *Commission review and approval, that fiber optic upgrades are not necessary or cost-justified to*
562 *maintain the safety and reliability of the electric grid. The provisions of this subsection shall be*
563 *construed to allow an electric utility to recover reasonable interconnection costs for each shared solar*
564 *facility.*

565 *I. For shared solar facilities up to two megawatts in alternating current capacity, the owner or*
566 *operator of the project shall, prior to starting any construction or installation of a shared solar facility*
567 *or adding capacity to an existing shared solar facility, submit a Level 1 or Level 2 interconnection*
568 *request form as prescribed by the Commission to the electric utility. The owner or operator of a shared*
569 *solar facility shall receive approval from the electric utility prior to interconnecting the new or*
570 *expanded shared solar facility. The electric utility shall have 60 days from the date of notification to*
571 *determine whether the requirements for a Level 1 or Level 2 interconnection request form have been*
572 *met. Sixty-one days after the date of notification, the owner or operator of the shared solar facility may*
573 *interconnect and begin operation of the generating facility unless the electric utility requests a waiver of*
574 *this provision from the Commission. The Commission may grant such waiver upon such terms and*
575 *conditions as the Commission may impose.*

576 *J. The Commission shall review the pilot program established for each Phase I Utility by July 1,*
577 *2024, and every two years thereafter for the duration of the pilot program. In its review, the*
578 *Commission shall determine whether limitations imposed pursuant to subsection E should be expanded,*
579 *reduced, or continued.*