1	SENATE BILL NO. 737
2	AMENDMENT IN THE NATURE OF A SUBSTITUTE
3	(Proposed by the Senate Committee on Commerce and Labor
4	on)
5	(Patron Prior to SubstituteSenator Surovell)
6	A BILL to amend and reenact §§ 56-576 and 56-585.7 of the Code of Virginia, relating to electric utilities;
7	energy efficiency programs; on-bill tariff program.
8	Be it enacted by the General Assembly of Virginia:
9	1. That §§ 56-576 and 56-585.7 of the Code of Virginia are amended and reenacted as follows:
10	§ 56-576. Definitions.
11	As used in this chapter:
12	"Affiliate" means any person that controls, is controlled by, or is under common control with an
13	electric utility.
14	"Aggregator" means a person that, as an agent or intermediary, (i) offers to purchase, or purchases,
15	electric energy or (ii) offers to arrange for, or arranges for, the purchase of electric energy, for sale to, or
16	on behalf of, two or more retail customers not controlled by or under common control with such person.
17	The following activities shall not, in and of themselves, make a person an aggregator under this chapter:
18	(i) furnishing legal services to two or more retail customers, suppliers or aggregators; (ii) furnishing
19	educational, informational, or analytical services to two or more retail customers, unless direct or indirect
20	compensation for such services is paid by an aggregator or supplier of electric energy; (iii) furnishing
21	educational, informational, or analytical services to two or more suppliers or aggregators; (iv) providing
22	default service under § 56-585; (v) engaging in activities of a retail electric energy supplier, licensed
23	pursuant to § 56-587, which are authorized by such supplier's license; and (vi) engaging in actions of a
24	retail customer, in common with one or more other such retail customers, to issue a request for proposal
25	or to negotiate a purchase of electric energy for consumption by such retail customers.

26	"Business park" means a land development containing a minimum of 100 contiguous acres
27	classified as a Tier 4 site under the Virginia Economic Development Partnership's Business Ready Sites
28	Program that is developed and constructed by a locality, an industrial development authority, or a similar
29	political subdivision of the Commonwealth created pursuant to § 15.2-4903 or other act of the General
30	Assembly, in order to promote business development.
31	"Combined heat and power" means a method of using waste heat from electrical generation to
32	offset traditional processes, space heating, air conditioning, or refrigeration.
33	"Commission" means the State Corporation Commission.
34	"Community in which a majority of the population are people of color" means a U.S. Census tract
35	where more than 50 percent of the population comprises individuals who identify as belonging to one or
36	more of the following groups: Black, African American, Asian, Pacific Islander, Native American, other
37	non-white race, mixed race, Hispanic, Latino, or linguistically isolated.
38	"Cooperative" means a utility formed under or subject to Chapter 9.1 (§ 56-231.15 et seq.).
39	"Covered entity" means a provider in the Commonwealth of an electric service not subject to
40	competition but does not include default service providers.
41	"Covered transaction" means an acquisition, merger, or consolidation of, or other transaction
42	involving stock, securities, voting interests or assets by which one or more persons obtains control of a
43	covered entity.
44	"Curtailment" means inducing retail customers to reduce load during times of peak demand so as
45	to ease the burden on the electrical grid.
46	"Customer choice" means the opportunity for a retail customer in the Commonwealth to purchase
47	electric energy from any supplier licensed and seeking to sell electric energy to that customer.
48	"Demand response" means measures aimed at shifting time of use of electricity from peak-use
49	periods to times of lower demand by inducing retail customers to curtail electricity usage during periods
50	of congestion and higher prices in the electrical grid.
51	"Distribute " "distributing " or "distribution of" electric energy means the transfer of electric

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

53 54 "Distributor" means a person owning, controlling, or operating a retail distribution system to provide electric energy directly to retail customers.

55 "Electric distribution grid transformation project" means a project associated with electric 56 distribution infrastructure, including related data analytics equipment, that is designed to accommodate or 57 facilitate the integration of utility-owned or customer-owned renewable electric generation resources with 58 the utility's electric distribution grid or to otherwise enhance electric distribution grid reliability, electric 59 distribution grid security, customer service, or energy efficiency and conservation, including advanced 60 metering infrastructure; intelligent grid devices for real time system and asset information; automated 61 control systems for electric distribution circuits and substations; communications networks for service 62 meters; intelligent grid devices and other distribution equipment; distribution system hardening projects 63 for circuits, other than the conversion of overhead tap lines to underground service, and substations 64 designed to reduce service outages or service restoration times; physical security measures at key 65 distribution substations; cyber security measures; energy storage systems and microgrids that support 66 circuit-level grid stability, power quality, reliability, or resiliency or provide temporary backup energy 67 supply; electrical facilities and infrastructure necessary to support electric vehicle charging systems; LED 68 street light conversions; and new customer information platforms designed to provide improved customer 69 access, greater service options, and expanded access to energy usage information.

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

73 "Energy efficiency program" means a program that reduces the total amount of <u>electricity energy</u> 74 that is required for the same process or activity implemented after the expiration of capped rates <u>but does</u> 75 <u>not include electrification of any process or activity primarily fueled by natural gas</u>. Energy efficiency 76 programs include equipment, physical, or program change designed to produce measured and verified 77 reductions in the amount of <u>electricity site energy</u> required to perform the same function and produce the 78 same or a similar outcome. Energy efficiency programs may include, <u>but are not limited to</u>, (i) 79 electrification, including measures that electrify space heating, water heating, cooling, drying, cooking,

80 industrial processes, and other building and industrial end uses that would otherwise be served by onsite. 81 nonelectric fuels, provided that the electrification measures reduce site energy consumption and that, to 82 the maximum extent practical, seek to combine with federally authorized customer rebates for heat pump 83 technology; (ii) programs that result in improvements in lighting design, heating, ventilation, and air 84 conditioning systems, appliances, building envelopes, and industrial and commercial processes; (ii) (iii) 85 measures, such as but not limited to the installation of advanced meters, implemented or installed by 86 utilities, that reduce fuel use or losses of electricity and otherwise improve internal operating efficiency 87 in generation, transmission, and distribution systems; and -(iii) (iv) customer engagement programs that 88 result in measurable and verifiable energy savings that lead to efficient use patterns and practices. Energy 89 efficiency programs include demand response, combined heat and power and waste heat recovery, 90 curtailment, or other programs that are designed to reduce-<u>electricity</u> site energy consumption so long as 91 they reduce the total amount of <u>electricity</u> site energy that is required for the same process or activity. 92 Utilities shall be authorized to install and operate such advanced metering technology and equipment on 93 a customer's premises; however, nothing in this chapter establishes a requirement that an energy efficiency 94 program be implemented on a customer's premises and be connected to a customer's wiring on the 95 customer's side of the inter-connection without the customer's expressed consent. Electricity consumption 96 increases that result from Commission-approved electrification measures shall not be considered as a 97 reduction in energy savings under the energy savings requirements set forth in subsection B of § 56-596.2. 98 Utilities may apply verified total site energy reductions that are attributable to Commission-approved 99 electrification measures to the energy savings requirements set forth in subsection B of § 56-596.2, subject 100 to a conversion of British thermal unit-based energy savings to an equivalent kilowatt-hour-based energy 101 savings, which conversion shall be subject to Commission approval.

102 "Generate," "generating," or "generation of" electric energy means the production of electric103 energy.

104 "Generator" means a person owning, controlling, or operating a facility that produces electric105 energy for sale.

106 "Historically economically disadvantaged community" means (i) a community in which a majority107 of the population are people of color or (ii) a low-income geographic area.

108 "Incumbent electric utility" means each electric utility in the Commonwealth that, prior to July 1,
109 1999, supplied electric energy to retail customers located in an exclusive service territory established by
110 the Commission.

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

114 "In the public interest," for purposes of assessing energy efficiency programs, describes an energy 115 efficiency program if the Commission determines that the net present value of the benefits exceeds the net 116 present value of the costs as determined by not less than any three of the following four tests: (i) the Total 117 Resource Cost Test; (ii) the Utility Cost Test (also referred to as the Program Administrator Test); (iii) the 118 Participant Test; and (iv) the Ratepayer Impact Measure Test. Such determination shall include an analysis 119 of all four tests, and a program or portfolio of programs shall be approved if the net present value of the 120 benefits exceeds the net present value of the costs as determined by not less than any three of the four 121 tests. If the Commission determines that an energy efficiency program or portfolio of programs is not in 122 the public interest, its final order shall include all work product and analysis conducted by the 123 Commission's staff in relation to that program, including testimony relied upon by the Commission's staff, 124 that has bearing upon the Commission's decision. If the Commission reduces the proposed budget for a 125 program or portfolio of programs, its final order shall include an analysis of the impact such budget 126 reduction has upon the cost-effectiveness of such program or portfolio of programs. An order by the 127 Commission (a) finding that a program or portfolio of programs is not in the public interest or (b) reducing 128 the proposed budget for any program or portfolio of programs shall adhere to existing protocols for 129 extraordinarily sensitive information. In addition, an energy efficiency program may be deemed to be "in 130 the public interest" if the program (1) provides measurable and verifiable energy savings to low-income 131 customers or elderly customers or (2) is a pilot program of limited scope, cost, and duration, that is

intended to determine whether a new or substantially revised program or technology would be cost-effective.

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

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

141 "Measured and verified" means a process determined pursuant to methods accepted for use by 142 utilities and industries to measure, verify, and validate energy savings and peak demand savings. This may 143 include the protocol established by the United States Department of Energy, Office of Federal Energy 144 Management Programs, Measurement and Verification Guidance for Federal Energy Projects, 145 measurement and verification standards developed by the American Society of Heating, Refrigeration and 146 Air Conditioning Engineers (ASHRAE), or engineering-based estimates of energy and demand savings 147 associated with specific energy efficiency measures, as determined by the Commission.

148 "Municipality" means a city, county, town, authority, or other political subdivision of the149 Commonwealth.

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

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

157 "Percentage of Income Payment Program (PIPP) eligible utility customer" means any person or158 household whose income does not exceed 150 percent of the federal poverty level.

159 "Person" means any individual, corporation, partnership, association, company, business, trust,160 joint venture, or other private legal entity, and the Commonwealth or any municipality.

161 "Previously developed project site" means any property, including related buffer areas, if any, that
162 has been previously disturbed or developed for non-single-family residential, non-agricultural, or non163 silvicultural 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.

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

172 "Renewable energy" means energy derived from sunlight, wind, falling water, biomass, 173 sustainable or otherwise, (the definitions of which shall be liberally construed), energy from waste, landfill 174 gas, municipal solid waste, wave motion, tides, and geothermal power, and does not include energy 175 derived from coal, oil, natural gas, or nuclear power. "Renewable energy" also includes the proportion of 176 the thermal or electric energy from a facility that results from the co-firing of biomass. "Renewable 177 energy" does not include waste heat from fossil-fired facilities or electricity generated from pumped 178 storage but includes run-of-river generation from a combined pumped-storage and run-of-river facility.

179 "Renewable thermal energy" means the thermal energy output from (i) a renewable-fueled 180 combined heat and power generation facility that is (a) constructed, or renovated and improved, after 181 January 1, 2012, (b) located in the Commonwealth, and (c) utilized in industrial processes other than the 182 combined heat and power generation facility or (ii) a solar energy system, certified to the OG-100 standard 183 of the Solar Ratings and Certification Corporation or an equivalent certification body, that (a) is 184 constructed, or renovated and improved, after January 1, 2013, (b) is located in the Commonwealth, and 185 (c) heats water or air for residential, commercial, institutional, or industrial purposes.

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

190 "Renovated and improved facility" means a facility the components of which have been upgraded191 to enhance its operating efficiency.

192 "Retail customer" means any person that purchases retail electric energy for its own consumption193 at one or more metering points or nonmetered points of delivery located in the Commonwealth.

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

195 "Revenue reductions related to energy efficiency programs" means reductions in the collection of 196 total non-fuel revenues, previously authorized by the Commission to be recovered from customers by a 197 utility, that occur due to measured and verified decreased consumption of electricity caused by energy 198 efficiency programs approved by the Commission and implemented by the utility, less the amount by 199 which such non-fuel reductions in total revenues have been mitigated through other program-related 190 factors, including reductions in variable operating expenses.

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

206 "Solar energy system" means a system of components that produces heat or electricity, or both,207 from sunlight.

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

"Supply" or "supplying" electric energy means the sale of or the offer to sell electric energy to aretail customer.

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

221 "Transmission of," "transmit," or "transmitting" electric energy means the transfer of electric
222 energy through the Commonwealth's interconnected transmission grid from a generator to either a
223 distributor or a retail customer.

224 "Transmission system" means those facilities and equipment that are required to provide for the225 transmission of electric energy.

"Waste heat to power" means a system that generates electricity through the recovery of a qualifiedwaste heat resource.

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§ 56-585.7. On-bill tariff program; electric cooperatives.

A. As used in this section:

230 "Cooperative" means a utility consumer services cooperative.

"Eligible customer" means a member-consumer receiving service from a cooperative that (i) has
asked to participate in the cooperative's on-bill tariff program and (ii) has been determined by the
cooperative to be eligible to participate in its on-bill tariff program.

"Energy efficiency measures" means any installation, improvement, addition, or equipment approved by the cooperative for purpose of its on-bill tariff program that has the primary purpose of improving the energy efficiency of the premises and reducing its consumption of energy, including heating and air conditioning systems, water heaters, weatherization, insulation, window and door modifications, appliances, and automatic or Internet-connected energy control systems. "Energy efficiency measures"

does not include (i) energy conservation measures to improve the energy efficiency of (i) premises
constructed within five years prior to an eligible customer's request to participate in an on-bill tariff
program or (ii) premises that are under initial construction or (ii) the electrification of any process or
activity primarily fueled by natural gas.

243 "Energy savings charge" means the charge placed by the cooperative on the monthly billing
244 statement of an eligible customer or subsequent customers in order to recover the costs of the energy
245 efficiency measures installed at the eligible customer's premises.

"On-bill tariff agreement" means an agreement between an eligible customer and a cooperative
that provides for the terms, conditions, payments, and costs, including financing or capital costs, of the
installation of energy efficiency measures at a premises to be paid by or through the cooperative and repaid
by the eligible customer or subsequent customer at the same premises by means of an energy savings
charge.

251 "On-bill tariff program" means a voluntary tariff program that allows eligible customers (i) to
252 arrange through the cooperative for its provision and installation, including by its chosen vendors, of
253 energy efficiency measures at the customer's premises without an upfront payment and (ii) to pay back
254 over time the cost of the energy efficiency measures through an energy savings charge.

255 "Program costs" means a participating cooperative's (i) identified, projected, and actual costs to
256 design, implement, and operate its on-bill tariff program, including costs to request and evaluate vendor
257 proposals and manage the vendors; (ii) administrative, labor, and marketing charges; (iii) costs of
258 obtaining funds used by the cooperative to pay for the energy efficiency measures; (iv) write-offs for
259 unpaid energy savings charges after reasonable collection efforts; and (v) reasonable margin.

B. On or after January 1, 2021, notwithstanding any other provision of law, a cooperative may, without Commission approval, upon an affirmative resolution of its board of directors and without the requirement of any filing other than as required in this subsection, propose, establish, and implement an on-bill tariff program for energy efficiency measures, provided that such program adheres to the provisions of this section. This regulated, tariffed program shall be reviewable by the Commission at the cooperative's next general rate proceeding. A cooperative shall recover the program costs through a new

266 rate schedule established by this section or otherwise through its rates. A cooperative shall file a copy of any such new rate schedule with the Commission for informational purposes.

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268 C. At least 120 days prior to making an informational filing as described in subsection B, a 269 cooperative shall conduct a stakeholder process to design the on-bill tariff program collaboratively with 270 interested parties. Such stakeholder process shall be open to the cooperative's membership and invited 271 guests and shall include an opportunity to participate for low-income and middle-income advocates, 272 energy efficiency advocates, affordable housing advocates, and the staff of the Commission. The 273 stakeholder process shall examine and recommend, among other things, appropriate additional consumer 274 safeguards for potential adoption by the cooperative, including oversight of third-party vendors and 275 appropriate methods for notifying customers that vendors are subject to the Virginia Consumer Protection 276 Act (§ 59.1-196 et seq.). The stakeholder process shall allow for remote or electronic participation and 277 may include multiple cooperatives or be coordinated, convened, and facilitated by a group or association 278 of cooperatives. The meetings of the stakeholders may be held anywhere in the Commonwealth. The 279 cooperative shall include documentation concerning the stakeholder process in its informational filing to 280 the Commission.

281 D. A cooperative's on-bill tariff program shall include criteria for selecting eligible customers; 282 limits on the individual and aggregate amounts of energy efficiency measures for each eligible customer; 283 limits on the overall amount available under the on-bill tariff program; generally applicable repayment 284 terms; and qualifications of potential vendors that will market or install energy efficiency measures. 285 Multiple cooperatives may collaborate to create a similar structure for on-bill tariff programs.

286 E. An on-bill tariff agreement shall:

287 1. Specify that the eligible customer or subsequent customers at the premises shall only be 288 responsible for the payment of the energy savings charge upon satisfactory installation of the energy 289 efficiency measures as set forth in their on-bill tariff agreement;

290 2. Specify that the cooperative may recover the costs, including financing or capital costs, of 291 installing the energy efficiency measures at an eligible customer's premises through the energy savings 292 charge;

293 3. Provide for the inclusion of an energy savings charge that is stated as a separate line item on the294 eligible customer's or subsequent customer's utility bill;

4. Provide that an eligible customer shall enter into an on-bill tariff agreement to participate in theon-bill tariff program;

297 5. Provide that the cooperative may apply the energy savings charge to the meter or bill of
298 subsequent customers at the premises and that the then-current eligible customer is required to notify the
299 subsequent customer of the on-bill tariff agreement and the energy savings charge;

300 6. Deem amounts due under the tariff to be amounts owed for regulated electric service and for
301 which an eligible customer is subject to disconnection of service pursuant to the cooperative's existing
302 policies for disconnection;

303 7. Provide that any loan or financing interest rate or cost of capital, or their equivalent, that is
304 provided to the eligible customer pursuant to an on-bill tariff agreement shall be less than prevailing
305 market rates;

306 8. Provide that payments for energy-saving charges made by eligible and subsequent customers
 307 shall be retained by the cooperative and amounts credited against the appropriate category of program
 308 costs; and

309 9. Result in deemed savings that are reasonably projected, based on the customer's-electricity
310 energy utilization and rates at the beginning of the term, to result in lower-electric energy bills for the
311 customer, and that allocate a portion of the gross cost savings resulting from the energy efficiency
312 measures to the eligible customer and the remaining portion to the cooperative to recover the program
313 costs.

F. Customers having a grievance or complaints against an on-bill tariff program shall have recourseto the informal and formal procedures of the Commission.

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