## VIRGINIA ACTS OF ASSEMBLY — CHAPTER

2 An Act to amend and reenact §§ 56-585.2 and 58.1-439.12:08 of the Code of Virginia and to amend the Code of Virginia by adding in Article 13 of Chapter 3 of Title 58.1 a section numbered 58.1-439.12:11, relating to Virginia research and development expenses tax credits.

5 6 Approved

Be it enacted by the General Assembly of Virginia:

1. That §§ 56-585.2 and 58.1-439.12:08 of the Code of Virginia are amended and reenacted and that the Code of Virginia is amended by adding in Article 13 of Chapter 3 of Title 58.1 a section numbered 58.1-439.12:11 as follows:

§ 56-585.2. Sale of electricity from renewable sources through a renewable energy portfolio standard program.

A. As used in this section:

"Qualified investment" means an expense incurred in the Commonwealth by a participating utility in conducting, either by itself or in partnership with institutions of higher education in the Commonwealth or with industrial or commercial customers that have established renewable energy research and development programs in the Commonwealth, research and development activities related to renewable or alternative energy sources, which expense (i) is designed to enhance the participating utility's understanding of emerging energy technologies and their potential impact on and value to the utility's system and customers within the Commonwealth; (ii) promotes economic development within the Commonwealth; (iii) supplements customer-driven alternative energy or energy efficiency initiatives; (iv) supplements alternative energy and energy efficiency initiatives at state or local governmental facilities in the Commonwealth; or (v) is designed to mitigate the environmental impacts of renewable energy projects.

"Renewable energy" shall have the same meaning ascribed to it in § 56-576, provided such renewable energy is (i) generated in the Commonwealth or in the interconnection region of the regional transmission entity of which the participating utility is a member, as it may change from time to time, and purchased by a participating utility under a power purchase agreement; provided, however, that if such agreement was executed on or after July 1, 2013, the agreement shall expressly transfer ownership of renewable attributes, in addition to ownership of the energy, to the participating utility; (ii) generated by a public utility providing electric service in the Commonwealth from a facility in which the public utility owns at least a 49 percent interest and that is located in the Commonwealth, in the interconnection region of the regional transmission entity of which the participating utility is a member, or in a control area adjacent to such interconnection region; or (iii) represented by renewable energy certificates. "Renewable energy" shall not include electricity generated from pumped storage, but shall include run-of-river generation from a combined pumped-storage and run-of-river facility.

"Renewable energy certificate" means either (i) a certificate issued by an affiliate of the regional transmission entity of which the participating utility is a member, as it may change from time to time, or any successor to such affiliate, and held or acquired by such utility, that validates the generation of renewable energy by eligible sources in the interconnection region of the regional transmission entity or (ii) a certificate issued by the Commission pursuant to subsection J and held or acquired by a participating utility, that validates a qualified investment made by the participating utility.

"Total electric energy sold in the base year" means total electric energy sold to Virginia jurisdictional retail customers by a participating utility in calendar year 2007, excluding an amount equivalent to the average of the annual percentages of the electric energy that was supplied to such customers from nuclear generating plants for the calendar years 2004 through 2006.

B. Any investor-owned incumbent electric utility may apply to the Commission for approval to participate in a renewable energy portfolio standard program, as defined in this section. The Commission shall approve such application if the applicant demonstrates that it has a reasonable expectation of achieving 12 percent of its base year electric energy sales from renewable energy sources during calendar year 2022, and 15 percent of its base year electric energy sales from renewable energy sources during calendar year 2025, as provided in subsection D.

C. It is in the public interest for utilities that seek to have a renewable energy portfolio standard program to achieve the goals set forth in subsection D, such goals being referred to herein as "RPS Goals." A utility shall receive double credit toward meeting the renewable energy portfolio standard for energy derived from sunlight, from onshore wind, or from facilities in the Commonwealth fueled

primarily by animal waste, and triple credit toward meeting the renewable energy portfolio standard for energy derived from offshore wind.

D. Regarding any renewable energy portfolio standard program, the total electric energy sold by a utility to meet the RPS Goals shall be composed of the following amounts of electric energy or renewable thermal energy equivalent from renewable energy sources, as adjusted for any sales volumes lost through operation of the customer choice provisions of subdivision A 3 or A 4 of § 56-577:

RPS Goal I: In calendar year 2010, 4 percent of total electric energy sold in the base year.

RPS Goal II: For calendar years 2011 through 2015, inclusive, an average of 4 percent of total electric energy sold in the base year, and in calendar year 2016, 7 percent of total electric energy sold in the base year.

RPS Goal III: For calendar years 2017 through 2021, inclusive, an average of 7 percent of total electric energy sold in the base year, and in calendar year 2022, 12 percent of total electric energy sold in the base year.

RPS Goal IV: For calendar years 2023 and 2024, inclusive, an average of 12 percent of total electric energy sold in the base year, and in calendar year 2025, 15 percent of total electric energy sold in the base year.

A utility may not apply renewable energy certificates issued pursuant to subsection J to meet more than 20 percent of the sales requirement for the RPS Goal in any year.

A utility may apply renewable energy sales achieved or renewable energy certificates acquired during the periods covered by any such RPS Goal that are in excess of the sales requirement for that RPS Goal to the sales requirements for any future RPS Goals in the five calendar years after the renewable energy was generated or the renewable energy certificates were created, except that a utility shall be able to apply renewable energy certificates acquired by the utility prior to January 1, 2014.

E. A utility participating in such program shall have the right to recover all incremental costs incurred for the purpose of such participation in such program, as accrued against income, through rate adjustment clauses as provided in subdivisions A 5 and A 6 of § 56-585.1, including, but not limited to, administrative costs, ancillary costs, capacity costs, costs of energy represented by certificates described in subsection A, and, in the case of construction of renewable energy generation facilities, allowance for funds used during construction until such time as an enhanced rate of return, as determined pursuant to subdivision A 6 of § 56-585.1, on construction work in progress is included in rates, projected construction work in progress, planning, development and construction costs, life-cycle costs, and costs of infrastructure associated therewith, plus an enhanced rate of return, as determined pursuant to subdivision A 6 of § 56-585.1. This subsection shall not apply to qualified investments as provided in subsection K. All incremental costs of the RPS program shall be allocated to and recovered from the utility's customer classes based on the demand created by the class and within the class based on energy used by the individual customer in the class, except that the incremental costs of the RPS program shall not be allocated to or recovered from customers that are served within the large industrial rate classes of the participating utilities and that are served at primary or transmission voltage.

F. A utility participating in such program shall apply towards meeting its RPS Goals any renewable energy from existing renewable energy sources owned by the participating utility or purchased as allowed by contract at no additional cost to customers to the extent feasible. A utility participating in such program shall not apply towards meeting its RPS Goals renewable energy certificates attributable to any renewable energy generated at a renewable energy generation source in operation as of July 1, 2007, that is operated by a person that is served within a utility's large industrial rate class and that is served at primary or transmission voltage, except for those persons providing renewable thermal energy equivalents to the utility. A participating utility shall be required to fulfill any remaining deficit needed to fulfill its RPS Goals from new renewable energy supplies at reasonable cost and in a prudent manner to be determined by the Commission at the time of approval of any application made pursuant to subsection B. A participating utility may sell renewable energy certificates produced at its own generation facilities located in the Commonwealth or, if located outside the Commonwealth, owned by such utility and in operation as of January 1, 2010, or renewable energy certificates acquired as part of a purchase power agreement, to another entity and purchase lower cost renewable energy certificates and the net difference in price between the renewable energy certificates shall be credited to customers. Utilities participating in such program shall collectively, either through the installation of new generating facilities, through retrofit of existing facilities or through purchases of electricity from new facilities located in Virginia, use or cause to be used no more than a total of 1.5 million tons per year of green wood chips, bark, sawdust, a tree or any portion of a tree which is used or can be used for lumber and pulp manufacturing by facilities located in Virginia, towards meeting RPS goals, excluding such fuel used at electric generating facilities using wood as fuel prior to January 1, 2007. A utility with an approved application shall be allocated a portion of the 1.5 million tons per year in proportion to its share of the total electric energy sold in the base year, as defined in subsection A, for all utilities participating in the RPS program. A utility may use in meeting RPS goals, without limitation, the following sustainable biomass and biomass based waste to energy resources: mill residue, except wood chips, sawdust and bark; pre-commercial soft wood thinning; slash; logging and construction debris; brush; yard waste; shipping crates; dunnage; non-merchantable waste paper; landscape or right-of-way tree trimmings; agricultural and vineyard materials; grain; legumes; sugar; and gas produced from the anaerobic decomposition of animal waste.

- G. The Commission shall promulgate such rules and regulations as may be necessary to implement the provisions of this section including a requirement that participants verify whether the RPS goals are met in accordance with this section.
- H. Each investor-owned incumbent electric utility shall report to the Commission annually by November 1 identifying:
  - 1. The utility's efforts, if any, to meet the RPS Goals, specifically identifying:
- a. A list of all states where the purchased or owned renewable energy was generated, specifying the number of megawatt hours or renewable energy certificates originating from each state;
- b. A list of the decades in which the purchased or owned renewable energy generating units were placed in service, specifying the number of megawatt hours or renewable energy certificates originating from those units; and
- c. A list of fuel types used to generate the purchased or owned renewable energy, specifying the number of megawatt hours or renewable energy certificates originating from each fuel type;
  - 2. The utility's overall generation of renewable energy; and

- 3. Advances in renewable generation technology that affect activities described in subdivisions 1 and 2.
- I. The Commission shall post on its website the reports submitted by each investor-owned incumbent electric utility pursuant to subsection H.
- J. The Commission shall issue to a participating utility a number of renewable energy certificates for qualified investments, upon request by a participating utility, if it finds that an expense satisfies the conditions set forth in this section for a qualified investment, as follows:
- 1. By March 31 of each year, the participating utility shall provide an analysis, as reasonably determined by a qualified independent broker, of the average for the preceding year of the publicly available prices for Tier 1 renewable energy certificates and Tier 2 renewable energy certificates, validating the generation of renewable energy by eligible sources, that were issued in the interconnection region of the regional transmission entity of which the participating utility is a member;
- 2. In the same annual analysis provided to the Commission, the participating utility shall divide the amount of the participating utility's qualified investments in the applicable period by the average price determined pursuant to subdivision 1;
- 3. The number of renewable energy certificates to be issued to the participating utility shall equal the product obtained pursuant to subdivision 2; and
- 4. The Commission shall review and validate the analysis provided by the participating utility within 90 days of submittal of its analysis to the Commission. If no corrections are made by the Commission, then the analysis shall be deemed correct and the renewable energy certificates shall be deemed issued to the participating utility.

Each renewable energy certificate issued to a participating utility pursuant to this subsection shall represent the equivalent of one megawatt hour of renewable energy sales achieved when applied to an RPS Goal.

- K. Qualified investments shall constitute reasonable and prudent operating expenses of a participating utility. Notwithstanding subsection E, a participating utility shall not be authorized to recover the costs associated with qualified investments through rate adjustment clauses as provided in subdivisions A 5 and A 6 of § 56-585.1. In any proceeding conducted pursuant to § 56-585.1 or other provision of this title in which a participating utility seeks recovery of its qualified investments as an operating expense, the participating utility shall not be authorized to earn a return on its qualified investments.
- L. A participating utility shall not be eligible for a research and development tax credit pursuant to § 58.1-439.12:08 or 58.1-439.12:11 with regard to any expense incurred or investment made by the participating utility that constitutes a qualified investment pursuant to this section.

## § 58.1-439.12:08. Research and development expenses tax credit.

A. As used in this section, unless the context requires a different meaning:

"Partnership" means the Virginia Economic Development Partnership.

"Virginia base amount" means the base amount as defined in § 41(c) of the Internal Revenue Code, as amended, that is attributable to Virginia, determined by (i) substituting "Virginia qualified research and development expense" for "qualified research expense"; (ii) substituting "Virginia qualified research" for "qualified research"; and (iii) instead of "fixed base percentage," using:

1. The percentage that the Virginia qualified research and development expense for the three taxable

years immediately preceding the current taxable year in which the expense is incurred is of the taxpayer's total gross receipts for such years; or

2. The percentage that the Virginia qualified research and development expense for the applicable number of taxable years immediately preceding the current taxable year in which the expense is incurred is of the taxpayer's total gross receipts for such years, for the taxpayer that has fewer than three but at least one prior taxable year.

"Virginia gross receipts" means the same as "gross receipts" as defined in § 58.1-3700.1.

"Virginia qualified research" means qualified research, as defined in § 41(d) of the Internal Revenue Code, as amended, that is conducted in the Commonwealth.

"Virginia qualified research and development expenses" means qualified research expenses, as defined in § 41(b) of the Internal Revenue Code, as amended, incurred for Virginia qualified research.

B. For taxable years beginning on or after January 1, 2011, but before January 1, 2019 2022, a taxpayer shall be allowed a credit against the tax levied pursuant to § 58.1-320 or 58.1-400 in an amount equal to (i) 15 percent of the first \$234,000 \$300,000 in Virginia qualified research and development expenses paid or incurred by the taxpayer during the taxable year or (ii) 20 percent of the first \$234,000 \$300,000 in Virginia qualified research and development expenses paid or incurred by the taxpayer during the taxable year if the Virginia qualified research was conducted in conjunction with a Virginia public or private college or university, to the extent the expenses exceed the Virginia base amount for the taxpayer.

The C. 1. Effective for taxable years beginning on or after January 1, 2016, at the election of the taxpayer, the credit otherwise allowed under this section shall be computed under this subsection and shall equal 10 percent of the difference of (i) the Virginia qualified research and development expenses paid or incurred by the taxpayer during the taxable year and (ii) 50 percent of the average Virginia qualified research and development expenses paid or incurred by the taxpayer for the three taxable years immediately preceding the taxable year for which the credit is being determined. If the taxpayer did not pay or incur Virginia qualified research and development expenses in any one of the three taxable years immediately preceding the taxable year for which the credit is being determined, the tax credit shall equal five percent of the Virginia qualified research and development expenses paid or incurred by the taxpayer during the relevant taxable year.

2. The aggregate amount of credits allowed to each taxpayer under this subsection shall not exceed \$45,000 for the taxable year, except that the aggregate amount of credits allowed to each taxpayer shall not exceed \$60,000 for the taxable year if the Virginia qualified research was conducted in conjunction with a Virginia public or private college or university.

D. The aggregate amount of credits available under this section for each fiscal year of the Commonwealth shall be as follows:

1. For taxable years beginning on or after January 1, 2014, but prior to January 1, 2016, the total amount of credits granted for each of fiscal year of the Commonwealth pursuant to this section years 2015 and 2016 shall not exceed \$6 million.

2. For taxable years beginning on or after January 1, 2016, the total amount of credits granted for each fiscal year of the Commonwealth beginning with fiscal year 2017 shall not exceed \$7 million.

C. E. A taxpayer meeting the requirements of this section shall be eligible to receive a tax credit as provided herein. The Department shall develop and publish guidelines for applications and such guidelines shall be exempt from the Administrative Process Act (§ 2.2-4000 et seq.). Applications must be received by the Department no later than July 1 of the calendar year following the close of the taxable year in which the expenses were paid or incurred. In the event approved applications for the tax credits allowed under this section exceed \$6 million for any the amount of credits specified in subsection D for the taxable year, the Department shall apportion the credits by dividing \$6 million the amount of credits specified in subsection D by the total amount of tax credits applied for approved, to determine the percentage of allowed tax credits each taxpayer shall receive. In the event that the total amount of approved tax credits under this section for all applications for any taxable year is less than \$6 million the maximum amount of credits for the year as specified in subsection D, the Department shall allocate credits up to the maximum of \$6 million amount as specified in subsection D, on a pro rata basis, to taxpayers who are already approved for the tax credit for the taxable year, in the following amounts:

1. If the taxpayer computed the credit pursuant to subsection B, in an amount equal to 15 percent of the second \$234,000 \$300,000 in qualified research expenses during the taxable year or 20 percent of the second \$234,000 \$300,000 in qualified research expenses if the Virginia qualified research was conducted in conjunction with a public or private college or university located in the Commonwealth; or

2. If the taxpayer computed the credit under subdivision C 1, in an amount equal to the excess of the limitation set forth in subdivision C 2, up to an additional \$45,000 per taxpayer, or \$60,000 per taxpayer if the Virginia qualified research was conducted in conjunction with a public or private college

or university located in the Commonwealth.

- D. F. If the amount of the credit allowed exceeds the taxpayer's tax liability for the taxable year, the amount that exceeds the tax liability shall be refunded to the taxpayer, subject to the limitations set forth in the guidelines developed by the Department.
- E. G. Any taxpayer who claims the tax credit for Virginia qualified research and development expenses pursuant to this section shall not use such expenses as the basis for claiming any other credit provided under the Code of Virginia.
- H. Effective for taxable years beginning on or after January 1, 2016, no taxpayer with Virginia qualified research and development expenses in excess of \$5 million for the taxable year shall claim both the credit allowed pursuant to this section and the credit allowed under § 58.1-439.12:11 for such year.
- F. I. Credits granted to a partnership, limited liability company, or electing small business corporation (S corporation) shall be allocated to the individual partners, members, or shareholders, respectively, in proportion to their ownership interests in such entities or in accordance with a written agreement entered into by such individual partners, members, or shareholders, unless the partnership, limited liability company, or electing small business corporation (S corporation) elects for such credits not to be so allocated but to be received and claimed at the entity level by the partnership, limited liability company, or electing small business corporation (S corporation) pursuant to guidelines that shall be issued by the Department for purposes of such election.
- G. J. The Department shall adopt guidelines to prescribe standards for determining when research and development is considered conducted in the Commonwealth for purposes of allowing the credit under this section. In adopting guidelines, the Department may consider (i) the location where the research and development is performed; (ii) the residence or business location of the taxpayer or taxpayers conducting the research and development; (iii) the location where supplies used in the research and development are consumed; and (iv) any other factors that the Department deems to be relevant.
- H. K. The Partnership shall include the tax credits approved in accordance with the provisions of this section in the Annual Report on Business Incentives compiled by the Secretary of Commerce and Trade. Such report shall include (i) the total number of applicants approved for tax credits for the applicable tax year and (ii) the total number of tax credits approved for the applicable tax year.
- I. L. The Department shall require taxpayers applying for the credit to provide information including (i) the number of full-time employees employed by the taxpayer in the Commonwealth during the taxable year for which the credit is sought; (ii) the taxpayer's sector or sectors according to the 2012 edition of the North American Industry Classification System (NAICS) as published by the United States Census Bureau; (iii) a brief description of the area, discipline, or field of Virginia qualified research performed by the taxpayer; (iv) the total gross receipts or anticipated total gross receipts of the taxpayer for the taxable year for which the credit is sought; and (v) whether the Virginia qualified research was conducted in conjunction with a Virginia public or private college or university. The Department shall aggregate and summarize the information collected and make it available to the Governor and any member of the General Assembly upon request, regardless of the number of taxpayers applying for the credit.

## § 58.1-439.12:11. Major research and development expenses tax credit.

A. As used in this section, unless the context requires a different meaning:

"Virginia qualified research" means qualified research, as defined in § 41(d) of the Internal Revenue Code, as amended, that is conducted in the Commonwealth.

"Virginia qualified research and development expenses" means qualified research expenses, as defined in  $\S 41(b)$  of the Internal Revenue Code, as amended, incurred for Virginia qualified research.

- B. For taxable years beginning on or after January 1, 2016, but before January 1, 2022, a taxpayer with Virginia qualified research and development expenses for the taxable year in excess of \$5 million shall be allowed a credit against the tax levied pursuant to \$58.1-320 or 58.1-400 in an amount equal to 10 percent of the difference between (i) the Virginia qualified research and development expenses paid or incurred by the taxpayer during the taxable year and (ii) 50 percent of the average Virginia qualified research and development expenses paid or incurred by the taxpayer for the three taxable years immediately preceding the taxable year for which the credit is being determined. If the taxpayer did not pay or incur Virginia qualified research and development expenses in any one of the three taxable years immediately preceding the taxable year for which the credit is being determined, the tax credit shall equal five percent of the Virginia qualified research and development expenses paid or incurred by the taxpayer during the relevant taxable year.
- C. The aggregate amount of credits granted for each fiscal year of the Commonwealth pursuant to this section shall not exceed \$20 million.
- D. In the event approved applications for the tax credits allowed under this section exceed \$20 million for any taxable year, the Department shall apportion the credits by dividing \$20 million by the

total amount of tax credits approved, to determine the percentage of allowed tax credits each taxpayer shall receive.

- E. The amount of the credit claimed for the taxable year shall not exceed 75 percent of the total amount of tax imposed by this chapter upon the taxpayer for the taxable year. Any credit not usable for the taxable year for which the credit was first allowed may be carried over for credit against the income taxes of the taxpayer in the next 10 succeeding taxable years or until the total amount of the tax credit has been taken, whichever is sooner.
- F. Any taxpayer who claims the tax credit for Virginia qualified research and development expenses pursuant to this section shall not use such expenses as the basis for claiming any other credit provided under the Code of Virginia.
- G. Credits granted to a partnership, limited liability company, or electing small business corporation (S corporation) shall be allocated to the individual partners, members, or shareholders, respectively, in proportion to their ownership interests in such entities or in accordance with a written agreement entered into by such individual partners, members, or shareholders.
- H. The Department shall develop and publish guidelines under this section including guidelines for applying for the tax credit. Such guidelines shall be exempt from the Administrative Process Act (§ 2.2-4000 et seq.). Applications for the tax credit must be received by the Department no later than July 1 of the calendar year following the close of the taxable year in which the expenses were paid or incurred.

The Department shall also adopt guidelines to prescribe standards for determining when research and development is considered conducted in the Commonwealth for purposes of allowing the credit under this section. In adopting guidelines, the Department may consider (i) the location where the research and development is performed; (ii) the residence or business location of the taxpayer or taxpayers conducting the research and development; (iii) the location where supplies used in the research and development are consumed; and (iv) any other factors that the Department deems to be relevant.

2. That no tax credit shall be allowed pursuant to § 58.1-439.12:11 of the Code of Virginia, as created by this act, if the otherwise qualified research and development expenses are paid for or incurred by a taxpayer for research conducted in the Commonwealth on human cells or tissue derived from induced abortions or from stem cells obtained from human embryos. The foregoing provision shall not apply to research conducted using stem cells other than embryonic stem cells.