

COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

AT RICHMOND, AUGUST 25, 2017

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COMMONWEALTH OF VIRGINIA, *ex rel.*

2017 AUG 25 : A 8: 59

STATE CORPORATION COMMISSION

CASE NO. PUR-2017-00099

Ex Parte: In the matter of amending regulations
governing net energy metering

ORDER ESTABLISHING PROCEEDING

The Regulations Governing Net Energy Metering, 20 VAC 5-315-10 *et seq.* ("Net Energy Metering Rules"), adopted by the State Corporation Commission ("Commission") pursuant to § 56-594 of the Virginia Electric Utility Regulation Act, Chapter 23 (§ 56-576 *et seq.*) of Title 56 of the Code of Virginia ("Code"), establish the requirements for participation by an eligible customer-generator in net energy metering in the Commonwealth of Virginia. The Net Energy Metering Rules include conditions for interconnection and metering, billing, and contract requirements between net metering customers, electric distribution companies, and energy service providers.

Chapters 565 and 581 of the 2017 Acts of Assembly ("Chapters 565 and 581") amended § 56-594 of the Code by adding a new § 56-594.2 to add a definition of "small agricultural generator" and to provide for the interconnection of such generator to utilities. In addition, Chapters 565 and 581 provide that on and after July 1, 2019, interconnection of eligible agricultural customer-generators under § 56-594 shall cease for electric cooperatives only, and such facilities shall interconnect solely as small agricultural generators under § 56-594.2. The current Net Energy Metering Rules thus must be revised to reflect the changes set forth in Chapters 565 and 581.

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NOW THE COMMISSION, upon consideration of the matter, is of the opinion and finds that a proceeding should be established to amend the Net Energy Metering Rules to provide for the interconnection of small agricultural generators, as defined in the Code.

To initiate this proceeding, the Commission Staff has prepared proposed rules ("Proposed Rules") which are appended to this Order. We will direct that notice of the Proposed Rules be given to the public and that interested persons be provided an opportunity to file written comments on, propose modifications or supplements to, or request a hearing on the Proposed Rules. We will further direct that each Virginia electric distribution company within the meaning of 20 VAC 5-315-20 serve a copy of this Order upon each of their respective net metering customers and file a certificate of service. Individuals should be specific in their comments, proposals, or supplements to the Proposed Rules and address only those issues pertaining to the amendment of § 56-594 of the Code of Virginia pursuant to Chapters 565 and 581. Issues outside the scope of implementing these amendments will not be open for consideration.

Accordingly, IT IS ORDERED THAT:

- (1) This case is docketed and assigned Case No. PUR-2017-00099.
- (2) The Commission's Division of Information Resources shall forward a copy of this Order to the Registrar of Regulations for publication in the Virginia Register of Regulations.
- (3) On or before September 19, 2017, each Virginia electric distribution company shall serve a copy of this Order upon each of their respective net metering customers and file with the Commission a certificate of service no later than October 3, 2017, consistent with the findings above.

(4) On or before October 31, 2017, any interested person may comment on, propose modifications or supplements to, or request a hearing on the Proposed Rules by filing an original and fifteen (15) copies of such comments or requests with Joel H. Peck, Clerk, State Corporation Commission, c/o Document Control Center, P.O. Box 2118, Richmond, Virginia 23218.

Interested persons desiring to submit comments or hearing requests electronically may do so by following the instructions available at the Commission's website:

<http://www.scc.virginia.gov/case>. Individuals shall be specific in their comments, proposals, or supplements to the Proposed Rules and shall address only those issues pertaining to the amendment of § 56-594 of the Code of Virginia pursuant to Chapters 565 and 581. Issues outside the scope of implementing this amendment will not be open for consideration. Any request for hearing shall state with specificity why the issues raised in the request for hearing cannot be adequately addressed in written comments. If a sufficient request for hearing is not received, the Commission may consider the matter and enter an order based upon the papers filed herein. Interested parties shall refer in their comments or requests to Case No.

PUR-2017-00099.

(5) This matter is continued.

AN ATTESTED COPY hereof shall be sent by the Clerk of the Commission to all persons on the official Service List in this matter. The Service List is available from the Clerk of the State Corporation Commission, c/o Document Control Center, 1300 East Main Street, First Floor, Tyler Building, Richmond, Virginia 23219.

STATE CORPORATION COMMISSION
Regulations Governing Net Energy Metering

20VAC5-315-10. Applicability and scope.

These regulations are promulgated pursuant to the provisions of §§ 56-594 and 56-594.2 of the Virginia Electric Utility Regulation Act (§ 56-576 et seq. of the Code of Virginia). They establish requirements intended to facilitate net energy metering for customers owning and operating, or contracting with persons to own or operate, or both, electrical generators that use specific types of renewable energy as the total fuel source. These regulations will standardize the interconnection requirements for such facilities and will govern the metering, billing, payment and contract requirements between net metering customers, electric distribution companies and energy service providers. Agricultural net metering customers are subject to the same provisions as nonagricultural net metering customers unless otherwise specified. On or after July 1, 2019, interconnection of eligible agricultural customer-generators shall cease for member-owned electric cooperatives only, and such facilities shall interconnect solely as small agricultural generators. For member-owned electric cooperatives, agricultural net metering customers whose agricultural renewable fuel generators were interconnected before July 1, 2019, may continue to participate in net energy metering for a period not to exceed 25 years from the date of their agricultural renewable fuel generator's original interconnection.

These regulations also establish requirements for the interconnection of small agricultural generators. Small agricultural generators or agricultural renewable fuel generators may elect to interconnect as a net metering customer or as small agricultural generators pursuant to 20VAC5-315-75, but not both. Existing eligible agricultural renewable fuel generators may elect to become small agricultural generators, but may not revert to being an agricultural renewable fuel generator after such election.

~~The amendments regarding agricultural net metering apply to customers of investor-owned electric utilities on July 1, 2014, and apply to customers of electric cooperatives on July 1, 2015, as provided in the State Corporation Commission's Order Adopting Regulations, Case No. PUE-2014-00003, dated June 23, 2014, and published in the Virginia Register of Regulations, Volume 30, Issue 23, July 14, 2014.~~

20VAC5-315-20. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Agricultural business" means any sole proprietorship, corporation, partnership, electing small business (Subchapter S) corporation, or limited liability company engaged primarily in the production and sale of plants and animals, products collected from plants and animals, or plant and animal services that are useful to the public.

"Agricultural net metering customer" means a customer that operates an electrical generating facility consisting of one or more agricultural renewable fuel generators having an aggregate generation capacity of not more than 500 kilowatts as part of an agricultural business under a net metering service arrangement. An agricultural net metering customer may be served by multiple meters of one utility that are located at separate but contiguous sites and that may be aggregated into one account. This account shall be served under the appropriate tariff.

"Agricultural renewable fuel generator" or "agricultural renewable fuel generating facility" means one or more electrical generators that:

1. Use as their sole energy source solar power, wind power, or aerobic or anaerobic digester gas;
2. The agricultural net metering customer owns and operates, or has contracted with other persons to own or operate, or both;

3. Are located on land owned or controlled by the agricultural business;
4. Are connected to the agricultural net metering customer's wiring on the agricultural net metering customer's side of the agricultural net metering customer's interconnection with the distributor;
5. Are interconnected and operated in parallel with an electric company's distribution facilities; and
6. Are used primarily to provide energy to metered accounts of the agricultural business.

"Billing period" means, as to a particular agricultural net metering customer or a net metering customer, the time period between the two meter readings upon which the electric distribution company and the energy service provider calculate the agricultural net metering customer's or net metering customer's bills.

"Billing period credit" means, for a nontime-of-use agricultural net metering customer or a nontime-of-use net metering customer, the quantity of electricity generated and fed back into the electric grid by the agricultural net metering customer's agricultural renewable fuel generator or generators or by the net metering customer's renewable fuel generator or generators in excess of the electricity supplied to the customer over the billing period. For time-of-use agricultural net metering customers or time-of-use net metering customers, billing period credits are determined separately for each time-of-use tier.

"Contiguous sites" means a group of land parcels in which each parcel shares at least one boundary point with at least one other parcel in the group. Property whose surface is divided only by public right-of-way is considered contiguous.

"Customer" means a net metering customer or an agricultural net metering customer.

"Demand charge-based time-of-use tariff" means a retail tariff for electric supply service that has two or more time-of-use tiers for energy-based charges and an electricity supply demand (kilowatt) charge.

"Electric distribution company" means the entity that owns and/or operates the distribution facilities delivering electricity to the premises of an agricultural net metering customer or a net metering customer.

"Energy service provider (supplier)" means the entity providing electricity supply service, either tariffed or competitive service, to an agricultural net metering customer or a net metering customer.

"Excess generation" means the amount of electrical energy generated in excess of the electrical energy consumed by the agricultural net metering customer or net metering customer over the course of the net metering period. For time-of-use agricultural net metering customers or net metering customers, excess generation is determined separately for each time-of-use tier.

"Generator" or "generating facility" means an electrical generating facility consisting of one or more renewable fuel generators or one or more agricultural renewable fuel generators that meet the criteria under the definition of "net metering customer" and "agricultural net metering customer," respectively.

"Net metering customer" means a customer owning and operating, or contracting with other persons to own or operate, or both, an electrical generating facility consisting of one or more renewable fuel generators having an aggregate generation capacity of not more than 20 kilowatts for residential customers and not more than one megawatt for nonresidential customers. The generating facility shall be operated under a net metering service arrangement.

"Net metering period" means each successive 12-month period beginning with the first meter reading date following the final interconnection of an agricultural net metering customer or a net metering customer's generating facility consisting of one or more agricultural renewable fuel generators or one or more renewable fuel generators, respectively, with the electric distribution company's distribution facilities.

"Net metering service" means providing retail electric service to an agricultural net metering customer operating an agricultural renewable fuel generating facility or a net metering customer operating a renewable fuel generating facility and measuring the difference, over the net metering period, between the electricity supplied to the customer from the electric grid and the electricity generated and fed back to the electric grid by the customer.

"Person" means any individual, sole proprietorship, corporation, limited liability company, partnership, association, company, business, trust, joint venture, or other private legal entity, the Commonwealth, or any city, county, town, authority, or other political subdivision of the Commonwealth.

"Renewable Energy Certificate" or "REC" represents the renewable energy attributes associated with the production of one megawatt-hour (MWh) of electrical energy by a generator.

"Renewable fuel generator" or "renewable fuel generating facility" means one or more electrical generators that:

1. Use renewable energy, as defined by § 56-576 of the Code of Virginia, as their total fuel source;
2. The net metering customer owns and operates, or has contracted with other persons to own or operate, or both;

3. Are located on the net metering customer's premises and connected to the net metering customer's wiring on the net metering customer's side of its interconnection with the distributor;
4. Are interconnected pursuant to a net metering arrangement and operated in parallel with the electric distribution company's distribution facilities; and
5. Are intended primarily to offset all or part of the net metering customer's own electricity requirements. The capacity of any generating facility installed on or after July 1, 2015, shall not exceed the expected annual energy consumption based on the previous 12 months of billing history or an annualized calculation of billing history if 12 months of billing history is not available.

"Small agricultural generating facility" means an electrical generating facility that:

1. Has a capacity of not more than 1.5 megawatts; and does not exceed 150 percent of the customer's expected annual energy consumption based on the previous 12 months of billing history, or an annualized calculation of billing history if 12 months of billing history is not available;
2. Uses as its total source of fuel renewable energy;
3. Is located on the customer's premises and is interconnected with the utility's distribution system through a separate meter;
4. Is interconnected and operated in parallel with an electric utility's distribution system but not transmission facilities;
5. Is designed so that the electricity generated is expected to remain on the utility's distribution system; and

6. Is a qualifying small power production facility pursuant to the Public Utility Regulatory Policies Act of 1978 (P.L. 95-617).

"Small agricultural generator" means a customer that:

1. Is not an eligible agricultural customer-generator pursuant to § 56-594 of the Code of Virginia;
2. Operates a small agricultural generating facility as part of an agricultural business;
3. May be served by multiple meters that are located at separate but contiguous sites;
4. May aggregate the electricity consumption measured by the meters, solely for purposes of calculating 150% of the customer's expected annual energy consumption, but not for billing or retail service purposes, provided that the same utility serves all of its meters;
5. Uses not more than 25% of the contiguous land owned or controlled by the agricultural business for purposes of the renewable energy generating facility; and
6. Provides the electric utility with a certification, attested under oath, as to the amount of land being used for renewable generation.

"Time-of-use customer" means an agricultural net metering customer or net metering customer receiving retail electricity supply service under a demand charge-based time-of-use tariff.

"Time-of-use period" means an interval of time over which the energy (kilowatt-hour) rate charged to a time-of-use customer does not change.

"Time-of-use tier" or "tier" means all time-of-use periods given the same name (e.g., on-peak, off-peak, critical peak, etc.) for the purpose of time-differentiating energy (kilowatt-hour)-based charges. The rates associated with a particular tier may vary by day and by season.

20VAC5-315-30. Company notification.

A. A prospective agricultural net metering customer or a prospective net metering customer (hereinafter referred to as "customer") shall submit a completed commission-approved notification form to the electric distribution company and, if different from the electric distribution company, to the energy service provider, according to the time limits in this subsection. If the prospective customer has contracted with another person to own or operate, or both, the generator or generators, then the notice will include detailed, current, and accurate contract information for the owner or operator, or both, including without limitation, the name and title of one or more individuals responsible for the interconnection and operation of the generator or generators, a telephone number, a physical street address other than a post office box, a fax number, and an email address for each such person.

1. A residential customer shall notify its supplier and receive approval to interconnect prior to installation or adding capacity to an electrical generating facility. The electric distribution company shall have 30 days from the date of notification to determine whether the requirements contained in 20VAC5-315-40 have been met. The date of notification shall be considered to be the third day following the mailing of the notification form by the prospective customer.

2. A nonresidential customer shall notify its supplier and receive approval to interconnect prior to installation or adding capacity to an electrical generating facility. The electric distribution company shall have 60 days from the date of notification to determine whether the requirements contained in 20VAC5-315-40 have been met. The date of notification shall be considered to be the third day following the mailing of the notification form by the prospective customer.

B. Thirty-one days after the date of notification for a residential customer, and 61 days after the date of notification for a nonresidential customer, the prospective customer may

interconnect and begin operation of the generating facility unless the electric distribution company or the energy service provider requests a waiver of this requirement under the provisions of 20VAC5-315-80 prior to the 31st or 61st day, respectively. In cases where the electric distribution company or energy service provider requests a waiver, a copy of the request for waiver must be mailed simultaneously by the requesting party to the prospective customer and to the commission's Division of Energy Public Utility Regulation.

C. The electric distribution company shall file with the commission's Division of Energy Public Utility Regulation a copy of each completed notification form within 30 days of final interconnection.

20VAC5-315-40. Conditions of interconnection.

A. A prospective customer may begin operation of the generating facility on an interconnected basis when:

1. The customer has properly notified both the electric distribution company and energy service provider (in accordance with 20VAC5-315-30) of the customer's intent to interconnect.
2. If required by the electric distribution company's tariff, the customer has installed a lockable, electric distribution company accessible, load breaking manual disconnect switch at each of the facility's generators.
3. The licensed electrician who installs the customer's generator or generators certifies, by signing the commission-approved notification form, that any required manual disconnect switch or switches are being installed properly and that the generator or generators have been installed in accordance with the manufacturer's specifications as well as all applicable provisions of the National Electrical Code. If the customer or licensed Virginia Class A or B general contractor installs the customer's generator or

generators, the signed final electrical inspection can be used in lieu of the licensed electrician's certification.

4. The vendor certifies, by signing the commission-approved notification form, that the generator or generators being installed are in compliance with the requirements established by Underwriters Laboratories or other national testing laboratories in accordance with IEEE Standard 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems, July 2003.

5. In the case of static inverter-connected generators with an alternating current capacity in excess of 10 kilowatts, the customer has had the inverter settings inspected by the electric distribution company. The electric distribution company may impose a fee on the customer of no more than \$50 for each generator that requires this inspection.

6. In the case of nonstatic inverter-connected generators, the customer has interconnected according to the electric distribution company's interconnection guidelines and the electric distribution company has inspected all protective equipment settings. The electric distribution company may impose a fee on the customer of no more than \$50 for each generator that requires this inspection.

7. The following requirements shall be met before interconnection may occur:

- a. Electric distribution facilities and customer impact limitations. A customer's generator shall not be permitted to interconnect to distribution facilities if the interconnection would reasonably lead to damage to any of the electric distribution company's facilities or would reasonably lead to voltage regulation or power quality problems at other customer revenue meters due to the incremental effect of the generator on the performance of the electric distribution system, unless the customer reimburses the electric distribution company for its cost to accommodate the

interconnection, including the reasonable cost of equipment required for the interconnection.

b. Secondary, service, and service entrance limitations. The capacity of the generators at any one service location shall be less than the capacity of the electric distribution company-owned secondary, service, and service entrance cable connected to the point of interconnection, unless the customer reimburses the electric distribution company for the reasonable cost of equipment required for the interconnection.

c. Transformer loading limitations. A customer's generator shall not have the ability to overload the electric distribution company's transformer, or any transformer winding, beyond manufacturer or nameplate ratings, unless the customer reimburses the electric distribution company for the reasonable cost of equipment required for the interconnection.

d. Integration with electric distribution company facilities grounding. The grounding scheme of each generator shall comply with IEEE 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems, July 2003, and shall be consistent with the grounding scheme used by the electric distribution company. If requested by a prospective customer, the electric distribution company shall assist the prospective customer in selecting a grounding scheme that coordinates with its distribution system.

e. Balance limitation. The generator or generators shall not create a voltage imbalance of more than 3.0% at any other customer's revenue meter if the electric distribution company transformer, with the secondary connected to the point of interconnection, is a three-phase transformer, unless the customer reimburses the

electric distribution company for the reasonable cost of equipment required for the interconnection.

B. A prospective customer shall not be allowed to interconnect a generator if doing so will cause the total rated generating alternating current capacity of all interconnected net metered generators, as defined in 20VAC5-315-20, within that customer's electric distribution company's Virginia service territory to exceed 1.0% of that company's Virginia peak-load forecast for the previous year. In any case where a prospective customer has submitted a notification form required by 20VAC5-315-30 and that customer's interconnection would cause the total rated generating alternating current capacity of all interconnected net metered generators, as defined in 20VAC5-315-20, within that electric distribution company's service territory to exceed 1.0% of that company's Virginia peak-load forecast for the previous year, the electric distribution company shall, at the time it becomes aware of the fact, send written notification to the prospective customer and to the commission's Division of Energy Public Utility Regulation that the interconnection is not allowed. In addition, upon request from any customer, the electric distribution company shall provide to the customer the amount of capacity still available for interconnection pursuant to § 56-594 D of the Code of Virginia.

C. Neither the electric distribution company nor the energy service provider shall impose any charges upon a customer for any interconnection requirements specified by this chapter, except as provided under subdivisions A 5, 6, and 7 of this section, 20VAC5-315-50, and 20VAC5-315-70 as related to additional metering.

D. A customer shall immediately notify the electric distribution company of any changes in the ownership of, operational responsibility for, or contact information for any of the customer's generators.

20VAC5-315-75. Interconnection of small agricultural generators.

Small agricultural generators electing to interconnect pursuant to 20VAC5-315-75 shall enter into a power purchase agreement with its supplier to sell all of the electricity generated from its small agricultural generating facility. The customer's supplier shall be obligated by the power purchase agreement to purchase the excess generation at a price equal to a rate agreed upon by the parties that is not less than the utility's commission-approved avoided cost tariff for energy and capacity.

Small agricultural generators with renewable energy certificates or other environmental attributes generated by the small agricultural generating facility shall have the rights described in 20VAC5-315-50.

Small agricultural generators shall abide by the small generator interconnection process described in 20VAC5-314. Such customer shall be responsible for all costs associated with any interconnection or engineering studies that may be required prior to interconnection.

DOCUMENTS INCORPORATED BY REFERENCE

1547, IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems, July 2003, The Institute of Electrical and Electronics Engineers, Inc.

Rider G, Renewable Energy Program, Virginia Electric and Power Company, January 1, ~~2009~~ 2012.