

CHAPTER 315.

REGULATIONS GOVERNING NET ENERGY METERING.

20 VAC 5-315-20. Definitions.

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

"Billing period" means, as to a particular customer, the time period between the dates on which the electric distribution company or energy service provider, as the case may be, issues the customer's bills.

"Electric distribution company" means the entity that owns and/or operates the distribution facilities delivering electricity to the net metering customer's premises.

"Energy service provider" means the entity providing electric energy to a net metering customer, either as a tariffed, competitive, or default service pursuant to § 56-585 of the Code of Virginia.

"Net metering customer" means a customer owning and operating a renewable fuel generator under a net metering service arrangement.

"Net metering period" means each successive 12-month period beginning with the first meter reading date following the date of final interconnection of the renewable fuel generator with the electric distribution company's facilities.

"Net metering service" means measuring the difference, over the net metering period between electricity supplied to a net metering customer from the electric grid and the electricity

generated and fed back to the electric grid by the net metering customer, using a single meter or, as provided in 20 VAC 5-315-70, additional meters.

"Renewable fuel generator" means an electrical generating facility that:

1. Has an alternating current capacity of not more than 10 kilowatts for residential customers and not more than 500 kilowatts for nonresidential customers;
2. Uses as its total fuel source solar, wind, or hydro energy;
3. Is owned and operated by the net metering customer and is located on the customer's premises;
4. Is interconnected [pursuant to a net metering arrangement] and operated in parallel with the electric distribution company's facilities; and
5. Is intended primarily to offset all or part of the net metering customer's own electricity requirements.

20 VAC 5-315-30. Company notification.

A. The prospective net metering customer shall submit a completed commission-approved notification form to the electric distribution company and, if different from the electric distribution company, the energy service provider, according to the following time limits.

1. For a renewable fuel generator with an alternating current capacity of 25 kilowatts or less, the notification form shall be submitted at least 30 days prior to the date the customer intends to interconnect his renewable fuel generator to the electric distribution company's facilities. Such net metering customer shall have all equipment necessary to complete the grid interconnection installed prior to such notification. The electric distribution company shall have

30 days from the date of notification to determine whether the requirements contained in 20 VAC 5-315-40 have been met. The date of notification shall be considered to be the third day following the mailing of such notification form by the prospective net metering customer.

2. For a renewable fuel generator with an alternating current capacity greater than 25 kilowatts, the notification form shall be submitted at least 60 days prior to the date the customer intends to interconnect his renewable fuel generator to the electric distribution company's facilities. Such net metering customer shall have all equipment necessary to complete the grid interconnection installed prior to such notification. Such net metering customer should contact his electric distribution company prior to making financial commitments. The electric distribution company shall have 60 days from the date of notification to determine whether the requirements contained in 20 VAC 5-315-40 have been met. The date of notification shall be considered to be the third day following the mailing of such notification form by the prospective net metering customer.

B. Thirty-one days after the date of notification for renewable fuel generators with a rated capacity of 25 kilowatts or less, and 61 days after the date of notification for renewable fuel generators with an alternating current capacity greater than 25 kilowatts, a net metering customer may interconnect his renewable fuel generator and begin operation of said renewable fuel generator unless the electric distribution company or the energy service provider requests a waiver of this requirement under the provisions of 20 VAC 5-315-80 prior to said 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 net metering customer and to the commission's Division of Energy Regulation.

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

20 VAC 5-315-40. Conditions of interconnection.

A. A prospective net metering customer may begin operation of his renewable fuel generator on an interconnected basis when:

1. The net metering customer has properly notified both the electric distribution company and energy service provider (in accordance with 20 VAC 5-315-30) of his intent to interconnect;

2. If required by the electric distribution company's net metering tariff, the net metering customer has installed a lockable, electric distribution company accessible, load breaking manual disconnect switch;

3. A licensed electrician has certified, by signing the commission-approved notification form that any required manual disconnect switch has been installed properly and that the renewable fuel generator has been installed in accordance with the manufacturer's specifications as well as all applicable provisions of the National Electrical Code;

4. The vendor has certified, by signing the commission-approved notification form that the renewable fuel generator being installed is 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 renewable fuel generators with an alternating current capacity in excess of 10 kilowatts, the net metering customer has had the inverter settings inspected by the electric distribution company. The inspecting electric distribution company may impose a fee on the net metering customer of no more than \$50 for such inspection;

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

7. In the case of renewable fuel generators with an alternating current capacity greater than 25 kilowatts, the following requirements shall be met before interconnection may occur:

a. Electric distribution facilities and customer impact limitations. A renewable fuel 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 modify any facilities needed to accommodate the interconnection.

b. Secondary, service, and service entrance limitations. The capacity of the renewable fuel generator 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 its cost to modify any facilities needed to accommodate the interconnection.

c. Transformer loading limitations. The renewable fuel generator shall not have the ability to overload the electric distribution company transformer, or any transformer winding, beyond manufacturer or nameplate ratings, unless the customer reimburses the electric distribution company for its cost to modify any facilities needed to accommodate the interconnection.

d. Integration with electric distribution company facilities grounding. The grounding scheme of the renewable fuel 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 net metering customer, the electric distribution company shall assist the prospective net metering customer in selecting a grounding scheme that coordinates with its distribution system.

e. Balance limitation. The renewable fuel generator 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 its cost to modify any facilities needed to accommodate the interconnection.

B. A prospective net metering customer shall not be allowed to interconnect a renewable fuel generator if doing so will cause the total rated generating alternating current capacity of all interconnected renewable fuel generators within that customer's electric distribution company's [Virginia] service territory to exceed 0.1% of that company's Virginia peak-load forecast for the previous year. In any case where a prospective net metering customer has submitted a notification form required by 20 VAC 5-315-30 and that customer's interconnection would cause the total rated generating alternating current capacity of all interconnected renewable fuel generators within that electric distribution company's service territory to exceed 0.1% 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 such prospective net metering customer and to the commission's Division of Energy 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 net metering customer for any interconnection requirements specified by this chapter, except as provided under subdivisions A 5 and 6 of this section, and 20 VAC 5-315-50 as related to off-site metering.

20VAC5-315-50. Metering, billing and tariff considerations.

Net metered energy shall be measured in accordance with standard metering practices by metering equipment capable of measuring (but not necessarily displaying) power flow in both directions. Each contract or tariff governing the relationship between a net metering customer, electric distribution company or energy service provider shall be identical, with respect to the rate structure, all retail rate components, and monthly charges, to the contract or tariff under which the same customer would be served if such customer was not a net metering customer with the exception that time of use metering is not permitted. Said contract or tariff shall be applicable to both the electric energy supplied to, and consumed from, the grid by that customer.

In instances where net metering customers' metering equipment is of a type for which meter readings are made off site and where this equipment has, or will be, installed for the convenience of the electric distribution company, the electric distribution company shall provide the necessary additional metering equipment to enable net metering service at no charge to the net metering customer. In instances where a net metering customer has requested, and where the electric distribution company would not have otherwise installed, metering equipment which is intended to be read off site, the electric distribution company may charge the net metering customer its actual cost of installing any additional equipment necessary to implement net metering service.

If electricity generated by the net metering customer and fed back to the electric grid exceeds the electricity supplied to the net metering customer from the grid during a net metering period, the net metering customer shall receive no compensation from the electric distribution

company nor the energy service provider unless that net metering customer has entered into a purchase power contract with the electric distribution company and/or the energy service provider.

If electricity generated by the net metering customer and fed back to the electric grid exceeds the electricity supplied to the net metering customer from the grid during any billing period (billing period credit), the net metering customer shall be required to pay only the nonusage sensitive charges for that billing period. Such billing period credits shall be accumulated, carried forward and applied at the first opportunity to any billing periods having positive net consumptions. However, any accumulated billing period credits remaining unused at the end of a net metering period shall be carried forward into the next net metering period only to the extent that such accumulated billing period credits carried forward do not exceed the net metering customer's positive net consumption for the current net metering period.

20VAC5-315-60. Liability insurance.

A net metering customer with a renewable fuel generator with a rated capacity not exceeding 10 kilowatts shall maintain homeowners, commercial, or other insurance providing coverage in the amount of at least \$100,000 for the liability of the insured against loss arising out of the use of a renewable fuel generator, and for a renewable fuel generator with a rated capacity exceeding 10 kilowatts such coverage shall be in the amount of at least \$300,000. Net metering customers shall not be required to obtain liability insurance with limits higher than that which is stated in this section; nor shall such customers be required to purchase additional liability insurance where the customer's existing insurance policy provides coverage against loss arising

out of the use of a renewable fuel generator by virtue of not explicitly excluding coverage for such loss.

20VAC5-315-70. Additional controls and tests.

Except as provided in 20VAC5-315-40 A 5 and 6 and 20VAC5-315-50 as related to off-site metering, no net metering customer shall be required to pay for additional metering, testing or controls in order to interconnect with the electric distribution company or energy service provider. However, this chapter shall not preclude a net metering customer, an electric distribution company or an energy service provider from installing additional controls or meters, or from conducting additional tests. The expenses associated with these additional meters, tests or equipment shall be borne by the party desiring the additional meters, tests or equipment.

20VAC5-315-80. Request for waivers.

Any request for a waiver of any of the provisions of this chapter shall be considered by the Virginia State Corporation Commission on a case-by-case basis, and may be granted upon such terms and conditions as the commission may impose.

Form NMIN

**Effective 04/05****INTERCONNECTION NOTIFICATION**

PURSUANT TO COMMISSION REGULATION 20 VAC 5-315-30, APPLICANT HEREBY GIVES NOTICE OF INTENT TO OPERATE A GENERATING FACILITY.

**Section 1. Applicant Information**

Name \_\_\_\_\_

Mail Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Facility Location (if different from above) \_\_\_\_\_

Daytime Phone Number(s) \_\_\_\_\_

Distribution Utility \_\_\_\_\_ Account Number \_\_\_\_\_

Energy Service Provider (ESP) \_\_\_\_\_ Account Number \_\_\_\_\_

(if different than electric distribution company)

Proposed Interconnection Date \_\_\_\_\_

**Section 2. Generating Facility Information**

Fuel (check one) Solar \_\_\_\_\_ Wind \_\_\_\_\_ Hydro \_\_\_\_\_

Generator Manufacturer, Model \_\_\_\_\_

Power Rating in Kilowatts: AC \_\_\_\_\_ DC \_\_\_\_\_

Inverter Manufacturer, Model \_\_\_\_\_

Battery Backup? (circle one) Yes No

**Section 3. Information for Renewable Fuel Generators with an Alternating Current Capacity in Excess of 25 Kilowatts**

Generator Type (circle one) Inverter Induction Synchronous

Frequency \_\_\_\_\_ Hz, Number of phases (circle one) One Three

Capacity: DC power \_\_\_\_\_, AC apparent power \_\_\_\_\_, AC real power \_\_\_\_\_,  
power factor \_\_\_\_\_%, AC voltage \_\_\_\_\_, AC amperage \_\_\_\_\_

Facility schematic and equipment layout must be attached to this form.

A prospective net metering customer considering installing a renewable fuel generator with a capacity in excess of 25 kilowatts is strongly encouraged to contact the electric distribution company prior to making financial commitments to the project.

**Section 4. Vendor Certification**

The system hardware is listed by Underwriters Laboratories to be in compliance with UL 1741.

Signed (Vendor) \_\_\_\_\_ Date \_\_\_\_\_

Name (printed) \_\_\_\_\_ Phone Number \_\_\_\_\_

Company \_\_\_\_\_

**Section 5. Electrician Certification**

The system has been installed in accordance with the manufacturer's specifications as well as all applicable provisions of the National Electrical Code.

Signed (Licensed Electrician) \_\_\_\_\_ Date \_\_\_\_\_

Name (printed) \_\_\_\_\_

License Number \_\_\_\_\_ Phone Number \_\_\_\_\_

Mail Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Utility signature signifies only receipt of this form, in compliance with the Commission's net energy metering regulations, Regulation 20 VAC 5-315-30.

Signed (Utility Representative) \_\_\_\_\_ Date \_\_\_\_\_

**I hereby certify that, to the best of my knowledge, all of the information provided in this Notice is true and correct.**

**Signature of Applicant** \_\_\_\_\_ **Date** \_\_\_\_\_