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5.100 REGULATIONS PERTAINING TO CONSTRUCTION AND OPERATION OF NET METERING SYSTEMS

5.101 Purpose and Scope

- (A) This rule governs the application for, and issuance, amendment, transfer, or revocation of, a certificate of public good for net metering systems under the provisions of 30 V.S.A §§ 248, 8002, and 8010. In addition, this rule governs the terms upon which any electric company shall offer net metering service within its service territory.
- (B) This rule applies to all net metered installations in Vermont and applies to every person, firm, company, corporation, and municipality engaged in the site preparation, construction, ownership, or operation of any net metering system that is subject to the jurisdiction of this Board.

5.102 Definitions

For the purposes of this rule, the following definitions apply:

"Category I Net Metering System" means a net metering system with a capacity of 15 kW or less.

"Category II Net Metering System" means a net metering system with a capacity of more than 15 kW and less than 150 kW that meets any of the following criteria:

- (1) On a new or existing structure, where the primary purpose of such structure is not the generation of electricity;
- (2) On a brownfield. For purposes of this subsection, "brownfield" means real property, the expansion, redevelopment, or reuse of which may be complicated by the release or threatened release of a hazardous material. Applicants seeking to receive this credit must file as part of their application for authorization to construct the net metering system a letter from the Agency of Natural Resources confirming that the net metering

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system is located on a brownfield;

(3) On a sanitary landfill, as defined in 10 V.S.A. §6602;

(4) Over a parking lot;

(5) In the disturbed portion of a gravel pit;

(6) Is supported by all Adjoining Landowners. Applicants seeking to receive this classification must demonstrate as part of their application for authorization to construct the Net Metering System that the project is supported by all Adjoining Landowners;

(7) On-site Primary Off-taker. Applicants seeking to receive this classification must demonstrate that more than fifty percent (50%) of the Net Metering System's electrical output is allocated to a customer on the same site as the Net Metering System. This allocation must exceed 50% during the first 10 years following project commissioning; or

(8) In a town-designated area specifically designated for the development of resources meeting the characteristics of the net metering facility.

"Category III Net Metering System" means a net metering system with a capacity of 150 kW and up to 500 kW that meets any of the following criteria:

(1) On a new or existing structure, where the primary purpose of such structure is not the generation of electricity;

(2) On a brownfield. For purposes of this subsection, "brownfield" means real property, the expansion, redevelopment, or reuse of which may be complicated by the release or threatened release of a hazardous material. Applicants seeking to receive this credit must file as part of their application for authorization to construct the net metering system a letter from the Agency of Natural Resources confirming that the net metering system is located on a brownfield;

(3) On a sanitary landfill, as defined in 10 V.S.A. §6602;

(4) Over a parking lot;

(5) In the disturbed portion of a gravel pit;

(6) Is supported by all Adjoining Landowners. Applicants seeking to receive this classification must demonstrate as part of their application for authorization to construct

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the Net Metering System that the project is supported by all Adjoining Landowners;

(7) On-site Primary Off-taker. Applicants seeking to receive this classification must demonstrate that more than fifty percent (50%) of the Net Metering System's electrical output is allocated to a customer on the same site as the Net Metering System. This allocation must exceed 50% during the first 10 years following project commissioning; or

(8) In a town-designated area specifically designated for the development of resources meeting the characteristics of the net metering facility.

"Category IV Net Metering System" means a net metering system with a capacity of more than 15 kW and less than 150 kW that does not meet the criteria set forth in Category II.

"Category V Net Metering System" means a net metering system with a capacity of 150 kW and up to 500 kW that does not meet the criteria set forth in Category III.

5.103 Electric Company Tariffs

(A) Tariffs. Pursuant to 30 V.S.A. § 225, an electric company shall propose to the Board a rate schedule to implement a net metering program in its service territory pursuant to this Rule to take effect on January 1, 2017.

(1) Initial tariffs filed pursuant to this rule shall be submitted to the Board no later than September 1, 2016, and they shall conform with the requirements of this Rule.

(2) Any revisions to an electric company's net metering tariff shall be filed pursuant to 30 V.S.A. § 225. Such tariff revisions will be required any time an electric company seeks to alter the substantive terms of its net metering tariff, including, but not limited to, the following circumstances:

- (a) Revisions to an electric company's Blended Residential Rate;
- (b) Revisions to generally applicable REC Adjustors and Siting Adjustors required after the Biennial Updates; and

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(c) Revisions to the Equalization Charge.

(B) Grandfathering of Existing Net Metering Customers.

(1) For net metering systems commissioned prior to January 1, 2017:

(a) Such customers shall, for a period of 20 years from the date of commissioning, continue to take service pursuant to the terms of the electric company's approved net metering tariff on file with the Board on December 31, 2016. At the end of this 20-year period, such customers shall take service pursuant to the electric company tariff on file with the Board at that time, except as provided for in section (b) below.

(b) In no event shall such customers be eligible for any Siting Adjustors or REC Adjustors established under this Rule at the conclusion of the 20-year period set forth in subsection (a) above.

(c) RECs created by net metering systems commissioned prior to January 1, 2017 shall, at the conclusion of the 20-year period set forth in subsection (a) above, continue to be treated per the election made in the net metering system at the time of application for the original CPG. For CPG applications filed prior to the time when such election was available, RECs shall be retained by the owner of the net metering system.

(d) Customers shall not be grandfathered under this subsection if they use a net metering system that was commissioned or that underwent a major amendment after January 1, 2017.

(2) For net metering systems commissioned on or after January 1, 2017, the terms of this Rule shall apply.

5.104 Energy Measurement for Net Metering Systems

(A) Electric energy measurement for Net Metering Systems shall be performed in the following manner:

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- (1) Net metering customers/groups shall install a production meter to measure the electricity produced by the net metering system at their own expense.
- (2) The electric company that serves the customer or group shall measure the amount of electricity produced and consumed in kWh during a billing period, in accordance with normal metering practices.
- (3) For the purposes of calculating net metering customer bills, the electric company shall monetize and net Electricity Produced and Electricity Consumed in each billing period, as follows:
 - (a) Electricity Produced during the billing period shall be measured in dollars and calculated by multiplying the total number of kWh generated during the billing period times the sum of the following, less the currently applicable Equalization Charge (if any):
 - (i) Currently applicable Blended Residential Rate;
 - (ii) For the first twenty (20) years after the system is commissioned, the REC Adjustor set forth in the net metering facility's CPG; and
 - (iii) For the first ten (10) years after the system is commissioned, the Siting Adjustor set forth in the net metering facility's CPG.
 - (b) Electricity Consumed during the billing period shall be measured in dollars and calculated by multiplying the total number of kWh used by the customer or group during the billing period times the customer's applicable usage rate (e.g., general residential, time-of-use, demand, etc.)
 - (c) At the end of the billing period, the electric company shall net Electricity Produced with Electricity Consumed.
 - (i) If Electricity Consumed by the customer/group exceeds the Electricity Produced by the customer/group, the customer/group shall be billed the difference, net of any

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credit accumulated in the preceding 12 months.

- (ii) If Electricity Produced by the customer/group exceeds the Electricity Consumed by the customer/group, the customer/group shall be credited the difference. Such credits will be tracked and carried forward on customer bills, as described in section 5.109(A)(5).

5.105 Determination of Applicable Rates and Adjustors

(A) The Blended Residential Rate shall be determined as follows:

- (1) For electric companies that do not employ inclining block rates, the \$/kWh charge set forth in that utility's tariff for general residential service; or
- (2) For electric companies that do employ inclining block rates, a blend of those rates determined by adding together all of the revenues to the company during the most recent calendar year from kWh sold under those block rates and dividing the sum by the total kWh sold by the company at those rates during the same year. Each electric company that employs inclining block rates shall perform this calculation no later than February 1 of each calendar year and, to the extent there has been a change from the previous year, file revision to its net metering tariff to reflect the change.

(B) The REC Adjustors shall be determined as follows:

- (1) All tradeable renewable energy credits (REC) shall be transferred to the electric company unless the customer elects to retain ownership of such credits. An applicant must make this election at the time an application for authorization to construct the net metering system is filed with the Board. The Net Metering System's REC Adjustor shall be calculated in dollars per kWh (\$/kWh) at the time the Board issues it a CPG and it shall apply for a period of twenty (20) years. Both the amount and the term of the REC Adjustor shall be reflected in the Net Metering System's CPG.
- (2) During each Biennial Update, the Board shall establish two REC

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Adjustors:

- (a) a REC Adjustor (Retention), to be applicable to all net metering customers/groups that elect to retain ownership of RECs; and
 - (b) a REC Adjustor (Transfer), to be applicable to all net metering customers/groups that do not elect to retain ownership of RECs,
- (3) The REC Adjustors may be positive or negative values, as appropriate, and shall be determined in a way that provides appropriate incentives to net metering customers/groups to transfer RECs to their electric company in furtherance of State energy goals, while at the same time allowing those who wish to retain them to do so. In determining the REC Adjustors, the Board shall consider:
- (a) The pace of renewable energy deployment necessary to be consistent with the Renewable Energy Standard program, the Comprehensive Energy Plan, and any other relevant State program;
 - (b) The total amount of renewable energy capacity commissioned in Vermont in the most recent two years;
 - (c) The total amount of net metering capacity commissioned in Vermont in the most recent two years and the percentage of that capacity that has transferred RECs to the respective electric company;
 - (d) Any other information deemed appropriate by the Board.
- (4) Initial REC Adjustors at the time this Rule becomes effective (January 1, 2017) are as follows:
- (a) REC Adjustor (Retention) = 0 cents per kilowatt hour – \$.00/kWh;
 - (b) REC Adjustor (Transfer) = 3 cents per kilowatt hour – \$.03/kWh.
- (C) The Siting Adjustors shall be determined as follows:
- (1) In order to provide incentives for the appropriate and beneficial siting of Net Metering Systems, each Net Metering System shall receive the highest

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value Siting Adjustor for which it meets the applicable criteria. The Net Metering System's Siting Adjustor shall be calculated in dollars per kWh (\$/kWh) at the time the Board issues it a CPG and it shall apply for a period of ten (10) years. Both the amount and the term of the Siting Adjustor shall be reflected in the Net Metering System's CPG.

- (2) During each Biennial Update, the Board shall establish no more than five Siting Adjustors, as follows:
 - (a) Siting Adjustor (A), which shall apply to Category I Net Metering Systems;
 - (b) Siting Adjustor (B), which shall apply to Category II Net Metering Systems;
 - (c) Siting Adjustor (C), which shall apply to Category III Net Metering Systems;
 - (d) Siting Adjustor (D), which shall apply to Category IV Net Metering Systems;
 - (e) Siting Adjustor (E), which shall apply to Category V Net Metering Systems.
- (3) The Siting Adjustors may be positive or negative values, as appropriate, and shall be determined in a way that provides appropriate incentives to achieve preferred siting outcomes consistent with State energy goals. In determining the Siting Adjustors, the Board shall consider:
 - (a) The amount of Net Metering Systems receiving CPGs in the most recent two years that fall into each of the four Categories set forth herein;
 - (b) The extent to which certain currently effective Siting Adjustors may be driving siting decisions in certain ways;
 - (c) The extent to which changes to the qualifying criteria of the Categories may require modifications;
 - (d) The overall pace of net metering deployment; and

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- (e) Any other information deemed appropriate by the Board.
- (4) The initial Siting Adjustors at the time this Rule becomes effective (January 1, 2017) are as follows:
 - (a) Siting Adjustor (A) = 2 cents per kilowatt hour – \$.02/kWh;
 - (b) Siting Adjustor (B) = 1 cent per kilowatt hour – \$.01/kWh;
 - (c) Siting Adjustor (C) = 0 cents per kilowatt hour – \$.00/kWh;
 - (d) Siting Adjustor (D) = negative 2 cents per kilowatt hour –
\$.02)/kWh;
 - (e) Siting Adjustor (E) = negative 3 cents per kilowatt hour –
\$.03)/kWh.

5.106 Biennial Update Proceedings

- (A) The Board shall initiate a notice-and-comment Biennial Update on or before February 1, 2018, and the February 1 of every two years thereafter to review the pace of net metering deployment, the costs and benefits associated with the net metering program, the impact of the net metering program on State energy goals, and to update the following:
 - (1) REC Adjustors;
 - (2) Siting Adjustors;
 - (3) The weighted average statewide Blended Residential Rate;
 - (4) Criteria applicable to different Categories of Net Metering Systems;
 - (5) Standard Environmental Conditions to be incorporated in Net Metering System CPGs.
- (B) On February 1, the Board shall issue a notice to all electric companies requiring the submittal of certain data on or before February 15, including but not limited to the following:
 - (1) Details of net metering applications received by the electric company and Net Metering Systems interconnected since the prior Biennial Update, including each Net Metering System's size, energy source, REC election,

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- and applicable Siting Adjustor;
- (2) For electric companies that employ inclining block rates, an update of its Blended Residential Rate; and
 - (3) Any proposed revisions to its Equalization Charge, with support therefore.
- (C) In responding to the Board's notice on or before February 15, electric companies shall provide the information set forth above, and may provide any additional information regarding the state of the electric company's net metering program.
 - (D) By no later than March 15, the Department of Public Service shall propose updates to the items specified in section 5.106(A)(1) – (4) and reasons therefor.
 - (E) By no later than March 15, the Agency of Natural Resources shall propose updates to the items specified in section 5.106(A)(4) – (5) and reasons therefor.
 - (F) Any person may comment on the electric company filings and Department report by March 31.
 - (G) The Board shall issue its Biennial Update no later than May 1. The Report shall update the items specified in section 5.106(A)(1) – (5), as necessary. Adjustors shall be determined to ensure that the net metering deployment occurs at a reasonable pace and in furtherance of State energy goals.
 - (H) Electric companies shall file revisions to their net metering tariffs by no later than May 15 that incorporate the new values set forth by the Board in its Biennial Update. Such tariffs shall have an effective date of July 1. To the extent an electric company proposes any changes to its net metering tariff that go beyond compliance with the Board's Biennial Update, such changes shall be separately identified and supported.

5.107 Billing Standards and Procedures

- (A) Customer Billing Requirements. The bill of a net metering customer shall include the following:
 - (1) the dollar amount of any credits carried forward from the previous months;

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- (2) the dollar amount of credits that have expired in the current month;
 - (3) the dollar amount of credits generated in the current month;
 - (4) the dollar amount of credits remaining;
 - (5) the total kWh generated by the net metering system in the current month;
and
 - (6) the total kWh allocated to a group net metering customer in the current month.
- (B) Accumulated Bill Credits. Any accumulated bill credit shall be used within 12 months from the month it is earned, or it shall revert to the electric company without any compensation to the net metering system customer. Bill credits may not be transferred independent of a transfer of ownership of a Net Metering System.
- (C) Membership in Multiple Net Metering Groups. Individual customer accounts may be enrolled in only one net metering group at one time. Customers with multiple accounts may enroll each account in a separate net metering group. In addition, more than one net metering system may be attributed to one group. A net metering group may increase the capacity of existing generation attributed to the group, and may merge with other groups.
- (D) Group Member Allocations. Where the customer has, at their own expense, provided a separate meter for measuring production, the kWh produced by a net metering system may be allocated on a percentage basis to the accounts of a single customer or the accounts of group members, or the kWh may be allocated in order of priority for offsetting the bills of accounts belonging to a single customer or the accounts of members of a group. Where there is no separate production meter, the excess generation may be allocated in order of priority for offsetting the bills of accounts belonging to a single customer or the accounts of members of a group.

5.108 Group System Requirements

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- (A) In addition to any other requirements, 30 V.S.A. §§ 248, 8010, and any applicable Board rules, before a group system may be formed and served by an electric company, the group shall file the following information with the electric company:
- (1) The meters to be included in the group system, which shall be located within the same electric company service territory;
 - (2) A process for adding and removing meters in the group and an allocation that shall be used by the electric company to allocate any credits among the members of the group. This allocation arrangement may be changed only on written notice to the electric company by the person designated under 5.108(A)(3), and any such change may only apply on a prospective basis;
 - (3) The name and contact information for a designated person who shall be responsible for all communications from the group system to the serving electric company, except for communications related to billing, payment, and disconnection; and
 - (4) A binding process for resolving any disputes among the members of a group relating to the net metering system. This dispute resolution process shall not in any way require the involvement of the electric company, the Board, or the Department. This process does not apply to disputes between the electric company and individual group members regarding billing, payment, or disconnection.
- (B) The electric company shall implement appropriate changes to a net metering group within 30 days after receiving written notification of such changes from the person designated under subsection 5.108(A)(3). Written notification of a change in the person designated under subsection 5.108(A)(3) shall be effective upon receipt by the electric company. The electric company shall not be liable for the consequences from action based on such notification.
- (C) For each group member's customer account, the electric company shall bill that

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group member directly and send directly to that group member all communications related to billing, payment, and disconnection of that group member's customer account. Any volumetric charges for any account so billed shall be based on the individual meter for the account.

5.109 Electric Company Requirements

- (A) Generally. Electric companies:
- (1) Shall make net metering available to any customer or group using a Net Metering System on a first-come, first-served basis. Any Plant first commissioned prior to January 1, 2017 shall be ineligible for net metering under this Rule, except as permitted by subsection 5.103(B);
 - (2) Shall allow net metering systems to be interconnected using a kWh meter capable of registering the flow of electricity in two directions or such other meter of comparable functionality that would otherwise be applicable to the customer's usage but for the use of net metering;
 - (3) May, with the written consent of the customer and at the customer's expense, install one or more additional meters to monitor the flow of electricity in each direction;
 - (4) Shall not apply any bill credits toward the customer's energy efficiency charge or energy assistance program fee;
 - (5) Shall track credits by month/year created and apply them on a first created-first used basis;
 - (6) May charge a reasonable fee for establishment, special meter reading, accounting, account correction, and account maintenance for a net metering system;
 - (7) May, prior to interconnection, charge a reasonable fee to cover the cost of interconnection, including any distribution system improvements necessary to safely and reliably serve the net metering customer;

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- (8) May require that all meters included within a group system be read on the same billing cycle.
- (B) Equalization Charge. Municipal companies formed under local charter or under Title 30, Chapter 79 of the Vermont Statutes with fewer than 6,000 customers and cooperatives formed under Title 30, Chapter 81 of the Vermont Statutes may impose an Equalization Charge, in \$/kWh of energy produced from a Net Metering System, per the terms of this subsection.
- (1) An initial Equalization Charge, as well as any adjustments to that fee thereafter, must be filed by the electric company pursuant to 30 V.S.A. § 225, and it must be designed to achieve either of the following results:
- (a) Capture the fixed costs necessary to support the electric company's infrastructure and the administrative costs associated with net metering, or
- (b) Reduce the extent to which costs associated with a net metering program are disproportionately shifted onto non-net metering customers.
- (2) Equalization Charge Cap. An Equalization Charge may not exceed one cent per kilowatt hour (\$.01/kWh) plus the Blended Residential Rate of the electric company proposing the fee minus the weighted average of all Blended Residential Rates of electric companies within the State.
- (3) Any electric company that imposes an Equalization Charge must update that fee after each Biennial Update to ensure that the fee does not exceed the Equalization Charge Cap.
- (C) Tariff. All such requirements shall be governed by and administered pursuant to a tariff approved by the Board and any applicable Board rule or order.
- (D) Contracts. Notwithstanding the provisions of Section 5.107(B), an electric company may contract to purchase all or a portion of the output products from a net metering system, as represented as accumulated bill credits, pursuant to the provisions of Rule 4.100.