Norwich PC Solar Siting Subcommittee
Regular Meeting – Tuesday, September 19, 2023 6:30pm

To be held via Zoom:

Topic: Solar Siting Subcommittee
Time: Tuesday, September 19, 2023, 6:30 PM Eastern Time (US and Canada)
https://us02web.zoom.us/j/84563923987
Meeting ID: 845 6392 3987
888 475 4499 US Toll-free

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1. Approve Agenda

2. Public comments for Items not on the Agenda

3. Correspondence

4. Write a charge for the Solar Siting Subcommittee

5. Review Energy Chapter of Town Plan as it relates to solar siting/preferred site status

6. Review State Regulations as they relate to solar siting/preferred site status

   * PUC Proposed Rules Changes 5.100
   (link): https://epuc.vermont.gov/?q=node/64/139251/FV-BDIssued-PTL

7. State resources: websites/maps

   Vermont ANR: https://anrmaps.vermont.gov/websites/anra5/
   EAN Energy Dashboard: https://www.vtenergydashboard.org/energy-atlas
   VT E9-1-1 : https://maps.vermont.gov/e911/Html5Viewer/?viewer=e911viewer

8. Adjourn

Solar Siting Subcommittee – Charter and activity ideas **DRAFT** **JTL 9.13.23**

OVERVIEW

This committee will work to:

- Guide and encourage solar project siting in Norwich in locations which are appropriate to Norwich with its unique character, topography, and the desires of its residents.

- Create a collaborative process, using clear and defined siting criteria, resident input, and full participation in the PUC process.

- Use the planning tools available, including revisions to the town plan, zoning by-laws, and subdivision regulations.

WORKING ASSUMPTIONS & GIVENS

State laws and regulations play a dominant role in the siting of medium and large solar projects. The town must understand how its inputs fit into this larger context to maximize our influence. These regulations have changed since the last revision of our town planning documents.

There exists strong societal pressure for renewable energy. This creates a development pressure to build PV projects in Norwich.

PV projects done appropriately and sensitively are desirable, within guidelines set up by the residents of Norwich.

There are technical considerations associated with these projects, such as economies of scale and design drivers relating to steep slopes, shading, infrastructure, etc.

BACKGROUND

We will need to collect a great deal of background reference material, which can be used by both this committee and the wider Norwich community to help understand all elements of the solar siting process.

This information will include:

Details of state statutes & PUC process

Regional energy plan

Norwich specific conditions:

- Topography, slopes, forest blocks
- Agricultural soils and activities
- Rooftop solar opportunities
- State recognized preferred sites, e.g. gravel pits
- Utility infrastructure – 3 phase power
- Current town plan, zoning by-laws and subdivision regs

- Recent project experience

SUBCOMMITTEE ACTIVITIES

- Instigate and encourage town wide conversation on this important topic, including interested town groups and residents.

- Understand and create reference materials for state, federal and regional laws. Specifically, understand changes in state law that must be incorporated in our town plan and regs for Norwich's documents to be current.

- Review other towns experiences and best practices.

- Embed land use for solar projects into the bigger picture of land-use planning in Norwich.

- Discuss and clearly define criteria for solar project siting:
  - Slopes Ridgelines
  - Forest clearing Scenic views – from where?
  - Farmland Wetlands

- Research and evaluate Norwich's methods for influence, using both incentives and limitations.

- Evaluate the possibility of creating an enhanced energy plan as a method to increase influence.

- Identify possible sites that are preferred. Within the context of state energy policy and statutes it is not a valid strategy to say no to all PV projects. Such a stance would reduce the town's influence on projects that are proposed.

SUBCOMMITTEE OUTPUT

1. Recommended changes to the town plan, zoning bylaws and subdivision regulations. These should include specific guidance on preferred siting. These would be included in the overall effort of the Planning Commission to amend these documents. Any changes would first be approved by the PC, then submitted to the Selectboard for approval.

2. A defined process for solar project siting with a focus on the Planning Commission's role, including use of party status, encouraging public participation, providing resources, etc.

Agenda Item #5

3 | ENERGY

3.1 Objectives

3-1.a Reduce greenhouse gas emissions from Norwich municipal operations, businesses and residents (24 VSA §4302 (c) (7)).

3-1.b Reduce overall energy use in Norwich (24 VSA §4302 (c) (7)).

3-1.c Shift energy use in Norwich from non-renewable to renewable sources (24 VSA §4302 (c) (7) (A)).

3-1.d Increase the amount of renewable energy being produced in Norwich in a manner that is consistent with the goals, objectives and policies of this plan (24 VSA §4302 (c) (7) (A)).

3-1.e Pursue strategies identifies in the State Energy Plan (30 VSA §§202, 202b).

3.2 Policies

3-2.a Establish a mechanism to collect and appropriate funds to support projects that further the objectives of this Energy Plan.

3-2.b Ensure that the review of the Norwich Zoning and Subdivision Regulations is informed by the link between changing land use patterns and reducing fossil fuel use, including, but not limited to, consideration of increasing density adjacent to the existing village district, and the creation of new zoning districts.

3-2.c Promote bike and pedestrian as non-vehicular transport modes using best practices for traffic engineering such as sidewalks, bike lanes and dedicated trails.

3-2.d Consider lifecycle costs when planning to construct or upgrade municipal facilities.

3-2.e Develop programs that assist low-income households with weatherizing and improving the efficiency of existing dwelling units.

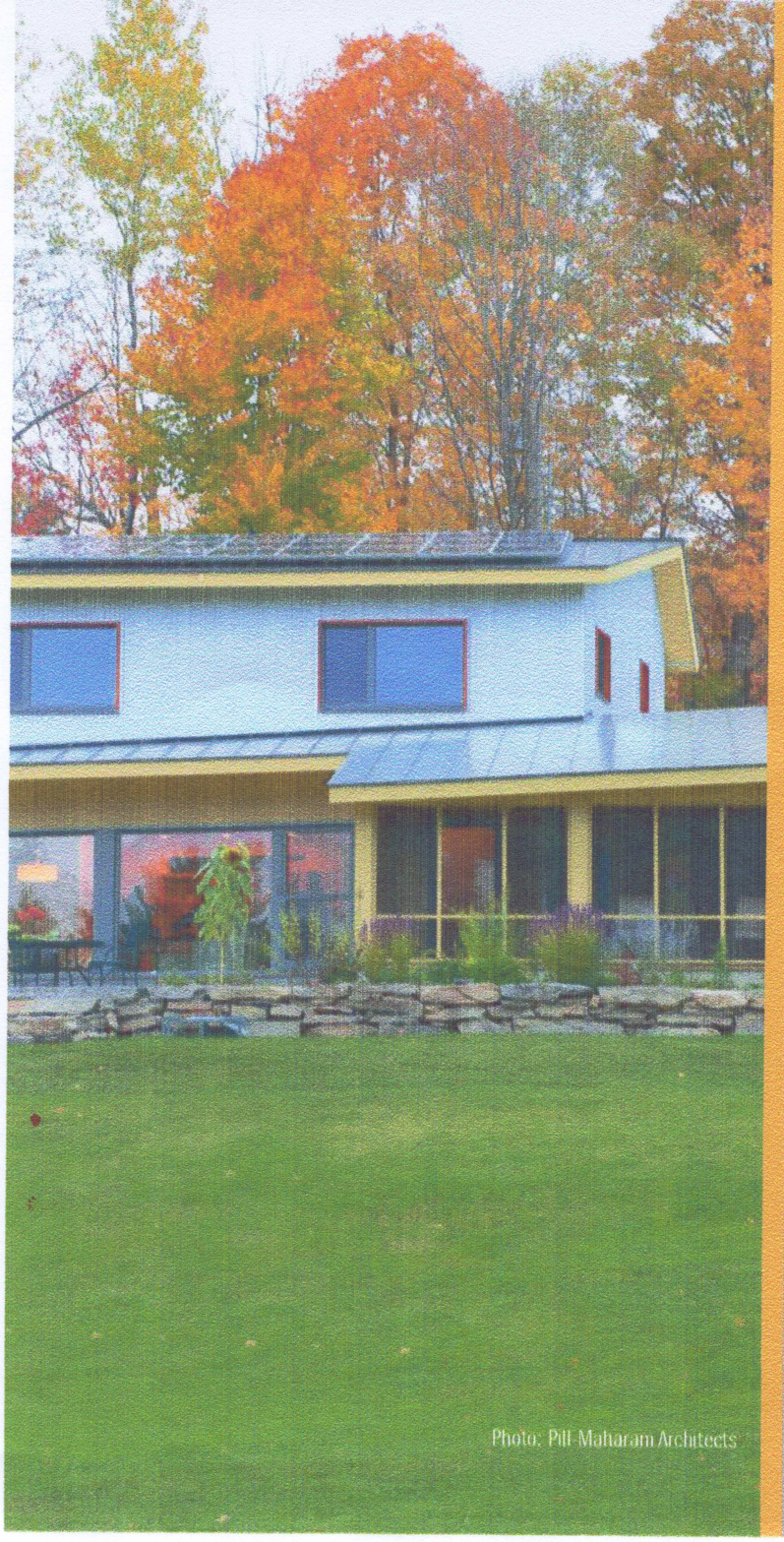


Photo: Pill-Maharam Architects

3-2.f Expand the authority of the Zoning Administrator to require the issuance of a Certificate of Compliance on all new construction over 800-sq ft ensuring that such work meets the VT Residential Building Standards (VT-RBES).

3-2.g Require large-scale commercial and institutional development to install solar panels on roofs and over any parking lots where feasible.

3-2.h For solar generation projects sized from 15kW to 500kW the presumption is that all of Norwich meets the Public Utility Commission definition of 'preferred site', notwithstanding the existing areas of local concern including the Ridgeline Protection Overlay Area, Shoreline Protection Overlay Area and the historic village district as identified in the Norwich Land Use Regulations.

3-2.i Support Advanced Transit in providing a range of commuter services to Norwich, providing connections with locations where residents attend school, work and shop.

3.3 Actions

3-3.a Advocate before VTrans on behalf of non-vehicular road users for improved accommodations on state highways.

3-3.b Review hybrid and electric options for any municipal vehicle purchase or replacement.

3-3.c Consider how to address barriers to development related to limitations on wastewater capacity, including a review of the findings of the 2005 study conducted by the Norwich Sewer Committee in light of current challenges and changes in wastewater management.

3-3.d Encourage development projects to install solar collectors on rooftops and parking lots.

3-3.e Participate in the Section 248 process before the Public Utility Commission to make decisions that further the goals, objectives, and policies of this plan.

3-3.f Implement to the best of our abilities the (non-binding) Article 36 from the Town of Norwich 2019 ballot, which was passed by voters:

Shall the voters of Norwich direct all Town officials to take immediate and sustained efforts to gradually and continually reduce the Town's direct use of fossil fuels, beginning at a rate of no less than 5 percent per year starting in the 2019-20 fiscal year and continuing until they are eliminated entirely, and shall the Town Manager be charged with monitoring such efforts and reporting on them each year in the annual Town Report, and no capital expenditures shall be made that contradict or undermine this direction, absent a majority vote of the Selectboard?

3-3.g Ensure that the Zoning Administrator or their designee has the training and resources to both enforce state Residential Building Energy Standards and issue Certificates of Compliance on development projects greater than 800-sf.

3-3.h Provide residents with information on:

i. cold-climate heat pumps, and other non-fossil fuel heat sources in new construction and in existing homes and buildings;

ii. replacing fossil fuels powered vehicles with electric vehicles;

iii. managing forest land for long-term, sustainable harvesting of wood.

3-3.i Raise climate crisis and energy awareness.

3-3.j Work with community groups and others to support non-vehicular transportation options in Norwich.

3.4 Overview

We have understood for at least fifty years that human dependence on fossil fuels is not sustainable. Only now are we beginning to grapple with the climate crisis resulting from burning fossil fuels. We also need to develop community resiliency to better withstand the disruptions caused by the changing climate. There is an active grassroots effort in Vermont and around the world to act locally in addressing the climate crisis and in building resiliency.

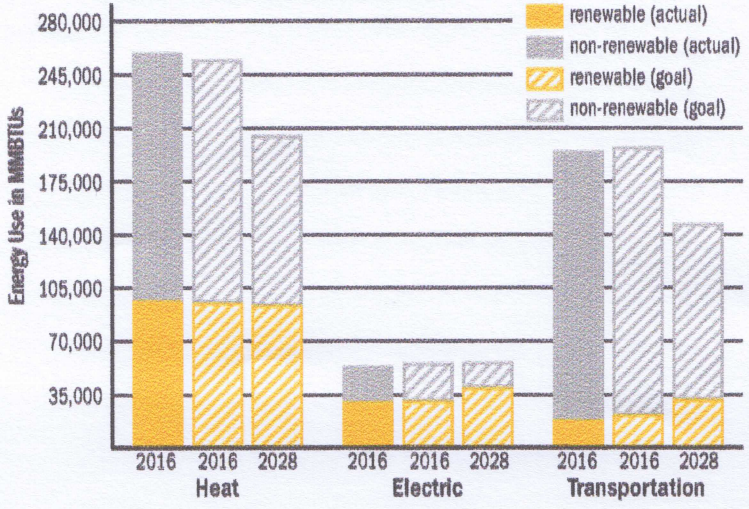
This chapter details an energy plan for Norwich residents, businesses, and town government in the context of Vermont's "90 percent renewable by 2050" energy goal. Policies and objectives focus on those decisions directly within the control of the town, assuming the current regulatory scope and commitment of resources. Opportunities for promoting changes in residential energy consumption with existing town volunteer resources are also identified. Assumptions made in the Vermont 2016 Comprehensive Energy Plan (CEP) and the shortcomings in available data are noted to encourage more rigorous planning at the state level, where the vast majority of decisions regarding energy markets (fossil fuel and renewable) are made.

3.5 Current Energy Use

According to the 2018 Progress Report by the Energy Action Network, Vermont greenhouse gas emissions have been increasing despite significant reduction commitments. Transportation and thermal energy (heating and cooling) are the largest contributors to the state's greenhouse gas emissions. This plan assumes that this state-level analysis applies to Norwich as well.

The accepted estimate of the total amount of energy being used in Norwich is from the Energy Action Network Community (EAN Energy Dashboard). This source suggests that in 2016 (the latest year actual use figures are available) Norwich consumed 508,115 MMBTUs (million BTUs) for electricity, thermal, and transportation (see Figure 11). Energy use in Norwich reflects the settlement pattern, which is dominated by low density residential lots, and little or no industrial or commercial activity.

Figure 11. **Energy Use and Goals by Sector**



Source: Brighter Vermont Community Energy Dashboard

In developing this chapter, the town relied upon:

- 2017 Two Rivers Ottauquechee Regional Commission (TRORC) regional energy planning
- The EAN Energy Dashboard which tracks the progress of each Vermont community towards the state's goal of meeting 90 percent of local energy needs through efficiency and renewable energy by 2050.
- The Act174 Supplement prepared for Norwich by TRORC is incorporated into this plan and included in Appendix B.

Data on electricity consumption is specific to Norwich and up-to-date because Green Mountain Power (GMP) as a

utility regulated by the VT Public Utilities Commission (PUC) provides detailed statistics about electricity generation and use as part of their license to operate. Approximately 60 percent of the GMP portfolio is made up of renewable energy, predominantly hydro-electric from Quebec. Current commercial transportation energy use and future trends were not assessed by TRORC as part of their Act 174 energy planning. The published figures for thermal and transportation energy are rough estimates, based on statewide averages and Census data. More reliable and accurate data is needed for town energy planning to be meaningful and effective.

3.6 Renewable Energy Resources

Vermont's Renewable Energy Goals

Greenhouse gas (GHG) emissions caused from human activities are driving the global climate crisis. In 2011 Vermont adopted a goal to obtain 90 percent of the total energy used in the state (primarily electricity, thermal, and transportation) from renewable sources by 2050. Advisory 2050 targets have been set for each Vermont municipality. The energy and conservation targets for Norwich are shown in Figure 12. Specific targets for renewable energy generation are included in Appendix B, Energy Targets and Conservation Goals.

Figure 12. **Norwich Energy Targets**

Year	Renewable	Nonrenewable	Efficiency	Total
2014 (baseline)	144.3	380.1	0	524.4
2016 (actual)	145.4	362.7	8.7	508.1
2025 (target)	160.1	273.8	47.9	434.0
2035 (target)	174.5	177.2	91.5	351.7
2050 (target)	196.1	32.3	156.8	228.4

All values expressed in thousand MMBTUs.
Source: Energy Action Network 2050 Energy Pathway Analysis

Town-level efforts to meet the State's '90 by 50' goal will focus on redirecting energy demand to renewable electric sources. These efforts will be challenged by the limited authority of municipalities to affect energy use outcomes. Energy products (including efficiency and renewables) are allocated via markets which are regulated by State and US governments. Municipalities are best understood as institutional consumers who have no jurisdiction over the structure and operation of energy markets. In the case of Norwich, the town is a very small consumer, even compared to local school districts and larger regional employers.

Municipalities do have the authority to regulate land use (an authority granted to municipalities by state statute and case law). Because land use patterns in Norwich have been consistent for many decades, and the rate of development is exceedingly slow, changing land use patterns will not play a major role in achieving the targets within the timeframes identified by the VT CEP. Nevertheless, Norwich will use this opportunity to review the zoning and subdivision regulations to encourage future development patterns that reduce energy use and preserve forest and agricultural lands for

ecosystem services. These concerns are addressed in more detail in the Land Use, Housing and Transportation chapters.

Fifty seven percent of the electricity consumed in Norwich is from renewable sources (based on the GMP renewable portfolio and local generation), 0.5 percent below the 2016 EAN Dashboard target. Converting current electricity use to renewable sources has been relatively straightforward in response to state policies such as the Renewable Energy Standard, which required utilities to procure 55 percent of their electricity from renewable sources in 2017. That figure will increase incrementally to 75 percent by 2032. Conversion of transportation and thermal energy (most of the energy used in Norwich) to renewable sources are beyond the regulatory scope of the municipality, and thus the Town can only influence the outcome at the margins.

In summary, it is important to acknowledge that the town's ability to meet the ambitious and necessary state energy goals is limited. It falls primarily in 1) land use regulation, 2) modeling the adoption of energy conservation and renewable energy in Town facilities and equipment, and 3) ensuring local regulations are not a barrier to necessary change. Norwich is, nevertheless, determined to take concerted action to make progress.

Renewable Energy Generation Potential

Act 174 Maps. As required by the state under Act 174, TRORC has mapped areas of Norwich that have potential for renewable energy generation (see Appendix B).

The maps for solar potential rely heavily on analyzing aspect (south-facing landforms are most suitable for solar generation). The maps do not correct for features that will limit uptake of solar projects including: current land use and lot boundaries, extent of forest cover, proximity to roads, and distance to electric distribution (particularly 3-phase power and transmission infrastructure). Each of these factors presents serious limitations to utility scale (>500 kW) solar energy development.

At present, the most salient factors for determining where non-residential renewable energy projects may feasibly be located is proximity to the existing power grid (3-phase power and transmission lines) and the capacity of the grid to accommodate additional load. As of 2019, the GMP Solar Map 2.0 indicated that there were system limitations on the circuit along the Thetford-Norwich border and to the far west of Norwich near the Sharon town-line. Norwich operates on circuit 71G1 of the Wilder substation, which the utility lists as having 72 percent of its capacity remaining (approximately 10.2 MW). Therefore, installation of numerous 150 kW solar arrays is feasible. Three-phase power lines currently run along Main Street as far as Willey Hill Road, Route 5 South, and Route 5 North (to just south of Farrell Farm Road). Beyond these areas infrastructure upgrades would be required for larger projects.

SOLAR POWER. The EAN Dashboard identifies 190 small PV sites in Norwich, with a total capacity of almost 1,800 kW (approximately 11 percent of the generation goal). The Norwich Energy Committee tracks solar installations, including households that have purchased shares of solar

projects located in other towns. This count tallies 283 residences, businesses, or churches that have "gone solar" — more projects of this scale and type are likely. The EAN Dashboard ranks Norwich 12th out of 250 towns in Vermont for the number of solar electric sites.

While large scale development of solar energy will require proximity to a substation and three phase power, the utility grid in Norwich is well-suited for projects of about 150kW or smaller. Using the Act 174 mapping methodology 6,341 acres out of a total 28, 620 acres in Norwich has solar potential (southern facing slopes). But, 22,116 acres (or 77 percent) of Norwich is forested. About 67 percent of the area identified as having solar potential is currently under forest. Aside from the economic cost of clearing, the release of carbon from cleared lands would diminish the climate benefits of solar development on these sites. The mapping of solar potential also includes the Right-of-Way (ROW) for Interstate 1-91 and other lands not available for development.

About 16 MW of installed solar would be needed for Norwich to meet its renewable energy generation target of about 20,000 MWh per year (Appendix B, table 1Q). This is the town share of projected statewide energy demand in 2050, in proportion to its population. Based on current solar technology. 16 MW of solar generation would require about 160 acres total, or about 0.5 percent of the towns total land area. Assuming that solar panels continue to increase in efficiency, the area needed to meet Norwich energy demand will decrease as a result. Today 150 kW solar arrays typically require about of a third of an acre. To the extent that homes and businesses take up roof and parking lot installations the need for larger ground-based solar arrays will be reduced.

BIOMASS. It is not known how much wood is harvested for fuel in Norwich on an annual basis. Wood is a renewable source of thermal energy and technological improvements have greatly increased the efficiency and reduced the pollution associated with burning wood. A large percentage of homes in Norwich use wood as either a primary or secondary heating source. The State of Vermont is encouraging schools and municipal facilities to install high efficiency wood pellet or woodchip heating systems. More recently Dartmouth College (in neighboring Hanover, NH) is reconsidering a proposal for a biomass plant to replace existing fossil fuel fired heat system, due to concerns about the risk of increasing greenhouse gas emissions (including the impact of trucking woodchips) and local air quality effects. While the climate benefits of burning wood for heat are being reassessed Norwich will promote the clear path of solar electricity and switching to electric heat and transportation.

GEOTHERMAL. There is one ground source heat pump installed at a residential property in Norwich, according to the EAN Dashboard. The feasibility of installing geothermal systems needs to be assessed on a site-by-site basis. As of 2019, the town is considering geothermal heat pumps for three town buildings (Tracy Hall, the Fire Department apparatus bay, and the Town Garage).

HYDRO POWER. There are no hydropower facilities currently located in Norwich according to the Energy Dashboard. Small, run-of-the-river generators would be the only likely future hydro generation, given current state and federal regulations regarding the damming of waterways. However, just over 60 percent of GMP electricity is provided by contracts with Hydro-Quebec, a public utility.

WIND POWER. According to the Energy Dashboard there are no wind energy projects installed in Norwich as of 2018. There is no meaningful potential for utility- or community-scale wind generation in Norwich given current turbine technology, which generally requires an average wind speed of at least 6 meters per second. Only two locations in Norwich are identified through the Act 174 mapping process with wind speeds at 6 meters per second or above (accessed via turbines set between 50 and 70 meters high). Both are off Chapel Hill Rd along the Sharon town-line. These sites are not currently accessible from roads suitable for this scale of development, nor to a power transmission line.

3.7 Energy Conservation and Efficiency

STRUCTURES. The scenario for meeting the state's renewable energy goal presented on the EAN Dashboard shows that by 2050 Norwich will need to use a total of 296 MMBTUs of energy less than it did in the baseline year of 2014. Under the US and Vermont constitutions, the town has no role in shaping or regulating the market provision of energy conservation or efficiency products and services. In addition, the annual rate of new construction, or even substantial improvement, is very low. Nevertheless, the town can still play a role by encouraging energy code compliance, modeling energy-efficiency in municipal facilities, supporting outreach and information-sharing with residents, and investigating how it could take on inspection and enforcement.

TRANSPORTATION. Of note here is the assumption that the town's total energy use for transportation will go from 205,793 MMBTUs in the baseline year of 2014 to 56,348 MMBTUs in 2050 (see EAN Dashboard, regional energy planning). That is, the town's transportation energy use in 2050 will be 27 percent of what it was in 2014. It is also expected that fully 90 percent of the 2050 transportation energy budget will be provided from renewable sources. This is a major change from the town's current modes of transportation and entirely outside the control of (existing) municipal decision-making. Land-use policy, a clear area of town authority, will play an important role, as will town support for regional public transit and town infrastructure for walking, biking, and electric vehicles. Land use policy can help support reductions in the number and length of car trips — and thus greenhouse gas emissions — by encouraging future development to be located close to job and retail centers and public transit lines, and creating walkable neighborhoods.

village center. Renewable energy projects in Norwich are further conditioned on the following standards:

- For individual or group net metered renewable energy projects, the property owner must take reasonable measures to site and/or screen the installations to minimize any visual or noise impacts beyond the property line, particularly on sites where there are neighboring homes in close proximity.
- Projects larger than 150 kW must meet existing standards for setbacks, site design (landscaping, screening, lighting, stormwater, etc.) as laid out in the Norwich Zoning and Subdivision Regulations.
- Projects larger than 500 kW must have a management and decommissioning plan that will ensure the land will be returned to its prior condition when no longer actively used for renewable energy generation. Wherever feasible, the energy generation use must be combined with continued agricultural use of the land or habitat management, such that soil health and fertility is maintained.
- Projects larger than 500 kW must not clear land within a mapped forest block (see Figure 8) unless there is a management and decommissioning plan that will ensure the land will be re-forested and managed in accordance with a forest management plan, when no longer actively used for renewable energy generation.

3.8 Future Generation, Use and Conservation

Energy Targets

Future targets for energy generation, use and conservation have been set for all Vermont municipalities as part of the state's enhanced energy planning under Act 174 (see Figure 12). The planning scenario presented on the EAN Dashboard envisions that total energy consumption of Norwich will decrease from the 2014 baseline consumption of 524,4000 MMBTUs to 228,400 MMBTUs in 2050. A reduction to 44 percent of 2014 levels. Moreover, only 32,300 MMBTUs (or 14 percent of the total) will be from non-renewable sources. This reduction will primarily rely on the efficiencies of weatherization and electric transportation.

This plan's land use, housing and transportation objectives and policies call for new housing and economic development to be focused in and adjacent to the village and mixed use areas. This is where people can live close to employment, shopping and services. Such proximity allows walking, biking and public transit, all of which reduce transportation energy use. Encouraging such a development pattern through the Town's land use regulations and public infrastructure are the most effective and direct measures Norwich government can take to move towards meeting the state's energy goals.

The 2017 TRORC Energy Plan recognizes that Norwich is currently generating 2.2 GWh/year of electricity from solar and sets a target for a total of 20GWh/year of renewable energy generation by 2050. This is based on Norwich's fraction of the regional population. The portfolio of renewable energy generating sources includes both rooftop and ground-mounted solar, wind, and hydropower. The TRORC energy plan suggests that there is 81 times more 'suitable land' than is needed to host such renewable energy projects (primarily for solar) in Norwich.

Renewable Energy Project Siting Standards

This plan supports renewable energy production in Norwich. For this policy to continue with broad community support it must be balanced with this plan's policies related to:

- Protecting natural resources, environmental quality, scenic resources and rural character
- Maintaining viable farms and the working lands needed to sustain them
- Focusing development in those areas of town already served by existing public infrastructure
- Preserving cultural resources within Norwich village
- Preserving the recreational and natural value of those lands identified in the Ridgeline Protection Overlay Area and Shoreline Protection Overlay Area
- Increasing the supply, diversity and affordability of housing in Norwich

This plan calls upon the Public Utility Commission to issue Certificates of Public Good for projects between 15 kW and 500 kW based on the presumption that lands in Norwich meet the so-called 'preferred site criteria', except in areas already mapped as Ridgeline Protection Overlay Area, the Shoreline Protection Overlay Area, and the designated

5.100 RULE PERTAINING TO CONSTRUCTION AND OPERATION OF NET-METERING SYSTEMS

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PART I: GENERAL PROVISIONS

5.101 Purpose and Scope

(A) This Rule governs the terms upon which any electric company offers net-metering service within its service territory. In addition, this Rule governs the application for and issuance, amendment, transfer, and revocation of a certificate of public good for net-metering systems under the provisions of 30 V.S.A §§ 248, 8002, and 8010.

(B) Except as modified by Section 5.125 (Pre-Existing Net-Metering Systems), this Rule applies to all net-metering systems 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 Commission.

(C) No person may commence site preparation for or construction of a net-metering system or convert an existing plant into a net-metering system without first obtaining a CPG under this Rule.

(D) In the event that any portion of this Rule is found by a court of competent jurisdiction to be illegal or void, the remainder is unaffected and continues in full force and effect.

5.102 Computation of Time

(A) Computation. ~~In computing any period of time prescribed or allowed by this Rule, by order of the Commission, or by any applicable statute, the day from which the designated period of time begins to run is excluded from the computation. The last day of the period is included in the computation, unless it is a Saturday, a Sunday, or a state or federal legal holiday, or a day on which weather or other conditions have made the Commission's office and the Commission's electronic filing system unavailable, in which event the period runs until the end of the next day that is not one of the aforementioned days. Intermediate Saturdays, Sundays, and legal holidays are not counted when the period of time prescribed or allowed is less than 11 days.~~Under this Rule, time is

computed in accordance with Commission Rule 2.207.

(B) Enlargement. The Commission for cause shown may at any time in its discretion:

(1) Grant an extension of time if it is requested before the expiration of the period originally prescribed, or

(2) Upon request made after the expiration of the specified period, grant an extension where the failure to act was the result of excusable neglect or other good cause.

5.103 Definitions

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

"Account" means a unique identifier assigned by the electric company to a customer for billing purposes. A customer account may include one or more meters.

"Adjoining Landowner" means a person who owns land in fee simple that:

(1) Shares a property boundary with the tract of land on which a net-metering system is located; or

(2) Is adjacent to that tract of land and the two properties are separated only by a river, stream, railroad line, or public highway.

"Adjustor" means a positive or negative charge applied to production kWh based on factors related to site selection (Site Adjustor) and retention of tradeable renewable energy credits (REC Adjustor).

"Amendment" means ~~one or more of the following changes to the physical plans or design of a net-metering system. An amendment is either "major" or "minor":~~

~~(1) The following changes constitute a "major" amendment:~~

~~(a) increasing the nameplate capacity of the net-metering system by more than 5% or reducing the nameplate capacity of the net-metering system by more than 60%;~~

~~(b) moving the limits of disturbance by more than 50 feet;~~

~~(c) changing the fuel source of the net-metering system; or~~

~~(d) any other change that the Commission, in its discretion, determines is likely to have a significant impact under one or more of the criteria of Section 248 applicable to the net-metering system.~~

~~(2) The following changes constitute a "minor" amendment:~~

~~(a) proposing additional aesthetic mitigation; or~~

~~(b) any other change to the physical plans or design of the system that is not a major amendment~~ a request for approval of a modification to a proposal that is either under review or has been approved by the Commission. The term amendment also includes requests to change the terms or conditions of a CPG issued by the Commission.

"Applicant" means the entity seeking authorization to construct and operate a net-metering system.

"Billing Meter" means an electric meter that measures either the consumption of electricity by a customer or the net of electric consumption by the customer and production by the net metering system.

"Blended Residential Rate" means the lesser of either:

(1) For electric companies whose general residential service tariff does not include inclining block rates, the $/kWh charge set forth in that electric company's tariff for general residential service;

(2) For electric companies whose general residential service tariff does include inclining block rates, a blend of the electric company's general residential service inclining block rates that is 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; or

(3) The weighted statewide average of all electric company blended residential retail rates, as determined by the Commission, whichever is lower.

~~"Commission" means the Public Utility Commission of the State of Vermont and the employees thereof.~~

"Capacity" means the rated electrical nameplate for a plant, except that, in the case of a solar energy plant, the term means the aggregate AC nameplate capacity of all inverters used to convert the plant's output to AC power. The capacity of an inverter is not changed when it is derated.

"Category I Net-Metering System" means a net-metering system that is not a hydroelectric facility and that has a capacity of 15 kW or less.

"Category II Net-Metering System" means a net-metering system that is not a hydroelectric facility that has a capacity of more than 15 kW and less than or equal to 150 kW, and that is sited on a preferred site.

"Category III Net-Metering System" means a net-metering system that is not a hydroelectric facility, that has a capacity of greater than 150 kW and less than or equal to 500 kW, and that is sited on a preferred site.

"Category IV Net-Metering System" means a net-metering system that is not a hydroelectric facility, that has a capacity of greater than 15 kW and less than or equal to 150 kW, and that is not located on a preferred site.

"Certificate Holder" means one who holds a CPG. The certificate holder must have legal control of the net-metering system.

"Certificate of Public Good" or "CPG" means a certificate of public good issued by the Commission pursuant to 30 V.S.A. § 8010.

"Commission" means the Public Utility Commission of the State of Vermont and the employees thereof.

"Commissioned" or "Commissioning" means the first time a plant is put into operation following the initial construction of the plant.

"Conditional Waiver of a Criterion of 30 V.S.A. § 248" means the Commission waiver of the requirements for the presentation of evidence under the criterion, a specific review of the project by the Commission under the criterion, and the development of specific findings of facts for the criterion, unless the Commission finds that the application raises a significant issue under that criterion.

"Customer" means a retail electric consumer.

"Department" means the Vermont Department of Public Service.

"Earth disturbance" means construction activities including clearing, grading, and excavating, but does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

"Electric Company" means the utility serving the net-metering customer or the utility that would serve an applicant seeking authorization to construct and operate a net-metering system, as the context indicates.

"Excess Generation" means the following: for customers who elect to wire net-metering systems such that they offset consumption on the billing meter, excess generation is the number of kWh by which production exceeds consumption. For customers who elect to wire net-metering systems such that they do not offset consumption on any customer's billing meter, all recorded production is considered excess generation.

"File" means the submission of documents, exhibits, plans, information, or other materials to the Commission through the Commission's electronic filing system, by delivery to the Commission's offices, or by delivery to the Commission during the course of a hearing.

"Group Net-Metering System" means a net-metering system serving more than one customer, or a single customer with multiple electric meters, located within the service area of the same retail electricity provider. Various buildings owned by municipalities, including water and wastewater districts, fire districts, villages, school districts, and towns, may constitute a group net-metering system. A union or district school facility shall be considered in the same group net-metering system with buildings of its member municipalities that are located within the service area of the same retail electricity provider that serves the facility.

"Host Landowner" means the owner of the property on which the net-metering system is or will be located.

"kW" means kilowatt or kilowatts (AC).

"kWh" means kilowatt hours.

"Inclining Block Rate" means a rate structure where an electric company charges a higher rate for each incremental block of electricity consumption.

"Interconnection Facilities" means all facilities and equipment between the generation resource and the point of interconnection, including any modifications, additions, or upgrades that are necessary to physically and electrically interconnect the generation resource to the interconnecting utility's distribution or transmission system. Interconnection facilities are sole-use facilities and do not include system upgrades.

"Project Limits ~~of Disturbance~~" means the boundary within which all construction, materials storage, ~~grading~~earth disturbance, vegetation clearing, planting, management, landscaping, and any other activities related to site preparation, construction, operation, maintenance, and decommissioning take place as a result of the net-metering system, including ~~areas disturbed due to~~ the creation or modification of access roads~~,~~ and utility lines~~, and the~~

~~clearing or management of vegetation~~.

"Net-Metering" means ~~the process of~~ measuring the difference between the electricity supplied to a customer and the electricity fed back by ~~a~~the customer's net-metering system(s) during the customer's billing period:

(1) using a single, non-demand meter or such other meter that would otherwise be applicable to the customer's usage but for the use of net metering; or

(2) if the system serves more than one customer, using multiple meters. The calculation shall be made by converting all meters to a non-demand, non-time-of-day meter, and equalizing them to the tariffed kWh rate.

"Net-Metering System" means a plant for generation of electricity that:

(1) is of no more than 500 kW capacity;

(2) operates in parallel with facilities of the electric distribution system;

(3) is intended primarily to offset the customer's own electricity requirements and does not primarily supply electricity to electric vehicle supply equipment, as defined in 30 V.S.A. § 201, for the resale of electricity to the public by the kWh or for other retail sales to the public, including those based in whole or in part on a flat fee per charging session or a time-based fee for occupying a parking space while using electric vehicle supply equipment; and

(4) either ~~(i)~~ employs a renewable energy source~~;~~ or ~~(ii)~~ is a qualified micro-combined heat and power system of 20 kW or less that meets the definition of combined heat and power facility in subsection 8015(b)(2) of Title 30 and uses any fuel source that meets air quality standards.

"Non-Bypassable Charges" means those charges on the electric bill defined in an electric company's tariffs that apply to a customer regardless of whether they net-meter or not. Non-bypassable charges may not be offset using current or previous net-metering credits. A customer is liable for payment of these charges regardless of whether the customer has a credit balance resulting from net-metering. The customer charge, energy efficiency charge, energy assistance program charge, any on-bill financing payment, and any equipment rental charge are non-bypassable charges.

"Party" means any person who has obtained party status under Section 5.117 of this Rule.

"Plant" means an independent technical facility that generates electricity from renewable energy. A group of facilities, such as wind turbines, will be considered one plant if the group is part of the same project and uses common equipment and infrastructure, such as roads, control facilities, and connections to the electric grid. Common ownership, control, proximity in time of construction, and proximity of facilities to each other will be relevant to determining whether a group of facilities is part of the same project.

"Pre-Existing Net-Metering System" means a net-metering system for which a completed CPG application was filed with the Commission prior to January 1, 2017, and whose completed application was either filed at a time when net-metering was being offered by the electric company pursuant to 30 V.S.A. § 219a (h)(1)(A) as the statute existed on December 31, 2016, or qualified under state law as a system that did not count towards the capacity limit on net-metering contained in that statute.

"Preferred Site" means one of the following, provided that the site does not require significant forest clearing:

(1) A new or existing constructed impervious surface or structure whose primary use is not the generation of electricity or providing support for the placement of equipment that generates electricity~~;~~.

(2) A parking lot canopy over a ~~paved~~ parking lot, provided that the location remains in use as a parking lot~~;~~.

(3) A tract previously developed for a use other than siting a plant on which a structure or constructed impervious surface was lawfully in existence and use ~~prior to July 1 of~~at any time during the year preceding the ~~year in which~~date an application for a certificate of public good under this Rule is filed. To qualify under this subdivision (3), more than half of the ~~limits of disturbance of a proposed net-metering system~~energy generation component of the plant must ~~include~~be located within the footprint of either the existing structure or impervious surface ~~and~~. The project limits may not include any headwaters, streams, shorelines, floodways, rare and irreplaceable natural areas, necessary wildlife habitat, wetlands, endangered species, productive ~~forestlands~~forest soils, or primary agricultural soils, all of which are as defined in 10 V.S.A. chapter 151. For purposes of this subsection, the

energy generation component of the plant does not include interconnection facilities~~;~~.

(4) Land certified by the Secretary of Natural Resources to be a brownfield site as defined under 10 V.S.A. § 6642, provided any request to the Secretary of Natural Resources for such certification includes a report from a diligent and appropriate investigation, as required by 10 V.S.A. chapter 159~~;~~.

(5) A sanitary landfill as defined in 10 V.S.A. § 6602 and contiguous land, structures, appurtenances, and improvements on the land used for treating, storing, or disposing of solid waste, provided that the Secretary of Natural Resources certifies that the land constitutes such a landfill and ~~is suitable for the development of the plant~~contiguous land, structures, appurtenances, or improvements, and that the landfill is actively maintained under the authority of a post-closure certification, administrative order, or assurance of discontinuance, or in custodial care as recognized by the Agency of Natural Resources. To qualify under this subdivision (5), some portion of the plant must be located on the landfill cap~~;~~.

(6) ~~The disturbed portion of a lawful~~A gravel pit, quarry, or similar site for the extraction of a mineral resource, provided that ~~all activities pertaining to site reclamation required by applicable law or permit condition are completed prior to the installation of the plant;~~:

(a) more than half of the energy generation component of the plant is located within the disturbed or previously disturbed portion of the extraction site. For purposes of this subsection, the energy generation component of the plant does not include interconnection facilities; and

~~(a)~~(b) all state and local permit conditions related to reclamation of the site are satisfied before the operation of the plant.

~~(6)~~(7) A specific location ~~designated in a duly adopted municipal plan under 24 V.S.A. chapter 117 for the siting of a renewable energy plant or specific type or size of renewable energy plant, provided that the plant meets the siting criteria recommended in the plan for the location; or a specific location that is identified in a joint letter of support from the municipal legislative body and municipal and~~

~~regional planning commissions in the community where the net-metering system will be located~~ determined by the governing municipal legislative body and the municipal and regional planning commissions as suitable for the development of a net-metering system consistent with applicable policies in their respective plans. The specific location must be identified in a letter or letters from the municipal legislative body and the municipal or regional planning commissions based on their evaluation after having received the 45-day notice for the project. Such letters in no way limit the ability of municipalities and regional planning commissions to participate in the Commission's review of the net-metering system proposed to be constructed on the location identified in the letter.

~~(7)~~(8) A site listed on the National Priorities List (NPL) established under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. chapter 103, if the U.S. Environmental Protection Agency or the Agency of Natural Resources confirms that the site is listed on the NPL, and ~~further~~ provided that the applicant demonstrates as part of its CPG application that:

(a) development of the plant on the site will not compromise or interfere with remedial action on the site; and

(b) the site is suitable for development of the plant.

~~(8)~~(9) On the same parcel as, or directly adjacent to, a customer that has been allocated more than 50 percent of the net-metering system's electrical output. The allocation to the host customer may not be less than 50 percent during each of the first 10 years of the net-metering system's operation.

"Production Meter" means an electric meter that measures the amount of kWh produced by a net-metering system.

"Significant Forest Clearing" means clearing more than three acres of forest. For purposes of this Rule, the word forest means land that has at least 10 percent canopy cover by live trees of any size and associated naturally occurring vegetation or has had at least 10 percent canopy cover of live trees and associated naturally occurring vegetation in the past and has stumps, snags, or other evidence indicating that it has not been converted to a non-forest use at the time of a CPG application filing. To qualify as forest, an area must be at least one

acre in size and 120 feet wide. In determining whether an area is at least one acre in size or 120 feet wide, any portion of a group or contiguous area of trees that extends beyond the project or parcel boundaries must be counted. Canopy cover must be measured from the outermost edge of tree crowns across a group or contiguous area of trees. The three-acre limit on significant forest clearing is cumulative and includes each discrete area of any forest proposed for clearing. Clearing of individual trees that are not part of a forest will not count toward the three-acre limit on significant forest clearing.

"Substantial Change" means a change to a proposed or approved net-metering system that has the potential for significant impact with respect to any of the criteria of Section 248(b) or on the general good of the State under Section 248(a).

"Time-of-Use Meter" means an electric meter that measures the consumption of electricity during defined periods of the billing cycle.

"TOU" means time-of-use.

"Tradeable Renewable Energy Credit or REC" means all of the environmental attributes associated with a single unit of energy generated by a renewable energy source where:

(1) Those attributes are transferred or recorded separately from that unit of energy;

(2) The party claiming ownership of the tradeable renewable energy credits has acquired the exclusive legal ownership of all, and not less than all, the environmental attributes associated with that unit of energy; and

(3) Exclusive legal ownership can be verified through an auditable contract path or pursuant to the system established or authorized by the Commission, or any program for tracking and verifying the ownership of environmental attributes of energy that is legally recognized in any state and approved by the Commission.

PART II: REGISTRATIONS AND APPLICATIONS FOR CPGS

5.104 Eligibility

To be eligible to apply for a net-metering CPG under this Rule, an applicant must propose one of the following:

(A) A category I net-metering system;

(B) A category II net-metering system;

(C) A category III net-metering system;

(D) A category IV net-metering system; or

(E) A hydroelectric system with a capacity of 500 kW or less.

5.105 Registration of Hydroelectric Facilities, Ground-Mounted Photovoltaic Facilities of up to 15 kW in Capacity, ~~and~~ Roof-Mounted Photovoltaic Net-Metering Systems of Any Capacity Up to 500 kW, and Mixed Ground- and Roof-Mounted Systems of up to 500 kW Where the Ground-Mounted Portion Does Not Exceed 15 kW

(A) Applicability. The registration procedure is applicable only to hydroelectric facilities, ground-mounted photovoltaic systems of up to 15 kW ~~and~~, photovoltaic net-metering systems that are mounted on a roof, and mixed ground- and roof-mounted systems of up to 500 kW where the ground-mounted portion of the system does not exceed 15 kW.

(B) Form and Content. A net-metering system under this subsection must be registered with the Commission in accordance with the filing procedures and registration form prescribed by the Commission and must contain all of the information required by the instructions for completing that form.

(C) Timeframes. Unless ~~a letter raising interconnection issues is timely filed with the~~ otherwise directed by the Commission ~~by the interconnecting utility~~, a CPG will be deemed issued by the Commission without further proceedings, findings of fact, or conclusions of law, and the applicant may commence construction of the system ~~according to the following timeframes:~~

~~(1) in the case of a net-metering system with a capacity of 15 kW or less,~~on the ~~eleventh business~~15th day following the filing of the form~~; and~~.

~~(2) in the case of a net-metering system with a capacity of greater than 15 kW, the thirty-first day following the filing of the form.~~

(D) Service. Upon filing the net-metering registration form with the Commission, the ~~applicant must also cause notice of the form to be sent to the electric company and to the Department via the~~ Commission's electronic filing system will send notice of the registration to the electric company, the Department, and the Agency of Natural Resources.

(E) Interconnection. ~~If the electric company believes that the interconnection of the net-metering system raises concerns, the electric company must convey these concerns in writing to the applicant and the Commission within the timeframes in (C), above. The electric company's filing must include a recommendation as to how the interconnection issues could be resolved by the applicant. The company must also convey a copy of the letter to the installer of the system named on the form. If an objection to the interconnection has been timely filed by the interconnecting electric company, the applicant may not commence construction of the project until the interconnection issues have been resolved. Disputes between the applicant and the electric company will be resolved using the dispute resolution procedures contained in Commission Rule 5.500, which governs interconnection requests.~~ All CPGs deemed issued under this Rule are conditioned on the CPG holder complying with all electric company interconnection requirements. Interconnection approval must be obtained from the electric company pursuant to Rule 5.500.

(1) For systems up to 15 kW, a registration form filed under this Rule constitutes a Rule 5.500 interconnection application. The review of the interconnection application by the electric company is governed by Rule 5.500.

~~(1)~~(2) For systems greater than 15 kW, the applicant must obtain interconnection approval from the electric company under Rule 5.500 before submitting a registration form under this Rule.

5.106 Applications for Ground-Mounted Photovoltaic Net-Metering Systems Greater Than 15 kW and up to and Including 500 kW and for Facilities Using Other Technologies up to and Including 500 kW

(A) Applicability. This application procedure is applicable to ground-mounted photovoltaic net-metering systems that are greater than 15 kW and up to 500 kW in capacity and mixed ground- and roof-mounted systems of up to 500 kW where the ground-mounted portion of the system exceeds 15 kW. This application procedure is also applicable to net-metering systems ~~of 50 kW or less~~ that use ~~other~~ eligible technologies other than photovoltaic systems. This application procedure does not apply to hydroelectric facilities or roof-mounted photovoltaic net-metering systems with no ground-mounted system.

(B) Form and Content. An application for a CPG under this subsection must be filed with the Commission in accordance with the Commission's current filing procedures, using the application form prescribed by the Commission, and must contain all of the information required by this Rule and the instructions for that form. The Commission will develop forms for:

(1) Photovoltaic systems where the capacity of the ground-mounted portion of the system is greater than 15 kW, up to and including 50 kW;

(2) Net-metering systems using a technology other than photovoltaics up to and including 50 kW; and

~~(1)~~(3) Net-metering systems with a capacity of greater than 50 kW up to and including 500 kW.

(C) Advance Submission Requirements. The applicant must provide notice of the application as follows:

(1) Recipients Entitled to Advance Submission. The applicant must provide the following persons with an advance submission, at least 45 days in advance of filing the application with the Commission:

(a) the municipal legislative bodies and municipal and regional planning commissions in the communities where the project will be located;

(b) all adjoining landowners;

(c) the host landowner;

(d) the Department of Public Service;

(e) the Agency of Natural Resources;

(f) the Natural Resources Board, if the proposed net-metering system is located on a ~~parcel subject to an Act 250 Land Use Permit~~ resource extraction site;

(g) the Division for Historic Preservation;

(h) the Agency of Agriculture Food and Markets; ~~and~~

(i) the electric company; and

~~(i)~~(j) the Commission.

(2) Method of Service of Advance Submission. The applicant must ~~cause~~provide the advance submission to ~~be served to the entities listed in (1)(a) through (c), above,~~ the municipal legislative body, municipal planning commission, adjoining landowners, and the host landowner by ~~certified~~ first-class mail, personal delivery, or any other means authorized by the persons entitled to service. Adjoining landowners must be identified using the host town's certified grand list as it existed no more than 60 days before the date of the advance submission or online through

the Vermont Center for Geographic Information database, municipality-specific databases, the Vermont Department of Taxes grand lists, or electronic versions of grand lists maintained by municipalities. An applicant must verify with the relevant municipality that the online database provides accurate and current information regarding parcel ownership within that municipality. Documentation of verification must be signed and attested to by an applicant. ~~The applicant must cause~~ Service of the advance submission ~~to be transmitted to~~ on the ~~entities listed in (1)(d) through (i), above, using~~state agencies, electric company, and regional planning commission will occur through ePUC, the Commission's electronic filing system~~, unless the applicant is making a paper filing in accordance with the Commission's rules, in which case service must be by certified mail. With permission from the intended recipient, the applicant may serve a copy of the advance submission via electronic mail~~.

(3) Contents of Advance Submission. The advance submission must state that the applicant intends to file a Section 8010 application with the Commission, must identify the location of the project site ~~and the number of any Act 250 Land Use Permit applicable to the host parcel~~, and must provide a description of and site plan for the proposed project, including any aesthetic mitigation plan, in sufficient detail to afford the recipient reasonable notice of the nature of the project so that the recipient is able to make an informed judgment as to any potential impact the construction or operation of the project may have on any interest of the recipient that is within the Commission's jurisdiction to address. The submission must provide contact information and state that the recipient may file inquiries or comments with the applicant about the project and that the recipient will also have an opportunity to file comments with the Commission once the application is filed.

(4) Timing of Advance Submission and Application. If, within 180 days of the date of the advance submission, the applicant has not filed a complete application for the project that fully complies with the filing requirements of this Rule, the submission will be treated as withdrawn without further

action required by the Commission.

(D) Filing Requirements. Applications ~~for net-metering systems that are greater than 15 kW and up to and including 50 kW and that are not roof-mounted photovoltaic systems~~ must contain the following information. Failure to provide any required information will result in the application being deemed incomplete:

(1) Applicant name. The application must include the legal name (and the "doing business as" name, if different), contact information, Vermont business registration number (if applicable), and a description of the company or person making the application. For example:

XYZ Corporation (d/b/a ABC Solar)
Headquarters at 123 Maple Lane, Anytown, VT 05600
Service Agent: Jane Doe, Esq.
VT Business ID#: 12345

(2) Host landowner. The application must include the name and address of the legal owner of the land ~~up~~on which the proposed net-metering system would be built~~, and the number of any Act 250 Land Use Permitapplicable to the host parcel~~.

(3) Adjoining landowners. The application must include the names and addresses of all adjoining landowners. ~~This information must be obtained from the most recent version of the town's grand list.~~ Adjoining landowners must be identified using the host town's certified grand list as it existed no more than 60 days before the date of the advance submission or online through the Vermont Center for Geographic Information database, municipality-specific databases, the Vermont Department of Taxes grand lists, or electronic versions of grand lists maintained by municipalities. An applicant must verify with the relevant municipality that the online database provides accurate and current information regarding parcel ownership within that municipality. Documentation of verification must be signed and attested to by an applicant.

(4) Certification that advance submission requirements have been met. The applicant must certify that it has complied with the advance submission requirements listed above.

(5) Site plans. The applicant must provide a site plan for each project. A site

plan must include:

(a) Proposed facility location ~~and~~, any project features, and project limits;

(b) Approximate property boundaries and setback distances from those boundaries to the corner of the closest project-related structure, approximate distances to any nearby residences, and dimensions of all proposed improvements;

(c) Proposed utilities, including approximate distance from source of power, sizes of service available and required, and approximate locations of any proposed utility or communication lines;

(d) ~~A description~~Locations, specific descriptions, and the total acreage of any areas where vegetation is to be cleared or altered, proposed earth disturbance, ~~and~~ a description of any proposed direct or indirect alterations to or impacts on wetlands or other natural resources protected under 30 V.S.A. § 248(b)(5), including the project limits ~~of disturbance and the total acreage of any disturbed area~~, and the total acreage of forest clearing;

(e) Detailed plans for any drainage of surface and/or sub-surface water and plans to control erosion and sedimentation both during construction and as a permanent measure;

(f) Locations and specific descriptions of proposed screening, aesthetic mitigation, landscaping, groundcover, fencing, exterior lighting, and signs;

(g) Plans of any proposed access driveway, roadway, or parking area at the project site, including grading, drainage, and traveled width, as well as a cross-section of the access drive indicating the width, depth of gravel, paving, or surface materials; and

~~(g)~~ The latitude and longitude coordinates for the proposed project~~; and~~

(h) ~~The approved site plan from any Act 250 Land Use Permit applicable to the host parcel~~.

(6) Wetland delineation. The applicant must provide either a wetland

delineation prepared by a qualified consultant, or a letter from the district wetland ecologist or a qualified consultant stating that no delineation is necessary because the net-metering system will not be proximate to any significant wetlands. The wetland delineation must have been completed within the five years before the date of the application.

~~(7)~~ Response to comments received in response to 45-day advance submission. The applicant must file a document summarizing the comments and recommendations received in response to the 45-day notice. The document must respond to the issues raised in those comments and recommendations and must state what steps the applicant has taken to address those issues or why the applicant is unable to do so.

~~(8) Statement of Consistency with Act 250 Land Use Permit. If the host parcel is subject to an Act 250 Land Use Permit, the applicant must file a document describing whether the construction of the proposed net-metering system will interfere with the satisfaction of any condition contained in the Act 250 Land Use Permit. If the construction will interfere with the satisfaction of any Act 250 Land Use Permit condition, the applicant must explain what steps it will take to address such issues or why the applicant is unable to do so.~~

(8) Preferred-Site Documentation.

(a) Brownfields. If a project will be located on a brownfield and an applicant claims preferred-site status under subsection (4) or (7) of the definition of "preferred site," the applicant must provide a site investigation report, as required by the Agency of Natural Resources' Investigation and Remediation of Contaminated Properties Rule, or a letter from the Secretary of Natural Resources stating that a site investigation report is not necessary.

(b) Resource extraction sites. If a project will be located on a resource extraction site and an applicant claims preferred-site status under subsection (6) or (7) of the definition of "preferred site," the applicant must provide:

(i) Evidence depicting what is or was the disturbed portion of

the site, which may include plans for the extraction site, aerial photographs, topographic surveys, and information about vegetative communities; and

(ii) If the extraction site has state or local permits with reclamation requirements, copies of such permits and documentation from the permitting agency stating that all permit reclamation requirements have been or will be satisfied before operation of the plant.

(9) Proof of interconnection approval. The applicant must receive approval to interconnect the proposed net-metering system to the interconnecting utility's distribution system before filing an application. Interconnection applications and disputes about interconnection requirements are governed by Rule 5.500.

(10) A statement of whether the proposed net-metering system will be in a flood hazard area or river corridor and whether the proposal will comply with the Agency of Natural Resources' Flood Hazard Area and River Corridor Rule.

(11) Adjacent facilities. The applicant must identify any known (e.g., visible from the project site, or developed by the same applicant, developer, installer, or an affiliated entity) existing or planned generation facilities on the same or an adjacent parcel as the proposed net-metering system. The applicant must:

(a) State the distance between the facilities;

(b) Identify the owner(s) of the facilities and explain their relationship, if any;

(c) Describe the timing of the construction of the facilities;

(d) Identify and describe any infrastructure shared by the facilities; and

(e) Provide a site plan showing the two facilities.

(12) Systems greater than 50 kW must provide the following:

(a) Required evidence, project narrative, proposed findings, and proposed CPG. The applicant must provide evidence

demonstrating that the proposed net-metering system will meet the criteria applicable to the system under Section 5.111 of this Rule. A witness sponsoring evidence must file a notarized affidavit stating that the information provided is accurate to the best of the witness's knowledge. All evidence must be sponsored by a witness. The witness must further attest to having personal knowledge to be able to testify as to the validity of the information contained in the evidence. The applicant must include a brief project narrative describing the project in plain terms. The applicant must file proposed findings of fact and a proposed CPG with the application.

(b) The presence and total acreage of primary agricultural soils as defined in 10 V.S.A. § 6001 on each tract to be physically disturbed in connection with the construction and operation of the net-metering system, the amount of those soils to be disturbed, and any other proposed impacts to those soils.

(c) For each proposed structure, the applicant must provide elevation drawings. The elevation drawings must be to appropriate scales but no smaller than 1"/20'.

(i) The applicant must include two elevation drawings of the proposed structures drawn at right angles to each other, showing the ground profile to at least 100 feet beyond the edge of any proposed clearing, and showing any guy wires or supports. The elevation drawing must show height of the structure above grade at the base, and describe the proposed finish of the structure.

(ii) The elevation drawing must indicate the relative height of the facility to the tops of surrounding trees as they presently exist.

(d) Local and regional plans. The applicant must provide copies of the relevant sections of any town plan and regional plan in effect in the community in which the proposed facility will be located. The

applicant must describe how the project complies with or is inconsistent with the land conservation measures in those plans.

(e) Decommissioning plan. All applications for net-metering systems with capacities equal to or greater than 150 kW must include a decommissioning plan that provides for the removal and safe disposal of project components and the restoration of any primary agricultural soils, if such soils are present within the net-metering system's project limits.

~~(D)~~(E) Review for Administrative Completeness. Commission staff will review all filed applications to determine whether they are administratively complete enough to process. Applicants should receive an e-mail message with the results of this review within ~~5 business~~7 days of the date the Commission received the application; however, the expiration of this time period without the receipt of an e-mail message does not constitute a determination that the application is administratively complete enough to process. If the application is found to be complete, the applicant must provide copies of the application to the persons set forth in Sections 5.106(F), below. If the application is found to be incomplete, the applicant will be informed of the deficiencies and will be given an opportunity to cure them. A determination that an application is administratively complete enough to process is not a legal determination regarding the sufficiency of the information included in the application.

~~(E)~~(F) Service of ~~Copies~~ Notice of Applications. Within 2 ~~business~~ days after the application is determined to be administratively complete, the applicant must serve ~~copies~~ notice of the application in accordance with this section.

(1) Entities Entitled to ~~Copies~~ Notice of the Application:

(a) the municipal legislative bodies and the municipal and regional planning commissions where the net-metering system will be located;

(b) the host landowner;

(c) all adjoining landowners;

(d) the Department of Public Service;

(e) the Agency of Natural Resources;

(f) the Natural Resources Board, if the proposed net-metering systems is located on a ~~parcel subject to an Act 250 Land Use~~

~~Permit~~resource extraction site;

(g) the Division for Historic Preservation;

(h) the Agency of Agriculture Food and Markets; and

(i) the electric company.

(2) Method of Service.

~~(a) The applicant must provide a copy of the application to the entities named in (1)(a) through (c), above, by certified mail.~~

~~The applicant must cause copies of the application to be transmitted to the entities listed under (1)(d) through (i), above, using the Commission's electronic filing system, or if the applicant is making a paper filing, then using certified mail.~~Notice to state agencies, the electric company, and regional planning commissions will occur through ePUC. The applicant must provide notice to any affected municipal legislative body and planning commission, host landowner, and adjoining landowners by first-class mail, personal delivery, or any other means authorized by the person entitled to service. This notice must include, at a minimum, the case number, a reference and link to the advance submission required under Rule 5.106(C), a general description of the proposed net-metering system and its location, a statement that a complete application has been filed with the Commission and that the case has been opened, and information and a link that will allow the recipient to access the complete application electronically. The notice must also include instructions on how a recipient can contact the applicant to obtain a hard copy of the complete project plans and petition if the recipient is not able to access them electronically. If a hard copy is requested by the recipient, the applicant must serve it by first-class mail or its equivalent within 4 days of the request.

(G) Effect of Failure to Provide Timely Service. The Commission will grant reasonable extensions of time to the entities listed under (F)(1), above, to make a responsive filing when the applicant fails to cause timely service of ~~copies~~ notice of an application.

~~(H) Interconnection. If the electric company finds that the interconnection of the net-~~

metering system will have an adverse effect on system stability or reliability, the electric company shall convey these concerns in writing to the applicant and the Commission by no later than the thirty-first day following the Commission's determination that the application is complete. The electric company's filing must include a recommendation as to how the interconnection issues could be resolved by the applicant. If a concern is raised, a CPG will not issue until the electric company files a letter stating that the concern has been addressed or the Commission finds that the proposed net-metering system may be safely interconnected with the company's distribution grid without having an adverse impact on system stability and reliability. The letter must also describe all improvements to the grid necessary to interconnect the net-metering system. Any dispute between an applicant and the electric company shall be resolved using the dispute resolution procedures contained in Rule 5.500.

5.107 Applications for Net-Metering Systems Greater Than 50 kW That Are Not Roof-Mounted Photovoltaic Systems or Hydroelectric Facilities[DELETED]

(A) Applicability. This application procedure is applicable to net-metering systems greater than 50 kW that are not photovoltaic systems mounted on a roof or hydroelectric facilities.

(B) Advance Notice Requirements. The applicant must provide notice of the application as follows:

(1) Recipients Entitled to Advance Submission. The applicant must provide the following persons with an advance submission, at least 45 days in advance of filing the application with the Commission:

(a) the municipal legislative bodies and municipal and regional planning commissions in the communities where the project will be located;

(b) all adjoining landowners;

(c) the host landowner;

(d) the Department of Public Service;

(e) the Agency of Natural Resources

(f) the Natural Resources Commission, if the proposed net-metering system is located on a parcel subject to an Act 250 Land Use

Permit;

(g) the Division for Historic Preservation;

(h) the Agency of Agriculture Food and Markets; and

(i) the electric company.

(2) Method of Service of Advance Submission. The applicant must cause the advance submission to be served to the entities listed in (1)(a) through (c), above, by certified mail. The applicant must cause the advance submission to be transmitted to the entities listed in (1)(d) through (i), above, using the Commission's electronic filing system, unless the applicant is making a paper filing in accordance with the Commission's rules, in which case service must be by certified mail. With permission from the intended recipient, the applicant may serve a copy of the advance submission via electronic mail.

(3) Contents of Advance Submission. The notice must state that the applicant intends to file a Section 8010 application with the Commission, must identify the location of the project site and the number of any Act 250 Land Use Permit applicable to the host parcel, and must provide a description and site plan of the proposed project in sufficient detail to afford the recipient reasonable notice of the nature of the project so that the recipient is able to make an informed judgment as to any potential impact the construction or operation of the project may have on any interest of the recipient that is within the Commission's jurisdiction to address. The submission must provide contact information and state that the recipient may file inquiries or comments with the applicant about the project and that the recipient will also have an opportunity to file comments with the Commission once the application is filed.

(4) Timing of Advance Submission and Application. If, within 180 days of the date of the advance submission, the applicant has not filed a complete application for the project that fully complies with the filing requirements of this Rule, the submission will be treated as withdrawn without further action required by the Commission.

(C) Filing Requirements. Applications for net-metering systems subject to this

Section 5.107 must contain the following information. Failure to provide any required information will result in the application being deemed incomplete:

(1) Applicant name. The application must include the legal name (and the "doing business as" name, if different), contact information, Vermont business registration number (if applicable), and a description of the company or person making the application. For example:

XYZ Corporation (d/b/a ABC Solar)
Headquarters at 123 Maple Lane, Anytown, VT 05600
Service Agent: Jane Doe, Esq.
VT Business ID#: 12345

(2) Host landowner. The application must include the name and address of the legal owner of the land upon which the proposed net-metering system would be built and the number of any Act 250 Land Use Permit applicable to the host parcel.

(3) Adjoining landowners. The application must include the names and addresses of all adjoining landowners. This information must be obtained from the most recent version of the town's grand list.

(4) Certification that advance submission requirements have been met. The applicant must certify that it has complied with the advance submission requirements listed above.

(5) Site plans. The applicant must provide a site plan for each project. A site plan must include:

(a) Proposed facility location and any project features;

(b) Approximate property boundaries and setback distances from those boundaries to the corner of the nearest project-related structure, approximate distances to any nearby residences, and dimensions of all proposed improvements;

(c) Proposed utilities, including approximate distance from source of power, sizes of service available and required, and approximate locations of any proposed utility or communication lines;

(d) A description of any areas where vegetation is to be cleared or altered and a description of any proposed direct or indirect alterations to or impacts on wetlands or other natural resources

~~protected under 30 V.S.A. § 248(b)(5), including the limits of disturbance, and the total acreage of any disturbed area;~~

~~(e) Detailed plans for any drainage of surface and/or sub-surface water and plans to control erosion and sedimentation both during construction and as a permanent measure;~~

~~(f) Locations and specific descriptions of proposed screening, landscaping, groundcover, fencing, exteriorlighting, and signs;~~

~~(g) Plans of any proposed access driveway, roadway, or parking area at the project site, including grading, drainage, and traveled width, as well as a cross-section of the access drive indicating the width, depth of gravel, paving, or surface materials;~~

~~(h) The latitude and longitude coordinates for the proposed project;~~

~~(i) The presence and total acreage of primary agricultural soils asdefined in 10 V.S.A. § 6001 on each tract to be physically disturbed in connection with the construction and operation of the net-metering system, the amount of those soils to be disturbed, andany other proposed impacts to those soils; and~~

~~(j) The approved site plan from any Act 250 Land Use Permit applicable to the host parcel.~~

~~(6) Elevation drawings.~~

~~(a) For each proposed structure, the applicant must provide elevation drawings.~~

~~(b) The elevation drawings must be to appropriate scales but no smaller than 1"/20'.~~

~~(c) The applicant must include two elevation drawings of the proposed structures drawn at right angles to each other, showing the ground profile to at least 100 feet beyond the edge of any proposed clearing, and showing any guy wires or supports. The elevation drawing must show height of the structure above grade at the base, and describe the proposed finish of the structure.~~

~~(d) The elevation drawing must indicate the relative height of the facility to the tops of surrounding trees as they presently exist.~~

(e) Each plan sheet must be clearly labeled with the project title, date, revision date(s), scale, and name of the person or firm that prepared the plan.

(7) Testimony, exhibits, proposed findings, and proposed CPG. The applicant must address each of the applicable Section 248 criteria through testimony and exhibits. The testimony and exhibits must contain sufficient facts to support a positive finding by the Commission under each of the applicable Section 248 criteria. To the extent that the proposal will result in an adverse impact affecting any of these criteria, the applicant must describe what measures, if any, will be taken to minimize any such impact.

Any witness sponsoring an exhibit or testimony must file a notarized affidavit stating that the information provided is accurate to the best of the witness's knowledge. All exhibits must be sponsored by a witness. The witness must further attest to having personal knowledge to be able to testify as to the validity of the information contained in the exhibit or testimony.

The applicant must file proposed findings of fact and a proposed CPG with the application.

(8) Local and regional plans. The applicant must provide copies of the relevant sections of any town plan and regional plan in effect in the community in which the proposed facility will be located. The applicant must include testimony describing describe how the project complies with or is inconsistent with the land conservation measures in those plans.

(9) Wetland delineation. The applicant must provide either a wetland delineation prepared by a qualified consultant, or a letter from the district wetland ecologist or a qualified consultant stating that no delineation is necessary because the net-metering system will not be proximate to any significant wetlands.

(10) Interconnection.

(a) For net-metering systems with a capacity greater than 150 kW, the applicant must file as part of the application a letter from the

~~electric company stating that the proposed net-metering system may be safely interconnected with the company's distribution grid without having an adverse impact on system stability or reliability. The letter must also describe all improvements to the grid necessary to interconnect the net-metering system.~~

~~(b) For systems with a capacity less than or equal to 150 kW, no letter from the electric company is required as part of the application. However, if the electric company finds that the interconnection of the net-metering system will have an adverse effect on system stability or reliability, the electric company shall convey these concerns in writing to the applicant and the Commission no later than the thirty-first day following the Commission's determination that the application is complete. The electric company's filing must include a recommendation as to how the interconnection issues could be resolved by the applicant. If a concern is raised, a CPG will not issue until the electric company files a letter stating that the concern has been addressed or the Commission finds that the proposed net-metering system may be safely interconnected with the company's distribution grid without having an adverse impact on system stability and reliability. The letter must also describe all improvements to the grid necessary to interconnect the net-metering system. Any dispute between an applicant and the electric company shall be resolved using the dispute resolution procedures contained in Rule 5.500.~~

~~(11) Responses to comments received in response to 45-day advance submission. The applicant must file a document summarizing the comments and recommendations received in response to the 45-day notice. The document must respond to the issues raised in those comments and recommendations and must state what steps the applicant has taken to address those issues or why the applicant is unable to do so.~~

~~(12) Decommissioning plan. All applications for net-metering systems with capacities greater than 150 kW must include a decommissioning plan that provides for the removal and safe disposal of project components and the~~

restoration of any primary agricultural soils, if such soils are present within the net-metering system's limits of disturbance.

(i) Statement of consistency with Act 250 Land Use Permit. If the host parcel is subject to an Act 250 Land Use Permit, the applicant must file a document describing whether the construction of the proposed net-metering system will interfere with the satisfaction of any condition contained in the Act 250 Land Use Permit. If the construction will interfere with the satisfaction of any Act 250 Land Use Permit condition, the applicant must explain what steps it will take to address such issues or why the applicant is unable to do so.

(D) Review for Administrative Completeness. Commission staff will review all filed applications to determine whether they are administratively complete enough to process. Applicants should receive an e-mail message with the results of this review within 5 business days of the date the Commission received the application; however, the expiration of this time period without the receipt of an e-mail message does not constitute a determination that the application is administratively complete enough to process. If the application is found to be complete, the applicant must provide copies of the application to the persons as set forth in Section 5.107(E), below. If the application is found to be incomplete, the applicant will be informed of the deficiencies and will be given an opportunity to cure them. A determination that an application is administratively complete enough to process is not a legal determination regarding the sufficiency of the information included on the application.

(E) Service of Copies of Applications and Notices. Within 2 business 4 calendar days after the application is determined to be administratively complete, the applicant must serve copies of the application or provide notice of the application in accordance with this section.

(1) Entities Entitled to Copies of the Application:

(a) the municipal legislative bodies and the municipal and regional planning commissions where the net-metering system will be located;

(b) the Department of Public Service;

(c) the Agency of Natural Resources;

(d) the Natural Resources Board, if the proposed net-metering system

~~is located on a parcel subject to an Act 250 Land Use Permit;~~

~~(e) the Division for Historic Preservation;~~

~~(f) the Agency of Agriculture Food and Markets; and~~

~~(g) the electric company.~~

~~(h) the host landowner; and~~

~~(i) all adjoining landowners.~~

~~(2) Method of Service.~~

~~(a) The applicant must provide a copy of the application to the entities listed in (1)(a), (h), and (i), above, by certified mail.~~

~~(b) The applicant must cause copies of the application to be transmitted to the entities named in (1)(b) through (g), above, using the Commission's electronic filing system, or if the applicant is making a paper filing, using certified mail.~~

~~(c) The applicant must cause notices under (1)(h) and (i), above, to be served by certified mail.~~

~~(3) Effect of Failure to Provide Timely Service. The Commission will grant reasonable extensions of time to the entities listed in (E)(1) and (2), above, to file comments when the applicant fails to cause timely service of copies of an application or a notice.~~

~~5.109~~5.108 Amendments to Pending Registrations and Applications

(A) ~~Minor Amendment.~~ An applicant may amend a pending Section 5.105 registration by filing an amended registration form in the pending registration case. The applicant must pay the modification fee set forth in 30 V.S.A. § 248c(d). The filing of an amended registration form will trigger a new 14-day review period and a CPG will be deemed issued on the 15th day after the filing, unless otherwise ordered by the Commission.

~~(A)~~(B) An applicant may amend a pending Section 5.106 application by filing a motion in the pending application case. The applicant must pay the modification fee set forth in 30 V.S.A. § 248c(d). Applicants must provide notice of all ~~minor amendments~~ substantial changes to all persons and entities who were entitled to receive a copy of the original application. The ~~notice~~motion must ~~provide~~ include sufficient information, including an amended site plan, so that the Commission can understand the nature of the

proposed change and its impact, if any, ~~on~~under any of the Section 248 criteria. ~~The Commission may request additional information from the applicant; regarding a proposed minor amendment at any time during the review of a net-metering system. Any comments or objections to a proposed minor amendment must be filed within 10 business days of the date the minor amendment was filed with the Commission.~~ In response to a motion to amend, the Commission may, in its discretion:

(1) ~~Major Amendment. An applicant seeking a major amendment must withdraw its application or registration and refile the amended document in accordance with the applicable procedures for that type of net-metering system.~~ request additional information from the applicant;

(2) request comments from interested persons; and

(3) undertake any other process necessary to ensure the adequate review of the proposed amendment.

(C) Effect of amendment on applicable REC and siting adjustors. Except as provided below, the REC and siting adjustors applicable to an amended net-metering system, if any, will be based on the date that the first, complete application or registration was filed with the Commission and not on the date that the amendment request was filed. An amendment or series of amendments that increase the capacity of a net-metering system by more than 5% or 10 kW, whichever is greater, will trigger the application of the most recently adopted siting and REC adjustors to the entire output of the amended net-metering system.

~~(B)~~(D) Any amendment that is a material modification, as that term is defined in Rule 5.500, must be approved by the interconnecting utility before the amendment motion is filed with the Commission.

5.109 ~~Amendments~~Substantial Changes to Approved Net-Metering Systems and Amendment of CPGs

~~(A) Minor Amendment. For ground-mounted systems, certificate holders must provide notice of all minor amendments to the Commission, the Department of Public Service, the Agency of Natural Resources, the Natural Resources Board if the host parcel is subject to an Act 250 Land Use Permit, and any party to the proceeding in which the net-metering system was granted a CPG. For roof-mounted systems, certificate holders must provide notice of all minor amendments to the Commission, the Department of Public Service, the Natural Resources Board if the host parcel is subject to an Act 250 Land Use~~

~~Permit, and any party to the proceeding in which the net-metering system was granted a CPG. The notice must provide sufficient information so that the Commission can understand the nature of the proposed amendment and its impact, if any, on any of the Section 248 criteria. The certificate holder may implement the proposed minor amendments without further action by the Commission unless a written objection is filed with the Commission within 10 business days after the minor amendment notice. If an objection is filed by any of the persons specified in this subsection, the certificate holder may not implement the proposed minor amendment until the objection has been withdrawn or resolved by the Commission.~~

~~(B) Major Amendment. The procedure for obtaining authorization to implement a major amendment is the same as the application procedure for the category of net-metering system applicable to the amended net-metering system.~~

Commission approval is required for any substantial change to the plans of a net-metering system that has been issued or deemed issued a certificate of public good. An amended CPG, necessitated by changes substantial or non-substantial, may be obtained in the following manner:

(A) If the amended system meets the eligibility criteria to register for a CPG under Section 5.105, then the CPG holder may obtain an amended CPG by filing a revised registration form with the Commission. The registration must be filed as a new case in ePUC and will receive a new case number. The CPG holder requesting an amendment must submit the fee due for modifications under 30 V.S.A. § 248c(d)(3)(B).

(B) Amendment of CPGs issued pursuant to Rule 5.106. If the approved net-metering system has not been commissioned at the time the change is proposed, a request for an amendment to the CPG may be filed in the same case in which the CPG was issued. If the case in which the CPG was issued has been closed, the CPG holder must contact the Clerk of the Commission before filing. If the approved net-metering system has been commissioned, then the request for an amendment must be filed in a new case. The CPG holder requesting an amendment must submit the fee due for modifications under 30 V.S.A. § 248c(d)(3)(B).

(1) The CPG holder must provide notice of substantial changes to all parties to the original CPG case and the entities entitled to notice of a new application, including any newly affected adjoining landowners. Notice does not need to be given to previous adjoining landowners who have transferred their interests since the time of the project's approval. New case procedures, including the provision of a 45-day advance submission, do not apply. The request must include evidence addressing each of the applicable Section 248 criteria under which

the change has the potential to have a significant impact.

(2) The CPG holder must provide notice of requests for amendments to CPGs that are the result of non-substantial changes to the parties to the original CPG case. New case procedures, including the provision of a 45-day advance submission, do not apply. The request must include sufficient information for the Commission to determine that the proposed changes do not have the potential for significant impact under the applicable Section 248 criteria.

(C) ~~Maintenance and Repair.~~ The maintenance and repair of net-metering systems and the replacement of equipment with like equipment do not require ~~prior~~advance notice or Commission approval.

(D) Effect of amendment on applicable REC and siting adjustors. Except as provided below, the REC and siting adjustors applicable to an amended net-metering system, if any, will be based on the date that the first, complete application or registration was filed with the Commission and not on the date that the amendment request was filed. An amendment or series of amendments that increase the capacity of a net-metering system by more than 5% or 10 kW, whichever is greater, will trigger the application of the most recently adopted siting and REC adjustors to the entire output of the amended net-metering system.

(E) Any amendment that is a material modification, as that term is defined in Rule 5.500, must be approved by the interconnecting utility before the amendment is proposed to the Commission.

5.110 Transfer and Abandonment of CPGs

(A) ~~Transfer With Change in Ownership of Host Property.~~ A CPG for a net-metering system is deemed to be automatically transferred when the property hosting a net-metering system is sold or legal title is otherwise conveyed to a new owner. The new owner may continue operating the net-metering system provided that~~:~~ the new owner provides written notice of the transfer to the electric company.

~~(A)~~(B) A CPG for a net-metering system that is transferred independently of a change in ownership of the property hosting the net-metering system may be transferred provided that:

(1) the original certificate holder is in compliance with all terms and conditions of the CPG;

(2) the new ~~owner agrees to operate and maintain the net-metering system according to~~ certificate holder complies with all terms and conditions of the CPG and complies with this Rule 5.100; and

(3) within 30 days after acquiring ownership of the system, the new owner of

a ground-mounted system completes and files an official transfer form with the Commission, the Department of Public Service, the Agency of Natural Resources, and the electric company, or within 30 days after acquiring ownership of the system, the new owner of a roof-mounted system completes and files an official transfer form with the Commission, the Department of Public Service, and the electric company.

~~Transfer Separate from Change in Ownership of Host Property. CPG holders seeking to transfer a net-metering CPG separately from a change in ownership of the property hosting the net-metering system must obtain Commission approval prior to transferring a CPG. To obtain Commission approval of a proposed transfer, the current CPG holder and proposed CPG holder must complete and file a form developed for this purpose.~~

(C) Abandonment. Non-use of a CPG for a period of one year following the date the CPG is issued will result in the revocation of the CPG without further action by the Commission. For the purpose of this section, for a CPG to be considered used, the net-metering system must be commissioned. ~~An~~ A CPG holder may obtain an automatic one-year extension of time by providing written notice to the Commission and the electric company. Such notice must be (1) filed in the case in which the CPG was issued or deemed issued, unless the case is closed, in which case the filer should contact the Clerk, and (2) filed before the one-year anniversary of CPG issuance; otherwise the CPG will be deemed revoked. Further extensions will only be granted upon written request and for good cause shown before expiration of the CPG. ~~Prior to construction, a certificate~~A CPG holder may abandon a CPG ~~at any time upon~~ before construction by providing written notice ~~thereof~~ to the Commission, the Department, the Agency of Natural Resources, and the electric company.

5.111 Substantive Criteria of 30 V.S.A. § 248(b) Applicable to Net-Metering CPG Registrations and Applications

Pursuant to 30 V.S.A. § 8010, which provides that the Commission may waive the requirements of 30 V.S.A. § 248(b) that are not applicable to net-metering systems, the Commission will review registrations and applications for net-metering systems for compliance with the following statutory criteria. ~~(~~All other criteria are conditionally waived.~~)~~

(A) For state-jurisdictional hydroelectric net-metering systems and for net-metering systems that are located on a new or existing structure whose primary use is not the generation of electricity or providing support for the placement of equipment that generates electricity: 30 V.S.A. § 248(b)(3) ~~(stability and reliability)~~.

(B) For net-metering systems that are not located on a new or existing structure whose primary use is not the generation of electricity or providing support for the placement of equipment that generates electricity and that elect to *transfer* the tradeable renewable energy credits to the electric company: 30 V.S.A. §§ 248(b)(1) ~~(orderly development)~~; (b)(3) ~~(stability and reliability)~~; (b)(5)~~, (aesthetics, historic sites, air and water purity, the natural environment, the use of natural resources, and public health and safety)~~, except that the applicant does not need to address the effect of the net-metering system on municipal services, educational services, transportation, water conservation, sufficiency of water, existing water supply, or greenhouse gases; (b)(8) ~~(outstanding resource waters)~~; and Section 248(s) ~~(setbacks)~~.

(C) For net-metering systems that are not located on a new or existing structure whose primary use is not the generation of electricity or providing support for the placement of equipment that generates electricity and that elect to *retain* the tradeable renewable energy credits generated by the net-metering system: 30 V.S.A. §§ 248(b)(1) ~~(orderly development)~~; (b)(2) ~~(need)~~; (b)(3) ~~(stability and reliability)~~; (b)(5), ~~(aesthetics, historic sites, air and water purity, the natural environment, the use of natural resources, and public health and safety);~~except that the applicant does not need to address the effect of the net-metering system on municipal services, educational services, transportation, water conservation, sufficiency of water, existing water supply, or greenhouse gases; (b)(8) ~~(outstanding resource waters)~~; and Section 248(s) ~~(setbacks)~~.

5.112 Aesthetic Evaluation of Net-Metering Projects

(A) Quechee Test. In determining whether a net-metering system satisfies the aesthetics criterion contained in 30 V.S.A. § 248(b)(5), the Commission applies the so-called "Quechee test" as described in the case *In Re Halnon,* 174 Vt. 515(2002) (mem.), set forth below:

(1) Step one: Determine whether the project would have an adverse impact on

aesthetics and the scenic and natural beauty of an area because it would not be in harmony with its surroundings. If the answer is no, then the project satisfies the aesthetics criterion. If yes, move on to step two.

(2) Step two: The adverse impact will be found to be undue if any one of the three following questions is answered affirmatively:

(a) Would the project violate a clear, written community standard intended to preserve the aesthetics or scenic, natural beauty of the area?

(b) Would the project offend the sensibilities of the average person?

(c) Have the applicants failed to take generally available mitigating steps that a reasonable person would take to improve the harmony of the proposed project with its surroundings?

(B) Adverse Aesthetic Impact. In order to determine that a project would have an adverse impact on aesthetics and the scenic and natural beauty under subsection (A)(1), above, the Commission must find that a project would be out of character with its surroundings. Specific factors used in making this evaluation include the nature of the project's surroundings, the compatibility of the project's design with those surroundings, the suitability of the project's colors and materials with the immediate environment, the visibility of the project, and the impact of the project on open space.

(C) Clear, Written Community Standard. In order to find that a project would violate a clear, written community standard, the Commission must find that the Project is inconsistent with a provision of the applicable town or regional plan that:

(1) Designates specific scenic resources in the area where the project is proposed. Statements of general applicability do not qualify as clear, written community standards. For example, the general statement that "agricultural fields shall be preserved" would not qualify because the statement does not designate specific resources as scenic. The statement "the agricultural fields to the west of Maple Road are scenic resources that must be preserved" would qualify because it designates specific resources as scenic.

(2) Provides specific guidance for project design. For example, the statement "only dwellings, forestry, and agriculture are permitted within the Maple Road scenic protection area" would be a clear standard because it states

with specificity what type of development is permitted. The statement "all development in the Maple Road scenic protection area must maintain the rural character of the area" would not be a clear standard because it does not state with specificity what type of development is permitted.

(D) Offend the Sensibilities of the Average Person. A project will be found to offend the sensibilities of the average person if the project would be so out of character with its surroundings or so significantly diminish the scenic qualities of the area as to be offensive or shocking to the average person. In determining whether a project would offend the sensibilities of an average person, the Commission will consider the perspective of an average person viewing the project from both adjoining residences and from public vantage points.

(E) Generally Available Mitigating Steps. In determining whether an applicant has taken generally available mitigating steps, the Commission may consider the following:

(1) what steps, such as screening, the applicant is proposing to take;

(2) whether the applicant has adequately considered other available options for siting the project in a manner that would reduce its aesthetic impact;

(3) whether the applicant has adequately explained why any additional mitigating steps would not be reasonable; and

(4) whether mitigation would frustrate the purpose of the Project.

5.113 Setbacks

Applicants seeking authorization to construct a ground-mounted net-metering system must comply with the following minimum setback requirements:

(1) From a state or municipal highway, measured from the edge of the traveled way:

(a) 100 feet for a solar facility with a plant capacity exceeding 150 kW; and

(b) 40 feet for a solar facility with a plant capacity less than or equal to 150 kW but greater than 15 kW.

(2) From each property boundary that is not a state or municipal highway:

(a) 50 feet for a solar facility with a plant capacity exceeding 150 kW; and

(b) 25 feet for a solar facility with a plant capacity less than or equal to 150 kW but greater than 15 kW.

(3) This subsection does not require a setback for a solar facility with a plant capacity equal to or less than 15 kW.

(4) In the case of a net-metering wind turbine, the facility must be set back from all property boundaries and public rights-of-way by a distance equal to at least twice the height of the turbine, as measured from the tip of the blade.

(5) On review of an application, the Commission may either require a larger setback than this subsection requires, or approve an agreement to a smaller setback among the applicant, the municipal legislative body, and each owner of property adjoining the smaller setback.

PART III: PARTICIPATING IN THE REVIEW OF APPLICATIONS FOR CPGS

Part III describes the procedures ~~applicable to~~ available to the public and parties during the review of net-metering applications filed pursuant to Section~~s~~ 5.106 ~~and 5.107~~. Part III does not apply to the review of net-metering registrations filed pursuant to Section 5.105.

5.114 Obtaining Information About a Net-Metering CPG Application

Interested persons may obtain information about a net-metering CPG application by visiting ~~the web portal for the Commission's electronic filing system~~ePUC at https://epuc.vermont.gov or by contacting the Clerk of the Commission.

5.115 Rules and Processes Applicable to the Review of Net-Metering CPG Applications

The purpose of this Rule is to simplify the process of participating in the review of applications for net-metering CPGs. In keeping with this purpose, the process for reviewing CPG applications is described in Sections 5.116 through 5.124, below. ~~The following provisions of the Commission's general rules of practice, Commission Rule 2.200 (Procedures Generally Applicable), do not apply in the review of a net-metering application or a hearing thereon: Commission Rules 2.202 (initiation of proceedings), 2.204(A) (G) (filing and service requirements), 2.205 (notice), 2.207 (time), 2.213 (prefiled testimony), 2.214 (A)(discovery), and 2.216(A) (C) (evidence).~~ Any procedure not described in this Rule is governed by the provisions of Rule 2.200. Where there is a conflict between the procedures described in this Rule and any other Commission rule, the provisions of this Rule govern.

5.116 Submission of Public Comments

When a net-metering application is filed with the Commission, the public may file comments addressing whether the application should be approved. Public comments that do not include a notice of intervention, a motion to intervene, or a request for hearing may be filed using ePUC, by email to puc.clerk@vermont.gov, or in paper. All public comments concerning an application must be filed with the Commission, with a copy sent to the applicant unless the comment was filed in ePUC, within 30 days from the date of notification by the Commission that the application is administratively complete. These public comments will be viewable on the Commission's electronic filing system. The applicant may file a written response to all timely

filed public comments with the Commission within ~~15~~14 ~~calendar~~ days of the close of the 30-day public comment period, unless otherwise directed by the Commission.

5.117 Party Status in Net-Metering CPG Proceedings

(A) When a person wishes to participate in the review of a CPG application as a party, which is a prerequisite to filing an appeal of a final Commission decision, such person must obtain party status from the Commission.

(B) The following persons must obtain party status as follows:

(1) The Vermont Department of Public Service, and the Agency of Natural Resources are parties in any proceeding under this Rule.

~~The Natural Resources Board is a party in any proceeding for which it is entitled to receive notice of an application under this Rule.~~

(2) The following persons will ~~be granted~~obtain party status ~~by~~from the Commission only after filing a notice of intervention. All notices of intervention must be filed using ePUC unless the filing is accompanied by a request for a waiver under Commission Rule 2.107 to allow for paper filings. If a notice of intervention is filed in paper along with a request for a waiver of the requirement to use ePUC, the filer must mail copies of the entire filing to all parties in the case. Filers can obtain a list of names and addresses of the parties in the case by contacting Commission administrative staff at 802-828-2358 or puc.clerk@vermont.gov. The Commission will provide a form for such purpose:

(a) the electric company;

(b) the legislative body and the planning commission of the municipality in which a facility is located, pursuant to 30 V.S.A. § 248(a)(4)(F);

(c) the regional planning commission of the region in which a facility is located;

(d) the regional planning commission of an adjacent region if the distance between the net-metering system's nearest component and the boundary of that adjacent region is less than or equal to 500 feet

or 10 times the height of the facility's tallest component, whichever is greater;

(e) the legislative body and planning commission of an adjacent municipality if the distance between the net-metering system's nearest component and the boundary of that adjacent municipality is less than or equal to 500 feet or 10 times the height of the facility's tallest component, whichever is greater;

(f) adjoining landowners;

(g) the Vermont Agency of Agriculture Food and Markets; ~~and~~

(h) the Vermont Division of Historic Preservation; and

~~(h)~~(i) the Natural Resources Board.

(C) Any other person seeking to participate in a net-metering proceeding as a party must file a motion to intervene either in accordance with Commission Rule 2.209 or by filing a form developed by the Commission for use under this Rule. All motions to intervene must be filed using ePUC unless the filing is accompanied by a request for a waiver under Commission Rule 2.107 to allow for paper filings. If a motion to intervene is filed in paper along with a request for a waiver of the requirement to use ePUC, the filer must mail copies of the entire filing to all parties in the case. Filers can obtain a list of names and addresses of the parties in the case by contacting Commission administrative staff at 802-828-2358 or puc.clerk@vermont.gov.

(D) Any person who obtains party status acquires all of the legal rights and obligations of a party in a Commission proceeding. The filing of public comments on an application and the consideration of such public comments by the Commission do not confer party status. Party status is conferred only upon the filing of a notice of intervention by the persons listed in (B)(3), above, or upon issuance of an order from the Commission granting a duly filed motion to intervene.

5.118 Requests for Hearing

The review of net-metering CPG applications is based upon the information contained in the application filed by the applicant. If a party wishes to offer contrary evidence or to challenge the accuracy of information contained in an application, then the party must request a hearing to present such evidence and argument. A party must file a request for hearing within 30 days from the date of notification by the Commission that the application is administratively complete. The

request must identify the proposed issues to be resolved through the hearing. Unless the party has already been granted party status by the Commission, a request for a hearing must be accompanied by a notice of intervention or motion to intervene, pursuant to Section 5.117 of this Rule.

5.119 Circumstances When the Commission Will ~~Conduct a~~Grant a Request for Hearing

(A) The Commission will grant a request for a hearing only if such request is filed by a party. Such a request may be included with a notice of intervention or motion to intervene. A hearing requested by a party will be granted provided that the request raises:

(1) one or more substantive issues under the applicable Section 248 criteria; or

(2) a substantive issue that is within the Commission's jurisdiction to resolve.

(B) Requests must be supported by more than general or speculative statements. For example, it is not sufficient to state that an application "violates Section 248(b)(5)." Instead, a party should state with specificity why the project raises a substantive issue under the Section 248 criteria. For example: "The application raises an issue under the aesthetics criterion under Section 248(b)(5) because the applicant has not proposed adequate mitigation to screen the western portion of the project from Maple Street."

5.120 ~~Prehearing~~Scheduling Conferences and Status Conferences

In cases where the Commission has determined that a hearing will be held, on reasonable notice the Commission will conduct a ~~prehearing~~scheduling conference prior to the hearing. The Commission may also conduct additional status conferences as necessary. ~~Upon request of a party and in the discretion of the Commission, such conferences may be conducted telephonically~~. The following topics may be addressed at a ~~prehearing~~scheduling or status conference:

(a) clarifying the issues to be addressed at the hearing and, if possible, narrowing them;

(b) identifying evidence, documents, witnesses, stipulations, and other offers of proof to be presented at a hearing;

(c) promoting the expeditious, informal, and nonadversarial resolution of issues and the settlement of differences;

(d) requiring the timely exchange of information concerning the application;

(e) setting a schedule for the prefiling of testimony and exhibits; and

(f) such other matters as the Commission deems appropriate.

5.121 ~~Discovery~~[DELETED]

~~Each party may serve interrogatories, requests for documents, and requests to admit on any other party. The cumulative number of such discovery requests may not exceed 20. For purposes of this limit, each subpart of a discovery request will be counted as a separate request. Any additional discovery may be obtained only upon request of a party and upon order of the Commission where the Commission finds that the requested discovery would not be unduly burdensome or expensive, taking into account such factors as the needs of the case, limitations on the parties' resources, and the importance of the issue in the case. Any discovery dispute must be submitted to the Commission in writing for resolution.~~

5.122 Procedure for Hearings

(A) Notice. Prior to any hearing conducted under this Rule, each party will receive a notice stating the time, place, and nature of the hearing. The notice will include a short and plain statement of the matters at issue in the hearing and a statement of the statutes and rules involved in the case.

(B) Order of Witnesses, Marking of Exhibits. At the hearing the Commission will establish the order in which the parties will present their witnesses and evidence. At that time all exhibits and any other documents to be entered into the record must be marked for identification (for example, Exhibit Applicant-1).

(C) Pre-Filed Testimony and Exhibits. Each party must pre-file a copy of all testimony and exhibits with the Commission. Copies of such filings must be provided to the applicant and other parties at the time of filing. At the discretion of the Commission, parties may present live direct or rebuttal testimony.

(D) Cross-Examination. At the hearing, each party will be afforded a reasonable opportunity to ask questions of other parties' witnesses.

(E) Evidence. The Rules of Evidence, as modified by 3 V.S.A. § 810, apply in hearings under this Rule.

(F) Transcript. Any hearing will be transcribed and a transcript will be made

available to the public by the Commission.

(G) Briefs, Proposed Findings of Fact. At the conclusion of the hearing, the parties will state whether they wish to file proposed findings of fact or legal briefs. A schedule for making such filings will be established, if necessary.

5.123 Decisions

After the conclusion of the hearing and after the submission of any briefs and proposed findings of fact, the Commission will issue a written decision in the case. In a case where a majority of the Commission members have not heard the case or read the record, a proposal for decision will be provided to the parties for comment and opportunity for oral argument prior to the issuance of a final decision.

5.124 Appeals of Commission Decisions

Information about how to appeal a Commission decision to the Vermont Supreme Court will be provided with any final order from the Commission.

PART IV: THE NET-METERING PROGRAM

5.125 Pre-Existing Net-Metering Systems

(A) Eligibility. A pre-existing net-metering system must:

(1) have a complete CPG application filed with the Commission prior to January 1, 2017; ~~and~~

(2) the complete CPG application must have been filed at a time when the electric company was accepting net-metering systems pursuant to 30 V.S.A. § 219a(h)(1)(A) as the statute existed on December 31, 2016, orqualified under state law as a system that did not count towards the capacity limit on net-metering contained in that statute~~.~~; and

~~(2)~~(3) not have been amended to increase its capacity by more than 5% or 10 kW, whichever is greater, after the effective date of this Rule.

(B) ~~Rules Applicable to the Review of CPG Applications for Pre-Existing Net-Metering Systems. Any complete CPG application filed prior to January 1, 2017, shall be reviewed pursuant to the version of Rule 5.100 that was in effect at the time the complete application was filed.~~[DELETED]

(C) Applicable Rates for Pre-Existing Net-Metering Systems. Customers using pre-existing net-metering systems shall, for a period of 10 years from the date of the net-metering system's commissioning, be credited for generation according to the rates and incentives provided for in 30 V.S.A. § 219a, as the statute existed on December 31, 2016, and the Commission's rules implementing that statute. If the customer's system was commissioned before the electric company's first rate schedule to comply with Section 219a(h)(1)(K) took effect, then the 10-year period shall run from the effective date of the electric company's first rate schedule implementing the incentive. At the end of the applicable 10-year period, customers using pre-existing net-metering systems shall be credited for excess generation as provided in Section 5.126 of this Rule or its successor.

(D) Non-Bypassable Charges. For a period of 10 years from the date that a pre-existing net-metering system was commissioned, a customer using that net-metering system may apply any accrued net-metering credits to any charge irrespective of whether that charge is a non-bypassable charge.

(E) Adjustors Not Applicable to Pre-Existing Net-Metering Systems. Pre-existing net-metering systems are not subject to any siting adjustors or REC adjustors established under this Rule.

(F) Tradeable Renewable Energy Credits. Any tradeable renewable energy credits created by pre-existing net-metering systems will continue to be either retained by the customer or transferred to the electric company per the election made by the applicant at the time of application for its CPG. For CPG applications filed prior to the time when such election was available, tradeable renewable energy credits are retained by the customer.

(G) Existing Groups Using Pre-Existing Net-Metering Systems. Notwithstanding Sections 5.129(C) through (E), an existing group or customer may have more than 500 kW of pre-existing net-metering systems attributed to the group or customer if these net-metering arrangements were requested prior to January 1, 2017.

(H) Provisions of This Rule Applicable to Pre-Existing Net-Metering Systems. Pre-existing net-metering systems are subject only to the following provisions of this Rule.

(1) 5.109 (Amendments to Approved Net-Metering Systems);

(2) 5.110 (Transfers and Abandonment);

(3) 5.126 (Energy Measurement), except as modified by (C), above, and except that a customer is not required to install a production meter at a pre-existing system pursuant to 5.126(A)(1);

(4) 5.129 (Billing Standards and Procedures);

(5) 5.131 (Interconnection Requirements);

(6) 5.132 (Disconnection of Net-Metering Systems);

(7) 5.135 (Participation in Wholesale Markets);

~~(6)~~(8) 5.137 (Energy Storage Facility Electrically Connected to a Net-Metering System); and

~~(7)~~(9) ~~5.134~~5.138 (Compliance Proceedings).

(I) All other net-metering systems are subject to all provisions of this Rule.

5.126 Energy Measurement for Net-Metering Systems

(A) Electric energy measurement for net-metering systems must be performed in the following manner:

(1) At its own expense, the applicant must install a production meter to measure the electricity produced by the net-metering system.

(2) Individual Net-Metering System Billing: For customers who elect to wire net-metering systems such that they offset consumption on the billing meter, the billing meter establishes billing determinants for the customer's bill based on the rate schedule for the customer.

(a) At the end of the billing period, the electric company must net electricity produced with electricity consumed.

(i) If electricity consumed by the customer exceeds the electricity produced by the net-metering system, the customer must be billed the difference, net of any credit accumulated in the preceding 12 months. Credits may not be applied to non-bypassable charges as identified in a utility's tariff.

(ii) If the electricity produced by the net-metering system exceeds the electricity consumed, the excess generation must be monetized at the applicable blended residential rate. The monetized credit applies to all charges on the bill not identified as non-bypassable charges in a utility's tariff.

(iii) For the first 10 years after the system is commissioned, any zero or positive siting or REC adjustor set forth in the net-metering facility's CPG is multiplied by the kWh from the production meter and applied to the bill as a credit. For example, the $0.01/kWh siting adjustor for net-metering systems 15 kW or less will result in such systems receiving a bill credit of $0.01/kWh multiplied by all kWh on the production meter.

(iv) Any negative siting or REC adjustor set forth in the net-metering facility's CPG is multiplied by the kWh from the production meter and applied to the bill as an additional

charge. For example, the -$0.03/kWh REC adjustor for net-metering systems that retain their RECs will result in such systems receiving a bill charge of $0.03/kWh multiplied by all kWh on the production meter.

(v) If credits remain after being applied to all charges not identified in an electric company's tariff as non-bypassable charges, such credits must be tracked, applied, or carried forward on customer bills, as described in Section 5.129.

(3) Group Net-Metering System Billing for Systems Not Directly Interconnected: For customers who elect to wire group net-metering systems such that they offset consumption on the billing meter, the billing meter establishes the billing determinants for the customer's bill based on the rate schedule for the customer.

(a) At the end of the billing period, the electric company must net electricity produced with electricity consumed on the generation account.

(i) If electricity consumed by the customer exceeds the electricity produced by the net-metering system, the customer must be billed the difference, net of any credit accumulated in the preceding 12 months. Credits may not be applied to non-bypassable charges as identified in a utility's tariff.

(ii) If the electricity produced by the net-metering system exceeds the electricity consumed, the excess generation must be allocated to group members and monetized at the applicable blended residential rate. The monetized credit applies to all charges on the bill not identified as non-bypassable charges in a utility's tariff.

(iii) For the first 10 years after the system is commissioned, any zero or positive siting or REC adjustor set forth in the net-metering facility's CPG is multiplied by the kWh from the

production meter, allocated to the group members and applied to the bills as credits. For example, the $0.01/kWh siting adjustor for net-metering systems 15 kW or less will result in such systems receiving a bill credit of $0.01/kWh multiplied by all allocated kWh from the production meter.

(iv) Any negative siting or REC adjustor set forth in the net-metering facility's CPG is multiplied by the kWh from the production meter, allocated to the group members, and applied to the bills as additional charges. For example, the negative $0.03/kWh REC adjustor for net-metering systems that retain their RECs will result in such systems receiving a bill charge of $0.03/kWh multiplied by all allocated kWh from the production meter.

(v) If credits remain on group members' bills after being applied to all charges on the bills not identified as non-bypassable charges in an electric company's tariff, such credits must be tracked, applied, or carried forward on group member bills, as described in Section 5.129.

(4) Group Net-Metering System Billing for Systems Directly Interconnected: For customers who elect to wire group net-metering systems such that the generation is directly connected to the utility grid and does not also offset any customer's billing meter, the electricity produced by the net-metering system, all of which is excess generation as defined in this Rule, must be allocated to the group members and monetized at the applicable blended residential rate before netting. The monetized credit applies to all charges on the bill not identified as non-bypassable charges.

(a) For the first 10 years after the system is commissioned, any zero or positive siting or REC adjustor set forth in the net-metering facility's CPG is multiplied by the kWh from the production meter, allocated to the group members, and applied to the bills as credits. For example, the $0.01/kWh siting adjustor for net-metering

systems 15 kW or less will result in such systems receiving a bill credit of $0.01/kWh multiplied by all allocated kWh from the production meter.

(b) Any negative siting or REC adjustor set forth in the net-metering facility's CPG is multiplied by the kWh from the production meter, allocated to the group members, and applied to the bills as additional charges. For example, the negative $0.03/kWh REC adjustor for net-metering systems that retain their RECs will result in such systems receiving a bill charge of $0.03/kWh multiplied by all allocated kWh from the production meter.

(c) If credits remain on group members' bills after being applied to all charges on the bills not identified as non-bypassable charges in an electric company's tariff, such credits must be tracked, applied, or carried forward on group member bills, as described in Section 5.129.

(B) As part of a tariff filed for Commission approval pursuant to this Rule, an electric company may propose alternative methods of energy measurement for group net-metering systems if the application of Section (A), above, would cause unreasonable administrative burdens for the electric company. Such alternatives may not displace any of the applicable adjustors, credits, or charges provided inthis Rule.

5.127 Determination of Applicable Rates and Adjustors

(A) Depending on the electric company service territory in which the net-metering system is located, the blended residential rate used to determine the value of net-metering credits is the lowest of the following:

(1) For electric companies whose general residential service tariff does not include inclining block rates, the $/kWh charge set forth in that utility's tariff for general residential service;

(2) For electric companies whose general residential service tariff includes 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 whose general residential service tariff includes inclining block rates must perform this calculation (1) by May 15 of each even-numbered year and (2) ~~within 15 days of the effective date of a new~~when the electric company requests approval of a tariff for general residential service that includes a change in rates of more than 5%. To the extent the calculation shows that there has been a change from the rate then in effect, the electric company must file by that same date a revision to its net-metering tariff to reflect the change. Any change to the blended residential rate calculated pursuant to (1) of this subsection may be included in a tariff compliance filing made pursuant to Section 5.128(H) of this Rule. Any change to the blended residential rate calculated pursuant to (2) of this subsection must be filed as a separate tariff case at the same time the electric company files proposed revisions to its general residential service rates; or

(3) The weighted average of the blended residential rates for all Vermont electric companies. The average is weighted by the annual retail sales of the electric companies.

(B) The REC adjustors are determined as follows:

(1) At the time an application for authorization to construct the net-metering system is filed with the Commission, the applicant must elect whether to retain ownership of any RECs generated by the system or whether to transfer such RECs to the electric company. This election is irrevocable. The electric company must retire all RECs transferred to it by a net-metering customer.

(2) The REC adjustor for a net-metering system must be calculated in dollars per kWh ($/kWh) at the time the Commission issues the net-metering system a CPG. A zero or positive REC adjustor applies for a period of 10 years from the date the system is commissioned; a negative REC adjustor applies in perpetuity. Except for systems that register

pursuant to Section 5.105 of this Rule, both the amount and the term of the REC adjustor will be stated in the net-metering system's CPG.

~~(3) Initial~~The value of the REC adjustors ~~at the time this Rule becomes effective (January 1, 2017) are as follows:~~are those set in the most recent biennial update order issued by the Commission pursuant to Section 5.128.

~~(4) REC Adjustor (Transfer) = 3 cents per kilowatt hour;~~

~~REC Adjustor (Retention) = negative 3 cents per kilowatt hour.~~

~~(5)~~(3) Hydroelectric facilities net-metering under this rule are not subject to a REC adjustor.

(C) The siting adjustors are determined as follows:

(1) In order to provide incentives for the appropriate and beneficial siting of net-metering systems, each net-metering system may receive the highest-value siting adjustor for which it meets the applicable criteria. The net-metering system's siting adjustor must be expressed in dollars per kWh ($/kWh) at the time the Commission issues the net-metering system a CPG. A zero or positive siting adjustor applies for a period of 10 years from the date the system is commissioned; a negative siting adjustor applies in perpetuity. Except for systems that register pursuant to Section 5.105 of this Rule, both the amount and the term of the siting adjustor must be stated in the net-metering system's CPG.

(2) The ~~initial~~value of the siting adjustors ~~at the time this Rule becomes effective (January 1, 2017) are as follows:~~ for Category I through IV facilities and hydroelectric facilities are those set in the most recent biennial update order issued by the Commission pursuant to Section 5.128.

~~(a) Category I = 1 cent per kilowatt hour;~~

~~(b) Category II = 1 cent per kilowatt hour;~~

~~(c) Category III = negative 1 cent per kilowatt hour;~~

~~(d) Category IV = negative 3 cents per kilowatt hour;~~

~~(e) Hydroelectric facilities = 0 cents per kilowatt hour.~~

5.128 Biennial Update Proceedings

(A) The Commission must conduct a biennial update in ~~2018~~ 2024 and every two years thereafter to update the following:

(1) REC adjustors;

(2) siting adjustors;

(3) the statewide blended residential rate; and

(4) the eligibility criteria applicable to Categories I, II, III, and IV net-metering systems.

(B) In updating the REC adjustors, the Commission must consider:

(1) 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;

(2) the total amount of renewable energy capacity commissioned in Vermont in the most recent two years;

(3) the disposition of RECs generated by net-metering systems commissioned in the past two years; and

(4) any other information deemed appropriate by the Commission.

(C) In updating the siting adjustors, the Commission must consider:

(1) the number and capacity of net-metering systems receiving CPGs in the most recent two years;

(2) the extent to which the current siting adjustors are affecting siting decisions;

(3) whether changes to the qualifying criteria of the categories are necessary;

(4) the overall pace of net-metering deployment; and

(5) any other information deemed appropriate by the Commission.

(D) On or before ~~February~~ March 1 of each even-numbered year, each electric company must file ~~with the Commission and the Department of Public Service~~ in the biennial update investigation case a form developed by the Commission in consultation with the Department and the electric companies. The form will collect the following information regarding the state of the electric company's net-metering program:

(1) the number of net-metering systems interconnected with the electric company's distribution system during the past two years;

(2) the capacity of each system;

(3) the fuel source of each system;

(4) the REC disposition of each system;

(5) the siting adjustor applicable to each system; ~~and~~

(6) any other information the electric company believes to be relevant to the biennial update; and

~~(6)~~(7) any other information required by the Commission's form.

(E) By no later than ~~March~~April 1 of each even-numbered year, the Department of Public Service and the Agency of Natural Resources may file ~~with the Commission~~in the biennial update investigation case any proposed updates to the items specified in Section 5.128(A)(1)-(4) and reasons therefor.

(F) Any person may file comments on the filings under (D) and (E), above, by ~~March~~April 15.

(G) By ~~May~~June 1 of each even-numbered year, the Commission may by order update the items specified in Section 5.128(A)(1)-(4), as necessary. Adjustors must be determined to ensure that net-metering deployment occurs at a reasonable pace and in furtherance of State energy goals.

(H) Electric companies must file no later than ~~May~~June 15 revisions to their net-metering tariffs that incorporate the new values set forth by the Commission in its biennial update order. Each tariff must be filed as a new tariff case in ePUC. Such tariffs must have an effective date of ~~July~~August 1. This tariff compliance filing may not include any other proposed changes to the utility's net-metering tariff, except for a proposed change to the utility's blended residential rate calculated pursuant to Section 5.127(A) of this Rule.

(I) Notwithstanding the above, the Commission may conduct an update sooner than biennially at its own discretion or upon petition by the Department.

5.129 Billing Standards and Procedures

(A) Customer Billing Requirements. The bill of a net-metering customer must include the following:

(1) the dollar amount of any credits carried forward from the previous months;

(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; and

(5) the total kWh generated by the net-metering system in the current month.

(B) Accumulated Bill Credits. Any accumulated bill credit must be used within 12 months from the month it is earned, or it reverts to the electric company without any compensation to the net-metering customer. Bill credits may not be transferred independently 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 a time. Customers with multiple accounts may enroll each account in a separate net-metering group.

(D) 500 kW Customer Limit. The cumulative capacity of net-metering systems allocated to a single customer may not exceed 500 kW, except as provided in Rule 5.129(F), below. For example, a customer who has two accounts cannot have each account allocated more than 50 percent of the output from two 500 kW net-metering systems because the cumulative capacity of the allocated share of those net-metering systems would exceed 500 kW.

(E) Multiple Net-Metering Systems in a Group. Groups may~~, subject to Commission approval,~~ have more than one net-metering system attributed to a group and may increase the capacity of existing generation attributed to the group. However, the cumulative capacity of net-metering systems attributed to a group may not exceed 500 kW, except as provided in Rule 5.129(F), below.

(F) Cumulative Capacity of School Net-Metering Systems. The cumulative capacity of net-metering systems allocated to a single customer:

(1) that is a public school, as defined in 16 V.S.A. § 11(7); an independent school, as defined in 16 V.S.A. § 11(8); a supervisory union, as defined in 16 V.S.A. § 11(23); or a school district, as defined in 16 V.S.A. § 11(10), must not exceed 1 MW.

(2) that is a school district, as defined in 16 V.S.A. § 11(10), or a supervisory union, as defined in 16 V.S.A. § 11(23), created as a result of school

district consolidation under 2010 Acts and Resolves No. 153, 2012 Acts and Resolves No. 156, or 2015 Acts and Resolves No. 46, each as amended, must not exceed the greater of:

(a) the cumulative capacity of the net-metering systems that the school districts were participating in, or had agreed to participate in, prior to consolidation; or

(b) 1 MW.

~~(F)~~(G) Group Member Allocations. Where the customer has, at its own expense, provided a separate meter for measuring production, the kWh produced by a net-metering system may be allocated to the accounts of a single customer or the accounts of group members. Where there is no separate production meter, only the excess generation may be allocated to accounts belonging to a single customer or to the accounts of members of a group.

5.130 Group System Requirements

(A) In addition to any other requirements in 30 V.S.A. §§ 248 and 8010, and in any applicable Commission rules, before a group system may be formed and served by an electric company, the group must file the following information with the electric company:

(1) The meters to be included in the group system, which must be located within the same electric company service territory;

(2) A process for adding and removing meters in the group and an allocation of 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 5.130(A)(3), and any such change may only apply on a prospective basis;

(3) The name and contact information for a designated person who is 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 may not in any way require the involvement of the electric company, the

Commission, 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 must implement appropriate changes to a net-metering group within 30 days after receiving written notification of such changes from the person designated under subsection 5.130(A)(3). Written notification of a change in the person designated under subsection 5.130(A)(3) is effective upon receipt by the electric company. The electric company is not liable for the consequences from actions based on such notification.

(C) For each group member's customer account, the electric company must bill that 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 must be based on the individual meter for the account.

5.131 Interconnection Requirements

The interconnection of all net-metering systems is governed by Commission Rule 5.500. The applicant bears the costs of all equipment necessary to interconnect the net-metering system to the distribution grid and any distribution system upgrades necessary to ensure system stability and reliability.

5.132 Disconnection of a Net-Metering System

The following procedures govern the disconnection of a net-metering system from the electrical system. These procedures apply to net-metering systems only and do not supplant Commission Rules 3.300 and 3.400 relating to company disconnection in general. A customer who initiates a permanent disconnection of a net-metering system must notify the electric company. The electric company must notify the Commission and the Department of the disconnection.

(A) In the event the electric company must perform an emergency disconnection of a net-metering system, the electric company must notify the customer within 24 hours after the disconnection. For the purpose of this section, the term "emergency" means a situation in which continued interconnection of the net- metering system is imminently likely to result in significant disruption of service or endanger life or property.

(B) If the emergency is not caused by the operation of the net-metering system, the

company must reconnect the net-metering system upon cessation of the emergency.

(C) If the emergency is caused by the operation of the net-metering system, the electric company must communicate the nature of the problem to the customer within 5 days, and attempt to resolve the problem. If the problem has not been resolved within 30 days of an emergency disconnection, the electric company must file a disconnection petition with the Commission.

(D) Non-emergency disconnections must follow the same procedure as emergency disconnections in subsection B above, except that the electric company must give written notice of the disconnection no earlier than 10 days and no later than ~~3 working~~5 days prior to the first date on which the disconnection of the net-metering system is scheduled to occur. Such notice must communicate to the customer the reason for disconnection and the expected duration of the disconnection. With written consent from the customer, an electric company may arrange to provide the customer with notice of non-emergency disconnections on terms other than those set forth in this Rule, provided that the electric company first informs the customer of the provisions of this Rule and that the customer may contact the Consumer Affairs and Public Information Division of the Vermont Department of Public Service. For group systems, such consent may be obtained from the person designated under Section 5.130(A)(3).

(E) A customer who is involuntarily disconnected may file a written complaint with the Commission at any time following disconnection. The customer must provide a copy of the complaint to the electric company and the Department of Public Service. Within 30 days of the date the complaint is filed, the Commission may hold a hearing to investigate the complaint. In the event of the filing of such a complaint, the electric company must carry the burden of proof to demonstrate the reasonableness of disconnection.

5.133 Electric Company Requirements

(A) Generally. Electric companies:

(1) Must make net-metering available to any customer or group on a first-come, first-served basis as determined by the order in which customers file a complete interconnection application;

(2) Must track credits by the month and year created and apply them on a first-created, first-used basis;

(3) May charge a reasonable fee for establishment, special meter reading, accounting, account correction, and account maintenance for a net-metering system;

(4) May, prior to interconnection, charge a reasonable fee to cover the cost of electric company distribution system improvements necessary to safely and reliably serve the net-metering customer;

(5) May require a customer to install advanced metering infrastructure prior to serving the net-metering customer;

(6) May require that all meters included within a group system be read on the same billing cycle; and

(7) May require energy efficiency audits for customers seeking to install and operate a net-metering system if they are:

(a) a residential customer with historic energy consumption of 750 kWh or more per month; or

(b) a commercial or industrial customer.

(B) Each electric company with net-metering customers must maintain current records of the number, individual capacity, cumulative capacity, and disconnections of net-metering generation installed within its service territory.

5.134 ~~Electric Company Tariffs~~[DELETED]

~~Tariffs. Pursuant to 30 V.S.A. § 225, an electric company must propose for Commission approval a tariff to implement a net-metering program in its service territory pursuant to this Rule within 60 days after the effective date of this Rule. In connection with filing such tariffs, an electric company may request additional time to implement any provision of this Rule. The Commission will grant reasonable requests where there is good cause shown.~~

5.135 Participation in Wholesale Markets

No net-metering system may participate in a wholesale market unless the Commission finds that such participation will not harm the interests of Vermont ratepayers and will be in the public good.

5.136 Locational Adjustor Fee

An electric company may propose for Commission approval a tariff assessing a locational adjustor fee on new net-metering systems located in constrained or limited-headroom areas of the grid. The fee will be assessed on a per-kilowatt basis and collected before a net-metering system is energized. The amount of the fee must reflect the incremental economic harm caused by constructing additional generation in the area or the incremental cost to ratepayers of expanding the available grid capacity in the area. The electric company tariff must describe the physical boundaries of the constrained area or limited headroom area; existing and forecasted load and generation within the area; the capacity of the distribution, sub-transmission, or transmission system within the area; any other affected distribution utility, or VELCO, that is potentially affected by the addition of generation to the area, particularly in cases where it is the sub-transmission or transmission system that is facing a constraint; and any other factors relevant to the determination of whether a locational adjustor is just and reasonable. The tariff must also provide a method for allocating any fees collected among other electric companies affected by the constraint. A tariff proposed under this section may apply to new electric generation facilities other than net-metering systems.

5.137 Energy Storage Facility Electrically Connected to a Net-Metering System

(A) An energy storage facility that is electrically connected to a net-metering system must be configured such that the customer cannot receive net-metering compensation for electricity drawn from a source other than the net-metering system.

(B) No electric company may allow an energy storage facility to be interconnected in a manner that allows electricity generated by any source other than a net-metering system to receive net-metering compensation.

PART V: COMPLIANCE PROCEEDINGS

~~5.135~~5.138 Compliance Proceedings

(A) In response to a complaint filed by any member of the public or on its own motion, the Commission may open a compliance proceeding or refer matters concerning whether an approved net-metering system is complying with the terms of its CPG or any applicable law within the Commission's jurisdiction to the Department of Public Service for investigation and to make a recommendation as to whether the Commission should open a compliance proceeding or take any other steps necessary to ensure that the net-metering system continues to serve the public good.

(B) ~~After considering the Department's recommendation t~~The Commission may take any or all of the following steps to ensure that a net-metering system is constructed and operated in compliance with the terms and conditions of the CPG issued for that net-metering system and any related Commission order:

(1) Direct the certificate holder to provide the Commission with an affidavit under oath or affirmation attesting that the person, company, or corporation or any facility or plant thereof is in compliance with the terms and conditions of the CPG pursuant to 30 V.S.A. § 30(g);

(2) Direct the certificate holder to provide additional information;

(3) Dismiss the complaint;

(4) After notice and opportunity for hearing, amend or revoke any CPG for a net-metering system, impose a penalty under 30 V.S.A. § 30, or order remedial activities for any of the following causes:

(a) The CPG or order approving the CPG was issued based on material information that was false or misleading;

(b) The system was not installed, or is not being operated, in accordance with the National Electrical Code or applicable interconnection standards;

(c) The net-metering system was not installed or is not being operated

in accordance with the plans and evidence submitted in support of the application or registration form or with the findings contained in the order approving the net-metering system;

(d) The holder of the CPG has failed to comply with one or more of the CPG conditions, the order approving a CPG for the net-metering system, or this Rule; or

(e) Other good cause as determined by the Commission in its discretion.

(C) If, assuming the allegations in the complaint are true, the Commission determines that there is no probability of a violation of any CPG condition, Commission order, or any applicable law, the Commission will dismiss the complaint and inform the complainant and CPG holder of such dismissal.

History: Effective March 1, 2001; revised July, 2003; revised November 1, 2007; revised April 15, 2009; revised January 27, 2014; revised July 1, 2017.

Solar Siting Task Force Report

To the Vermont House and Senate Committees on Natural Resources and Energy, the House Committee on Commerce and Economic Development, and the Senate Committee on Finance

January 22, 2016

Overview

Charge

Act 56 of 2015, Section 26g, created the Solar Siting Task Force to study the design, siting, and regulatory review of solar electric generation facilities and provide a report in the form of proposed legislation with the rationale for each proposal.

Membership

The membership of the Solar Siting Task Force, per direction provided by Act 56, was:

Commissioner of Public Service or Designee: **Commissioner Christopher Recchia (Chair)**
Commissioner of Housing and Community Development or Designee: **Commissioner Noelle MacKay**
Secretary of Natural Resources or Designee: **Secretary Deb Markowitz**
Representative of the Vermont League of Cities and Towns: **Karen Horn**
Representative of the Vermont Planners Association: **Sharon Murray**
Representative of the Vermont Association of Planning and Development Agencies: **Adam Lougee**
Representative of Renewable Energy Vermont: **Andrew Raubvogel**
Representative of an electric distribution utility: **Robert Dostis**
Landscape architect: **Mitch Lefevre**
Vermont resident with public policy and environmental and energy expertise: **Sam Swanson (Vice Chair)**

Meetings

The Solar Siting Task Force met 10 times with a first meeting on July 28, 2015 and a final meeting on January 21, 2016. Meeting materials are available for review at http://solartaskforce.vermont.gov/announcements-meetings and http://solartaskforce.vermont.gov/materials.

Participants

The following individuals provided testimony to the Solar Siting Task Force, in order of appearance:

Dr. Asa Hopkins, Director of Planning and Energy Resource Development, Department of Public Service, on State Energy Goals, Portfolio Options, and Solar Land Use Implications

David Raphael, Landscape Architect and Planner, LandWorks, on Solar Aesthetics Guidance

Lou Borie and Jon Groveman, Natural Resources Board and **Jeannie Oliver**, Department of Public Service, providing an overview of Act 250 and 30 V.S.A. § 248

Sharon Murray, Vermont Planners Association, on Overview of 24 V.S.A. Chapter 117, State Land Use Goals and Energy

Peter Rothschild, New Haven Planning Commission, on Town Experience and Suggestions for Solar Development

Chad Farrell, Encore Redevelopment, on Developer Experience and Suggestions for Solar Development

Jeannine McCrumb - Charlotte Town Planner, **Ron Bouchard** - Shelburne Planning Commission, **Peter Rothschild** - New Haven Planning Commission, and **Mel Adams** - Randolph Town Manager – panel discussion providing town perspective

Tom Garden - Triland Partners, **Rod Viens** - GroSolar**, Luke Shullenberger** - Green Lantern Development, and **Nathanial Vandal** - Green Peak Solar – panel discussion providing developer perspective

Jim Sullivan - Bennington County Regional Commission, **Taylor Newton** - Northwest Regional Planning Commission, **Chris Sargent** - Two Rivers-Ottauquechee Regional Commission – providing an overview and update on the Regional Energy Planning Pilot

Jon Copans , Asa Hopkins, and Anne Margolis of the Department of Public Service – providing an overview of the Public Service Board's draft Net Metering Rule.

Diane Bothfeld - Agency of Agriculture, Food, and Markets Deputy Secretary – providing an update on Agricultural Soils and Solar Development

Presentations made to the Solar Siting Task Force are available at http://solartaskforce.vermont.gov/announcements-meetings.

Public Comment

The Solar Siting Task Force also heard from many stakeholders through verbal and written public comment. Thirty-five members of the public spoke over the course of the Solar Siting Task Force's meetings, and an additional 122 written public comments were received. Public comments provided to the Solar Siting Task Force are available at http://solartaskforce.vermont.gov/comments.

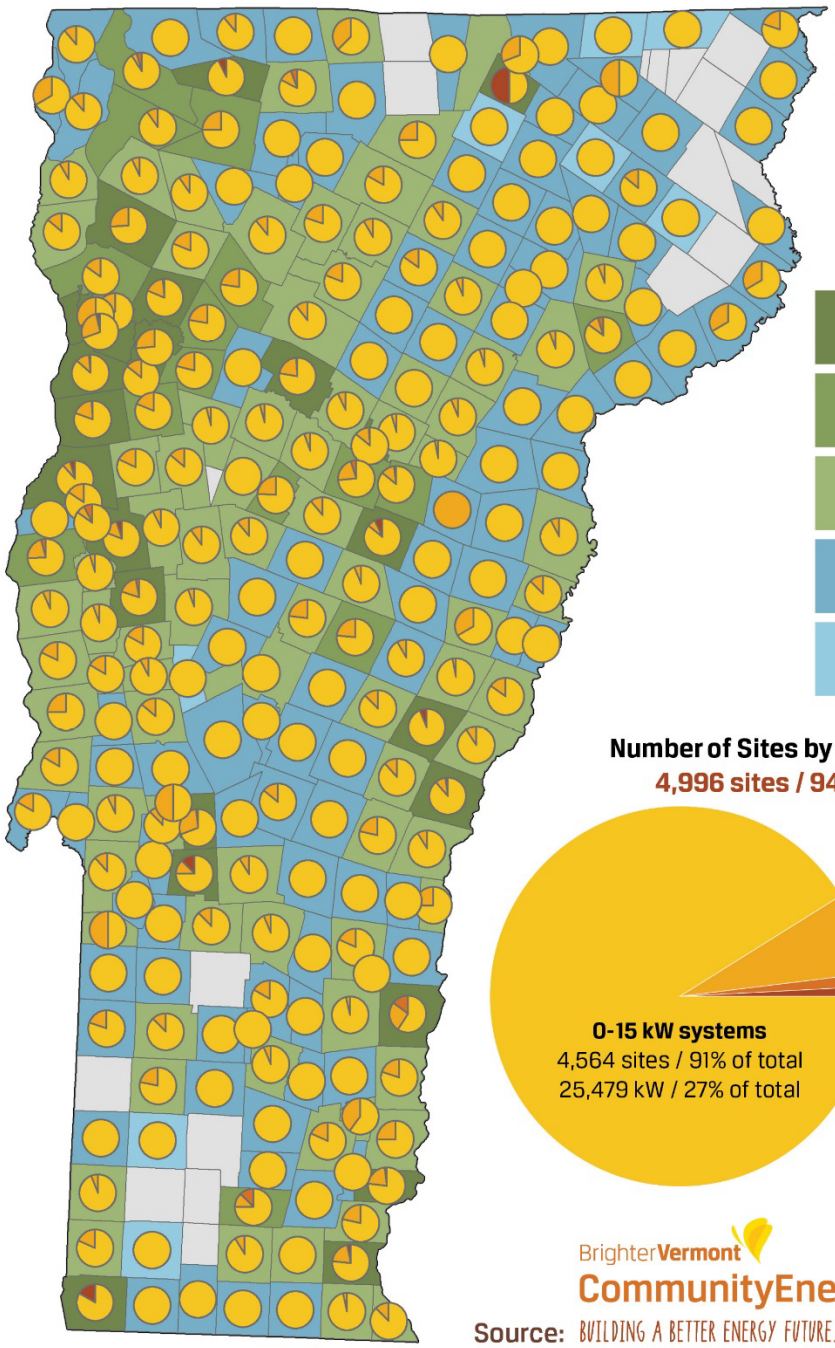
Current Trends in Solar Generation in Vermont

Vermont, like much of the rest of the U.S., has seen tremendous growth in solar photovoltaic (solar PV) electric generation since 2010. The Standard Offer program, net metering, and power purchase agreements (PPAs) directly with utilities are all serving as vehicles to enable growth in solar generation here in Vermont. As a measure of the current growth of solar development in Vermont, it took Green Mountain Power (GMP) from 2008 to 2014 to hit a net metering cap of 4% of peak load. Act 99 of 2014 raised the cap to 15%, and it took GMP less than two years to receive enough interconnection requests to hit the increased cap.

Exhibit 1. Total installed or applied for solar PV capacity of solar by town as of September 2015, and the relative number of projects by size within each town.

September 2015

All Solar PV by Town



Note: this map only depicts the location of generation sites and does not account for capacity factors, renewable energy credits sold, or ownership of systems.

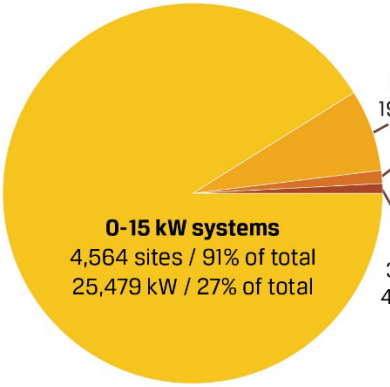
Many more solar projects—representing thousands of kilowatts— have been permitted but not yet built.

Legend

- 1,001 - 8,000 kW
- 501 - 1,000 kW
- 101 - 500 kW
- 6 - 100 kW
- 1 - 5 kW

Number of Sites by System Size

4,996 sites / 94,860 kW



0-15 kW systems
4,564 sites / 91% of total
25,479 kW / 27% of total

15-150 kW systems
346 sites / 7% of total
19,054 kW / 20% of total

150-500 kW systems
56 sites / 1% of total
8,734 kW / 9% of total

>500 kW systems
30 sites / 0.6% of total
41,593kW / 44% of total

BrighterVermont
CommunityEnergyDashboard

Source: BUILDING A BETTER ENERGY FUTURE. TODAY.

There are a number of factors that explain the rapid growth of solar in Vermont, but one primary driving force has been the steep decline in the cost of solar PV panels. As a measure of the rapid drop in the cost of solar, the avoided cost price cap for the Standard Offer program was $.24/kWh for solar projects in 2010. By 2015, the Standard Offer auction for solar projects resulted in a drop of over 50% to under $.11/kWh. This matches national trends in the pricing of larger-scale solar installations.

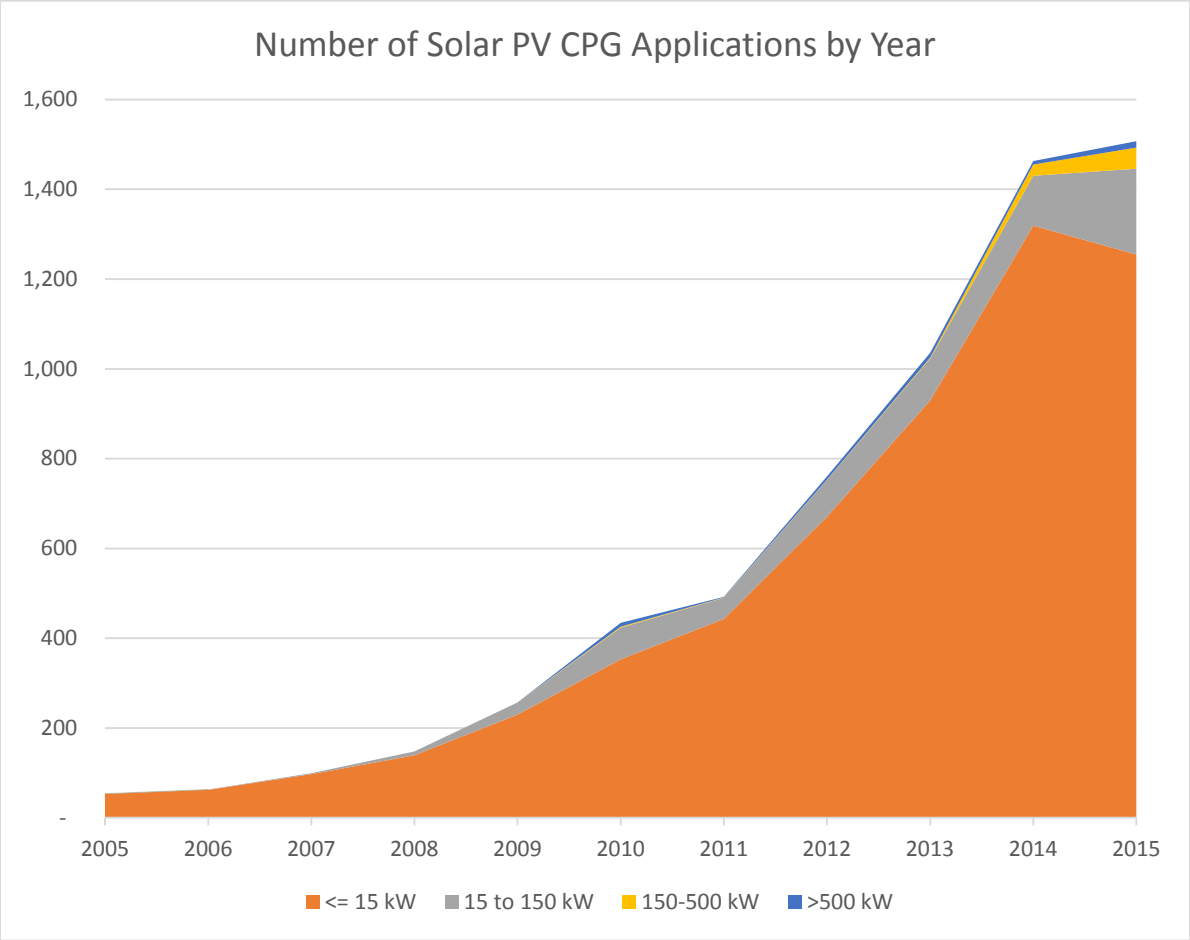
Exhibit 2. Standard Offer Program Solar PV Price Caps and Bid Price (Bid Process Debuted in 2013) by Year

Year	Avoided cost price cap ($/kWh)	Lowest Solar PV bid price ($/kWh)
2009	$0.300	-
2010	$0.240	-
2011	$0.240	-
2012	$0.271	-
2013	$0.257	$0.1340
2014	$0.257	$0.1187
2015	$0.155	$0.1096

Vermont's net metering program has also contributed to statewide growth in solar development. The cost to install net-metered-scale (1-500 kW) systems in Vermont has dropped 58% over the last eight years. As the price of solar panels has dropped, this program, which benefitted from a "solar adder" starting in 2008, has become increasingly attractive, both to developers and to program participants.

By all measures – the average size of systems, and the total capacity of systems installed – solar is on the rise. All told, growth in the solar sector has resulted in approximately 200 MW either permitted or in the permitting process in Vermont. Not surprisingly, employment in the solar sector is also on the rise. The *Vermont Clean Energy 2015 Industry Report* found that employment in the solar PV sector has increased 21.8% since 2013, with 1,889 solar PV jobs reported.

Exhibit 3. Number of Applications Received for Solar PV Systems, by Year*†



**Systems <500 kW are overwhelmingly net metered, while those > 500 kW are generally part of the Standard Offer program or have utility PPAs.*

†*Some projects < 15 kW applied for in December 2015 are not reflected in this chart.*

Looking ahead – 90% by 2050 and Tier 2 of the Renewable Energy Standard

The Legislature enacted a Renewable Energy Standard (RES) through Act 56 of 2015. The Distributed Generation (DG) tier of the RES requires Vermont utilities to retire renewable energy certificates (RECs) from new renewable generators of 5 MW or less interconnected to a Vermont utility. The requirements rise from 1% of their retail sales (in MWh) in 2017 to 10% in 2032. The pace of increase is 0.6% per year. At current levels of retail sales, 0.6% of new energy supplied per year would correspond to an increase in solar capacity of approximately 25-30 MW (if all of the DG requirement were met with solar, and depending on the systems' capacity factors). At about 7 acres per MW, this would mean between 175 and 210 acres per year would be utilized for solar. Approximately 8 MW per year of net metered systems under 15 kW have been installed in recent years; these are overwhelmingly located on buildings. If this continued, it would leave about 20 MW per year for ground mounting of larger systems, using about 140 acres per year. By 2032, meeting the DG tier of the RES with solar alone could require up to 500 MW.

On the longer time horizon envisioned by the 2016 Comprehensive Energy Plan (CEP), total solar PV deployment by 2050 could be in the range of 1,500 to 2,250 MW. The CEP discusses the land use implications of these targets, and concludes that between 8,000 and 13,000 acres may be necessary to meet these targets, assuming that land use remains approximately 7 acres per MW. [1] To place that figure in context, Vermont is approximately 6 million acres.

The CEP envisions an increasing pace of deployment as solar PV efficiencies improve and costs fall. Solar PV system expected lifetimes of about 25 years also means that most systems installed in the next few years may be retired by 2050, and would need to be replaced to hit these 2050 deployment targets. Overall, this would mean a pace of deployment starting at the levels envisioned by the RES and slowly accelerating, such that the average between now and 2050 would be between 50 and 75 MW per year.

Act 99 and Revision of the Net Metering Rule

In addition to raising the cap for the net metering program, Act 99 of 2014 initiated a process for the Public Service Board (PSB) to rewrite its rules governing the program with a date of January 1, 2017 for the new rule to take effect. That rulemaking process is underway. The PSB disseminated a draft proposal in December and stakeholders filed comments by January 13, 2016. The draft rule makes significant changes in the process for approving net metered projects and also adds differentiation the $/kwh received by projects depending on the treatment of RECs and siting considerations.

The Solar Siting Task Force was briefed on the PSB's draft rule, and the Department of Public Service (DPS) took into account the Solar Siting Task Force's deliberations as it crafted comments on the draft. The following section on incentives addresses most directly the critical nature of the net metering program and the potential for adjustments in the $/kwh to be received by different projects to have a meaningful impact on both the pace and location of future solar development in Vermont. Changes to the process depending on size and location of projects can also have significant impacts on siting.

Standard Offer Program

The Standard Offer program will make 7.5 MW of capacity available in 2016 and in each of the two subsequent years, then 10 MW per year available for 2019 through 2022. In its filing of December 9, 2015 regarding the 2016 capacity, the DPS proposed giving preferential treatment to approximately one-third (2.5 MW) of the capacity for projects sited in the built environment (including on parking lots), on brownfields, landfills, and other preferred classes of sites.

[1] Given the historic trend of increases in solar panel efficiency, there is a reasonable likelihood that the acreage per MW will continue to decrease over time.

Recommendations

The Solar Siting Task Force (Task Force) offers the following suite of recommendations, broken down into Planning, Incentives, Regulatory Process, and Aesthetics/Environment categories. Generally, each of these recommendations can stand on their own (i.e., this does not constitute an interdependent "package" of recommendations). However, the Task Force agrees unanimously that all of these recommendations are worthwhile and important, and that implementing them all will greatly improve the siting, design, and regulatory review of solar electric generation facilities. Members of the Task Force made additional recommendations on which consensus wasn't reached. Those recommendations can be reviewed at http://solartaskforce.vermont.gov/materials.

Planning

Effective planning has the potential to shape the municipal, regional and state energy future. The quality and degree of energy planning at the town and regional levels could be increased with resources and tools, such as an expansion of the regional energy planning work the Department of Public Service (DPS) has undertaken with Bennington, Two Rivers-Ottauquechee, and Northwest regional planning commissions.

The Task Force seeks to strengthen the contribution that town and regional planning will make to the siting of the solar generation contemplated in the state's Comprehensive Energy Plan. Accomplishing this requires both effective regional and local planning for solar generation and the effective consideration of the guidance such planning offers in the § 248 regulatory process that determines if and under what conditions a solar project application will be approved.

Findings

1. There is variability in the quality and degree of energy planning at the regional level.
2. Action is needed to improve the ability of regions and towns to contribute to the Public Service Board's (PSB's) decision-making for solar projects.
3. The Energy Generation Siting Policy Commission's 28 recommendations were well considered and should be revisited by the Senate and House Natural Resources and Energy Committees.

Objectives

1. Strengthen the capacity of regional planning commissions and municipal planning commissions to plan for solar facilities and provide that information to the PSB in a manner that will be meaningful in the § 248 Certificate of Public Good (CPG) process.

Recommendations

1. *Clarify and Enhance the Energy Planning Responsibilities of Regions and Municipalities under the Vermont Planning and Development Act (24 V.S.A., Chapter 117)*

State planning and development goals under ***24 V.S.A. § 4302*** specific to energy efficiency and renewable energy development – to be considered in the development of municipal, regional, and state agency plans – predate, and therefore do not reference or incorporate more recently enacted state renewable energy goals or comprehensive energy planning requirements under Title 30.

- Expand Role of Energy in the State's Planning and Development Goals: Current statutory language related to energy planning would benefit from revision to more specifically recognize and reference the State Comprehensive Energy Plan and current state energy goals, in a similar manner to that in which they were amended last year with respect to basin planning. ***24 V.S.A. § 4302(7)*** could be amended as: To encourage the efficient use of energy and the siting and development of renewable energy resources consistent with goals and recommendations developed in the State Comprehensive Energy Plan prepared under 30 V.S.A. § 202 and 202b.

- Make Certain Regional Energy Planning Duties Mandatory: Powers and duties related to energy planning that are currently *optional* for RPCs under ***24 V.S.A. § 4345 Optional powers and duties of regional planning commissions*** (specifically ***24 V.S.A. § 4345(1)*** and ***24 V.S.A. § 4345(6)***)could be made mandatory by moving them to ***24 V.S.A. § 4345a Duties of RPCs***.

- Expand RPC Energy Planning Responsibilities: Regional plans are required to include "energy elements." Current statutory language related to energy elements of regional plans would benefit from revision to acknowledge the comprehensive nature of energy planning the state is now doing, and the need for sufficient detail to guide energy development decisions. ***24 V.S.A. § 4348a(a)(3)*** could be amended as: An energy element, which may include an analysis of comprehensive energy resources, needs, scarcities, costs, and problems within the region, a statement of policy on the conservation of energy and the siting and development of distributed and utility-scale renewable energy resources, and a statement of policy on patterns and densities of land use and control devices likely to result in conservation of energy, and maps identifying potential areas for the development of renewable energy resources.

- Expand Municipal Energy Planning Responsibilities: Municipal plans are also required to include "energy elements." Current statutory language related to energy elements in town plans would benefit from revision to acknowledge the comprehensive nature of energy planning that the state is now doing, and the need for sufficient detail to guide energy

development decisions. ***24 V.S.A. § 4382 The plan for a municipality (9)*** could be amended as: An energy plan, including an analysis of comprehensive energy resources, needs, scarcities, costs and problems within the municipality, a statement of policy on the conservation of energy, including programs, such as thermal integrity standards for buildings, to implement that policy, a statement of policy on the siting and development of distributed and utility-scale renewable energy resources, a statement of policy on patterns and densities of land use likely to result in conservation of energy, and land-use suitability maps identifying potential areas for the development of renewable energy resources.

2. *Strengthen Regional Energy Planning*

Regional Planning Commissions (RPCs) have tools and expertise to analyze both comprehensive energy needs as well as potential energy resources and constraints for each of the 11 regions in the state. RPC energy plans have historically varied in terms of depth and specificity, both of which are necessary to help regions to develop meaningful goals, strategies, and recommendations that carry weight in the permitting process. Resources and training are necessary to help RPCs to carry out deep energy planning that involves their member communities.

- DPS-RPC Energy Planning Pilot: The DPS has partnered with three regional planning commissions (RPCs) — Bennington, Two Rivers-Ottauquechee, and Northwest — to advance a total energy approach to regional energy plans, consistent with the goals and approach embodied in the 2016 Comprehensive Energy Plan. This pilot program is underway, and will be complete in 2016. Each RPC, working with the Vermont Energy Investment Corporation, has modeled pathways to 90% renewable energy within its region, and will identify particular regional goals and actions on heat, transportation, and electric power. The updated plans will also include a mapping component, identifying promising areas for different kinds of renewable energy supply technologies. The DPS hopes the development and adoption of these revised plans will enable a bottom-up approach to energy planning that will complement the state-led CEP structure. The DPS has budgeted for support for an additional four RPCs to begin this work in 2016, taking advantage of the groundwork laid by the three pilot regions.

- Ongoing Support for RPC Energy Planning: The DPS hopes to be able to support this initial work by all the RPCs, but a contractual and funding mechanism for ongoing regional energy planning does not exist. This could be modeled, with funding support, on existing RPC contracts with the Vermont Agency of Transportation for regional transportation planning (under ***19 V.S.A. § 101***) and with the Agency of Natural Resources for basin planning (as enacted in 2015 under ***10 V.S.A. § 1253***).

- Make RPCs Parties by Right in the § 248 Process: One of the required duties of RPCs in ***24 V.S.A. § 4345a(14)*** is to appear before the PSB to aid them in making determinations. However, this duty does not come with a commensurate right to appear in those proceedings. This can be fixed by amending ***30 V.S.A. § 248(a)(4)(F)*** to read: The regional

planning commission for the region in which a facility is located shall have the right to appear as a party in any proceedings held under this subsection.

3. *Strengthen Municipal Energy Planning*

Town plan elements related to energy – including land use elements used in the § 248 process – have historically varied in terms of relevance and specificity, both of which are necessary to help towns to develop meaningful goals, strategies, and recommendations that carry weight in the permitting process. Resources and tools are necessary to help towns to carry out deep energy planning in coordination with and with assistance from their RPCs, which are carrying out this work on the regional level.

- Support for the Creation of Guidance and Tools for Local Energy Planning: Towns would benefit from information gleaned through the RPC energy planning work, such as individual town energy usage data and map layers of energy resources and constraints, which could be incorporated into comprehensive planning for land use and development at the local level. Other useful tools could include development of standard energy use modeling and resource mapping protocols, for towns that wish to undertake their own modeling and mapping exercises from scratch; and more detailed resource inventories and mapping to better identify and address potential land conservation and aesthetic impacts of solar facility development. With funding, other tools to universally benefit towns – such as model town energy plans and solar siting best practices – could be developed through the input of experts and stakeholders.

- Explore the Feasibility of Options for Municipal Review and Regulation of Small Solar Systems: At present, the vast majority of applications received by the PSB are for solar projects < 15 kW. These projects go through a "registration" process, where the PSB, DPS, and utility have 10 days to review the application, and the CPG is deemed issued on the 11th day if no issue arise. Municipalities do not receive notice of these applications, but may have an interest in them in terms of impacts on historic structures, flood hazard areas, rights-of-way, property boundaries, solar access, and other site-specific matters. The Task Force supports the idea of exploring options that allow for municipal administrative review of smaller systems, under the existing registration process or through limited local regulation (e.g., under ***24 V.S.A. § 4413 Limitations on Local Bylaws***), *as long as the process does not entail additional burdens or delays for these smaller systems as compared with the existing PSB registration process*.

4. *Develop Solar Siting Best Practices*

Best practices for solar facility siting and development, adapted for application within a Vermont context, would provide consistent, needed guidance for use in developing regional and municipal plans, and associated community standards, that are considered in § 248 proceedings, and for developers as they undertake site selection, project design, and impact mitigation.

- Initiate Solar Siting Best Practices Working Group: A working group of Vermont stakeholders, including representatives of state, regional, municipal, environmental, and industry interests, should be convened to develop a consensus-based set of guidelines for solar development best practices within a Vermont context.

Incentives

Aligning market signals with public policy objectives is one of the most effective ways to guide development. There is strong desire in the state for solar to be preferentially developed in already impacted areas, such as on buildings, parking lots, brownfields, landfills, and gravel pits. Solar is also generally desirable in locations where it provides the most value to the grid, and where there is a direct or tangible benefit to host communities and neighbors. Modest changes to existing incentive programs in the state offer a pathway toward achieving these goals.

Findings

1. Action is needed to incentivize the siting of ground-mounted solar projects to locations that may be preferred (from a policy perspective), in order to create viable alternatives to the siting of projects in open fields in rural areas away from load, sites which are often less expensive to develop and in close proximity to three-phase power lines.
2. Desirable siting of projects can be encouraged through both financial and regulatory incentives (such as conditional waivers of certain criteria or expedited review for appropriately sited and scaled projects).
3. Financial incentives to achieve desirable siting outcomes require careful consideration with respect to their interplay with other societal objectives, such as cost to ratepayers.
4. Incentives should encourage projects that help the State meet its renewable energy development and greenhouse gas reduction goals.

Objectives

1. Incentivize projects to locate in preferred locations, including: previously developed areas, close to load (where feasible), and in areas designated for such use by towns, especially where multiple state objectives can be met at the same time.
2. In statute, provide objectives for siting that can then be executed more specifically in relevant programs or rules. The use of specific thresholds, numbers, and siting requirements in statute does not allow for flexibility based on context, nor does it allow for timely or straightforward revision based on new information or lessons learned.

Recommendations

1. *Create Regulatory and Financial Incentives For Siting in Preferred Areas*

- Encourage Solar Projects to Locate in Locally Designated Areas: At present, there is no formal mechanism for communities to direct solar development within their boundaries to preferred areas. If communities take the initiative to plan for solar, there should be regulatory and financial incentives put in place to encourage projects to locate in those areas.

- Maximize Solar Development in Previously-Developed Locations and Close to Load: Vermont's renewable energy programs, such as Net Metering and Standard Offer, do not have program-based criteria for selecting solar sites. Modifications to these programs that incentivize maximum deployment of solar on existing structures, parking lots, brownfields, landfills, gravel pits, and other previously-developed areas, as well as close to load, should be prioritized. Regulatory processes for these types of projects should also be streamlined to the extent practicable.

2. *Incentivize Projects that Directly Benefit Neighbors*

- Create Incentives for Projects that Directly Benefit Local Communities: "Community solar" projects should directly benefit towns or neighborhoods in which they are sited, or the loads to which they are adjacent. Projects should receive financial or regulatory incentives if they can demonstrate benefits to local communities (serving local participants, loads, or providing other meaningful community benefits).

- Enable Portions of Large Projects to Benefit Neighbors and Host Communities: Current statutory language allowing portions of non-net metering projects to be net metered (30 V.S.A. § 8010) will expire at the end of 2016, and no equivalent provision exists in the draft proposed net metering rules to take effect in 2017. A mechanism should exist to enable project sponsors to allocate some portion of > 500 kW solar projects to neighbors and host towns, perhaps using the net metering program, but in a way that reflects economies of scale enjoyed by larger projects and require the consent of the interconnecting utility.

3. *Encourage Projects that Help Meet Other State Energy, Environmental, and Development Goals*

- Incentivize Projects with Superior Energy and Environmental Characteristics: In the siting of projects, we should account for their greenhouse gas benefits and potential offsets as well as other co-benefits. Projects that demonstrate contribution toward meeting the State's renewable energy and greenhouse gas goals should be especially encouraged.

- Incentivize Projects with Co-Benefits: Projects that are specifically designed to offer other public benefits – e.g., that are managed to enhance biodiversity or to integrate compatible agricultural, recreational, or other types of uses that provide public benefit – should be specifically encouraged.

Regulatory Process

Participation in some aspects of the § 248 process can be difficult for some stakeholders, especially those participating for the first time or who choose to represent themselves in contested cases. Efforts to improve the availability of information on cases, create process guidance, and remove barriers to participation would be welcomed by the public, towns, neighbors, state agencies, developers, and other stakeholders.

Findings

1. It can be difficult for members of the public seeking to participate in the § process for the first time to understand and effectively participate in that process. Regular participants in the §248 process can also experience difficulties navigating the regulatory system and obtaining timely information and decisions.
2. Intervention in a § 248 proceeding can be expensive, difficult, and/or time consuming particularly for pro se interveners.
3. A mechanism is needed to facilitate mediation of community and neighbor concerns with projects, outside of the formal contested case process.

Objectives

1. Enhance customer service and access to information at the PSB for those seeking to participate in the § 248 process.
2. Enable multiple mediation pathways for resolution of concerns between project developers and host towns/neighbors, with the goal of shortening and not lengthening the overall process.

Recommendations

1. Create Pathways for Mediation of Concerns with Projects

- Encourage Pre-Application Consultations: While there is an existing 45-day notice requirement to towns and neighbors for projects > 150 kW, there are no other formal avenues for developers, towns, and neighbors to constructively engage prior to an application being filed with the PSB. Additionally, there are no consultation requirements for projects < 150 kW. The PSB's draft net metering rule does attempt to address this need, by requiring a pre-application information session and consultation prior to application filing for all projects > 15 kW and < 500 kW. Projects > 150 kW must additionally respond to comments received at the information session and in response to the 45-day notice. The Task Force is encouraged by these recommendations and would like to see projects > 500 kW similarly engage with neighbors and communities prior to the 45-day notice. It may be worthwhile to further encourage these early discussions by offering > 500 kW projects a streamlined § 248 process (something akin to the current § 248(j) application process) when the project is supported by the host municipality.

- Create an Early Off-Ramp for Mediation of Concerns: The PSB should develop a process to assist in resolution of concerns between developers, towns, and neighbors in the early stages of the application process. This could involve exploring the ability of PSB staff (or outside mediators hired by the PSB) to play a mediation role up to the point a case becomes contested. The goal would be to shorten the overall process while satisfactorily resolving the concerns of towns and neighbors and avoiding the expense of litigation.

- Create a Mediation Process for Contested Cases: The PSB should also develop a process to assist in resolution of issues between developers, towns, and neighbors after a case becomes contested, perhaps through ordering third-party mediations. It could consider using process similar to 18 CFR 385.603 (the Federal Energy Regulatory Commission settlement process): after appointing a settlement officer, there would be a finite period of discussions between the developer and person requesting the settlement conference (perhaps scaled to the size or project or type of proceeding); the settlement officer would make a recommendation to the PSB on whether to extend the settlement period, accept the settlement proposal, or go to hearing.

2. *Provide § 248 Process Assistance to Developers and the Public*

    - Creation of Customer Assistance Roles at the PSB: The § 248 process, particularly for net metered projects, has evolved into a large permitting process that lacks the administrative support, routinized permitting systems, and communication with stakeholders that this scale of permitting usually requires in analogous programs. The Task Force encourages the PSB to undertake a comprehensive review of its permitting and customer service needs and the skill sets that are required, including reviewing permitting programs at the Agency of Natural Resources (ANR) that may provide a useful model. In the short term, addition of the appropriate number and type of staff commensurate with the scale of permitting that is taking place is vital. Other state permitting programs, for instance, might employ three to five individuals to accommodate this scale of program. Appropriate staff might include one or more permit program managers with broad program oversight, and one or more administrative staff. It is important to provide answers to both common, administrative-type questions as well as more detailed technical- or process-related questions. The PSB will need appropriate resources to accommodate these needs. The electronic filing system initiative underway at the PSB will be an integral tool toward achieving appropriate levels of customer service.

    - Development of Forms and Templates: Citizens, developers, and other participants in the § 248 process would benefit from forms for routine processes, such as intervention requests. These could be added to the PSB's *Citizen's Guide to the Vermont Public Service Board Section 248 Process*. In addition, the PSB should consider issuing guidance or templates on standard documents it requires from certain classes of CPG applicants (e.g., a form decommissioning letter of credit, where one is required).

3. *Participation of State Agencies in the § 248 Process*

Certain state agencies, particularly the Agency of Agriculture, Food & Markets (AAFM) and the Vermont Division for Historic Preservation (VDHP) are charged with advocating for the protection particular state resources (agricultural soils and historic resources, respectively) but are limited in their ability to participate, either by resources or perceived procedural hurdles.

- Party Status for AAFM: Make AAFM a "party by right" in the § 248 process, and be given the right to intervene under PSB Rule 2.209(A), *intervention as of right*. Additionally, in relevant rules, ensure that AAFM is on the notice list for all projects.
    - 30 V.S.A. § 248(a)(4)(F) could be added to read:
      The Vermont Agency of Agriculture, Food & Markets shall have the right to appear as a party in any proceedings held under this subsection. For solar projects, participation of the Vermont Agency of Agriculture, Food & Markets shall be limited to ground-mounted solar projects that impact agricultural soils.

- VDHP Notice and Developer Agreements: In relevant rules, ensure that the Division for Historic Preservation is on the notice list for all projects and that any agreement between developers and the DHP is included in the applicant's application or petition.

Aesthetics/Environment

In § 248, aesthetics is primarily reviewed in the context of criterion (b)(5), which requires that a project "….will not have an undue adverse effect on esthetics, historic sites, air and water purity, the natural environment, the use of natural resources, and the public health and safety…." [emphasis added]. The PSB uses the two-part Quechee test adopted by the former Environmental Board (now the Natural Resources Board) to determine the project's effect on aesthetics. The Quechee test can be summarized as follows:

Part One: Determine whether the project will have an adverse impact on aesthetics and the scenic and natural beauty of an area because it would not be in harmony with its surroundings. If yes, move to part two.

Part Two: Determine whether the adverse impact is undue, if any one of three questions is answered in the affirmative:
1) Does the project violate a clear, written community standard intended to preserve the aesthetics or scenic, natural beauty of the area?
2) Does the project offend the sensibilities of the average person?
3) Have the applicants failed to take generally available mitigating steps that a reasonable person would take to improve the harmony of the proposed project with its surroundings?

In the following language from a recent decision (*Petition of Rutland Renewable Energy, LLC*, Docket 8188, Order of 5/6/15 at 10, citations omitted), the PSB explains how it considers both the public views and also private concerns in its aesthetics review:

> [W]e conclude that our adaptation of the *Quechee* test to focus on the impacts experienced by the average public viewer is necessary for the lawful administration of Section 248 and the effective implementation of its policy goals.
>
> We recognize that, at times, projects that we find to promote the general good will have impacts on nearby landowners; this Project is one of those cases. It is not our practice to turn a blind eye to such impacts. Instead, we carefully consider ways to mitigate these impacts by imposing conditions that require the implementation of generally available mitigating steps that a reasonable person would undertake given the circumstances of each case.

In addition to criterion (b)(5) aesthetics review, the PSB can consider scenic resources through criterion (b)(1) (orderly development), to the extent scenic resources are identified in town and regional plans.

Aesthetics is by its very nature subjective. While the Quechee test attempts to lend some objectivity to the review, details of how the review is conducted, and what information feeds into the review, are not always clear. There is also need for improvement in the information collected for the purpose of aesthetics review, the ability for those potentially affected to be involved, and the assurance that aesthetic mitigation requirements (such as screening) remain effective over time.

Findings

1. There is need for plain-language guidance on the Quechee test for participants in the § 248 process, particularly with respect to the role and consideration of neighbors and town plans.
2. Site selection can constitute the most important element of meeting aesthetics goals. There is a need for guidance to be developed to signal to developers desirable and undesirable attributes of sites. The PSB should pay attention to that guidance to the extent it is incorporated in regional and town plans in its review of projects under criterion (b)(1).
3. Act 56 included provisions to improve the ability of towns to have meaningful input in the siting of solar projects. The Act granted automatic right to party status in § 248 proceedings to host-town selectboards and planning commissions, created statewide minimum setbacks for ground-mounted solar projects, and allowed municipalities to adopt solar screening bylaws that would be applied in the context of a § 248 proceeding. Towns have only just begun to take advantage of these provisions, so it is too soon to tell if they are achieving their purpose. However, members of the Task Force also have concerns about the scope, direction, and implementation of these statutory changes and their unintended consequences, possibly limiting the ability of municipalities to provide meaningful siting guidelines.
4. Certificate of Public Good conditions may require a greater degree of compliance oversight. Vegetated screening, for instance, must be properly maintained over the lifetime of the project.
5. The scenic resources of non-host towns can be affected by solar projects on their borders.
6. Currently, some applications for solar projects lack detail on some infrastructure components that may have aesthetic or environmental impacts.

Objectives

1. Ensure potentially affected towns receive notice of applications, and that the applications provide sufficient detail for thorough aesthetics review.
2. Provide guidance for towns and neighbors on the aesthetics review process.
3. Ensure aesthetic mitigation, if required, is successful.

Recommendations

1. *Improve Aesthetics Review Process, Transparency, and Compliance Provisions*

- Notification to Adjacent Towns: At present, projects that may affect the scenic resources of adjacent towns are not required to provide notice to those towns. Notification of projects within 500 feet of a town border to the adjacent municipal legislative body should be a requirement for all systems > 15 kW.

- Identification of Project Infrastructure, Soils, and Impacts on Site Plans: Applications for some projects, especially smaller net metering projects, do not always include identification of every piece of equipment that might have a bearing on aesthetics, environmental resources, or the presence of primary agricultural soils that may be impacted. Nor do they always adequately depict the full extent of project impacts or the limits of disturbance associated with the construction and operation of the project (such as access roads, underground or overhead electric service, and areas of vegetation or tree pruning to manage shade). Applicants for projects > 50 kW should be required to identify, on site plans: all visible infrastructure, including any proposed utility lines; the presence and total acreage of any primary agricultural soils in the project area; and all project impacts related to construction and operation, including new access roads and areas of one-time or ongoing tree/vegetative management for shade.

- Develop Aesthetics Guidance: Under the *Planning* section above, the Task Force recommended the creation of solar siting best practices by a stakeholder working group. The working group should specifically address guidance on aesthetics as it relates to site selection and design.

- Consider Improvements to Act 56 Setback and Screening Provisions and Implement as Appropriate: As discussed in the findings above, the setback and screening provisions in Act 56 require study to understand if and how they are working (or whether more time is needed to understand how the Act is working). Any results of such study should inform discussion of potential revisions to those provisions.

- Quechee Analysis Guidance: It is not always clear to project neighbors how their views are considered, or to towns how community standards are considered, in the Quechee

analysis. The PSB should develop a plain-language guide to the Quechee Analysis for use by all stakeholders, including a description and examples of the role of town plans and neighbors in the analysis.

- Aesthetics Mitigation Compliance: Ensuring ongoing compliance with the aesthetics mitigation requirements of Certificates of Public Good is essential. Therefore, a condition should be included in § 248 Certificates of Public Good for projects involving aesthetics mitigation that once a system is installed, a landscape architect or other appropriate expert shall certify that screening and other aesthetics mitigation components have been installed and maintained according to approved plans. Additionally, the condition should require submission of documentation that the plantings have been maintained, for a period of three years after installation, to all parties in the proceeding. The compliance proceedings language included in Section 5.115 of the PSB's proposed net metering rule provide a useful mechanism for the PSB to investigate potential violations of CPG conditions, either on its own volition or in response to a public complaint.

2. *Improving Water Quality Through Solar Transition*

- Support Development and Implementation of Multi-Agency Proposal: An opportunity exists to provide incentives for farmers and landowners to place solar on prior converted wetland soils. There is currently little incentive for farmers to stop the practice of cropping on prior converted wetland soils. AAFM and ANR are developing a proposal to incentivize the siting of solar generation on certain operating farms in locations that will improve water quality and provide a financial incentive to farmers to take these lands out of production with solar development. This proposal could be a win-win-win for the farm, for water quality, and for renewable energy generation. The Task Force encourages AAFM and ANR to continue their work toward development of a proposal for consideration by the Legislature.