9/21/2018 - Case No. 17-5257-INV: Review of the Standard Offer Program

Comments Index

VERMONT

DEPARTMENT OF PUBLIC SERVICE

MEMORANDUM

To: **Vermont Public Utility Commission**
From: **Ed McNamara, Director of Energy Policy and Planning**
Date: **September 21, 2018**
Re: **Case No. 17-5257-INV: Department comments in response to the Public Utility Commission's August 15, 2018 memorandum**

The Department of Public Service ("Department" or "PSD") appreciates the opportunity to provide comments to the Public Utility Commission ("PUC" or "Commission") addressing the following items as specified in the August 15, 2018 Memorandum: (1) any steps the Commission should take to improve the function of the standard-offer program; and (2) any recommendations the Commission should make to the Vermont General Assembly concerning the standard-offer program, including recommendations related to the exemption set forth at 30 V.S.A. § 8005a(k)(2)(B) and any issues arising from that exemption.

In general, the Department recommends phasing out the existing standard-offer program as soon as is practicable and enacting instead a requirement for an open and transparent utility procurement process that fits within the framework of the Renewable Energy Standard (RES). The Department recognizes that this would require legislative action; however, given the PUC's open-ended request for comments on the program, the Department believes that it is useful to put forward this proposal now. In addition, certain steps can also be taken to improve the function of the remaining standard-offer solicitation(s), which are also discussed below. Regarding the 30 V.S.A. § 8005a(k)(2)(B) exemption, the Department recommends ending the opportunity for

future exemptions from standard-offer obligations while grandfathering prior exemptions as long as renewability is demonstrated with the retirement of attributes.

I. STEPS THE COMMISSION SHOULD TAKE TO IMPROVE THE FUNCTION OF THE STANDARD-OFFER PROGRAM

Later in these comments, the Department recommends replacing the existing standard-offer program with a successor mechanism that would require utilities to conduct open and transparent procurements in the context of the RES and current and anticipated grid needs. The Department anticipates that such a transition would require some amount of time and that certain improvements could be made in that interim – however, there are very few that could be made without statutory change.

One potential change that could be made would be to require a refundable deposit for successful standard-offer bidders that is forfeited if a project withdraws prior to commissioning. VEPPI provided recommendations to this effect in Case Number 17-3935-INV; the PUC's March 16, 2018 order rejected this recommendation but stated that it "will revisit this issue before the 2019 RFP." The Department continues to support VEPPI's recommendations and recommends that the PUC implement these changes for the 2019 RFP. The Department includes VEPPI's October 20, 2017 comments as an attachment to this filing.

At the August 2, 2018 workshop, staff from the Lawrence Berkeley National Laboratory presented ideas regarding locational pricing. While the Department supports this concept it does not believe that the continuation of the standard-offer program in its current form is in the best interests of Vermont's ratepayers and instead inhibits progress toward the goals of the Comprehensive Energy Plan. Accordingly, the Department would not want to implement locational pricing for the standard-offer program at this point in time; instead, the locational

components could be integrated into the utilities' procurement under the program proposed by the Department or the concept could be further explored in the context of a future review of the net metering program.

II. RECOMMENDATIONS THE COMMISSION SHOULD MAKE TO THE VERMONT GENERAL ASSEMBLY CONCERNING THE STANDARD-OFFER PROGRAM

It would be prudent to undertake a review of any program reaching its 10-year anniversary; given the tectonic shifts in the electricity landscape in Vermont since that time and the administrative inefficiency associated with the standard offer program, it is timely to examine whether it is still able to adequately serve Vermont's energy policy goals.

In the nine years since the standard offer program was passed into law, sweeping changes have taken place in the electric sector. Cumulative capacity of net-metering applications grew from roughly 5 MW to close to 300 MW; standard-offer contracts grew from 0 to approximately 87 MW; Vermont's peak load has moved to after sunset for all months of the year; large areas of the state are either transmission- or distribution-constrained for additional generation; the region faces natural gas pipeline constraints resulting in higher fuel costs to gas-fired generators in the winter; and the variety and capabilities of various distributed energy resources have exploded (while their costs have simultaneously plummeted).

From a regulatory perspective, at the start of 2009, the only requirement related to renewable resources was the Sustainably Priced Energy Enterprise Development (SPEED) program, which required utilities to enter into long-term, stably priced contracts with renewable resources while allowing them to sell the RECs associated with those resources. In 2009, net-metering compensation was based on retail rates (most projects also received an up-front

capacity-based incentive from the Clean Energy Development Fund), and development was capped at 2% of utility peak demand in 1996. Today, there is no cap on the cumulative capacity of net-metering projects, and compensation is set using a complex process that attempts to set the appropriate pacing of new net-metered projects through compensation.

The standard-offer program aspect of the SPEED program was passed into law in 2009 and was designed to encourage the development of SPEED resources via a feed-in-tariff-like mechanism. Part of the underlying premise for the program in 2009 was the value that distributed generation brings to the distribution system. This point was explicitly made in Section 8005a(d)(2) which exempted from the statutory program cap those standard offer projects that "have sufficient benefits to the operation and management of the electric grid" and could "mitigate transmission and distribution constraints." As a result of aggressive energy efficiency and net-metering, load growth in Vermont is declining and distributed generation is, in some cases, imposing distribution costs rather than obviating the need for system upgrades. The location of utility-scale generation has operational and cost implications for the Vermont electric system; picking projects solely on price has the unintended and counter-intuitive consequence of actually increasing electricity costs. Given the importance of electrification in achieving the 90% renewable by 2050 goals contained in the Department's Comprehensive Plan, it is essential that the renewable generation requirements be met in as cost-effective a manner as possible.

A second area in which the standard offer program has also proven to have negative consequences is in the imposition of unnecessary costs associated with wheeling power from remote locations and out of the service territories of utilities that are hosting a disproportionate share of standard-offer generation. The PUC provided the following summary of the issue in Docket 8693:

> [T]he Standard-Offer program under 30 V.S.A. § 8005a has resulted in the development of much renewable generation. However, it has come to pass that many of the developed projects have not been sited near load, and that a disproportionately [sic] number of these projects are sited in the service territory of certain utilities (to date, GMP and VEC). In turn, this has resulted in higher costs to the interconnecting utilities and to the program as the power must be transmitted to load or must incur higher transmission costs because of the distribution of power to other utilities.[1]

The standard-offer program necessitates this wheeling because it involves a single, statewide entity to enter into contracts and assign the power and associated costs based on each utility's pro rata share of load. Based on information from the electric utilities, the wheeling costs to date total almost half a million dollars. Such costs from future standard offer projects would be obviated if the procurement was undertaken by the utilities rather than conducted through a state-wide process.

The standard-offer program is also administratively inefficient. The program requires the PUC, through VEPPI and with assistance from the Department, to establish avoided costs,[2] issue an RFP, make occasional changes to the generic power purchase agreement, and select winning bidders with whom to enter into contracts. This runs counter to the appropriate role of regulators – to provide oversight of the industry rather than make procurement decisions for the utilities.

The Renewable Energy Standard (RES) replaced the SPEED program and became effective in 2017. This has been an extremely significant regulatory change that has impacted the Vermont electricity industry. For the first time, utilities are required to retire Renewable Energy Credits (RECs) to demonstrate compliance, similar to every other renewable program in

---

[1] Docket No. 8693, Order of 9/2/16 at 1.
[2] Note that the term "avoided costs" used in Section 8005a does not resemble how the term is used more generally in the industry.

the Northeast. Additionally, Tier II of the RES requires utilities to invest in distributed generation within Vermont, at a pace estimated to be 30 MW per year. And finally, Tier III of the RES changes the utilities' relationship with their customers – utilities are working more directly with customers to incentivize the transition to cleaner technologies in the heating and transportation sectors while more actively reviewing load management strategies.

While modifications within the purview of the Commission can be made to the existing program to improve its functioning, statutory changes would be required to truly begin to adapt the program to today's circumstances. Minor reforms do not get to the Department's root concerns with the standard-offer program – the lack of coordination with current statutory requirements and imposition of unnecessary costs. Effective reforms would require such fundamental changes to the structure of the standard-offer program that it would be more effective to instead terminate the existing standard-offer program and replace in wholesale fashion with a successor mechanism reflective of today's grid opportunities and challenges (which vary geographically across the state and by utility) as well as the current regulatory landscape (where the RES is the primary driver of the pace of distributed generation).

Successor Mechanism for a Transparent and Open Procurement Process

Any successor mechanism to the standard-offer program should retain the elements of the original program that have proven value. These include creating price transparency and benchmarking for renewable development in the state through the use of a market mechanism as well as enabling non-utility parties to participate in Vermont's renewable energy landscape via long-term financing mechanisms.

The goals codified in 30 V.S.A. § 8001 that provide high-level direction for the development and implementation of Vermont's renewable programs must also be factored into

any successor mechanism. These can be summarized as: 1) balance costs and benefits; 2) support the development of renewable energy along with its related economic development; 3) provide price stability; 4) develop markets for renewable and energy efficiency projects; 5) promote air and water quality; 6) contribute to reducing climate change and anticipating impacts to the state's economy that might be caused by federal regulation to attain those reductions; 7) support generation which is distributed throughout the grid; and 8) promote diverse technologies.

The Commission concluded in docket 18-0086-INV (biennial update of the net-metering program) that "the RES is the best standard for determining the amount of renewable energy necessary to meet state policy goals,"[3] and that up to 30 MW of new distributed generation resources will be needed annually to meet the current requirements of Tier II of the RES. Further, as the Commission stated in that docket,

> The Commission has been tasked with finding the balance between moving toward a carbon-free energy future, as outlined in the CEP and the RES, and doing so at a reasonable cost to ratepayers. . . . Thus, the question presented in this proceeding is not what economic incentives the Commission should set to promote the maximum amount of net-metering, but rather what incentives are necessary to meet the CEP and RES goals while protecting the interests of ratepayers.[4]

The challenge here, as in the net-metering biennial review, is fitting the net-metering, standard-offer, power purchase agreement, and utility-owned programs and options together neatly into Tier II while optimizing achievement of the other policy goals. Neither the existing net-metering framework (no explicit pacing guidance in statute) nor the standard-offer framework (very specific statutory pacing guidance) offer the utilities much flexibility or control

[3] Case No. 18-0086-INV, Order of 5/1/18 at 32.
[4] Case No. 18-0086-INV, Order of 5/1/18 at 31.

in design of their Tier II portfolios. The Commission has taken steps to bring net-metering compensation into alignment with its system values; a successor mechanism to the standard-offer program would endeavor the same: enabling distribution utilities greater flexibility in designing least-cost pathways to achieving their RES requirements while ensuring system benefits in the context of a rapidly changing electric sector and preserving the most successful and meaningful elements of the standard-offer program.

Below, the Department outlines some of the key elements it envisions in any successor mechanism to the standard-offer program.

PPAs would be between the electric utilities and individual renewable resources

Under this framework, distribution utilities would be responsible for issuing requests for proposals (RFPs), and would have the opportunity to collaborate with other utilities to issue joint RFPs. As utilities are in the best position to evaluate system needs and project impacts, the utilities would be responsible for selecting projects, with the oversight described below. Contracts, in the form of power purchase agreements (PPAs), would be made between individual utilities and projects, rather than the current standard-offer program paradigm under which the statewide facilitator enters into contracts with resources and allocates production and renewable energy credits from those projects to utilities on a pro rata basis. Using bilateral PPAs eliminates the unnecessary costs associated with wheeling and also allows utilities to procure resources specific to their system needs.

Individual project size would be dictated by the Tier II RES requirements – up to 5 MW – rather than the 2.2 MW limit set in the standard offer program. The amount procured would be a percentage of the Tier 2 RES requirements and would have to be procured from third parties through competitive solicitations. There would need to be further discussion regarding the

appropriate percentage to be procured, and should account for the fact that net metering resources are currently filling a significant percentage of some utilities' Tier 2 RES requirement.

Ensure Transparency, Accountability, Consistency, and Predictability

In the Department's proposed framework for a successor mechanism to the standard-offer program, statutory and/or regulatory guidance would be issued at the outset regarding a minimum set of common parameters for RFPs and contracts, including but not limited to contractual lengths (sufficient for project financing), minimum frequency of solicitations, and ability to solicit excess generation in advance of future years' obligations, eligible technologies, technology allocations, any exemptions for distribution utilities from various requirements related to size or other characteristics, etc. The Commission would exercise oversight over the content of RFPs prior to issuance, the selection of winning projects (for example, through a transparent mechanism that accounts for price and any other system benefits prioritized in the RFP), and the content of contracts. In addition, there would be a transparent review process associated with the resource selection process.

The Department recognizes that this would likely create additional, up-front work on the part of the utilities and there may be additional costs related to litigation in the first year or two of the process. However, given that this mechanism would last at least through 2032, these costs would be offset in the long run by the improved efficiencies. In addition, regular evaluation of the program's outcomes and effectiveness could be accomplished through existing statutory reporting obligations regarding the RES.

Ensure System Benefits, Policy Objectives, and Least-Cost Outcomes are Achieved

The RFP process and associated Commission review would allow utilities to consider and assign value to resource flexibility (i.e. valuation of production based on daily or seasonal

timing) as well as locational benefits (or costs) in their solicitations, along with emphasis on any other policy goals (such as prioritizing projects on preferred locations). This RFP process would provide utilities with sufficient flexibility to select specific types of resources that are best suited for their power supply and system needs – for example, a utility could prioritize a small wind resource with a different output profile than solar or the utility could select a solar project with associated storage. In addition, utilities should have flexibility within each RFP to describe available contractual options that bidders can propose as one element of the bid package.

Recommendations Related to the Exemption Set Forth at 30 V.S.A. 8005a(k)(2)(B)

Section 8005a(k)(2)(B) states:

> A retail electricity provider shall be exempt and wholly relieved from the requirements of this subdivision if, during the immediately preceding 12-month period ending October 31, the amount of renewable energy supplied to the provider by generation owned by or under contract to the provider, regardless of whether the provider owned the energy's environmental attributes, was not less than the amount of energy sold by the provider to its retail customers.

In 2017, the PUC approved exemptions pursuant to Section 8005a(k)(2)(B) for Swanton Electric Department and the City of Burlington Electric Department. In those orders, the PUC stated:

> We are concerned about the potential effects of recognizing this exemption, as well as any potential future exemptions for other Vermont electric distribution utilities that may similarly qualify under the statute. Each utility that qualifies for an exemption in a given year decreases the number of utilities, and therefore the number of ratepayers, among which to distribute a pro rata share of the costs of the standard-offer program. The result will place upward pressure on rates on a service-territory-specific basis with fewer ratepayers subsidizing the costs of this program. However, the statute grants a qualified utility this exemption. [5]

[5] Docket 8863, Order of 1/13/17 at 3.

On February 8, 2017, the PUC provided a letter to the Chairs of the Senate Natural Resources & Energy, Senate Finance, and House Energy and Technology Committees addressing the exemption and stated: "This exemption, although provided for by law, has policy implications that will increase the compliance costs of the standard-offer program for the remaining utilities and could, if expanded to other utilities; undermine the operation of the broader program."

Act 53 imposed a moratorium on new utilities receiving an exemption under Section 8005a(k)(2)(B) and also required:

> On or before December 15, 2018, the Public Utility Commission (Commission) shall submit a written report providing its recommendations related to the exemption set forth at 30 V.S.A. § 8005a(k)(2)(B) and any issues arising from that exemption, including the effect of the exemption on the State's achievement of the renewable energy goals set forth in 30 V.S.A. § 8001.

With respect to the effect of the exemption on Vermont's renewable energy goals, the primary negative impact is associated with goal 8001(a)(7): "Providing support and incentives to locate renewable energy plants of small and moderate size in a manner that is distributed across the State's electric grid . . . ." The exemption reduces the need for qualifying utilities to support distributed resources. However, the Department also notes that there are competing renewable goals that focus on affordability and it could be argued that the exemption appropriately supports the goal related to affordability.

As passed in Act 53 of 2017, only utilities that have previously qualified for an exemption can continue be exempt from the entire standard-offer program for 2018 and 2019; utilities that have not previously qualified for an exemption are not eligible in 2018 and 2019.

The Department views the future of exemptions for the remainder of the Program as having three possible outcomes:

1. Remove the moratorium and allow any utility, regardless of their exemption history, to apply;
2. Eliminate exemptions for all utilities, both historically and going forward; or
3. Implement a hybrid approach that would continue exemptions for previously exempt utilities on projects built in or before 2019, but not allow any exemptions on post-2019 projects to any utility.

The Department recommends moving forward with the hybrid approach. As the PUC noted in its letter to the legislature, the continuation of exemptions from any utility is not a sustainable path, as it is conceivable for all utilities to be eligible for exemption in which case there would be no offtakers of the power and the contracts could go into default. Conversely, to entirely eliminate exemptions for all utilities would put too much regulatory uncertainty on the previously exempt utilities. Those utilities have made power supply decisions based on an assumption that they would continue to be exempt; while rules can always change, there are equity issues associated with changing utilities' allocation of power from existing standard-offer projects. The Department believes that middle-ground can be achieved with a hybrid approach.

One of the primary goals of the statue was to stimulate economic development of small in-state renewables by offering long-term fixed price contracts, and in effect requiring the utilities to support renewable development. While utilities that have previously been exempt may have made significant efforts to source their energy from renewable generation (which includes large out-of-state generators that may not include the renewable attributes), this should not entirely relieve them of their obligation to support small in-state development. Utilities that have

previously qualified for an exemption, and continue to meet the requirements, should be grandfathered and continue to receive an exemption on all projects built prior to 2020. Exemptions on new projects should cease in 2020, but previously exempt utilities that continue to meet the exemption criterion should not be allocated a share of pre-2020 standard-offer projects.

However, the Department also recommends that the exemption requirements be adjusted to reflect the new regulatory paradigm such that grandfathered utilities can only continue to be exempt if these new requirements are met. Exemption requests currently do not require the retirement of RECs, but instead a utility is exempt "if, during the immediately preceding 12-month period ending October 31, the amount of renewable energy supplied to the provider by generation owned by or under contract to the provider, regardless of whether the provider owned the energy's environmental attributes, was not less than the amount of energy sold by the provider to its retail customers." (30 V.S.A. §8005a(k)(2)(B)) In other words, a utility can sell the RECs associated with the renewable energy used to achieve exemption, and at the end of the year, the utility cannot make any claims of renewability. With the Renewable Energy Standard and the associated requirement for annual compliance filings, it follows that utilities should be required to demonstrate 100% renewability for standard-offer exemption with the retirement of RECs in NEPOOL GIS.

Conclusion

The Department appreciates the opportunity to comment in this docket, and looks forward to reviewing comments filed by other stakeholders.

Attachment list

Attachment A – VEPP Inc.'s comments of Oct. 20, 2017 in Case 17-3935-INV

Attachment A

October 20, 2017

Ms. Judith C. Whitney
Vermont Public Utility Commission
112 State Street
Montpelier, VT 05620

Re: Case No. 17-3935-INV
2018 Standard Offer Program RFP

Dear Ms. Whitney:

Please accept VEPP Inc.'s comments in response to the Public Utility Commission's (Commission) request for comments for the 2018 Vermont Standard Offer Program Request for Proposals (Vermont RFP). These comments were created with the VEPP Inc. Board of Directors.[1]

I. New England RFP Study

Since the first Vermont RFP was issued in 2013, twenty-seven projects have been awarded Standard Offer Contracts. Of the twenty-seven projects awarded contracts, three are commissioned and ten have withdrawn. More than half of the remaining projects have requested commissioning milestone extensions (eleven out of remaining seventeen). This rate of development, attrition, and difficulty commissioning in accordance with statutory deadlines, prompted the VEPP Inc. Board of Directors to question the viability of proposals being submitted to the Vermont RFP. 30 V.S.A. §8005a(h) states that the "Board shall administer the process of applying for and obtaining a standard offer contract in a manner that ensures that the resources and capacity of the Standard Offer Program are used for plants that are reasonably likely to achieve commissioning." In light of these facts, VEPP Inc. conducted a review of New England renewable energy RFP requirements in order to determine if we could maximize the efficiency of the Vermont RFP process while maintaining the balance between price competitiveness and timely commissioning of projects. A table, reflecting our New England RFP study findings, is attached.

Generally, as the size of the project being solicited increases, so do the requirements under the New England renewable energy RFPs. The Rhode Island RFP was most comparable to the Vermont RFP, both in terms of requirements and project size. As a result, the comments that follow refer primarily to the Rhode Island RFP.

[1] The VEPP Inc. Board of Directors is comprised of four distribution utility representatives, four independent power producer representatives, and three public representatives appointed by the Vermont Department of Public Service.

1. Security Deposit Requirement – The Rhode Island RFP security deposit for a 2.2 MW solar project is approximately $69,000 versus the Vermont RFP security deposit of $55,000 for the same size project.[2] Importantly, the Rhode Island RFP security deposit is forfeited, if the project is withdrawn before it is commissioned. The Vermont RFP $15/kW refundable deposit is refunded 100% if the project withdraws in the first year and 50% if the project withdraws in the second year[3]. All of the withdrawn Standard Offer Projects have been refunded 100% of their $15/kW refundable deposit.

   Based on our review of prevailing practices in the attached New England RFP study, we recommend that the $15/kW refundable deposit be fully forfeited when a project is withdrawn prior to commissioning, except if the certificate of public good petition is denied. This would eliminate the ability of projects to be easily withdrawn, thereby increasing the likelihood of pre-proposal project viability vetting, as proponents seek to minimize the risk of economic loss. To the extent that accepted projects have undergone a rigorous vetting process, the number as well as pace of projects achieving commissioning may increase.

2. Interconnection Requirement – The Rhode Island RFP requires submission of either an interconnection application and impact study or a fully executed interconnection service agreement. Although the Vermont RFP does not contain interconnection requirements, a complete interconnection application must be filed upon acceptance[4].

   Several Standard Offer Projects have cited interconnection problems as the basis for requesting commissioning milestone extensions. In order to help project proponents identify interconnection issues *before* proposals are submitted to the Vermont RFP, we recommend requiring that proposals include a letter from their interconnecting utility identifying any initial concerns the utility may have. The utilities could be encouraged to adopt a standard form, in order to facilitate the request. This initial utility input could reveal potential issues early on in the process, such as whether the proposed project is inside or outside of the Sheldon-Highgate Export Interface limit or the need to install a Direct Transfer Trip, which could adversely impact project viability. Because of the critical nature of this requirement, the Commission may wish to add it to section 3.2 Mandatory Requirements of the Vermont RFP, such that failure to satisfy it would cause the proposal to be rejected.

---

[2] The Rhode Island RFP security deposit is $25 per Renewable Energy Credit generated by the project in one year. Using a capacity factor of 14.5%, the number of RECs generated for a 2.2 MW facility is 2,794. The Vermont RFP security deposit is $10/kW of proposal security plus an additional $15/kW of refundable deposit, if the proposal is accepted.

[3] This refund schedule applies to solar and small wind. The refund schedule for the remaining technologies is listed in the Vermont Standard Offer Purchase Power Agreement, Paragraph 9 Administrative Fee and Deposit, Page 5.

[4] 30 V.S.A. §8005a(i).

3. Permitting Requirement – All of the New England renewable energy RFPs reviewed require proponents to address necessary permits. However, the Vermont RFP does not list permitting requirements nor does it contain the certificate of public good milestone requirement to submit a complete certificate of public good petition within one year of the effective date of the Standard Offer Contract.[5]

   In light of the certificate of public good milestone requirement as well as the Commission's concerns regarding the completeness of certificate of public good petitions, the Vermont RFP should provide notice to project proponents, many of whom are out of state developers unfamiliar with the Vermont permitting landscape, that they will be required to submit a complete certificate of public good petition within one year of the effective date of the contract, if their proposal is accepted. A link to the Standard Offer Program website containing information regarding what constitutes a complete certificate of public good petition could be included. The goal of this recommendation is to minimize the occurrence of certificate of public good milestone extension requests and incomplete filings.

4. Project Map Requirement – Detailed project maps are required in every New England renewable energy RFP reviewed. The Vermont RFP project map requirement states "Proposals shall include a project map that indicates the location of the project site and specifies the parcels for which the proponent has site control" (RFP at 7).

   We recommend adding the following language to the Vermont RFP project map requirement as well as requesting a site layout plan:

   > "Proposals shall include a site plan including a map(s) that clearly identify the property for which the proponent has site control including property line boundaries, the location of the project site on the property, any required rights-of-way, the total acreage of the project site, the anticipated interconnection point, the location of any existing projects or other proposed projects within a one mile radius, and the relationship of the site to other local infrastructure, including power lines, roadways, and water sources. In addition to the project map, provide a site layout plan that illustrates the location of all major equipment and facilities such as panel arrays, inverters, transformers, and any required structures on the project site. The site layout plan should be provided on a 24" X 36" plan at a sufficient scale (i.e. 1 inch = 50 feet) such that the location of all project facilities are easily discerned."

   The intent behind requiring a more detailed project map and a site layout plan is to increase preliminary project development, identify parcel constraints, and assist proposal review.

[5] The certificate of public good milestone is located in the Standard Offer Contract. See Vermont Standard Offer Purchase Power Agreement, Paragraph 7(a) Milestones, Page 5.

In addition to the above recommendations prompted by the New England RFP study, we also offer the following suggestions with the purpose of promoting project viability in the Vermont RFP.

II. Vermont RFP Issuance Timing

Previous Vermont RFP schedules contemplate a release of the RFP in the last week of April, with bid opening scheduled for the last week in May. The Commission announces the award group in the first week of June with Standard Offer Contracts executed in July. This schedule, in conjunction with program milestones, results in a certificate of public good milestone of July of year one and a commissioning milestone of July of year two.

However, in many instances, project development does not commence until after a Standard Offer Contract is executed, near the beginning of August. Initial development may entail detailed survey work, soils exploration, and engineering design. Once a formal design is completed, the developer is able to undertake environmental studies (i.e. wetlands, endangered species, etc.) required for the certificate of public good petition. The difficulty is that the resource agencies and consultants have a queue for studies, and many of the studies cannot be conducted in winter conditions. This often delays the timing of required studies until the spring of the following year with the completed studies available in early summer. As a result, complete certificate of public good petitions are not filed for review by the Commission until mid-summer, one full year after contract execution. More importantly, this time line causes the commissioning milestone to occur in the middle of the year two summer construction season. Therefore, developers are unable to take advantage of the full summer construction season, and typically must request extensions of their commissioning milestone.

A possible solution is to alter the Vermont RFP schedule. For example, if Standard Offer Contracts were executed later in the fall, the developers might have the entire year two summer construction season to build their projects, thereby minimizing the need for commissioning milestone extension requests. We suggest the Commission obtain comments on whether this change to the schedule presents a workable solution or if stakeholders can offer insight regarding a more advantageous schedule. If necessary, the Commission could hold a workshop where developers, consultants, regulators and resource agencies can be engaged to determine the best RFP schedule so as provide for a feasible timeline for environmental studies and for full utilization of the year two summer construction season while also honoring programmatic milestones.

III. Vermont RFP Independent Technical Facility Requirement

Section 3.2.3 Independent Technical Facility of the Vermont RFP presently states:

> "If a proposed project is located at, adjacent to, or near an existing or proposed renewable energy generation facility, the project proponent must demonstrate that the proposed project is an independent technical facility and does not use common equipment or infrastructure such as roads, control facilities, or connections to the electric grid" (RFP at 8).

This language is drawn from 30 V.S.A. § 8002(18) definition of a "Plant." However, legislative changes have added the following sentence to 30 V.S.A. § 8002(18): "Common ownership, contiguity in time of construction, and proximity of facilities to each other shall be relevant to determining whether a group of facilities is part of the same project." We suggest adding this sentence to Section 3.2.3 Independent Technical Facility of the Vermont RFP to mirror the statutory definition of a "Plant" contained in 30 V.S.A. §8002(18). This addition will provide necessary information to proponents and eliminate the need to request it after the proposals are submitted.

IV. Vermont RFP Review Period

We request that the RFP Schedule in Section 2.1 of the Vermont RFP be adjusted to allow the Standard Offer Facilitator up to three weeks to review proposals and provide recommendations to the Commission.

Thank you,

VEPP Inc.

Carolyn Alderman

Carolyn M.X. Alderman
Executive Director

Enclosure

cc: VEPP Inc. Board of Directors

New England RFP Requirement Comparison

REQUIREMENTS	BY STATE COMPARISON					
	Vermont	Rhode Island	Connecticut - 2013	Connecticut - 2016	CT, MA, RI	Massachusetts
Program Name	Standard Offer Program	RE Growth Program	PA 13-303 Section 6 Procurement	PA 15-107 Section 1(b) Procurement	Clean Energy RFP	SMART Program
Products Solicited	Energy, Capacity, RECs	Energy, Capacity, RECs	Energy and/or RECs Capacity Optional	Energy and/or RECs	Energy, RECs, and Transmission	Energy
Renewable Resource	yes	yes	yes	yes	yes	yes/solar
In-State Requirement	yes	yes	no	no	no	yes
Project Description, Location, Capacity	yes	yes	yes	yes	yes	yes
Size	≤ 2.2 MW	25 kW - 5 MW	≥ 20 MW	2 MW - 20 MW	≥ 20 MW	≤ 5 MW
Non-Refundable Bid Fee	no	no	no	no	$7,500 for 20 MW increasing by $375 for each additional MW	no
Proposal Security	$10/kW	$25/REC for 1 year	no	no	no	$25/kW maximun
Development Security	$15/kW	no	$20,000 per MWh of contract maximum amount; paid 50% upon contract execution and 50% upon regulatory approval	$20,000 per MWh of contract maximum amount; paid 50% upon contract execution and 50% upon regulatory approval	$20,000 per MWh of contract maximum amount; paid 50% upon contract execution and 50% upon regulatory approval	TBD*
Operating Security	no	no	$20,000 per MWh of contract maximum amount	$20,000 per MWh of contract maximum amount	$20,000 per MWh of contract maximum amount	TBD*
Security Refund	Upon commissioning, forfeit percentage of $15/kW refundable deposit depending on when project withdrawn	In year 1 after commissioning, forfeit entire amount if project withdrawn	Upon commissioning, upon buyer default, or if PURA does not approve PPA	Upon commissioning, upon buyer default, or if PURA does not approve PPA	Refunded if regulatory agency does not approve PPA	Refunded if project is built within 12 months of SMART Program Effective Date
Site Control	yes	yes	yes	yes	yes	yes
Interconnection	no	Interconnection Application and Impact Study or Interconnection Service Agreement	no	no	no	Interconnection Service Agreement
Interconnection Location	no	Must interconnect with distribution system of National Grid and be located in National Grid ISO-NE Load Zone	Must identify delivery point that is an ISO-NE PTF node	Must identify delivery point that is an ISO-NE PTF node	Must identify delivery point that is an ISO-NE PTF node	Must be interconnected with electric grid in Massachusetts
Project Independence	yes	yes	no	no	no	yes
Equipment Description	no	no	Yes and ability to acquire the required equipment	Yes and ability to acquire the required equipment	Yes and ability to acquire the required equipment	TBD*
Commissioning Deadline	no	Solar - 24 months Digester - 36 months Hydro - 48 months	Applicant determines commissioning date	Applicant determines commissioning date	Applicant determines commissioning date	TBD*
Technical Viability	no	no	Must demonstrate technology is technically viable	Must demonstrate technology is technically viable	Must demonstrate technology is technically viable	no

	Vermont	Rhode Island	Connecticut - 2013	Connecticut - 2016	CT, MA, RI	Massachusetts
Financial Feasability	no	yes	Ability to finance proposed project, financial plan, plan for funding of development costs, plan for funding transmission upgrades	Must demonstrate financial viability of project, including funding of development costs and required development period security	Must demonstrate financial viability of project, including funding of development costs and required development period security	TBD*
Project Experience	no	no	Must demonstrate experience to successfully develop and operate the project	Must demonstrate sufficient development, financing, and construction experience	Must demonstrate sufficient development, financing, and construction experience	TBD*
Permitting	no	Must address permitting, ability to build, and timing for construction	Must provide list of all permits, licenses, and environmental assessments required	Must demonstrate viable plan to acquire permits, licenses, and environmental impact assessments	Must provide list of all permits, licenses, and environmental assessments required	Must provide all necessary governmental permitting and approvals to construct
Public Support	no	no	Must provide documentation identifying level of public support for project and plan for community outreach activities	Must provide documentation identifying level of public support for project and plan for community outreach activities, copies of agreements with communities	Must provide documentation identifying level of public support for project and plan for community outreach activities, copies of agreements with communities	TBD*
Operation and Maintenance Plan	no	no	yes	yes	yes	TBD*
Project Schedule	yes	no	yes	yes	yes	TBD*
Commercial Access to Equipment	no	no	yes	yes	yes	TBD*
Contribution to Economic Development	no	no	yes	yes	yes	TBD*
QF Status	no	no	no	no	no	yes
RPS Qualification	no	yes	yes	yes	yes	yes
Application Submission	bid form	yes	yes	yes	yes	yes
Bid Evaluation	quantitative	quantitative	Stage 2 Scoring: 80% quantitative, 20% qualitative designed to assess likelihood of project being built	Stage 2 Scoring: 75% quantitative, 25% qualitative	Stage 2 Scoring: 75% quantitative, 25% qualitative	quantitative

* RFPs issued no later than October 24, 2017. Additional requirements to be determined (TBD).

Sources:

Vermont RFP: Vermont Standard Offer - 2017 RFP Information. State of Vermont Request for Proposals for the Standard-Offer Program. Issuance date April 24, 2017. www.vermontstandardoffer.com/2017-rfp-information/.

Rhode Island RFP: National Grid Rhode Island Renewable Energy Growth Program. Rhode Island Renewable Energy Growth Program Solicitation and Enrollment Process Rules for Solar (Greater than 25 kW), Wind, Hydro and Anaerobic Digester Projects. Issuance date April 1, 2017. https://www9.nationalgridus.com/narragansett/non_html/2017%20RE%20Growth%20SolarWindHydroAD%20Rules%20as%20of%202-21-17%20-%20Clean.pdf.

Connecticut - 2013 RFP: Connecticut Department of Energy and Environmental Protection: Notice Of Request For Proposals from Private Developers Implementation of an Act Concerning Connecticut's Clean Energy Goals. Issuance date July 8, 2013. www.ct.gov/deep/lib/deep/energy/renewableenergy/rfp-classi.pdf.

Connecticut - 2016 RFP: Connecticut Department of Energy and Environmental Protection: Notice Of Request for Proposals from Private Developers for Clean Energy. Issuance date March 9, 2016. Copy on file with author.

Connecticut, Massachusetts and Rhode Island RFP: Clean Energy RFP. Specified State Agencies and Electric Distribution Companies in Connecticut, Massachusetts and Rhode Island: Notice of Request for Proposals from Private Developers for Clean Energy and Transmission Implementation of Certain Procurement Statute. Issuance date November 12, 2015. www.cleanenergyrfpdotcom.files.wordpress.com/2015/11/clean-energy-rfp-final-111215.pdf.

Massachusetts RFP: Massachusetts Department of Energy Resources. Solar Massachusetts Renewable Target (SMART) Program (MA Reg #1346). Issuance date August 25, 2017. www.mass.gov/courts/docs/lawlib/220-229cmr/225cmr20.pdf.

PREPARED BY VEPP INC. ***October 20, 2017***

ANDREW QUINT
POWER AND MARKETS ANALYST

Direct Dial Number:
(802) 747-6871
andrew.quint@greenmountainpower.com

September 21, 2018

Ms. Judith Whitney, Clerk
Vermont Public Utilities Commission
112 State Street
Montpelier, Vermont 05620-2601

filed via ePUC

Re: Comments on the Standard Offer program (17-5257-INV)

Dear Ms. Whitney:

On August 2, 2018, a workshop was held to discuss the Standard Offer program. On August 18, 2018, a memorandum was issued by Hearing Officer Marren requesting comments on (1) any steps the Public Utility Commission ("Commission") should take to improve the function of the standard-offer program; and (2) any recommendations the Commission should make to the Vermont General Assembly concerning the standard-offer program, including recommendations related to the exemption set forth at 30 V.S.A. § 8005a(k)(2)(B) and any issues arising from that exemption. Green Mountain Power ("GMP") appreciates the opportunity to comment on these issues.

History and Current status of the Standard Offer program

Since passage the Vermont Energy Act of 2012 (Act 170), there has been substantial and rapid growth in Vermont's renewable energy resources. At that time, GMP's system had about 28 MW of distributed renewable generating capacity. In the ensuing years, growth has come from a number of sources including the Standard Offer program, net metering, utility owned resources, and Purchase Power Agreements ("PPAs") between the Vermont Distribution Utilities ("VDU") and project developers. As of August 2018, GMP had almost 250 MWs of distributed generation on its system including 157 MW of net metering, 50 MW of Standard Offer projects, and about 40 MW of distributed generation resources that are either under PPAs or GMP projects.

The Standard Offer program deserves credit for helping to drive some of this growth in renewable energy. And while the early Standard Offer projects were relatively high priced and well above market, since the Standard Offer program incorporated a Request for Proposal ("RFP") process in 2012, prices have declined and are more cost competitive (particularly for solar projects), providing value for customers. However, there are several drawbacks to the Standard Offer program. Specifically, many projects awarded PPAs have failed to reach commercial operation, primarily due to project abandonment or delay in obtaining permits. In

addition, there has been an overall lack of technological diversity in the Standard Offer program, in that almost all of the Standard Offer project volume in recent years has been solar.

Vermont's Renewable Energy Standard ("RES"): Cutting Carbon

When the Standard Offer program launched, Vermont had a SPEED renewable energy goal that only explicitly addressed renewable goals for the year ending December 31, 2017. Vermont's Renewable Energy Standard ("RES") framework has since established specific annual renewable energy requirements for VDUs, starting in 2017. The RES framework allows the VDUs to procure new renewable generation in the context of their expected portfolio needs. The RES sets forth different requirements for procurement by Tier; specific to the Standard Offer, such projects usually qualify for the RES's Tier II requirement.[1] The VDUs are able to use a variety of resources and programs to meet Tier II obligations and cut carbon emissions, including the procurement of RECs through the "Net Metering 2.0" provisions (affecting projects starting in January 2017); eligible Standard Offer RECs; and eligible RECs from VDU owned projects and PPAs.

Standard Offer projects have created planning challenges regarding Tier II obligations. Based on the rapid growth of Net Metering in recent years we expect that Net Metering will provide a large portion of the RECs required to meet GMP's annual Tier II obligations. The VDUs do not have control over the volume and timing of these projects and the pace of deployment can vary significantly over time. Given the need to manage costs and RES compliance, these realities regarding Net Metering have made it difficult for VDUs to rely on the use of less expensive Standard Offer projects for Tier II obligations. This is particularly true in light of the difficulty many of the selected Standard Offer projects have had reaching commercial operation. At the same time that we have tried to balance the uncertain pace of Net Metering and Standard Offer projects with our RES Tier II obligations, GMP has been able to acquire (through PPAs and GMP-sponsored plants) new renewable generation at competitive prices.

Comments and Suggestions

As the Commission considers potential changes to the Standard Offer program and recommendations to the Legislature, we offer the following suggestions to help Vermont continue to grow renewable generation at a reasonable cost to customers.[2]

1) During the August 2nd workshop, the Department of Public Service (the "Department") proposed ending the Standard Offer program. GMP will more specifically respond to the Department's proposal in its reply comments after the Department submits its comments. We note that, based on the rapid growth of renewable generation in Vermont and the specific renewable obligations under the RES, the Standard Offer program may not be essential to achieving Vermont's energy objectives. For example, we do not believe that ending the program would slow the pace of renewable generation

[1] Tier II-eligible projects must be renewable, located and interconnected in Vermont, have a nameplate capacity of less than 5 MWs and reach commercial operation after June 30, 2015.
[2] In addition, GMP provided comments for improvements to the Standard Offer program in its February 2, 2018 comments in this Docket.

growth in Vermont, since GMP and other utilities have the ability to procure new renewables through other means (via PPAs, or utility-sponsored projects).

2) When evaluating whether to continue the Standard Offer program, it is important to keep in mind that the biggest opportunity for Vermont is to balance the growth of renewable generation between Net Metering and other, lower priced resources to minimize rate impacts for customers while meeting Vermont's renewable goals under the RES. Net Metering solar generation has been one of the primary drivers of growth in distributed renewables, but is also more expensive than the prices we are currently seeing for solar generation from Standard Offer projects or other Tier II qualifying resources. For example, the latest Standard Offer RFP yielded Price Competitive Block solar project prices as low as about 9 cents/kWh and up to slightly over 11 cents/kWh, compared to large Net Metered solar projects at an effective current cost of about 15.4 cents/kWh. From the perspective of Vermont customers it makes sense for VDUs to be able to meet a large fraction of their needs for new distributed renewables with relatively lower-priced sources sized from 2 to 5 MW – whether through the Standard Offer program, bilateral PPAs, or VDU-owned projects.

3) If the program is retained we believe there should be adjustments to the exemption provision in 30 V.S.A. § 8005a(k)(2)(B), which presently allows VDUs that have achieved a portfolio that is 100% renewable to avoid the obligation to receive output from all of the Standard Offer program's generators. One consequence of this provision has been to allow VDUs that are exempted from the program to avoid not only the obligation to purchase from future Standard Offer projects, but also the obligation to purchase output from projects that reached commercial operation prior to the date that the VDU was exempted – which notably includes the most expensive projects in the program.[3] The practical consequence of the exemption has been a significant cost shift from these VDUs to the remaining VDUs and their customers. For example, exemptions granted to other VDUs in recent years accounted for approximately $1 million of cost pressure for GMP customers in 2017. GMP requests that the Commission recommend to the Legislature that the exemption provision be removed or at least revised so that eligible VDUs who receive an exemption are only exempt from projects that reach commercial operation after the date when their petition is approved by the Commission.

4) To the extent the Standard Offer program is continued in its current form, the Commission and stakeholders should continue to seek program refinements (e.g., based on lessons learned in other states) to limit the attrition rate among projects that are awarded Standard Offer contracts. Refinements could include such mechanisms as larger, non-refundable security deposits or penalties for failing to meet milestones. Additionally, a significant design consideration should be the pace of volumes to be procured each year. The current method that uses fixed MW volumes each year offers predictability for suppliers, but, as discussed above, may not always be well-matched to the VDUs' Tier II needs.

[3] The earlier Standard Offer projects include solar PV projects that received PPA prices of 24 to 30 cents/kWh, compared to Price Competitive Block solar PPAs being offered at 10 cents/kWh or less in recent RFPs.

Thank you for the opportunity to comment on this matter. If you have any questions please feel free to contact me at (802) 747-6871 or at Andrew.Quint@GreenMountainPower.com.

Sincerely,

Andrew Quint
Power and Markets Analyst

cc: 17-5257 Service list

This document is being filed electronically using ePUC.

STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 17-5257

In re: review of the standard-offer program	

COMMENTS OF VERMONT ELECTRIC COOPERATIVE, INC.

Vermont Electric Cooperative, Inc., (VEC) reiterates the comments that it submitted on February 2, 2018, in response to the Order Re Notice of Proceeding issued on December 29, 2017, as follows:

The Renewable Energy Standard Will Ensure that Vermont Meets Its Renewable Energy Goals, thus Obviating the Need for the Standard Offer Program.

VEC believes that it is time to reconsider the need for the standard-offer program in its present form. The program was conceived and implemented at a time when utilities were not pursuing renewable energy resources, largely because the price of such resources was higher than that of traditional electric generation resources. As part of the SPEED program, the standard-offer program filled a gap and provided support for renewable resources that the state deemed good public policy. With the adoption of the Renewable Energy Standard (RES), utilities now have a mandate to acquire renewable resources to meet state goals, and they have proven able to do that in a cost-effective manner. For example, VEC now has sufficient renewable resources in place to meet its RES goals at least through 2022. These resources cost less than many of the Standard Offer projects that are in the current program.

Certainly with respect to solar resources, the Vermont distribution utilities have been able to develop projects or (in VEC's case) negotiate purchase power contracts to obtain resources to meet their RES goals at competitive prices without the need for the standard offer program. The value of having utilities take on the role of acquiring renewable resources is that they can ensure that such resources are placed on their systems in the best location given grid considerations.

Standard Offer Projects Should Not Be Accepted In the SHEI Export Constrained Area.

To the extent that the program is continued, VEC urges the Commission to place a pause on locating any new standard-offer projects within the Sheffield-Highgate Export Interface (SHEI) until a solution can be developed to address the curtailments and pricing impacts that continue to occur, to the detriment of Vermont ratepayers. As the Commission is well aware, VEC and other Vermont distribution utilities are facing cost increases as a result of generation within the SHEI that exceeds the export limits of the electric grid in that area. Under current conditions, these market forces have caused significant economic impacts on VEC and other distribution utilities with entitlements to existing generation resources in the SHEI. Cost estimates to address current curtailments start at $10 million, with some options being considered substantially more expensive.

Beyond current conditions, there are pending generation projects within the SHEI totaling up to an additional 69 MW. Any new generation in the SHEI will exacerbate curtailments and electric rate impacts, causing further harm to Vermont ratepayers.

With no mechanism to take these impacts into account through the current auction process, projects in the SHEI may be awarded a contract and displace a contract outside the SHEI even though the net effective cost of the project in the SHEI is higher. VEC urges the Commission to place an indefinite pause on new standard-offer projects within the SHEI to allow time to identify the least-cost solution to this serious problem.

In the event that the Commission continues to allow standard-offer projects within the SHEI, VEC believes that bid prices for such projects should be adjusted to reflect the fact that such projects increase costs for utilities and their ratepayers and therefore provide less value.

If the Standard Offer Program Continues, the Commission Should Recommend Removal of the Provision in the Statute that Allows Exemptions for Utilities from Participation in the Program.

VEC believes that the exemption in §8005a(k)(2)(B) conflicts with current state energy policy and has the potential to render the standard-offer program unsustainable as more utilities claim an exemption.

This document is being filed electronically using ePUC.

With the enactment of the Renewable Energy Standard, the legislature intended to encourage small, in-state renewable energy resources, which include standard-offer projects. The exemption allows a utility to purchase energy from large out-of-state wind projects (with or without retaining the renewable attributes of the energy) and thereby avoid purchases from in-state standard-offer projects. This exemption seems to be a clear disconnect from current state policy and should be eliminated going forward.

As to lack of sustainability, the obvious question is what happens if Green Mountain Power, VEC, and the remaining municipal utilities enter contracts that allow them to join WEC, BED, and Swanton Electric in becoming exempt from the standard-offer program? Who then pays for the standard-offer power?

In sum, the standard offer program was a successful in acquiring renewable resources at a time when there utilities were not pursuing such resources on their own. With the passage of the RES, the regulatory environment has evolved and Vermont utilities are fully engaged in procuring resources to meet state goals in the least-cost manner. The state can celebrate "mission accomplished" and sunset the program. Thank you for the opportunity to comment.

Respectfully submitted,

VERMONT ELECTRIC COOPERATIVE, INC.

Victoria J. Brown, General Counsel
Vermont Electric Cooperative, Inc.
42 Wescom Road
Johnson, Vermont 05656
802-730-1129
vbrown@vermontelectric.coop

Washington Electric Cooperative, Inc

P.O. Box 8, 40 Church Street
East Montpelier, Vermont 05651

Telephone: 802-223-5245; Fax 802-223-6780
www.washingtonelectric.coop

Filed by ePUC

September 21, 2018

Judith Whitney, Clerk
Vermont Public Utility Commission
112 State Street
Montpelier, VT 05620-2701

Case No. 17-5257-INV: Standard Offer Program Review

Dear Ms. Whitney:

The Vermont Public Utility Commission (PUC) opened a proceeding to review the effectiveness of the standard offer program. In the PUC's letter dated August 15, 2018 it requested participants file comments with the Vermont Public Utility Commission addressing: (1) any steps the Commission should take to improve the function of the standard-offer program; and (2) any recommendations the Commission should make to the Vermont General Assembly concerning the standard-offer program, including recommendations related to the exemption set forth at 30 V.S.A. § 8005a(k)(2)(B) and any issues arising from that exemption.

The PUC has identified several problems with the current standard offer structure. WEC believes costs for renewable resources qualifying under standard offer could be lowered with a new approach. Siting and location of generation is a significant issue that are increasing costs of projects in sub-optimal locations.

WEC understands that the Department of Public Service (PSD) plans to submit a proposal, that if approved, would restructure standard offer in a way that requires each utility in the state to issue RFP's for renewable sources to meet certain state renewable mandates and goals such as the Renewable Energy Standard (RES). The concept of a new structure of renewable procurement is designed to be more aligned with a utility's load and power supply needs.

Each utility has differing load and supply needs. Knowledge of grid infrastructure and the best location to site new generation is best managed by each utility. WEC believes a utility run model could reap many benefits including reduced cost, avoidance of wheeling, resource selection that is consistent with each utilities' IRP, better siting of new generation, and resource enhancements such as co-locating generation with evolving peak control technologies (battery storage).

WEC reserves its comments until having an opportunity to review the PSD's proposal. In the event the PSD submits a better procurement design, it is possible that the items listed in the PUC's workshop notice dated June 21, 2018 could be addressed and eliminated.

Absent a new standard offer program design that is workable to utilities like WEC that are 100% renewable, then WEC strongly supports continuation of the exemption. The exemption was created for utilities that made significant investments in renewable sources of energy long before state mandates were adopted. WEC was an early adopter of renewable technology and did so at its own direction. In fact, WEC will meet all of its load needs for the foreseeable future with renewable power (and have excess renewable power in many period) for the next 20 years. WEC has already met the Comprehensive Energy Plan goal of 90% renewable by 2050, and it has exceeded the RES Tier I 55% requirement of 2017 as well as the 75% requirement of 2032. Eliminating this exemption would penalize WEC's member for their foresight by requiring WEC to take on new sources of power. This would also be inconsistent with WEC's power and least-costs planning requirements. Specifically, WEC points to 30 VSA §§ 202a, 202b, 218c, and §248.

Section 218(c) requires utilities to follow a plan that meets its member load needs in a least cost manner and requires that new power supply resources fill a **need** at the lowest life cycle cost while meeting the state's laws and other environmental requirements. WEC does not have a **need** for new renewable sources of power as it already has excess energy for the next 20 years to fully meet its customer's energy needs. Furthermore, WEC has met the 2032 Tier 1 requirements of the RES. Specifically, 218 (c) states:

A "least-cost integrated plan" for a regulated electric or gas utility is a plan for **meeting the public's need for energy services,** after safety concerns are addressed, at the **lowest present value life cycle cost**, including environmental and economic costs, through a strategy combining investments and expenditures on energy supply, transmission, and distribution capacity, transmission and distribution efficiency, and comprehensive energy efficiency programs. Economic costs shall be assessed with due regard to (emphasis added):

(A) the greenhouse gas inventory developed under the provisions of 10 V.S.A. § 582;

(B) the State's progress in meeting its greenhouse gas reduction goals;

(C) the value of the financial risks associated with greenhouse gas emissions from various power sources; and

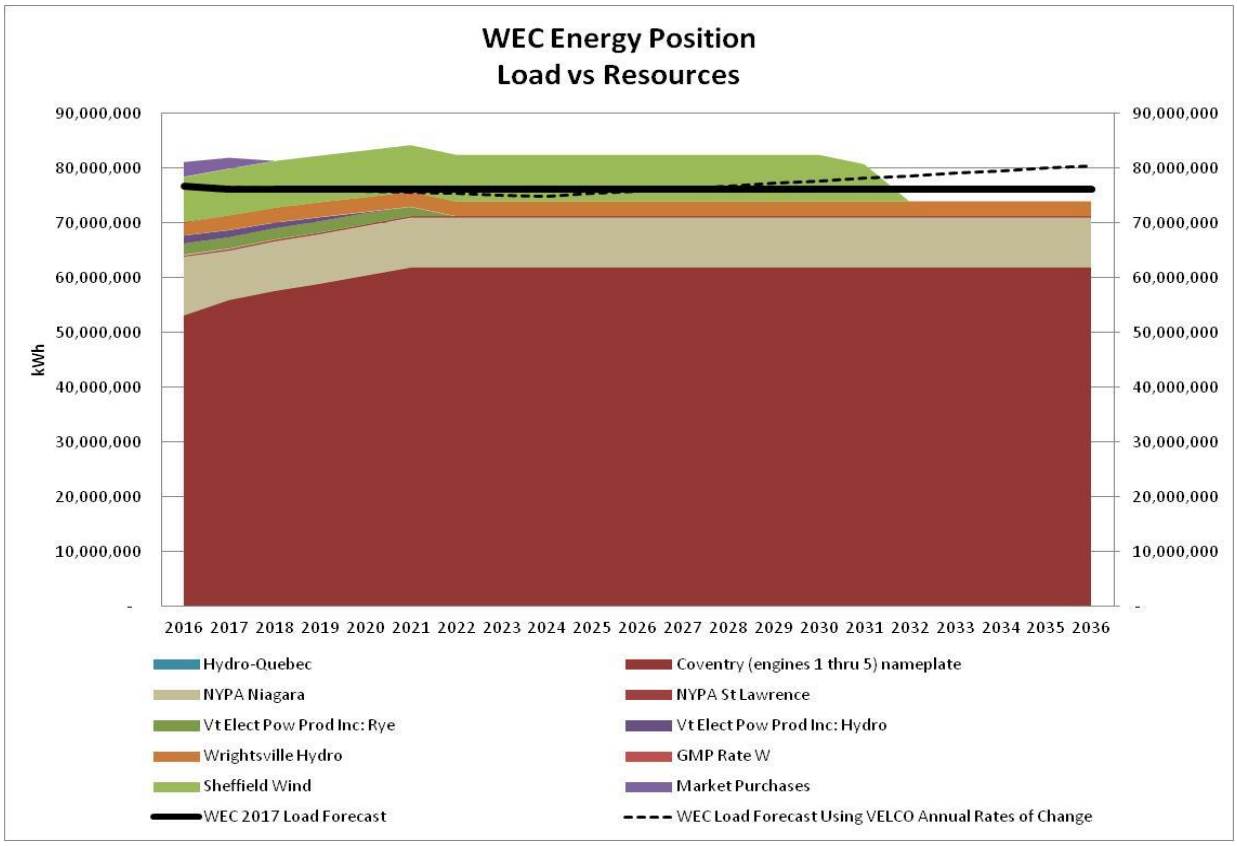
(D) consistency with section 8001 (renewable energy goals) of this title.[1]

[1] 30 VSA 218 (c)

The standard offer program was established in 2009 by lawmakers as an effort to increase renewable generation development in the state and to help Vermont utilities that had gaps in their power supply mix as compared to load procure instate renewable sources of power. Lawmakers in that legislation recognized that early adopters like WEC that had already become 100% renewable and that had invested in generation in the state before 2009 should not be required to take on more power as it would increase an excess position and cause increased cost to WEC consumers. In 2009, WEC had already invested in the Coventry landfill generating plant and entered a contract to buy power from a wind farm in Sheffield. WEC's supply mix and long-term comparison of supply to load is provided below. As provided in the chart it is clear WEC has excess power for the next 20 years. WEC's sources of power are predominately from instate renewable resources which was the underlying goal of standard offer.

Vermont Statute 30 V.S.A. § 202a states the purpose of the Energy Policy of the State of Vermont as follows:

> (1) To assure, to the greatest extent practicable, that Vermont can meet its energy services needs in a manner that is **adequate**, reliable, secure and sustainable; that assures **affordability** and encourages the state's economic vitality, the efficient use of energy resources and cost-effective demand side management; and that is environmentally sound.
>
> (2) To identify and evaluate on an ongoing basis, resources that will **meet Vermont's energy service needs in accordance with the principles of least cost integrated planning**; including efficiency, conservation and load management alternatives, **wise use of renewable resources** and environmentally sound energy supply.



If the exemption were removed, the power would be not needed and since it is above market would does not meet the cost-effective test.

WEC appreciates the opportunity to respond and for your consideration in this matter. If you need additional information do not hesitate to contact us.

Sincerely,

Patricia H. Richards
General Manger

ELECTRIC DEPARTMENT
P.O. BOX 190
STOWE, VERMONT 05672
(802) 253-7215
(802) 253-4555 FAX

September 21, 2018

Ms. Judith Whitney, Clerk
Vermont Public Utility Commission
112 State Street, 4th Floor
Post Office Drawer 20
Montpelier, VT 05623-2701

Re: Case No. 17-5257-INV - Review of Standard-Offer Program

Dear Ms. Whitney,

The Town of Stowe Electric Department ("Stowe") offers the following comments in response to the Public Utility Commission memorandum dated August 15, 2018 in case number 17-5257-INV regarding review of the standard-offer program.

The standard-offer program was designed to address constraints and trends which are no longer paramount. It was first developed and implemented during a point in time where the technological and regulatory landscape is very different from today. Deployment of distributed renewable generation projects was slow and much more costly and Vermont's budding renewable industry was seen as an avenue to achieve economic development. Today, wide-spread participation in the State net-metering program and the falling prices of renewable power due to advancements in technology have spurred significant growth in renewable capacity in Vermont. Arguably the largest difference in the current landscape stems from the implementation of the Renewable Energy Standard ("RES"), as DUs are now subject to long-term, incremental mandates for continual procurement of renewable energy for their supply portfolios, including a requirement to source power from small-scale renewable projects

interconnected with the Vermont grid. In light of these and other considerations that have led to Vermont achieving status as a leader in renewable development, it is appropriate to take the time to reassess the design and effectiveness of the standard-offer program as currently implemented.

Stowe has concerns about the standard-offer program's suitability when taking into consideration least-cost principles and believes that the RES provides sufficient incentive for DUs to source renewable resources in a more cost-effective manner. When a DU is pursuing a PPA or developing a utility-owned project, the full costs and benefits of that power are built into the associated price paid by the DU. This has resulted in the utilities pursuing resources that best suit their portfolio planning. The development of Stowe's 1 MW Nebraska Valley Solar project is a prime example of a resource that would not have been capitalized on if it had not been pursued by a utility due in part to its intent to address RES requirements. Stowe recognizes that other DUs have taken steps to develop similar projects of their own.

If the standard-offer program is to continue in its current format, Stowe would recommend that future bids are evaluated in a manner which reflects the true costs of that power. This would require the assessment of said power through the lens of possible constraints due to siting. As it is presently employed, the standard-offer RFP process awards contracts without taking such concerns into account. As a result, many standard-offer projects have been constructed in rural areas of certain DU service territories and are not sited near load. Some of these DUs host more standard-offer project capacity than their pro-rata share and therefore allocate the associated wheeling charges to the other DUs.

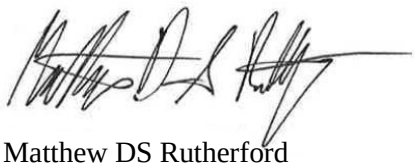
The implication of growing wheeling costs is of particular concern to Stowe. It is unlikely that Stowe will ever be the host utility for a standard offer project. This is due in large part to the fact that our service territory is a combination of concentrated development and large swaths of land which are subject to conservation easements and other development restrictions. Stowe also has limited transmission. So, while some utilities may be able to recover a certain amount of the wheeling costs through collecting their own wheeling revenue associated with projects in their service territory, the likelihood is very slim that Stowe will ever host capacity that exceeds its pro-rata share. As a result, Stowe faces the reality that

continued development within certain DU territories will continuously raise the cost of Stowe's standard-offer allocation.

The impact of this cost-shift to non-host utilities could be addressed would through the development of a capacity cap tied to a DUs pro-rata share of the standard-offer resources. This would restrict the development of new projects in the service territories of DUs who have already met or exceeded their cap. It would have the additional benefit of encouraging developers to build projects beyond areas of existing transmission constraints.

The concerns over the shifting of costs to certain utilities is further exacerbated by program exemptions provided pursuant to 30 V.S.A. § 8005a(k)(2)(B). The provision allowing for exemption from the standard-offer program has the potential to render the program itself unsustainable. It was designed as a statewide program and as more utilities claim exemption, the remaining utilities and their customers are required to take on increasingly larger shares of the associated costs. Although it is provided by statute, this exemption has the potential to undercut the program as a whole. It raises the obvious question of who will purchase the power if all of the utilities were to receive exemption by meeting the statutory conditions. It is also inconsistent with current state policy. Both the standard-offer program and the RES are intended to support the development small, distributed renewable generators within Vermont. Yet the exemption can be achieved through the procurement of energy from large, out of state generators, with or without retiring the associated attributes. This concern of pursuing renewable resources without retiring their attributes was one of the focal points of the Act 56 and the RES rulemaking.

Stowe appreciates the opportunity to comment on this matter. Please let me know should you have any questions.



Matthew DS Rutherford
Manager of Regulatory Compliance
Town of Stowe Electric Department

STATE OF VERMONT

PUBLIC UTILITY COMMISSION

Case No. 17-5257 INV

In re: Review of the Standard Offer Program

COMMENTS OF ALLEARTH RENEWABLES IN RESPONSE TO THE PUBLIC UTILITY COMMISSION'S MEMORANDUM OF AUGUST 15, 2018

The Vermont Public Utility Commission ("Commission") opened this investigation in December of 2017 with a goal of developing "an improved, transparent and methodologically sound framework for selecting standard-offer projects that will benefit the operation of the distribution system while fulfilling the Commission's statutory goal of the rapid development of standard-offer projects at the lowest feasible cost."[1] Following receipt of comments on six questions posed in its initial Order, the Commission held a workshop on August 2, 2018, sponsoring two presentations from Lawrence Berkeley National Laboratory. The Commission shortly thereafter invited written comments on two issues:

1. Any steps the Commission should take to improve the standard-offer program; and
2. Any commendations the Commission should make to the Vermont General Assembly concerning the standard-offer program, including recommendations related to the exemption set forth at 30 V.S.A. § 8005a(k)(2)(B) and any issues arising from that exemption.[2]

AllEarth Renewables ("AER") files these comments in accordance with the above.

INTRODUCTION

Discussion of the standard-offer program cannot be meaningfully held without an understanding of the basis for the composite utility system approach that has been an underpinning of the Vermont renewable landscape for over three decades, and the reasons for that approach. That approach, beginning with Commission (then Vermont Public Service Board) Rule 4.100 in the middle 1980's, arose in direct response to enactment of the federal PURPA

[1] Order of 12/29.2017 at p.1.

[2] Memorandum of August 15, 2018. The deadline for comments was later extended to September 21, 2018.

statute.[3] Using the broad authority delegated to the states in the implementation of PURPA, the Commission crafted a unique approach that recognized the challenges associated with multiple avoided cost calculations and other aspects of administration in a small state with a high number of electric utilities, many of them very small, falling within Commission jurisdiction under Title 30. While the Rule resulted in some litigation as do many rules, it also resulted in the development of both numerous hydro resources and the Ryegate wood energy facility.

During the next decade, the Commission appointed a non-profit purchasing agent under the Rule, awarding that role to an entity whose structure ever since that time has included a Board of Directors with appointees from the utilities, renewable energy projects and the general public as well.[4] No comments from any party in this proceeding have suggested that VEPP Inc., the Rule 4.100 Purchasing Agent as well as the Standard Offer Facilitator, has not performed its role capably and efficiently. In addition to the transparency associated with the presence of public Directors, the Purchasing Agent/Facilitator has also operated as a public body from the outset, pursuant to an informal opinion rendered by the Vermont Secretary of State in response to a VEPPI inquiry in 1996.

While much has evolved and changed in the industry over the last thirty-plus years, the fundamental factors that favor the standard offer composite approach remain firmly in place and in fact strengthened. The number of electric utilities, especially smaller ones, remains substantially the same, and each utility has a unique portfolio. The standard offer facilitator, VEPP Inc., remains capable, transparent and efficient. The wheeling issues of concern to utilities were resolved in a memorandum of understanding in docket 8693, and the success of projects through the early Rule 4.100, SPEED and standard offer eras underscores that the broader financing community is comfortable with the Vermont approach. While the prior comments of some parties in the matter have noted the level of attrition of standard offer projects awarded contracts, the consultants retained by the Commission indicated during the workshop that this level appeared comparable to that of other states based on the somewhat limited data available.[5] And while the historical timeline offered by the Department in its January 31, 2018 comments appears to be chronologically accurate, it fails to emphasize the fundamental points that the legislature adopted each of Vermont's renewable energy programs with full knowledge of the existing ones, after generally much debate and many amendments,[6] and that the work of the Commission here should be guided by respect and deference to the fundamental presumption that those elected by Vermonters to the House and Senate acted with mindfulness of what they had done previously.

---

[3] See Commission Rule 4.101, expressly stating that the purpose of the Rule is to implement the PURPA statute and regulations, as well the parallel state statute, 30 V.S.A. § 209(a)(8).

[4] *Appointment of Vermont Electric Power Producers, Inc. [sic] as Purchasing Agent Under PSB Rule 4.00,* docket 5837, Order of March 15, 1996, affirmed 165 Vt. 282, 683 A.2d 716 (1996).

[5] Tr. 08-02-2018 at 25-26.

[6] While AER has not had the opportunity to go back and count specific vote counts, it is AER's institutional recollection that the various measures were adopted by wide margins during both Republican and Democratic gubernatorial administrations.

1. ***Any Steps the Commission should take to improve the function of the standard-offer program.***

While the conclusions reached in the comments filed in this matter are diverse, themes of project attrition, the need for sound utility planning and the advantages of responding to locational issues expeditiously are ones that would all benefit from an updating and streamlining of the permitting process for standard offer projects. The key step that the Commission can take is thus to achieve this updating and streamlining to the fullest extent possible within the Commission's broad rulemaking powers. These changes could include regulatory timelines for action on standard offer projects, assignment of a "pretrial" hearing officer well versed in issues surrounding discovery and other areas likely to lead to prehearing activities surrounding standard offer projects, a more vigorous method and practice for requiring coordination of efforts of parties with common interests, and other steps that would no doubt emerge from a full discussion of how to make improvements that make the process less burdensome for all involved.

2. ***Any recommendations the Commission should make to the Vermont General Assembly concerning the standard-offer program, including recommendations related to the exemption set forth at 30 V.S.A. § 8005a(k)(2)(B) and any issues arising from that exemption.***[7]

Consistent with the above discussion, among the changes that the Commission should consider recommending to the General Assembly are the following:

1. To the extent that the Commission determines that it lacks authority under current law to implement any of the streamlining steps that occur following consideration of how to achieve that objective, all parties and the Commission would benefit from legislative enactments removing those obstacles. For example, the Commission and the Department have long experience with the "seven month rule" that has been applicable to utility rate cases for decades, and there is no reason that a similar provision cannot be put into place with respect to standard offer project proceedings by legislation were the Commission to concur it could not enact such a provision by rule.[8]
2. Elimination of the provider block for standard offer projects. Utilities have full ability and resources to develop projects on their own, and the provider block adds complexity that does not appear to be commensurate with its value to Vermonters. Eliminating the "provider block" would simplify the standard offer statute and its administration.
3. A changing of the maximum capacity for standard offer projects to 1.5 MW for all technologies, to reflect the reality of increasing capacity factors for projects. The resulting larger number of projects, with attendant greater geographic disbursement, will facilitate greater competition and tend mitigate any physical or economic grid impacts.
4. Merging of the small wind technology block with the large wind technology block.

[7] Memorandum of August 15, 2018. The deadline for comments was later extended to September 21, 2018.
[8] AER does not at this time have a conclusion relative to this precise question.

5. Continuation and expansion of the standard offer program. As discussed above, the composite system underlying the standard offer program has been a rational and effective one for over thirty years. Expansion of the program, coupled with the continued and improved use of market mechanisms to ensure cost-competitiveness, is critical toward achieving the transition to renewables required by Vermont law.
6. Requiring utilities and transmission providers to proactively report, within a short time frame, prospective physical or economic grid constraints, the projected costs and other impacts of those constraints, and the activities being taken to address them.
7. Limitation of utility exemptions under 30 V.S.A. § 8005a(k)(2)(B). The GMP January, 2018 comments aptly note the pressures that utility exemptions place on the customers of non-exempt utilities and the inconsistency of such exemptions with the composite system approach. The Commission, consistent with its prior expressions of concern regarding this issue, should look at recommending eliminating these exemptions.

Thank you for this opportunity to comment.

Dated this 21st day of September, 2018.

By: */s/Nick Charyk*

Nick Charyk
Communication & Public Affairs Manager
AllEarth Renewables, Inc.

Vermont Independent Power Producers Association
26 State Street
Montpelier, VT 05602

September 21, 2018

Vermont Independent Power Producers, Inc. (VIPPA) appreciates the opportunity to submit the following comments to the Vermont Public Utility Commission (PUC) regarding the Review of the Standard-Offer Program; Case No. 17-5257-INV.

VIPPA, an association of independent power producers, takes this opportunity to emphasize to the PUC that the Lawrence Berkeley National Laboratory report entitled "Comparative Review of Procurement Programs Targeting "Small Renewables" is **a vote of confidence for Vermont's Standard Offer Program.**

This report was commissioned by the PUC's staff to compare Vermont's Standard Offer Program with other state programs[1] targeting relatively small renewable generators. The report found that Vermont's Standard Offer Program, although small compared to the programs of other states, was similar to the other state programs in that it is mostly solar, administered by a regulatory body, results in a similar energy pricing and has a similar percentage of delays and cancellation of selected projects. The report went on to say that procurement programs, such as Vermont's Standard Offer Program, are commonly used in other states in tandem with a Renewable Portfolio Standards and net metering programs to achieve renewable energy goals. With these positive findings, the Berkeley Lab report offered no recommendations for improvement to Vermont's Standard Offer Program.

VIPPA recommends and encourages the PUC to work with the Vermont Legislature to enlarge the Standard Offer Program by either increasing the annual procurement requirements and/or extending the duration of the Program.

Vermont Independent Power Producers

Mathew Rubin

Mathew Rubin
President

[1] The Berkeley Lab's review compared Vermont's Standard Offer Program with the renewable procurement programs of 10 other states.

STATE OF VERMONT
BEFORE THE
PUBLIC UTILITY COMMISSION

Review of the standard-offer program	**)**	**Case No. 17-5257-INV**
	)	

COMMENTS OF ALLCO RENEWABLE ENERGY LIMITED

In response to the memorandum of August 15, 2018, Allco Renewable Energy Limited ("Allco") submits the following comments addressing steps to improve the function of the standard-offer program; and recommendations the Commission should make to the Vermont General Assembly concerning the standard-offer program.

At the technical hearing of August 2, 2018, there were some comments from participants that the standard offer has run its course and should be retired. No renewable energy facilities will be built in Vermont without a long-term revenue stream. The standard-offer program provides that to small power producer projects, rate recovery provides that to utilities, and long-term net metering off-take arrangements provides that for net-meter projects. Those are the fundamental and basic principles of project finance. Without programs like the standard-offer, the deployment of renewable energy would be turned-over to monopoly utilities whose primary objective is shareholder profits. For decades, even after the perils of climate change were known, utilities only took marginal steps in response to directives or goals established by regulators. Monopoly utilities are focused on expanding their rate base, which does not serve the urgent goal of transforming to a 100% renewable energy economy as quickly as possible, particularly when generation and distribution are under the same utility umbrella.

At a time when California has just committed to be 100% renewable energy based *and* 100% carbon-free by 2045, and scientists continue to warn of the approaching tipping point, Vermont should not be retreating by eliminating the standard-offer program.

Moreover, now is the time to fully value the societal costs that current utility generation resources have imposed, and continue to impose, on society. Societal benefits should be accounted for in a standard-offer fixed feed-in-rate program. While an analysis specific to Vermont may lead to somewhat different numbers, a recent report from the staff of the California Public Utilities Commission ("CPUC") provides good indicative numbers for the societal value of distributed solar projects such as standard offer projects. That report shows the dollar value and other benefits from distributed energy resources, such as standard offer projects, in abating the harmful effects of climate change and the adverse health effects of fossil-fuel use are very, very large. *See*, CPUC Docket R14-10-003, Order of March 14, 2018, *An Energy Division Staff Proposal Addendum #2.*[1] While such a conclusion should come as no surprise to Californians who are on the front lines of experiencing the effects of climate change—massive wildfires, mudslides, drought and other extreme weather events, even a cursory review of the value assessment leads to the likely conclusion that in Vermont standard offer projects result in a large net positive for ratepayers under any scenario.

Now is not the time for the standard-offer to be expanded and the Massachusetts SMART program provides a good example of how Vermont could expand the standard-offer.

I. Steps the Commission should take to improve the function of the standard-offer program.

A. Create A Framework For 30 V.S.A. §8005a(d).

Section 8005a(d)(2) describes what must be shown for a plant to receive a standard offer

[1] http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M212/K023/212023660.PDF. Using the social cost of carbon rates shown in the CPUC staff proposal at page 16 of the pdf, the levelized benefit from a standard offer project would be roughly $85.75 per MWh over a 20-year term contract. That would be added, of course, to the benefits from electricity, capacity, and network regional transmission service.

contract outside the cap. The plants must have "sufficient benefits to the operation and management of the electric grid or a provider's portion thereof because of their design, characteristics, location, or *any other discernible benefit*."[2] (emphasis added.) In 2013 the Department of Public Service correctly described this provision as implementing a standard avoided costs analysis. The plain language of the statute and its legislative history show that the Department's 2013 interpretation was the correct one. If the forecasted avoided costs from a project equal or exceed the price proposed by the generator then the Commission should consider that project to have "sufficient benefits to the operation and management of the electric grid," and issue a contract.

The Commission should use this statutory grant to implement a version of the Massachusetts SMART program with fixed rates and incorporate the societal benefits derived from the operation of the grid with renewable energy versus its current operation with predominantly fossil fuels, which continues to harm society and impose hidden costs everyone.

II. Recommendations the Commission should make to the Vermont General Assembly concerning the standard-offer program.

A. Expand The Program.

Programs like the standard offer program serve a critical role in expanding the development of renewable energy. Vermont produces less than 35% of the electricity it consumes and depends on power from the New England grid and Canada. https://www.eia.gov/state/?sid=VT. That means that Vermont ratepayers are spending 65% of their electricity dollars to support jobs, taxes and

[2] 30 V.S.A. §8002 (23) "Vermont composite electric utility system" means the combined generation, transmission, and distribution resources along with the combined retail load requirements of the Vermont retail electricity providers.

economic activity in other States or Canada. Those dollars are better spent to create economic activity in Vermont, particularly while the federal government provides the 30% tax credit. Coal, Oil and Gas resources represent approximately 71% of ISO-NE's fuel capacity, and that is expected to rise to 76% by 2025 (see: https://www.iso-ne.com/about/key-stats/resource-mix), which are a few of the reasons to significantly increase the standard offer capacity. *That 76% number is shocking*, and should cause the Legislature to take firm, bold action like California.

Now is not the time to turn the clock back and rely on monopoly utilities to deploy renewable energy.

B. Add a Storage Component.

Storage as part of a renewable energy project provides significant additional benefits to ratepayers, which GMP has quantified in its recent filings regarding storage as an addition to its solar projects. The standard offer statute contains no restriction on creating a separate technology allocation for a solar project with storage, but a legislative change would provide firm direction for storage in Vermont, and enable standalone storage projects. Vermont need only look to the Massachusetts SMART program which incorporates a stand-alone storage component. Any implementation of a storage component should also provide for storage to be added to existing standard-offer projects.

Respectfully submitted,

/s/Thomas Melone
Thomas Melone
Allco Renewable Energy Limited
1740 Broadway, 15th Floor
New York, NY 10019
Phone: (212) 681-1120
Email: Thomas.Melone@AllcoUS.com

Dated: September 21, 2018

BURLINGTON
ELECTRIC
DEPARTMENT

September 21, 2018

Judith Whitney, Clerk
Vermont Public Utility Commission
112 State Street, Montpelier, VT

Re: Case 17-5257-INV – Review of the standard-offer program

Dear Ms. Whitney:

In a memo dated September 5, 2018, the Public Utility Commission established a deadline of September 21, 2018 for filing comments on recommended improvements to the standard-offer program. Vermont Public Power Supply Authority ("VPPSA") and Burlington Electric Department ("BED") attended the August 2nd workshop on this topic and submit the following comments related to the standard-offer program. These comments supplement our joint filing in this proceeding dated February 2, 2018.

Context for BED and VPPSA's Recommendations

There have been significant changes in Vermont's energy policy landscape since the standard-offer program was established in 2009 to encourage the development distributed renewable generation within the state. Tier 2 of Vermont's Renewable Energy Standard ("RES") will ultimately dictate how much small-scale renewable generation is developed and consumed within the state. Generation from standard-offer resources may be utilized by Vermont utilities to comply with the RES. To the extent that generation from standard-offer and net metering resources are not sufficient to satisfy Tier 2, utilities will develop additional projects, seek out power purchase agreements with renewable generators, and/or purchase renewable attributes from merchant generators. The RES structure properly contains flexibility for utilities to achieve compliance with Vermont's renewable energy policy in the most cost-effective manner. Because of this structure, the standard-offer program no longer solicits *incremental* renewable generation. Instead, it displaces the development of resources utilities will be required to procure for RES compliance, reducing flexibility of utilities to meet their requirements and deliver environmental benefits at the lowest cost to ratepayers.

In addition to the changes in Vermont's energy policy framework, there have been significant changes in the physical electric grid since the standard-offer program began. Increasing levels of distributed generation resources have been concentrated within specific areas of the state, resulting in certain portions of the grid becoming export-constrained - in other words, there is often more generation than consumption and the area is limited in what can be exported. When the program was established in

2009 and significantly altered in 2012, standard-offer resources were envisioned to deliver grid benefits and help *avoid* the need for grid upgrades due to load growth. Now we are seeing these resources create and exacerbate grid constraints.

The unequal distribution of small generators across the state means that some utilities host a disproportionate amount of standard-offer capacity. Under the current program structure, utilities that host more than their pro-rata capacity of standard-offer resources are permitted to charge transmission "wheeling" costs to the recipients of standard-offer generation, representing significant costs to certain utilities. Recent solicitations have led to the State contracting with solar resources at prices that, at the low end, can be cost-competitive with market prices. However, wheeling charges of approximately $.03/kWh substantially increase the cost of standard-offer resources to some recipient utilities. The program was premised on sharing the costs and benefits of developing small, renewable resources, but the costs and benefits of the standard-offer program are not being equitably distributed among the State's utilities.

Increased costs due to grid constraints and the imposition of wheeling charges result from the disconnect between the entities making siting decisions (the project developers) and the entities paying for the projects (utility ratepayers). Because standard-offer generation is a "must-buy" resource for utilities, utilities are not able to negotiate to ensure that value commensurate with cost is delivered. Those making the siting decisions within the standard-offer program do not bear the financial consequences of those decisions.

Much of the August 2 workshop in this proceeding focused on a presentation by staff from Lawrence Berkeley National Lab that quantified the wholesale value of solar and wind resources located throughout the state. The presentation reinforced what analysis conducted by the VELCO and the distribution utilities has concluded: that distributed resources deliver significantly different net value depending on when generation occurs and where within the state those resources are located, with those located in the northern tier of the state providing the least value. However, under the current structure of the standard-offer program, there is no disincentive for developers to locate additional projects in the already congested northern portion of the state. Rather, developers are encouraged to exacerbate the problem because the lower costs of land in the affected area allows a lower bid price and an opportunity for a standard-offer contract.

The high costs at the inception of the program, the location of standard-offer resources where they deliver comparatively lower values that impact other utility resource investments, and imposition of wheeling charges all contribute to the potential for more utilities to seek exemption from the program and its above-market costs. A program structure that potentially allows all participants to opt-out is, of course, unsustainable. This is a fundamental flaw in the program that should be addressed. However, retroactively eliminating all program exemptions would unfairly discriminate against utilities that historically made long-term commitments to procure renewable resources, most often at prices higher than today.

Recommendations the Commission should make to the Vermont General Assembly concerning the standard-offer program, including recommendations related to the exemption set forth at 30 V.S.A. § 8005a(k)(2)(B) and any issues arising from that exemption

VPPSA and BED believe that the PUC should recommend to the Legislature that the standard-offer program should cease solicitations after 2019. This would undoubtably improve siting outcomes, as utility solicitation of distributed resources for RES compliance would consider *all* costs. Access for private developers would not be affected – in most cases utilities partner with developers to manage the development process and construct projects. As stated above, the structure of the RES ensures that ending standard-offer solicitations would not adversely affect the amount of renewable energy generation that is developed in Vermont. Phasing out standard-offer program solicitations would also address the concerns around inequity due to the "transfer payments" among utilities that occur as a result of wheeling costs and exemptions from the program.

Steps the Commission should take to improve the function of the standard-offer program

Should the PUC decide to recommend to the Legislature that standard-offer solicitations continue, the utility exemptions that have already been approved by the PUC should be maintained. In addition, if the program is continued, the PUC should address the issue of locating standard-offer resources in areas that are undesirable from a grid standpoint. BED and VPPSA suggested a framework for price adjustments accounting for grid condition in our February 2, 2018 comments in this proceeding.

Thank you for your consideration of these comments. Please contact me (mbailey@vppsa.com or 802-882-8509) with any questions you may have.

Sincerely,

Melissa Bailey
Legislative and Regulatory Affairs Representative
Vermont Public Power Supply Authority

Filed in ePUC

Mrs. Judith Whitney, Clerk
Vermont Public Utilities Commission
112 State Street
Montpelier, Vermont 05620-2601

Subject: Standard Offer Program - PUC Case Number 17-5257-INV

The Institute for Policy Integrity[1] submits these comments on the above-captioned proceeding. Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy. Policy Integrity regularly engages with public utilities commissions from a number of U.S. states on energy policy and regulations.[2]

On August 15, 2018, the Vermont Public Utilities Commission (PUC) issued a request for comments on the standard offer program (17-5257-INV).[3] Policy Integrity offers the following comments:

1. To the extent that the goals of 30 V.S.A. § 8001(a)(1) inform the structure of the standard offer program, the PUC should interpret the term "benefits" under 30 V.S.A. § 8001(a)(1) to include avoiding environmental externalities. The best tool for measuring avoided climate externalities is the social cost of greenhouse gas metric.
2. In the specific context of 30 V.S.A. § 8005a(d), the PUC should interpret "benefits to the operation and management of the electric grid" to include more than relieving transmission and distribution constraints. In particular, resilience is a benefit to the operation and management of the electric grid, and a system-wide review of resilience may reveal that renewable energy resources could be especially valuable to increasing the resilience of Vermont's electric grid.
3. The PUC should also consider how climate impacts may affect the operation and management of the electric grid through, for example, thermal efficiency effects. While the social cost of greenhouse gas tool measures climate externalities and is not specifically designed to identify precise effects on the operation and management of the electric grid, at least one state PUC (California) has cited the

[1] No part of these comments purports to present the views, if any, of New York University.

[2] *See, e.g.,* Policy Integrity. Environmental Value of Distributed Energy Resources for New York State - Subgroup Report. (Jul. 2019). *Available at*: https://policyintegrity.org/projects/update/environmental-value-of-distributed-energy-resources-for-new-york-state-subg.

[3] Vermont PUC. Memorandum re: Request for Comments to Parties in PUC Case Number 17-5257-INV (August 15, 2018). Specifically, the request asks for comments on "(1) any steps the Commission should take to improve the function of the standard-offer program; and (2) any recommendations the Commission should make to the Vermont General Assembly concerning the standard-offer program."

effects of climate change on grid operations as a reason to favor a higher estimate of the social cost of greenhouse gases.

We explain each of these recommendations in further detail, below.

1. The PUC should monetize environmental costs and benefits to implement Section 8001's broad statutory goal of balancing "benefits" against "costs."

The standard offer program under 30 V.S.A. § 8005a is designed to help "achieve the goals of section 8001." The first goal of Section 8001 is: "Balancing the benefits, lifetime costs, and rates of the State's overall energy portfolio to ensure that to the greatest extent possible the economic benefits of renewable energy in the State flow to the Vermont economy in general." To the extent that Section 8001's goals inform the PUC's rules for the standard offer program, the PUC should interpret the term "benefits" under Section 8001(a)(1) to include avoiding environmental externalities.[4] The environment externalities avoided by renewable energy can include, but are not limited to, the public health effects and climate effects of emissions from non-renewable energy sources.

To rationally and transparently balance benefits and costs, the PUC should monetize environmental externalities and other effects to the extent feasible. Monetization ensures that environmental effects will be treated on par with other the costs and benefits of renewable energy, and monetization will facilitate comparison against all other costs and benefits. When impacts are translated into the common metric of money, the tradeoffs inherent in policy decisions become apparent, and decisionmakers can more readily and more transparently compare society's preferences for competing priorities. Monetization therefore minimizes the risk that a decision will lean too heavily on any one factor or succumb to unintended and unknown biases.

If an analysis only qualitatively discusses the externalities of emissions, decisionmakers and the public will both tend to overly discount the significance of the effects. In general, non-monetized effects are often irrationally treated as worthless.[5] This may be especially true with respect to climate change. As the Environmental Protection Agency's website explains, "abstract measurements" of so many tons of greenhouse gases can be rather inscrutable for the public, unless "translat[ed] . . . into concrete terms you can understand."[6] When compared to global greenhouse gas emissions and atmospheric carbon concentrations, the emissions of any one state, like Vermont, may falsely appear trivial. Well-documented mental heuristic like "probability neglect" can cause the public and decisionmakers to irrationally reduce small-yet-significant probability risks entirely down to zero.[7] Monetization contextualizes the significance of the additional tons of emissions. For example, presenting Vermont's 2012 total greenhouse gas emissions of 8.27

[4] Policy Integrity. Valuing Pollution Reductions: How to Monetize Greenhouse Gas and Local Air Pollutant Reductions from Distributed Energy Resources (March 2018). Available at: https://policyintegrity.org/publications/detail/valuing-pollution-reductions

[5] Richard Revesz, *Quantifying Regulatory Benefits,* 102 Cal. L. Rev. 1424, 1434-35, 1442 (2014).

[6] EPA, Greenhouse Gas Equivalencies Calculator, https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator (last updated Sept. 2017).

[7] Cass R. Sunstein, *Probability Neglect: Emotions, Worst Cases, and Law*, 112 Yale L61, 63, 72 (2002) (drawing from the work of recent Nobel laureate economist Richard Thaler).

million metric tons[8] as 0.1% of total U.S. emissions[9] makes them seem trivial; yet, by applying the social cost of carbon to monetize the effects, it becomes apparent that those 8.27 million metric tons still caused $339 million worth of climate damages in the year 2012 alone.[10]

The best tool for measuring the avoided climate externality that emissions reductions provides is the social cost of greenhouse gases. The best available estimates, based on the most recent science and economics, were published by the federal Interagency Working Group on the Social Cost of Greenhouse Gases (IWG) in their 2016 update. The Interagency Working Group relied on a transparent, conservative, and consensus-driven methodology drawing from peer-reviewed models and inputs. Its process and estimates have been endorsed by the National Academies of Sciences,[11] the U.S. Government Accountability Office,[12] federal courts,[13] and countless experts in economics and climate change.[14] The social cost of greenhouse gas estimates try to capture as many climate damage categories as possible, from flooding to agricultural productivity to temperature-related changes in the demand for energy for cooling and heating.[15] Nevertheless, some significant categories of damages, like the risk of catastrophic climate outcomes, cannot currently be accurately modeled, and so the social cost of greenhouse gas metrics are widely recognized as a conservative underestimate of climate damages.[16]

A number of states have begun using the social cost of greenhouse gases to account for climate externalities in their energy and environmental policies. California, Colorado, Illinois, Minnesota, Nevada, New York, and Washington State have all used the metrics in various electricity and climate policies, either using actual IWG estimates or borrowing from the IWG's methodology to derive their own SCC values. Policy Integrity's Cost of Carbon Project website (costofcarbon.org) provides details on each states' use of the social

---

[8] State of Vermont. Climate Change in Vermont. https://climatechange.vermont.gov/node/174.

[9] Total U.S. emissions were 6528.8MMTCO2e in 2012. https://www.epa.gov/sites/production/files/2018-01/documents/2018_executive_summary.pdf.

[10] IWG 2016 TSD SC-CO2 central estimate for 2012 is $33 per ton in 2007$. https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/scc_tsd_final_clean_8_26_16.pdf. Converting to 2018$, it is $41.11 per ton. https://data.bls.gov/cgi-bin/cpicalc.pl?cost1=33&year1=200701&year2=201808

[11] Nat'l Acad. Sci., Eng. & Medicine, Valuing Climate Damages: Updating Estimates of the Social Cost of Carbon Dioxide 3 (2017); Nat'l Acad. Sci., Eng. & Medicine, Assessment of Approaches to Updating the Social Cost of Carbon: Phase 1 Report on a Near-Term Update 1 (2016).

[12] Gov't Accountability Office, *Regulatory Impact Analysis: Development of Social Cost of Carbon Estimates* 12-19 (2014).

[13] Zero Zone, Inc. v. Dep't of Energy, 832 F.3d 654, 679 (7th Cir. 2016); High Country Conservation Advocates v. Forest Service, 52 F. Supp. 3d 1174, 1191 (D. Colo. 2014); Montana Environmental Information Center v. Office of Surface Mining, 15-106-M-DWM, at 40-46, Aug. 14, 2017.

[14] *See, e.g* Richard L. Revesz et al., Best Cost Estimate of Greenhouse Gases, 357 SCIENCE 6352 (2017); Michael Greenstone et al., *Developing a Social Cost of Carbon for U.S. Regulatory Analysis: A Methodology and Interpretation*, 7 Rev. Envtl. Econ. & Pol'y 23, 42 (2013); Richard L. Revesz et al., *Global Warming: Improve Economic Models of Climate Change*, 508 Nature 173 (2014) (co-authored with Nobel Laureate Kenneth Arrow, among others); Decl. of Michael Hanemann ¶ 17, Wyoming v. Interior, No. 16-00285 (D. Wyo. Dec. 14, 2016), available at https://www.edf.org/sites/default/files/content/69.1-2016.12.15-Dec-of-M-Hanemann.pdf (The estimates that the Working Group prepared for the costs of methane are "the best available estimate of the environmental cost of an additional unit of methane emissions.").

[15] See Policy Integrity's website http://costofcarbon.org for more information on the SCC, its development and application.

[16] Revesz et al. 2014.

cost of greenhouse gases. The website also includes a frequently asked questions-style guide for state decisionmakers.[17]

2. The PUC should interpret "benefits to the operation and management of the electric grid" to include resilience benefits and other effects besides relieving transmission and distribution constraints.

In the specific context of 30 V.S.A. § 8005a(d), the PUC should interpret "benefits to the operation and management of the electric grid" to include more than just relieving transmission and distribution constraints. For example, a system-wide review of resilience may reveal that renewable energy resources could be especially valuable to increasing the resilience of Vermont's electric grid. Resilience of the grid is a paramount component of its operational abilities. To inform the "outside the cap" portion of the standard offer program under Section 8005a(d), Vermont should make use of available tools to measure the effect of renewable energy on resilience.[18]

In Policy Integrity's July 2018 report, *Toward Resilience*, we use a four-part framework to conceptualize resilience: "A resilient electric system is one that has the ability to (1) avoid or resist shocks, (2) manage disruption, (3) quickly respond to a shock that occurs, and (4) fully recover and adapt to mitigate the effects of future shocks."[19] The report goes onto explain how resilience can be measured either by performance of the system and its component, or by the attributes of the system and its components. While the report strongly recommends a system-wide evaluation based on quantitative performance metrics (such as the percentage of critical-customer energy demand served),[20] it is notable that renewable energy projects may often deliver the attributes of resilient systems, such as providing fuel security by virtue of being fuel-less,[21] using decentralized technologies (for example, the loss of a single or even cluster of wind turbines is less damaging to the grid than the loss of a single 1000MW coal-fired power station),[22] increasing geographic dispersion and diversity,[23] and reducing the power portfolio's dependence on water.[24] Our *Toward Resilience* report outlines tools that can empower decisionmakers to make policies that will advance system-wide resilience. In order to assess "benefits to the operation and management of the electric grid," the PUC should undertake a systematic review of grid resilience.

3. The PUC should consider how climate impacts may affect the operation and management of the electric grid.

---

[17] *Id*.

[18] http://policyintegrity.org/files/publications/Toward_Resilience.pdf

[19] Towards Resilience at 1.

[20] *Id.* at 5-6 (recommending a performance-based approach over an attribute-based approach, since the performance based approach is more objective and holistic, while an attribute-based approach may subjective focus too much on a single factor).

[21] *Id.* at 6.

[22] Scott Victor Valentine. Emerging Symbiosis: Renewable Energy and Energy Security. (Sept. 2011) *Available at*: http://www.scottvalentine.net/wp-content/uploads/2016/05/valentine-emerging-symbiosis.pdf, at 4576.

[23] Sadie Cox et al. Bridging Climate Change Resilience and Mitigation in the Electricity Sector Through Renewable Energy and Energy Efficiency. U.S. Agency for International Development. (Nov. 2017). Available at: https://www.nrel.gov/docs/fy18osti/67040.pdf at 8.

[24] *Id.*

While the social cost of greenhouse gas metric measures climate externalities and is not specifically designed to measure effects on the operation and management of the electric grid, there is some important overlap. States should take into serious consideration how climate change may affect the grid.

For example, the California Public Utilities Commission has been reviewing how it evaluates the benefits of distributed energy resources. In March 2018, an administrative law judge issued a ruling that, together with a proposed staff report, would require California utilities to calculate the climate benefits of DER by using the social cost of greenhouse gas estimates developed by the Interagency Working Group.[25] Specifically, the staff report recommends using the Interagency Working Group's high-impact estimate of the social cost of carbon ($123 per ton of carbon dioxide) instead of its central estimate ($42 per ton). The Interagency Working Group developed its high-impact estimate as a complement to its central estimate, in order to reflect the catastrophic impacts, risks, damage categories, and uncertainty that are not fully captured by the available data and methodologies. The California PUC staff report observed that among the climate damage categories not fully reflected in the central estimate were "the costs of climate change associated with electricity infrastructure," including:

- Line sag decreases to transmission efficiency
- Thermal efficiency decreases
- Lower efficiency, increased maintenance, and increased replacement costs of system components like transformers that cannot cool down and so overheat
- Significant cooling demand increases during both day and night[26]

Because of the serious adverse consequences climate change can have on electricity infrastructure, the PUC should consider climate impacts when assessing the benefits of renewable energy to the operation and management of the electric grid.

In conclusion, the PUC should take a broader approach to assessing the "benefits" of renewable energy and consider, as appropriate, such effects as resiliency benefits and monetized climate benefits.

Sincerely,

Jason A. Schwartz, Legal Director
Iliana Paul, Policy Analyst

Institute for Policy Integrity

For any questions, please contact jason.schwartz@nyu.edu.

[25] CPUC. Administrative Law Judge's Ruling Seeking Responses to Questions and Comment on Staff Amended Proposal on Societal Cost Test, Addendum #2, Energy Division Staff Report (March 14, 2018).

[26] *Id.* at 11.

Vermonters for a Clean Environment

Case No. 17-5257-INV

In re: review of the standard-offer program

VERMONTERS FOR A CLEAN ENVIRONMENT'S COMMENTS IN RESPONSE TO THE PUBLIC UTILITY COMMISSION'S AUGUST 15, 2018 MEMORANDUM

On August 15, 2018, the Public Utility Commission (PUC) issued a memorandum seeking comments on any steps the Commission should take to improve the function of the standard-offer program, and any recommendations the Commission should make to the Vermont General Assembly concerning the standard-offer program, including recommendations related to the exemption set forth in 30 V.S.A. § 8005a(k)(2)(B) and any issues arising from that exemption.

Vermonters for a Clean Environment (VCE) appreciates the opportunity to provide comments from our unique perspective addressing the impacts of the standard-offer program on Vermont residents and communities. These impacts have historically not been addressed by utilities, regulators, legislators, or developers. It is long past time to incorporate costs and benefits to our communities in this discussion.

A. Background

Vermonters for a Clean Environment, Inc. is a citizen-based public non-profit organization founded in 1999 that assists Vermonters in having a voice in what goes on in their communities, and holds corporations accountable for their actions. We respond to issues that Vermont citizens bring to us, and have established a framework for deciding what issues and projects to engage in. From an organizational perspective, that means we do not go out soliciting involvement in projects that are not brought to us by Vermont citizens.

Renewable energy development has consumed the majority of our organizational capacity for the last 9 years. During that time, thousands of solar projects have been permitted by the Public Utility Commission, very few of which have resulted in VCE's involvement. However, of those projects for which VCE has been asked for assistance, standard-offer projects

stand out as the largest number, with net-metering projects second. Utility projects have also caused citizens or towns to reach out to VCE, but our experience is that over time, the utilities have become much more sensitive to the needs of communities and are doing a good job locating sites that do not result in community opposition. We cannot say the same for merchant developers and their approach to siting renewable energy projects through the standard-offer or net-metering programs.

B. How Standard-Offer Projects Negatively Impact Vermont Communities

Vermonters overwhelmingly support the development of renewable energy projects, especially solar projects. It is common to hear Vermonters speak of a desire to see more use of in-state hydro, and recently we are hearing more discussion about incorporating battery storage. Wind energy is more problematic due to the failure to acknowledge that there are issues that need to be addressed before proceeding with this technology, especially industrial scale wind.

For years, VCE has been documenting via video the public hearings and community discussions about standard-offer projects on a case by case basis. These discussions occur *after* the standard-offer contract has been awarded. Communities and affected residents are caught off guard when they learn that a specific site has received a contract for development of a large solar array or wind turbine, without any prior notice to towns. The most representative PUC public hearing we have documented occurred in Sudbury in 2014 and can be viewed here https://youtu.be/nJQx2eHIhos. Citizens of Sudbury, including the chair of the Planning Commission, chair of the Select Board, and neighbors affected whose properties were situated such that the proposed project could not be screened from view spoke in opposition to the project. The primary message is one that we have documented in many other Vermont communities: "We want solar, and we want to be a part of it, we want some community benefits, but not here, not this site, not this way." Despite the nearly universal opposition, nobody intervened due to the extraordinary complexity and expense of the PUC process.

VCE supports the PUC's position regarding changing sites after the contract is awarded, and appreciates the Commission's position as recently stated in its order in the Brandon "Babcock" Conti Solar development where the community opposed the site and the developer sought alternative sites which were denied by the PUC. In its order denying the change in location, the PUC explained that its intended purpose is to encourage developers to do a better

job up front when choosing sites. The reality is this is not happening in actual practice, regardless of the intention.

The way the process works, as described by one developer, once the RFP is issued, there is a short time frame for finding a site and gaining site control in response to the RFP. Once site control is obtained, the developer responds to the RFP, and if the contract is awarded, a few people know about it via a PUC order or by checking the standard-offer administrator's website, but there is usually no contact with the community or Vermont citizens until the 45-day notice is issued.

Once the contract is issued, some developers have taken a hostile approach to communities and neighbors that creates excessive, unnecessary expensive litigation and stress. Recipients of standard-off contracts have been vindictive towards neighbors who have chosen to participate in the PUC's process, or have sued towns to the point that the town withdraws from PUC proceedings and essentially agrees to sell their town plan requirements for money to make the bleeding stop. Industrial Wind projects create even more expensive challenges for host communities in receipt of standard-offer contracts. This is no way to develop renewable energy in Vermont.

C. Suggestions for Changes to the Current Standard-Offer Process

Immediate improvements can be made to the standard-offer process by the PUC. One easy requirement to add to the developer who bids into the standard-offer program is notification to the host community that a bid has been submitted. Such notification should include the specific location of the property, and the notification should go to the same parties that would receive a 45-day notice. The process could be amended to include the opportunity for recipients of the notice to send comments to the standard-offer administrator so that site considerations could be incorporated into the decision.

It would even better if the standard-offer RFP process is amended to include a requirement to approach the host community prior to submitting the bid, with the minutes of the discussion included in the bid so that any issues that have been identified would be known up front. Those discussions might result in the developer's realization that they have chosen a poor site, such that the bid would not be offered at all. Holding that advance conversation would achieve the PUC's goal of encouraging the choice of better sites.

Regional Planning Commissions throughout Vermont have committees that review 45-day notices and petitions to the PUC. Those committees are learning about the issues, and that knowledge is growing. Initially, those discussions were primarily about the site. However, planners are recognizing that there are other issues that need to be considered such as net-metering's cost to rate-payers, and grid impacts. Without full knowledge of the environmental, neighbor, and grid capacity issues, planners are disadvantaged when they attempt to carry out their duties.

Act 174 energy planning (and net-metering, both of which include a preferred-site component) is in its early stages of implementation and the PUC has a separate investigation into the preferred-site definitions for net-metering. Towns that identify preferred-sites are doing so without adequate knowledge of the grid capacity issues at the locations that might be preferable due to site considerations, but may not be optimal for renewable energy additions to the grid in those locations.

The standard-offer program would benefit in the short tem by making changes to the program that incorporates a more holistic approach to locating renewable energy on sites that benefit the grid rather than create negative impacts, are welcomed by the community, and will not create expensive, extensive litigation that interferes with the completion of the project during its time frame. When projects receive multiple contract extensions, that is evidence of failure on the part of the developer in its community engagement and choice of sites.

D. Long Term Recommendations Regarding the Standard-Offer Program

Given the poor record of the standard-offer program's implementation, VCE recommends that this program has run its course and should end as soon as possible. The General Assembly should be advised by the PUC to replace the standard-offer program with a new process that will result in renewable energy built in the right locations, supported by communities with tangible community benefits and minimal environmental impacts, where the energy is needed as identified by the utilities serving the area.

VCE wishes to emphasize that Vermont community interests must be incorporated into renewable energy siting discussions going forward. It will be telling to note whether any other submission of comments in this investigation mention the interests of the people who live here and are affected by the development of renewable energy. We cannot afford to continue on the

path that has been taken for the last decade, where Vermonters feel left out of the process, or when they do choose to participate, find that it is a "pay to play" arena that is extraordinarily expensive, time-consuming and may involve bullying and threats of litigation that hurt, rather than advance, the development of renewable energy.

Overall, greater transparency would build support for renewable energy development among Vermonters. While developers do take financial risks, the profits being made by those who can afford to make the investments are apparently very large in comparison to the benefits to host communities. This formula that benefits the rich at the expense of the less well off is a dynamic that many Vermonters are conscious of and find offensive.

E. Ethical Standards for Merchant Developers

The standard-offer program is one of the few mechanisms by which merchant developers can participate in renewable energy development. The key to success is the contract which, once obtained, locks in the site and forces the utilities to purchase the energy generated. While utilities are regulated by the PUC, merchant developers have no similar checks on how they choose to operate. It is possible that shifting the process to require merchant developers to engage directly with the utilities rather than through the standard-offer administrator would insert some societal benefits and eliminate the developers who prefer to fight rather than collaborate.

F. Conclusion

VCE supports the continued development of renewable energy resources in Vermont in a manner that incorporates community and neighbor interests, requires more openness and sharing regarding financial benefits, at the lowest cost to ratepayers, assures that new development occurs in areas where it is needed and discourages development in areas where it is not needed, and creates a distributed renewable energy grid that reduces transmission costs.

Dated at Danby, Vermont on this 21st day of September, 2018

By: 

Annette Smith, Executive Director
789 Baker Brook Road
Danby, Vermont 05739
(802) 446-2094,vce@vce.org