

October 28, 2022

Via ePUC

Ms. Holly Anderson, Clerk
Vermont Public Utility Commission
112 State Street, 4th Floor
Montpelier, VT 05620-2071

RE: Request for Comment on Case No. 20-0203-INV - Investigation into the establishment of reduced rates for low-income residential ratepayers of Vermont electric utilities

On October 4, 2022, the Public Utility Commission ("Commission") issued an Order Requesting Comment on its Model of the *Investigation into the establishment of reduced rates for low-income residential ratepayers of Vermont electric utilities* case.

The Vermont Public Power Supply Authority ("VPPSA") offers the following responses to the Commission's order for comment. VPPSA has also included, in a separate file, calculations and modeling referenced herein to demonstrate, for illustrative purposes, the significant impacts that implementing a model funded through additional ratepayer surcharges would have on customers.

In addition to responding directly to the Commission's Order, VPPSA would like to preface this response by reasserting its opposition to requiring utilities to establish a ratepayer subsidized low-income rate and strongly believe that the most appropriate funding mechanism for any statewide low-income rate support is implemented by legislative allocation through General Fund revenues.

VPPSA members have and continue to support the State's broad array of low-income assistance programs and actively seek out collaboration with other entities that provide assistance and resources to customers facing financial instability. In addition to existing programs and outreach, VPPSA has also submitted a grant proposal to the Department of Public Service's ("PSD") *Affordable Community Renewable Energy (ACRE) Program RFP* designed to establish the Field-to-Family Community Energy Program providing reduced cost renewable energy directly to low-income qualifying customers throughout member service territories.

Model Data, Assumptions, and Methodology

As had previously been asserted in VPPSA's June 10, 2022 response to the Commission's RFI, there is a high degree of variability and error in using conventional means to estimate customers at or below the 185% Federal Poverty Level threshold. Despite those cautions, VPPSA expended considerable resources to perform GIS Analysis using several different methodologies which yielded divergent results¹.

Despite encouraging the Commission to establish a single acceptable methodology to calculate low-income estimates, in this Order, all distribution utilities are asked to model using data estimates supplied by Green Mountain Power Corporation, based on an analysis using approximate service territory boundaries and zip codes, which do not align with 100% accuracy to the 2021 American Consumer Survey data's ZCTA codes². Ultimately, VPPSA's GIS analysis using member utility residential customers by zip code data, in relation to poverty levels defined by census ZCTA populations, within members' specific utility service territories yielded the most granular results with ACS data available (which again, is subject to its own sampling and error margins³).

Figure 1 illustrates a comparison of Green Mountain Power Corporation's Utility Analysis of population and zip code data with VPPSA's own GIS Analysis of residential customers in relation to ZCTA data, within member service territory boundaries. While the total average (%) across member service territories is similar, there are substantial differences between these analyses for some individual member utilities.

¹ See [VPPSA Response PUC RFI Case 20-0203-INV \[PART\]](#) filed June 10, 2022 via ePUC.

² See [2022-06-10 GMP Responses re. LI Rate and Attachment 1 - Analysis of Utility Poverty Levels](#) filed June 10, 2022 via ePUC.

³ See [Annual Social and Economic Supplement \(ACEC\) of the Current Population Survey](#)

Figure 1: VPPSA and GMP Analysis of 185% Federal Poverty Level Comparison

Estimated of Number of Low-income Customers (185% of Federal Poverty Level) in VPPSA Member Utility's Service Territory						
VPPSA Member Utility	2021 Residential Customers	VPPSA GIS Analysis		GMP Analysis		
		Estimated Number of Customers at or below 185% using Residential Customer Count within ZCTA¹	% Of 2021 Residential Customers	Census Data Population	FPL <185%	% of Population
Barton	1,978	771	39.0%	1,847	642	34.8%
Enosburg	1,570	358	22.8%	4,822	1,156	24.0%
Hardwick	3,930	945	24.0%	6,999	1,441	20.6%
Jacksonville	670	190	28.4%	1,273	341	26.8%
Johnson	821	263	32.0%	957	351	36.7%
Ludlow	2,975	850	28.6%	1,717	474	27.6%
Lyndonville	4,906	1,423	29.0%	10,303	3,077	29.9%
Morrisville	3,644	893	24.5%	5,104	1,224	24.0%
Northfield	1,622	368	22.7%	2,697	667	24.7%
Orleans	580	220	38.0%	3,143	1,252	39.8%
Swanton	3,319	789	23.8%	6,310	1,446	22.9%
Total	26,014	7,070	28.43%	45,172	12,071	28.34%

¹ Data Source: United States Census Bureau, American Community Survey, S1701 | Poverty Status in the Past 12 Months in Vermont

While these variations may seem minimal in aggregate, when considering the large percentage of residential customers at or below 185% Federal Poverty Level in comparison to overall customer counts in VPPSA member service territories, the differences can be significantly impacted by any cross subsidization across ratepayers. This is especially true for the not-for-profit business model of municipally owned electric utilities, which carefully balance the needs of their local communities, all customers, and investments in the care and maintenance of the distribution system.

It is also important to raise concerns with the model's use of 5-year averages of both total and residential customers as well as revenue. There are significant impacts to projected cost estimates when using the law of averages, particularly in the current and recent economic environment which has been anything but "average".

In conducting our own analysis using 2021 data of total, residential and estimated qualifying customers, the impact of cross subsidization becomes increasingly apparent. As Figure 2 shows, qualifying customers represent anywhere from 18% - 35% of Total Customers, and 20.6% - 39.5% of Residential Customers. The "Statewide pooling" shows that 27.4% of Residential Customers in Vermont qualify at or below the 185% Federal Poverty Level, and that figure is even higher, at 28.3% for VPPSA member utilities.

Figure 2: Analysis of Qualifying Customers (Residential and Total Customers)

VPPSA Analysis: Qualifying Customers Percentage at 185% FPL of Residential and Total Customers					
Distribution Utility	2021 Total Customers*	2021 Residential Customers**	Qualifying customers	Percentage at 185% FPL Residential ***	Percentage at 185% FPL Total Cust.
GMP	269,867	224,519	49,212	22.1%	18%
VEC	40,254	35,371	7,577	21.7%	19%
WEC	11,791	11,118	2,587	23.6%	22%
BED	21,364	17,350	6,795	39.5%	32%
Stowe	4,358	3,537	884	25.6%	20%
Hyde Park	1,388	1,227	246	20.6%	18%
Barton	2,191	1,978	771	39.0%	35%
Enosburg	1,790	1,570	358	22.8%	20%
Hardwick	4,794	3,930	945	24.0%	20%
Jacksonville	729	670	190	28.4%	26%
Johnson	996	821	263	32.0%	26%
Ludlow	3,693	2,975	850	28.6%	23%
Lyndonville	5,884	4,906	1,423	29.0%	24%
Morrisville	4,313	3,644	893	24.5%	21%
Northfield	1,865	1,622	368	22.7%	20%
Orleans	671	580	220	38.0%	33%
Swanton	3,912	3,319	789	23.8%	20%
Statewide pooling	379,860	319,136	74,371	27.4%	20%
Statewide minus GMP	109,993	94,617	25,159	27.7%	23%
VPPSA Members	30,838	26,014	7,070	28.3%	23%

* Sources - **VPPSA Members:** DPS 2022 Annual Resource Survey (2021 Data); **Non-VPPSA Members:** PUC Model "Raw Data"

** Sources - **VPPSA Members:** DPS 2022 Annual Resource Survey (2021 Data); Swanton Residential Customers does NOT include "Rural" classification; **Non-VPPSA Members:** PUC Model "Raw Data"

*** Sources - **VPPSA Members:** ACS 185 % FPL Data as reported and geospatially allocated based on member service territories; **Non-VPPSA Members:** PUC Model Assumptions

All VPPSA member utilities are at or above the Statewide average, with qualifying customers representing a range of 20% - 35% of total customers. As has been continuously presented, VPPSA member utilities provide service to some of the state’s most geographically dispersed and energy burdened areas of the state, yet see no more or less past-due arrearages than other distribution utilities, all while striving to keep rates affordable across all customer classes, in large part by avoiding cross subsidization.

Finally, as it relates to data, VPPSA has concerns with the model’s assumptions of estimated monthly residential bills, especially for purposes of modeling cost, impact and annual revenue needed. As opposed to using a 5-year average of residential revenue and total residential customers, we would propose that a more accurate representation would be to illustrate a typical residential bill based on kWh usage and standard residential rates. While each utility has varying degrees of complexity in customer rates, surcharges, etc. kWh usage presents an opportunity to model cost, impact and annual revenue using a common denominator to compare “apples-to-apples”, so to speak. With rising inflation, costs-of-living, and uncertain

winter fuel forecasts for the thermal and transportation sectors, modeling for projected costs is exceptionally important.

According to 2021 data submitted for the Department of Public Service’s 2022 Annual Resource Survey, the average residential monthly usage for VPPSA members’ residential customers is 551.25 kWh.

For illustrative purposes only, Figure 3 compares Average Residential Bills based on the Model’s revenue calculation vs. 600 kWh usage using rates effective January 1, 2022⁴. Please be advised, these calculations are ours for illustrative purposes and are not intended to imply or encompass the variations within each utility’s unique billing and/or rate structure(s).

Figure 3: Analysis of Annual Revenue Needed

VPPSA Analysis: Annual Revenue Needed Average vs. Typical Residential Bill					
Distribution Utility	PUC Model: Revenue Impact		VPPSA Model: Revenue Impact		Comparison Model Forecasts + (-)
	Avg. Res. Bill (Residential Revenue/Total Res. Cust.)	Annual Revenue Needed (Assuming 30% Participation; 25% Bill Discount)	Typical 600 kWh Res. Bill (Rates Effective 1/1/2022)	Annual Revenue Needed (Assuming 30% Participation; 25% Bill Discount)	
GMP	\$ 106	\$ 4,711,511	\$ 129	\$ 5,699,879	(\$988,367.63)
VEC	\$ 104	\$ 710,675	\$ 125	\$ 851,903	(\$141,228.15)
WEC	\$ 107	\$ 248,014	\$ 149	\$ 346,827	(\$98,812.66)
BED	\$ 65	\$ 397,773	\$ 102	\$ 620,723	(\$222,949.34)
Stowe	\$ 108	\$ 86,316	\$ 117	\$ 93,159	(\$6,842.91)
Hyde Park	\$ 103	\$ 22,776	\$ 103	\$ 22,776	\$0.00
Barton	\$ 88	\$ 60,832	\$ 124	\$ 85,800	(\$24,967.97)
Enosburg	\$ 123	\$ 39,691	\$ 108	\$ 34,699	\$4,991.58
Hardwick	\$ 85	\$ 72,688	\$ 115	\$ 97,525	(\$24,836.93)
Jacksonville	\$ 77	\$ 13,107	\$ 108	\$ 18,405	(\$5,298.09)
Johnson	\$ 94	\$ 22,227	\$ 111	\$ 26,224	(\$3,996.50)
Ludlow	\$ 63	\$ 47,971	\$ 78	\$ 59,844	(\$11,873.78)
Lyndonville	\$ 84	\$ 107,613	\$ 100	\$ 128,621	(\$21,008.60)
Morrisville	\$ 81	\$ 64,948	\$ 101	\$ 81,116	(\$16,167.71)
Northfield	\$ 73	\$ 24,284	\$ 90	\$ 29,813	(\$5,528.30)
Orleans	\$ 75	\$ 14,849	\$ 84	\$ 16,678	(\$1,828.45)
Swanton	\$ 88	\$ 62,249	\$ 87	\$ 61,620	\$629.65
Statewide pooling	\$ 102	\$ 6,829,854	\$ 108	\$ 8,252,834	(\$1,422,980.13)
Statewide minus GMP	\$ 92	\$ 2,077,009	\$ 107	\$ 2,552,955	(\$475,945.65)
VPPSA Members	\$ 84	\$ 532,128	\$ 100	\$ 640,344	(\$108,216.91)

⁴ Typical Residential Bills are calculated using current tariff rates in effect as of January 1, 2022, including the EEC but excluding other utility surcharges. These are VPPSA’s calculations intended for illustrative purposes and are not intended to imply or encompass variations within each utility’s unique billing and/or rate structure(s).

Results

VPPSA appreciates the Commission's focus on creating equal opportunities for Vermonters, particularly low-income customers to thrive in Vermont. While electrification of the thermal and transportation sectors is already well underway, it is important to acknowledge the important difference between equity and equality. Equality assumes a one-size-fits all approach that can be broadly applied to solve a problem. Equity on the other hand leans on and supports diversity of thought, of ability, and of value to an ecosystem. Providing equitable access often requires a more complex approach to problem solving and must take into account the strength of differences.

For many of VPPSA's members' service territories, there are not enormous threshold gaps from those who are just above income-based benefits relief and those who are within those limits. As the state advances its renewable energy and greenhouse gas emissions targets through ongoing policy and rulemaking proceedings that promote electrification, it is important for distribution utilities to be focused on affordability and reliability as grid assets are modernized and managed to meet more complex loads.

To provide equitable opportunity, it is important to take into account not just equality, but also comparative impacts. Figure 4 illustrates the monthly bill impacts to typical 600 kWh residential bills using two bill reduction levels: a 25% reduction (currently offered by GMP for EAP participants) and 12.5% (proposed rate discount for Burlington Electric Department's low-income pilot program). Again, these are VPPSA's calculations for illustrative purposes and are not intended to imply or encompass variations within each utility's unique billing and/or rate structure(s).

Figure 4: Affordability Comparison

VPPSA Analysis: Affordability Comparison			
Utility	Typical 600 kWh Res Bill (600 kWh/2021 Rates)	Typical 600 kWh Bill Impact (Using 25% Bill Reduction; 30% Participation)	Typical 600 kWh Bill Impact (Using 12.5% Bill Reduction; 30% Participation)
GMP	\$128.69	1.37%	0.68%
VEC	\$124.93	1.41%	0.71%
WEC	\$148.95	1.65%	0.82%
BED	\$101.50	2.39%	1.19%
Stowe	\$117.08	1.52%	0.76%
Hyde Park	N/A	-	-
Barton	\$123.65	2.64%	1.32%
Enosburg	\$107.69	1.50%	0.75%
Hardwick	\$114.67	1.48%	0.74%
Jacksonville	\$107.63	1.96%	0.98%
Johnson	\$110.79	1.98%	0.99%
Ludlow	\$78.23	1.73%	0.86%
Lyndonville	\$100.43	1.81%	0.91%
Morrisville	\$100.93	1.55%	0.78%
Northfield	\$90.01	1.48%	0.74%
Orleans	\$84.23	2.46%	1.23%
Swanton	\$86.78	1.51%	0.76%
Statewide pooling	\$107.89	1.68%	0.84%
Statewide minus GMP	\$106.50	1.82%	0.91%
VPPSA Members	\$100.46	1.72%	0.86%

Again, VPPSA implores the Commission to consider the long-lasting impacts that a 1.5% - nearly 3.0% increase in electric utility bills will have on all state customers. These projections and models do not even consider the current or proposed rates currently under review and how another ratepayer funded program will impact the average consumer.

Administrative Costs

In its Order, the Commission has specifically requested VPPSA to comment on its ability to provide administrative support to its members and if so, the estimated cost. VPPSA continues to be responsive to its members' needs and provide services where requested, where it creates economies of scale, and where personnel capacity and resources may need additional support. VPPSA was granted broad statutory authority to provide an array of services required to support the activities of its member municipal utilities to maintain local autonomy and control, and it will continue to do so.

VPPSA is prepared to support our members with this program if they determine that having us do so is the most effective approach. Without having specific details of how a low-income bill assistance program would be funded, implemented, and administered, no estimate of administrative costs can be given at this time.

Conclusion

VPPSA members are not-for-profit municipal entities run by locally elected/appointed boards. They are dedicated to providing affordable, reliable electric service to all customers, including low-income households in some of the most economically underprivileged and rural areas in the state. Since community-owned utilities are non-profit and accountable to voters, including residential and low-income customers, there is a natural pressure to keep residential rates affordable and to keep fixed charges as low as possible, typically resulting in rate structures that allocate costs through the kWh charge where rate design principles allow that to occur.

VPPSA member utilities believe strongly that statewide low-income bill support should be implemented through a legislative allocation of state General Fund revenue as a social program. This would provide support to low-income households without designing a utility program that intentionally establishes cross-subsidization between customers. VPPSA members already engage in several programs outside of general affordability to offer expanded support to low- and moderate-income customers.

While the Commission continues to investigate the feasibility of a statewide program, we again ask that the proceedings are designed to allow the time for local officials to engage their communities in the design and to evaluate alternatives that meet local needs, including potentially seeking legislative authority for a statewide or VPPSA aggregate program.

If you have any questions or seek further clarification, please do not hesitate to contact me.

Respectfully,

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