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December 11, 2020

Filed in ePUC

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

Re: Investigation to review the 2021 implementation of the standard-offer program
Case No. 20-2935-INV

Dear Ms. Whitney:

Green Mountain Power appreciates the opportunity to comment on the issues set forth in the Public Utility Commission's ("PUC") October 10, 2020 Order in this case regarding the 2021 standard-offer program.

First, the PUC requested comment on Order 872 from the Federal Energy Regulatory Commission ("FERC") regarding updates to its Public Utility Regulatory Policies Act ("PURPA") regulations. Since issuance of the PUC's order, the FERC issued Order 872-A on November 19, 2020 that clarifies parts of Order 872. Given the breadth of the FERC's orders and the fact that we are nearing the end of the standard-offer program, it is difficult to comment generally on their impact. It does not appear from our initial review that Orders 872 or 872-A will impact the market-based mechanism the PUC uses to obtain plant capacity under the standard-offer program since Vermont's standard-offer program is supplemental to a Qualified Facility's PURPA rights, which are implemented through Rule 4.100.

Second, the PUC requested comments on the existing established price caps under the standard-offer program and asked for recommendations for any changes or updates. We renew our comments from last year and provide updated information in the event the Commission wishes to take this up, though we recognize the limited number of auctions remaining for this program.

The current avoided cost cap of 13 cents/kWh for solar photovoltaic projects has not been adjusted regularly and now appears to meaningfully exceed the prices that many suppliers with strong, viable, well-sited projects are willing and able to offer. Additionally, energy and capacity market prices have moved lower over the last several years, meaning that the value of the output provided by these projects has seen a comparable reduction in value. Figures 1 and 2 show annual average energy prices and Forward Capacity Auction clearing prices for recent years. In addition, during this same time period, the increase in solar output across New England has tended to suppress energy prices during the peak hours for solar generation,

thereby further lowering the value realized for the benefit of our customers from these projects. This context of declines in the wholesale market value of output from solar photovoltaic projects informs our opinion regarding the need to update standard-offer prices for this technology.

Figure 1 - Energy Prices

Year	Annual Average		Notes
	DA LMP	RT LMP	
2013	\$54.91	\$55.08	
2014	\$63.81	\$61.60	
2015	\$41.58	\$40.22	
2016	\$29.66	\$28.49	
2017	\$33.05	\$33.02	
2018	\$43.71	\$42.83	
2019	\$30.67	\$30.05	
2020	\$21.35	\$21.37	Through December 7, 2020

Source: ISO-NE settlement data for Node 4003 (Vermont Zone)

Figure 2 - Capacity Prices

Auction	Start Date	End Date	Rest of Pool
FCA 1	6/1/2010	5/31/2011	\$4.50
FCA 2	6/1/2011	5/31/2012	\$3.60
FCA 3	6/1/2012	5/31/2013	\$2.95
FCA 4	6/1/2013	5/31/2014	\$2.95
FCA 5	6/1/2014	5/31/2015	\$3.21
FCA 6	6/1/2015	5/31/2016	\$3.43
FCA 7	6/1/2016	5/31/2017	\$3.15
FCA 8	6/1/2017	5/31/2018	\$7.03
FCA 9	6/1/2018	5/31/2019	\$9.55
FCA 10	6/1/2019	5/31/2020	\$7.03
FCA 11	6/1/2020	5/31/2021	\$5.30
FCA 12	6/1/2021	5/31/2022	\$4.63
FCA 13	6/1/2022	5/31/2023	\$3.80
FCA 14	6/1/2023	5/31/2024	\$2.00

Source: <https://www.iso-ne.com/static-assets/documents/2018/05/fca-results-report.pdf>

Projects awarded PPAs have uniformly featured prices under 13 cents/kWh, with seventeen of the projects that submitted in the 2020 RFP offering prices between 8.77 cents/kWh and 10.69 cents/kWh. This suggests a competitive market wherein the current price cap is higher than it needs to be to support timely development at the lowest feasible cost. As GMP has suggested previously, the price cap could be set annually based upon the results of recent prior auctions by, for example, setting it as the lesser of: (a) the prior year's avoided cost price cap; or (b) 115% of the weighted average of all bids that were awarded PPAs or placed in the Reserve Group in the prior year's RFP. This method would result in an avoided cost cap of

10.37 cents/kWh for the 2021 RFP; GMP recommends that it should apply to both the Price Competitive and Provider blocks. GMP's calculation under this method is below in Figure 3.

Figure 3 - GMP's Solar Price Cap Proposal

Project Name	Award Group	Cents/kWh	MW Capacity
Bristol Solar	Provider Block	0.0870	2.200
Pittsford Solar	Provider Block	0.0899	2.200
Trolley racks	Price Competitive Block	0.0878	2.050
Waite Cemetary	Price Competitive Block	0.0885	2.200
NEER DG - Woodstock	Price Competitive Block	0.0887	2.200
63 Acre Solar	Price Competitive Block	0.0887	2.200
Patch Pond Solar	Price Competitive Block	0.0895	2.200
Walloomsac River Solar	Price Competitive Block	0.0895	1.000
Evergreen Road	Price Competitive Block	0.0908	2.200
NEER DG - Adams Road	Reserve Group	0.0911	2.200
Stone Mill	Reserve Group	0.0918	2.200
NEER DG - Outback Area	Reserve Group	0.0979	2.200
Weighted Average		0.0901	
15% Adjustment		0.0135	
Adjusted Price Cap		0.1037	

Using projects proposed in the most recent RFP as an indicator of what a project would need to charge in order to ensure financial viability seems to be a reasonable and fair way to review the price cap on an annual basis. Pairing the RFP results with the proposed adjustment factor allows for unforeseen changes to the market that might increase the economic requirements for projects to achieve commercial operation. Other methods of price updating could also be considered, provided that the key elements would be an easy, transparent annual reset and a price based upon actual auction result experience year to year.

GMP strongly supports the goal of technology diversity in the standard-offer program, and notes that all of the 2020 RFP bids for technologies other than Solar PV featured prices that were at or near the technology-specific avoided cost caps. This indicates an apparent lack of supplier competition and market innovation to lower costs. Few non-solar projects have been completed in recent years so it is difficult to know whether these projects could be developed at prices lower than the price caps. Given this uncertainty, GMP does not recommend a change to the price caps for technologies other than solar PV. If more significant numbers of wind and food digester projects begin to achieve commercial operation while the program is available, it may be appropriate to revisit the price caps for these technologies for future RFPs.

GMP Comments
Case No. 20-2935-INV
December 11, 2020

Thank you, and if you have any questions please feel free to contact me at (802) 747-6871 or at Andrew.Quint@GreenMountainPower.Com.

Sincerely,

A handwritten signature in blue ink that reads "Andrew Quint". The signature is written in a cursive style with a small dot above the 'i' in "Quint".

Andrew Quint