STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7873

Programmatic Changes to the Standard-Offer Program	)

and Docket No. 7874

Investigation into the Establishment of Standard-Offer	)
Prices under the Sustainably Priced Energy Enterprise	)
Development ("SPEED") Program	)

Order entered: 3/21/2014

ORDER RE 2014 IMPLEMENTATION ISSUES FOR THE STANDARD-OFFER PROGRAM

I. INTRODUCTION

On March 1, 2013, the Public Service Board ("Board") issued an Order implementing the significant changes to the Sustainably Priced Energy Enterprise Development ("SPEED") standard-offer program required by Public Act 170,[1] as codified in 30 V.S.A. §§ 8005a and 8006a (the "March 1 Order"). In the March 1 Order, pursuant to 8005a(f)(1), we established a request for proposal ("RFP") mechanism to determine the standard-offer projects that will fill annual plant capacity available under the program, and directed the SPEED Facilitator,[2] by April 1 of each year, to issue an RFP to solicit standard-offer projects to meet the requirements of 30 V.S.A. § 8005a(c). Pursuant to 8005a(f)(2), we also established avoided costs to serve as caps on the standard-offer prices solicited through the RFP. In addition, in the March 1 Order, pursuant to Section 8006a, we established a Greenhouse Gas ("GHG") Reduction Credit Program.

In this Order, pursuant to 8005a(f)(3), we determine the avoided costs that will serve as caps on the standard-offer prices solicited through the 2014 RFP. We also remand Docket No.

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1. Public Act 170 (2012, Vt., Adj. Sess.). The text of Act 170 can be found at http://www.leg.state.vt.us/DOCS/2012/ACTS/ACT170.PDF.

2. VEPP Inc. serves as the SPEED Facilitator under contract to the Board. The 2014 RFP can be found at: http://vermontspeed.com.

7874 to Board staff to further review the avoided costs for possible adjustment before the 2015 RFP is issued. In addition, pursuant to Sections 8005a(c)(1)(C) and 8006a(a), we determine the adjustment to the annual increase of the standard-offer programmatic cap due to GHG reduction credits and we establish further requirements for the GHG Reduction Credit Program.

II. Discussion and Conclusions

Avoided Costs for Standard-Offer Projects

Background

In the March 1 Order, pursuant to Section 8005a(f), the Board established an RFP mechanism for new standard-offer projects, for effect on April 1, 2013, and established avoided costs to serve as caps on the standard-offer prices solicited through the RFP.

Section 8005a(f)(2)(B) defines avoided cost as the "incremental cost to retail electricity providers of electric energy or capacity or both, which, but for the purchase through the standard offer, such providers would obtain from distributed renewable generation that uses the same generation technology as the category." In addition, pursuant to Section 8005a(f)(2)(B)(i)-(vi), in establishing a standard-offer price, the Board is required to consider the relevant cost data of the Vermont composite electric utility system, the duration of the potential contract, the availability of capacity or energy from the plant, the relationship of the availability of energy or capacity from the plant to the ability of the Vermont composite electric utility system to avoid costs, the costs or savings resulting from variations in line losses, and the supply and cost characteristics of plants eligible to receive the standard-offer contract.

Pursuant to 30 V.S.A. § 8005a(f)(3), the Board is required to annually review the established avoided costs "to decide whether they should be modified in any respect in order to achieve the goal and requirements of this subsection. Any such modification shall be effective on a prospective basis commencing one month after it has been made."

Accordingly, in a January 24, 2014, memorandum, participants in this proceeding were requested to file comments on the calculation of avoided costs pursuant to Section 8005a(f)(2).

Participants' Comments

On February 7, 2014, the Vermont Department of Public Service ("Department"), the City of Burlington Electric Department ("BED"), and Green Mountain Power Corporation ("GMP") filed separate comments in response to the January 24 memorandum. On February 10, 2014, Renewable Energy Vermont ("REV") filed comments.

The Department, BED, GMP, and REV recommend a review of the avoided price caps, for possible adjustment, in advance of the 2015 RFP. The Department, BED, and GMP contend that the results of the 2013 RFP support the review of the avoided cost cap of $0.257 per kWh for solar generation. The 2013 RFP produced more than 30 proposals for solar standard offer projects, with a substantial cluster of bids between $0.16 and $0.18 per kWh.

The Department contends that changes to avoided cost caps are unlikely to affect the outcome of the 2014 RFP given the diverse set of respondents to the 2013 RFP. In addition, the Department maintains two completed RFPs will provide a better assessment of the market costs of standard-offer projects. The Department also raises concerns over the practical implications of determining new avoided costs before the issuance of the 2014 RFP.

While supporting a review of price caps before the 2015 RFP, GMP also recommends that an avoided cost cap of $0.20 per kWh for solar projects be established for the 2014 RFP. GMP bases its recommendation on 2013 RFP results, taking the cluster of bids between $0.16 and $0.18 per kWh, and adding an allowance to account for the possibility that some of the solar project cost drivers (e.g., borrowing costs, panel costs) could increase from 2013 to 2014.

Discussion and Conclusion

The 2013 RFP produced bids for only one technology – solar – with the majority of the over 30 bids significantly below the $ 0.257 per kWh price cap. Based on the 2013 RFP results and the recommendations of the majority of participants, we conclude that our previous price determinations do not need to be modified before the 2014 RFP to achieve the requirements of Section 8005a(f). However, we conclude that it is appropriate to review the avoided costs that serve as caps on the standard-offer prices solicited through the RFP for possible adjustment before the 2015 RFP. A second year of RFP results will help inform the review of the avoided costs.

Accordingly, we will remand Docket No. 7874 to Board staff in order to review the avoided costs for possible adjustment before the 2015 RFP. Pursuant to Section 8005a, the following avoided costs[3] remain effective for the 2014 RFP. The avoided costs, except for farm methane, serve as caps on the prices solicited through the 2014 RFP.[4]

Avoided-Cost Schedule for Standard-Offer Projects ($/kWh)

	Biomass	Farm Methane	Hydroelectric	Landfill Gas	Wind >100 kW	Wind ≤ 100 kW	Solar PV
Levelized	0.125	0.141	0.123	0.090	0.118	0.253	0.257 for 25 years
Year 1	0.121	0.136	0.119	0.087	0.113	0.245	
Year 2	0.121	0.137	0.119	0.087	0.113	0.246	
Year 3	0.122	0.137	0.120	0.088	0.114	0.247	
Year 4	0.123	0.138	0.121	0.089	0.114	0.249	
Year 5	0.124	0.139	0.121	0.089	0.115	0.250	
Year 6	0.125	0.139	0.122	0.090	0.115	0.251	
Year 7	0.126	0.140	0.122	0.091	0.116	0.252	
Year 8	0.127	0.141	0.123	0.091	0.117	0.254	
Year 9	0.128	0.142	0.124	0.092	0.117	0.255	
Year 10	0.129	0.142	0.124	0.093	0.118	0.256	
Year 11	0.130	0.143	0.125	0.093	0.118	0.258	
Year 12	0.131	0.144	0.126	0.094	0.119	0.259	
Year 13	0.132	0.145	0.126	0.095	0.120	0.260	
Year 14	0.133	0.145	0.127	0.096	0.120	0.262	
Year 15	0.135	0.146	0.128	0.097	0.121	0.263	
Year 16	0.136	0.147	0.128	NA	0.122	0.265	
Year 17	0.137	0.148	0.129	NA	0.122	0.266	
Year 18	0.138	0.149	0.130	NA	0.123	0.268	
Year 19	0.140	0.149	0.131	NA	0.124	0.269	
Year 20	0.141	0.150	0.131	NA	0.124	0.271	

3. For all categories except solar PV, 30 percent of the cost increases by 1.6% each year to reflect the impact of inflation on operating and maintenance expenses. Docket 7533, Order of 1/15/10 at 21-22; Docket 7780, Order of 1/23/12.

4. Pursuant to Section 8005a(g), farm methane projects remain outside of the programmatic cap. Farm methane projects will receive a levelized standard-offer price of $0.141 per kWh and are not required to participate in a market-based mechanism.

Greenhouse Gas Reduction Credit Program

Background

Section 8006a requires the Board to develop a GHG Reduction Credit mechanism for certain customer(s). In particular, pursuant to Section 8006a(a), greenhouse gas reduction credits generated by an eligible ratepayer shall result in an adjustment to the annual increase of the standard-offer programmatic cap established under Section 8005a(c)(1).

Section 8006a(d) requires that an eligible ratepayer report to the Board annually on each specific project undertaken to create eligible reduction credits. Section 8006a(e) requires that a distribution utility provider pass on savings that it realizes through greenhouse gas reduction credits proportionally to the eligible ratepayers generating the credits.

In allocating the purchased standard-offer power to Vermont utilities, pursuant to Section 8005a(k), the SPEED Facilitator is required to adjust the *pro rata* share calculations to account for any GHG reduction credits. In addition, pursuant to Section 8006a(e), the utility (GMP) of the eligible ratepayer (IBM) is required to make a billing adjustment to reflect the annual GHG reduction credits.

In its January 29, 2013, Order in Docket No. 7873, the Board determined that International Business Machines Corporation ("IBM") satisfies the ratepayer eligibility requirements defined in Section 8006a(b)(1), and approved IBM's independent third-party verifier of GHG reductions.

In the March 1 Order, pursuant to Section 8005a(c)(1)(C), the Board established a process to adjust the annual increase in standard-offer capacity to account for GHG reduction credits, including the requirement that the eligible ratepayer file an annual report with information needed to make the adjustment. In addition, the Board provided additional time for a working group, comprised of IBM, the SPEED Facilitator, the Department, and GMP, to file a recommendation for: (1) the development of a methodology to allocate the *pro rata* share of standard-offer power to Vermont utilities to account for any GHG reduction credits; and (2) the billing adjustment made by the utility of the eligible ratepayer to reflect the annual GHG reduction credits.

Based on the 2013 annual report filed by IBM, the annual increase in 2013 program capacity was reduced by 35 kW to reflect 2012 GHG reductions.

On February 20, 2014, IBM filed a letter indicating that it has decided not to file an annual report for 2013 GHG reductions due to the cost associated with third-party verification.

Participants' Recommendation

On June 3, 2013, the SPEED Facilitator made the following recommendation for an allocation methodology and billing adjustment for any GHG reduction credits. The SPEED Facilitator represented that the Department and GMP supported the recommendation. No comments were filed on the recommendation.

Each year, beginning the month after the quarter in which the first of the projects for a given year's adjusted annual increase of the standard-offer program capacity comes on-line, a quarterly GHG reduction credit for the projects will be determined. Separate quarterly credits will be determined for each year based on that year's specific GHG reduction credits and the specific projects which have come on-line. The quarterly GHG reduction credit applied to the utility accounts will be determined as follows:

> Step 1: A GHG credit rate will be determined for each standard-offer technology for each annual increase in standard-offer capacity. The GHG credit rate will be calculated using the technology-specific standard-offer contract price (based on results of a given year's RFP) reduced by the value of the avoided wholesale energy cost, avoided wholesale capacity cost, avoided share of the region's electric transmission charges (the Regional Network Service or "RNS" charge), and market value of generated renewable energy credits.
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> Step 2: An adjusted value is determined for the quarterly output for the specific online projects associated with a given year's annual increase in standard-offer capacity. The adjusted value is calculated by dividing the actual quarterly metered data for the online projects by one minus the annual GHG reduction credit.
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> Step 3: The quarterly GHG credit amounts for each project in the specific year will be calculated as the standard-offer project output (kWh) billed minus the adjusted standard-offer project output (kWh) multiplied by the GHG credit rate.
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> Step 4: The sum of all the project-specific GHG credits will be calculated and billed to all the Vermont utilities participating in the standard-offer program on a *pro rata* share of retail sales.

> Step 5: The sum of the project-specific GHG credits will be allocated to eligible ratepayer's utility each quarter as a component of the utility's monthly billing by the SPEED Facilitator. This sum will reduce the utility's allocation of costs for the standard-offer program. The utility's cost savings will be passed onto the eligible ratepayer through a billing adjustment made by the utility.

Discussion and Conclusions

Pursuant to Section 8005a(c)(1)(C), the Board is required to adjust the annual increase in standard-offer capacity to account for GHG reduction credits by April 1. IBM, the eligible ratepayer, has indicated that it has decided not to file an annual report for 2013 GHG reductions. Accordingly, there will be no reduction in the annual increase in 2014 standard-offer program capacity to reflect GHG reductions. The annual increase shall be 5 MW (4.5 MW for the 2014 capacity cap and 0.5 MW for the Provider Block).[5]

We accept the participants' recommendation for the methodology to adjust the annual increase in standard-offer capacity to account for: (1) the allocation of the *pro rata* share of standard-offer power to Vermont utilities to account for any GHG reduction credits; and (2) the billing adjustment made by the utility of the eligible ratepayer to reflect the annual GHG reduction credits. The methodology requires the determination, for the purpose of calculating a greenhouse gas credit rate, of values for avoided wholesale energy cost, avoided wholesale capacity cost, avoided RNS charge, and market value of generated renewable energy credits. Accordingly, we require that interested parties file, by November 15, 2014, recommendations with regard to these values.

III. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board ("Board") of the State of Vermont that:

1. Effective for any standard-offer contract, executed after March 1, 2014, the standard-offer prices for renewable power under 30 V.S.A. § 8005a(b)(2) shall be determined through a

5. Pursuant to 30 V.S.A. § 8005a(c)(1)(B), each year, ten percent of the standard-offer program is not available for development of renewable energy projects by merchant generators, but is instead reserved for Vermont's utilities. This portion of the program is known as the "Provider Block."

request for proposal issued by the SPEED Facilitator and shall be no higher than the avoided costs as specified within this Order. For farm methane projects the standard-offer price shall be the avoided costs as specified within this Order.

2. We remand Docket No. 7874 to Board staff in order to conduct additional proceedings as necessary to review for possible adjustment the avoided costs established for standard-offer projects.

3. Pursuant to 30 V.S.A. § 8006a, the allocation of the *pro rata* share of standard-offer power to Vermont utilities to account for any greenhouse gas reduction credits and the billing adjustment made by the utility of the eligible ratepayer to reflect the annual greenhouse gas reduction credits shall be made using the methodology as determined herein.

4. On or before November 15, 2014, interested parties shall file recommendations, for the purpose of calculating a greenhouse gas credit rate, for values of avoided wholesale energy cost, avoided wholesale capacity cost, avoided Regional Network Service charge, and market value of generated renewable energy credits.

Dated at Montpelier, Vermont, this 21st day of March, 2014.

s/James Volz	)	
	)	PUBLIC SERVICE
	)	
s/John D. Burke	)	BOARD
	)	
	)	OF VERMONT
s/Margaret Cheney	)	

OFFICE OF THE CLERK

FILED: March 21, 2014

ATTEST: s/Judith C. Whitney
Deputy Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and Order.