STATE OF VERMONT PUBLIC UTILITY COMMISSION

Case No. 18-4145-INV

2018 updates to the Regional Greenhouse Gas	
Initiative auction procedures for Vermont	

Order entered: 01/10/2019

ORDER IMPLEMENTING THE REGIONAL GREENHOUSE GAS INITIATIVE AUCTION PROCEDURES FOR THE STATE OF VERMONT

I. INTRODUCTION

The Regional Greenhouse Gas Initiative ("RGGI") is a cooperative effort by a group of Northeastern and Mid-Atlantic states, including Vermont, to reduce carbon dioxide ("CO₂") emissions – a greenhouse gas that contributes to global climate change. Central to this initiative is the implementation of a multi-state cap-and-trade program with a market-based emissions trading system. The Vermont Public Utility Commission ("Commission") has been tasked by statute, 30 V.S.A. § 255, to implement the auction provisions of the RGGI program. As described below, the Vermont Agency of Natural Resources ("ANR") is also tasked with implementing the RGGI program.

On December 19, 2017, the RGGI states released the results of a two-year program review in the form of an updated RGGI Model Rule (the "2017 Model Rule"), which incorporates recommended revisions to the RGGI program.³ The updated 2017 Model Rule includes two provisions related to auction implementation, not previously incorporated into Vermont's auction procedures, known as the "cost containment reserve" and "emissions containment reserve."

¹ The RGGI participating states currently include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Vermont committed to participate in RGGI when then Governor Douglas signed the RGGI Memorandum of Understanding, on December 20, 2005, with the governors of the other participating states. The Vermont General Assembly then enacted statutory provisions, 30 V.S.A. § 255, to implement the RGGI program in Vermont.

² Pursuant to Section 9 of Act 53 of the 2017 legislative session, the Vermont Public Service Board's name was changed to the Vermont Public Utility Commission, effective July 1, 2017. For clarity, activities of the Vermont Public Service Board that occurred before the name change will be referred to in Commission documents as activities of the Commission unless that would be confusing in the specific context.

³ The 2017 Model Rule as well as materials related to the program review can be found at: https://www.rggi.org/program-overview-and-design/program-review.

In this Order, we update Vermont's auction procedures to include the cost containment reserve and emissions containment reserve. With the exceptions of those additions and other minor clarifying changes (for instance, changing "Board" to "Commission"), this Order includes the previous requirements of the April 2, 2014, Order implementing the RGGI auction procedures and the set-aside program. Accordingly, this Order supersedes the April 2, 2014, Order.

II. BACKGROUND

The RGGI multi-state cap-and-trade program requires certain electric power generators in participating states to purchase allowances for their CO₂ emissions. To support the state CO₂ Budget Trading Programs, the RGGI participating states have implemented a regional auction platform to sell CO₂ allowances.

Under the multi-state cap-and-trade program, a CO₂ allowance represents a limited authorization to emit one short ton of CO₂.⁴ A regulated power plant must hold CO₂ allowances equal to its emissions to demonstrate compliance at the end of each three-year compliance period.⁵ CO₂ allowances issued by any participating state can be used in any RGGI state program, so that the individual state CO₂ Budget Trading Programs, in aggregate, form one regional compliance market for CO₂ emissions.

Under 30 V.S.A. § 255, the Commission must establish a process to allocate the carbon credits that Vermont receives as part of its participation in RGGI. The Commission is also authorized to appoint a Trustee or Trustees to "receive, hold, bank, and sell tradeable carbon credits created under this program."

Pursuant to 30 V.S.A. § 255(d), Vermont's auction proceeds are deposited into the electric efficiency fund created under 30 V.S.A. § 209(d)(3). The State's energy efficiency utilities combine the RGGI proceeds with other funding sources to offer a variety of services and incentives that result in improved building performance and heating system efficiency, thereby creating jobs, saving Vermonters money, and reducing Vermont's greenhouse gas emissions.

⁴ A "short ton" is a unit of weight equal to 2,000 pounds.

⁵ The first control period took effect on January 1, 2009, and concluded on December 31, 2011. The second control period took effect on January 1, 2012, and concluded on December 31, 2014. The third control period took effect on January 1, 2015, and concluded on December 31, 2017. The fourth control period took effect on January 1, 2018, and concludes on December 31, 2020.

On July 18, 2008, the Commission issued the original order for the implementation of the RGGI auction procedures and disbursement of auction proceeds. On August 19, 2009, the Commission issued an order for the implementation of the RGGI set-aside program for voluntary renewable purchases. On April 2, 2014, the Commission issued an order superseding both the July 1, 2008, and August 19, 2009, Orders and updating and clarifying Vermont's implementation of the auction procedures and set-aside program for the RGGI program.⁶

As part of the RGGI program review during 2012-2013, the participating states agreed to conduct another program review starting in 2016. As a result of the 2016-2017 program review, RGGI released the 2017 Model Rule on December 19, 2017. This Order updates the auction procedures consistent with the 2017 Model Rule.⁷ As stated above, the 2017 Model Rule includes two provisions related to auction implementation, not previously incorporated into Vermont's auction procedures, known as the cost containment reserve and emissions containment reserve.

The cost containment reserve is a fixed quantity of allowances, in addition to the base budget, that may be made available during an auction if allowance prices exceed pre-defined price thresholds. The purpose of the cost containment reserve is to provide cost containment when market prices get too high. The emissions containment reserve is a fixed quantity of allowances that may be withheld and retired from an auction if allowance prices fall below pre-defined price thresholds. The purpose of the emissions containment reserve is to secure additional emissions reductions in the event of lower than anticipated emission reduction costs.

On November 9, 2018, a draft order was circulated to members of the informal RGGI Advisory Committee⁸ established under paragraph 2 of the Commission's July 18, 2008, Order.

On December 21, 2018, the Vermont Department of Public Service filed a comment letter stating that it had reviewed the draft order and had no objection to its adoption.

⁶ The Commission Orders implementing the Vermont RGGI program can be found at: https://puc.vermont.gov/electric/regional-greenhouse-gas-initiative.

⁷ ANR amended the "Vermont CO₂ Budget Trading Program Rule" to reflect the 2017 Model Rule, effective September 15, 2018, which can be found at: https://dec.vermont.gov/air-quality/laws.

⁸ The July 18, 2008, Order established an informal Advisory Committee that is self-selecting. All requests for Commission action, comments, and Commission decisions regarding the RGGI program are sent to the Advisory Committee. This Order retains the informal Advisory Committee.

III. DISCUSSION AND CONCLUSION

RGGI Auction Procedures

On April 2, 2014, the Commission issued an order for the implementation of the RGGI auction procedures and disbursement of auction proceeds.

This Order amends the auction procedures established by the April 2, 2014, Order by adding the cost containment reserve and emission containment reserve provisions set forth in RGGI's 2017 Model Rule.

The cost containment reserve is a fixed quantity of allowances for a given calendar year, 9 which are in addition to the base budget, that are to be made available during an auction if allowance prices exceed pre-defined price thresholds, known as the "cost containment reserve trigger price," and if the total quantity of cost containment reserve allowances for the calendar year has not already been sold in a previous auction or auctions. The purpose of the cost containment reserve is to provide cost containment when market prices get too high. The cost containment reserve trigger price shall be as follows:

- (1) for 2018, the cost containment reserve trigger price shall be \$10.25 per CO₂ allowance,
- (2) for 2019 through 2020, the cost containment reserve trigger price shall be 1.025 multiplied by the cost containment reserve trigger price from the previous calendar year, rounded to the nearest whole cent,
- (3) for 2021, the cost containment reserve trigger price shall be \$13.00, and
- (4) for 2022 and each calendar year thereafter, the cost containment reserve trigger price shall be 1.07 multiplied by the cost containment reserve trigger price from the previous calendar year, rounded to the nearest whole cent.

In an auction in which cost containment reserve allowances are sold, the cost containment reserve trigger price shall be the "reserve price," which is the minimum acceptable price for each allowance in a specific auction.

⁹ The number of cost containment reserve allowances available in a given calendar year is determined by ANR in the "Procedure for the Vermont CO₂ Budget Trading Program Allowance Budget Adjustments and Price Control Measures."

The emissions containment reserve is a fixed quantity of allowances for a given calendar year ¹⁰ that are to be withheld and retired from an auction if allowance prices fall below predefined price thresholds, known as the "emissions containment reserve trigger price," and if the total quantity of emissions containment reserve allowances for the calendar year has not already been withheld in a previous auction or auctions. The purpose of the emissions containment reserve is to secure additional emissions reductions in the event of lower than anticipated emission reduction costs. The RGGI states will begin implementing the emissions containment reserve provisions in 2021. The emissions containment reserve trigger price shall be as follows:

- (1) for 2021, the emissions containment reserve trigger price shall be \$6.00, and
- (2) for 2022 and each calendar year thereafter, the emissions containment reserve trigger price shall be 1.07 multiplied by the emissions containment reserve trigger price from the previous calendar year, rounded to the nearest whole cent.

With the exception of the above modifications and other minor clarifying changes, this Order otherwise includes the previous requirements of the April 2, 2014, Order implementing the auction procedures. Therefore, this Order supersedes the April 2, 2014, Order.

Set-Aside for Voluntary Renewable Energy Programs

On April 2, 2014, the Commission issued an order for the implementation of the RGGI set-aside program for voluntary renewable purchases. This Order includes the previous requirements of the April 2, 2014, Order implementing the set-aside program for voluntary renewable purchases, and therefore, today's Order supersedes the April 2, 2014, Order.

IV. CONCLUSION

In this Order, as discussed above, we have made modifications to the RGGI auction procedures for Vermont consistent with RGGI's 2017 Model Rule. With the exceptions of the modifications and other minor clarifying changes, this Order includes the previous requirements of the April 2, 2014, Order. Accordingly, this Order supersedes the April 2, 2014, Order.

¹⁰ The number of emissions containment reserve allowances available in a given calendar year is determined by ANR in the "Procedure for the Vermont CO₂ Budget Trading Program Allowance Budget Adjustments and Price Control Measures."

V. ORDER

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED by the Vermont Public Utility Commission ("Commission") that:

1. This Order supersedes the April 2, 2014, Order regarding the implementation of the Regional Greenhouse Gas Initiative ("RGGI") auction procedures and disbursement of auction proceeds, and the implementation of the RGGI set-aside program for voluntary renewable purchases.

General Auction Procedures and Disbursement of Auction Proceeds

- 2. A Trustee shall be appointed by the Commission to release RGGI CO₂ allowances to auction and collect and disburse auction proceeds. The Trustee shall perform the necessary ministerial work involved in these tasks. Consistent with Vermont's CO₂ allowance budget established by ANR's "Vermont CO₂ Budget Trading Program Rule" and "Procedure for the Vermont CO₂ Budget Trading Program Allowance Budget Adjustments and Price Control Measures," the Commission shall direct the Trustee as to the number of allowances to release to auction and how the funds shall be disbursed. CO₂ allowances shall be released to auction on an even basis across each year during each control period.¹¹
- 3. The Trustee shall be selected through a competitive solicitation process when the contract ends for the existing selected Trustee.
- 4. The Commission shall use an informal Advisory Committee that is self-selecting; interested parties may ask to be added to an email distribution list for the Advisory Committee. All requests for Commission action, comments, and Commission decisions shall be sent to the Advisory Committee. Before making substantive decisions regarding the use of the proceeds and allowances, the Commission shall request comments from the Advisory Committee. If the Commission determines that a more formal advisory process is appropriate in the future, it may request comments on whether the current process should be altered.
- 5. The Trustee shall collect auction proceeds and disburse these funds as directed by the Commission, using the following process:

¹¹ While the Commission directs the Trustee on the release and retirement of allowances, the actual management of allowances in the CO₂ Allowance Trading System is performed by the agency administering the CO₂ Allowance Trading System auction accounts. Currently, the Vermont Agency of Natural Resources administers the CO₂ Allowance Trading System auction accounts. At a future date, it is possible that the Commission may assume responsibility for the management of the auction accounts in the CO₂ Allowance Trading System.

(a) The costs associated with the Trustee and the administrative costs paid to RGGI, Inc. shall be reimbursed by RGGI auction proceeds, pursuant to 30 V.S.A. § 255(c)(2)(B).

- (b) The Agency of Natural Resources ("ANR") and the Department of Public Service ("Department") shall have the opportunity to request that appropriate and reasonable administrative costs associated with their administration of RGGI be paid from the auction proceeds and to request funds to "stimulate or support investment in the development of innovative carbon emissions abatement technologies that have significant carbon reduction potential," pursuant to 30 V.S.A. § 255(c)(2)(G).
- (c) Subject to the opportunity for comment provided under subsection (d) below, the Commission may decide to use auction proceeds to pay the Commission's reasonable administrative costs associated with its administration of RGGI.
- (d) The Advisory Committee shall have the opportunity to file comments before the Commission disburses any auction proceeds to ANR, the Department, or itself to defray reasonable administrative costs associated with the administration of RGGI, or to fund any requests made pursuant to 30 V.S.A. § 255(c)(2)(G) by the Department or ANR.
- (e) Minus any funds disbursed pursuant to subparagraphs (a)-(d), above, the remaining auction proceeds shall be deposited into the Electric Efficiency Fund created by 30 V.S.A. § 209(d)(3), in accordance with 30 V.S.A. § 255(d).

Voluntary Renewables Set-Aside Program

- 6. The Trustee shall withhold one percent of CO₂ allowances from a RGGI auction for retirement in proportion to participation in voluntary renewable programs.
- 7. CO₂ allowances held in the set-aside account shall be retired, in an amount approved by the Commission, up to the number of tons requested by authorized applicants to reflect the purchase and retirement of tradeable renewable energy credits ("RECs"), as defined under 30 V.S.A. § 8002, made by applicants during a given compliance year.
- 8. Any allowances held in the set-aside account not used for voluntary renewable programs in a given year shall be carried forward into future years and remain available for

authorized applicants to request for retirement. In the event the number of CO₂ allowances requested by authorized applicants exceeds the amount held in the set-aside account, the Commission shall seek comment from the Advisory Committee on whether to withhold greater than one percent of CO₂ allowances from a RGGI auction for retirement.

- 9. The set-aside for voluntary renewable programs shall be available to programs offered by Vermont electric utilities and other qualifying entities that purchase and retire RECs on behalf of Vermont customers.
- 10. Renewable energy generation projects shall be located in a RGGI-participating state to be eligible for the set-aside program.
- 11. An applicant shall submit a written request to the Commission to retire a specified number of CO₂ allowances in the voluntary purchase set-aside account. All requests for the retirement of allowances from the voluntary renewable energy market set-aside shall be submitted by July 1, immediately following the allocation year for which they are being made. The requests shall include the following information to verify and document that the voluntary renewable energy purchases demonstrate accreditable CO₂ emissions reductions or avoidance:
 - (a) Documentation of the number of RECs, in MWh, purchased on behalf of retail consumers in Vermont during the previous calendar year;
 - (b) Documentation that the RECs were purchased and retired by the applicant;
 - (c) Documentation of the calendar year when each retail purchase was made;
 - (d) State from which the RECs were purchased, including documentation of facility name, unique generator identification number, and fuel type;
 - (e) Documentation that the RECs: (i) have received a Statement of Qualification from the Massachusetts Division of Energy Resources certifying that the generating facility meets the requirements of eligibility as a New Renewable Generation Unit; or (ii) have been approved by the Connecticut Department of Public Utility Control as a qualified Class I Renewable Portfolio Standards Generator; or (iii) are consistent with the requirement of 30 V.S.A. § 8002(22)(A)(i) and meet the definition of new renewable energy resource under Section 8002;

(f) Any additional information to demonstrate that the RECs are eligible in Vermont, are not being credited in more than one participating state, and are not being credited toward any renewable portfolio standard.

12. The total tons of CO₂ retired shall be equal to the MWh purchase of voluntary renewable energy multiplied by the marginal CO₂ emissions rate for the region where the electricity represented by the sale was generated. Specifically, the total tons of CO₂ retired shall be determined using the following equation:

 CO_2 tons = $MP \times MER/2000$

where:

 CO_2 tons = the number of allowances (in tons rounded to the nearest whole ton) to be placed in the retirement account.

MP = the number of renewable energy credits (RECs) voluntarily purchased on behalf of Vermont consumers during the calendar year (in equivalent MWh), which have been generated within a participating RGGI state.

MER = the most recently published annual average marginal emission rate (in pounds of CO_2 per MWh) as reported by the corresponding participating state's regional transmission organization.

13. After review of applicant requests and providing for Advisory Committee input, following the July 1st application deadline, the number of CO₂ allowances equal to the amount of avoided CO₂ emissions from the previous calendar year, as determined by the equation above, shall be retired from the set-aside account upon instruction of the Commission.

Cost Containment Reserve and Emissions Containment Reserve

- 14. The cost containment reserve is a fixed quantity of allowances for a given calendar year, in addition to the base budget. The base budget and the number of cost containment reserve allowances available in a given calendar year are determined by ANR in accordance with its "Vermont CO₂ Budget Trading Program Rule" and "Procedure for the Vermont CO₂ Budget Trading Program Allowance Budget Adjustments and Price Control Measures." Cost containment reserve allowances are to be made available during an auction if:
 - (a) allowance prices exceed pre-defined price thresholds, known as the "cost containment reserve trigger price," and

(b) the total quantity of cost containment reserve allowances for the calendar year has not already been sold in a previous auction or auctions.

15. The cost containment reserve trigger price shall be as shown in Table 1, below.

Table 1. CO₂ Cost Containment Reserve Trigger Price

2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
\$10.25	\$10.51	\$10.77	\$13.00	\$13.91	\$14.88	\$15.92	\$17.03	\$18.22	\$19.50	\$20.87	\$22.33	\$23.89

- 16. Cost containment reserve allowances shall only be sold at an auction in which total demand for allowances, above the cost containment reserve trigger price, exceeds the number of CO₂ allowances available for purchase at the auction, not including any cost containment reserve allowances.
- 17. If the condition of paragraph 16 of this Order is met at an auction, then the number of cost containment reserve allowances offered for sale shall be equal to the number of cost containment reserve allowances in the cost containment reserve account at the time of the auction. When cost containment reserve allowances are offered for sale at an auction, the cost containment reserve trigger price shall be the "reserve price," which is the minimum acceptable price for each allowance in a specific auction.
- 18. After all the cost containment reserve allowances in the account have been sold in a given calendar year, no additional cost containment reserve allowances shall be sold at any auction for the remainder of that calendar year, even if the condition of paragraph 16 of this Order is met at an auction.
- 19. Starting in 2021, the emissions containment reserve is a fixed quantity of the regularly budgeted CO₂ allowances for a given calendar year. The number of emissions containment reserve allowances for a given calendar year is determined by ANR in accordance with its "Procedure for the Vermont CO₂ Budget Trading Program Allowance Budget Adjustments and Price Control Measures." Emissions containment reserve allowances are to be withheld and retired from an auction if:
 - (a) allowance prices fall below pre-defined price thresholds, known as the "emissions containment reserve trigger price," and

(b) the total quantity of emissions containment reserve allowances for the calendar year has not already been withheld in a previous auction or auctions.

20. The emissions containment reserve trigger price shall be as shown in Table 2, below.

Table 2. CO₂ Emissions Containment Reserve Trigger Price

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	\$ 6.00	\$ 6.42	\$ 6.87	\$ 7.35	\$ 7.86	\$ 8.41	\$ 9.00	\$ 9.63	\$10.30	\$11.02

- 21. Emissions containment reserve allowances shall only be withheld from an auction if the demand for allowances would result in an auction clearing price that is less than the emissions containment reserve trigger price before the withholding from the auction of any emissions containment reserve allowances.
- 22. If the condition of paragraph 21 of this Order is met at an auction, then the maximum number of emissions containment reserve allowances that may be withheld from that auction will be equal to the quantity established in ANR's "Procedure for the Vermont CO₂ Budget Trading Program Allowance Budget Adjustments and Price Control Measures" minus the total quantity of emissions containment reserve allowances that have been withheld from any previous auction in that calendar year.

OFFICE OF THE CLERK

Filed: January 10, 2019

Clerk of the Commission

Notice to Readers: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Commission (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: puc.clerk@vermont.gov)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Commission within 30 days. Appeal will not stay the effect of this Order, absent further order by this Commission or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Commission within 28 days of the date of this decision and Order.

PSB Case No. 18-4145-INV - SERVICE LIST

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Other Entities Receiving Notice:

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