

Regional Greenhouse Gas Initiative, Inc. 90 Church Street, 4th Floor New York, NY 10007

Contact: Nora Vogel

RGGI, Inc. 212-417-3179 nora.vogel@rggi.org

Friday, March 10, 2017

CO₂ Allowances Sold for \$3.00 in 35th RGGI Auction

\$43.1 Million Raised for Reinvestment in First Auction of 2017

NEW YORK — The nine Northeastern and Mid-Atlantic states participating in the Regional Greenhouse Gas Initiative (RGGI), the nation's first market-based regulatory program to reduce greenhouse gas (GHG) pollution, today announced the results of their 35th auction of carbon dioxide (CO₂) allowances.

14,371,300 CO₂ allowances were sold at the auction at a clearing price of \$3.00. Bids for the CO₂ allowances ranged from \$2.15 to \$13.75 per allowance. Additional details are available in the *Market Monitor Report for Auction 35*, which is also appended.

The March 8th auction was the first auction of 2017, and generated \$43.1 million for reinvestment in strategic programs, including energy efficiency, renewable energy, direct bill assistance, and GHG abatement programs. Cumulative proceeds from all RGGI CO₂ allowance auctions exceed \$2.68 billion dollars.

Ten million cost containment reserve (CCR) allowances were also available for sale. No CCR allowances were sold. The CCR is a fixed additional supply of allowances that are only available for sale if CO₂ allowance prices exceed certain price levels (\$10 in 2017 and rising by 2.5 percent each year thereafter).

"The reinvestment of these auction proceeds will help to build on the RGGI states' track record of achieving emissions reductions together with economic growth," said Katie Dykes, Chair of the Connecticut Public Utilities Regulatory Authority and Chair of the RGGI, Inc. Board of Directors. "The results of the auction are especially timely given that the RGGI states' innovative decision to auction CO₂ allowances has recently been the focus of a new independent report by MJ Bradley and Associates. RGGI's original program designers found that the auction format enables cost-effective pollution reductions while maximizing consumer benefit."

"Year after year, RGGI delivers triple benefits—economic, social, and environmental," said Jared Snyder, Deputy Commissioner, New York State Department of Environmental Conservation and Vice Chair of the RGGI, Inc. Board of Directors. "More than a decade ago our states chose to step up in the absence of federal action, and independent reports have found significant payback as a result. RGGI is boosting state economies and lowering consumers' energy bills while driving down carbon emissions and reducing the harmful health effects of fossil fuel pollution. The RGGI states continue to invest in the health of our communities while providing a clear market signal to power producers."

Auction 35 Results At-A-Glance		
Auction Date	Mar. 8, 2017	
Allowances Offered for Sale	14,371,300	
Allowances Sold	14,371,300	
Ratio of Bids to Supply	2.2	
Clearing Price	\$3.00	
Reserve Price	\$2.15	
Proceeds from Auction 35	\$43,113,900.00	
Total Cumulative Proceeds (All Auctions)	\$2,680,602,939.04	
Number of Bidders in Auction 35	36	
Percent of Allowances Purchased by Compliance- Oriented Entities in Auction 35	34%	
Percent of Allowances Purchased by Compliance Entities in Auction 35	47%	
Percent of Allowances Purchased by Compliance Entities in Auctions 1 - 35	76%	

More auction data is also available at: http://www.rggi.org/market/co2 auctions/results.

Market monitor reports are available at: http://www.rggi.org/market/market_monitor

To receive announcements relating to future auctions and other RGGI news, please join the RGGI, Inc. mailing list at http://www.rggi.org/news/mailing_list.

About the Regional Greenhouse Gas Initiative

The Northeast and Mid-Atlantic states participating in the third RGGI control period (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont) have implemented the first mandatory market-based regulatory program in the U.S. to reduce greenhouse gas emissions. The 2017 RGGI cap is 84.3 million short tons. The RGGI cap declines 2.5 percent each year until 2020. The RGGI states also include interim adjustments to the RGGI cap to account for banked CO₂ allowances. The 2017 RGGI adjusted cap is 62.5 million short tons.

RGGI is composed of individual CO₂ budget trading programs in each state, based on each state's independent legal authority. A CO₂ allowance represents a limited authorization to emit one short ton of CO₂, as issued by a respective state. A regulated power plant must hold CO₂ allowances equal to its emissions for each three-year control period. RGGI's third control period began on January 1, 2015 and extends through December 31, 2017. For more information visit www.rggi.org.

About Regional Greenhouse Gas Initiative, Inc.

Regional Greenhouse Gas Initiative, Inc. (RGGI, Inc.) was created to provide technical and administrative services to the states participating in the Regional Greenhouse Gas Initiative. RGGI, Inc. is a 501(c)(3) nonprofit organization. For more information, visit: www.rggi.org/rggi



MARKET MONITOR REPORT FOR AUCTION 35

Prepared for:

RGGI, Inc., on behalf of the RGGI Participating States

Prepared By:



March 10, 2017



This report was prepared by Potomac Economics (the contractor) in the course of performing work contracted for and sponsored by RGGI, Inc. on behalf of states participating in RGGI (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont). The opinions expressed in this report do not necessarily reflect those of RGGI, Inc. or any of the states participating in RGGI, and reference to any specific product, service, process, or method does not constitute an implied or expressed recommendation or endorsement of it. Further, RGGI, Inc., the states participating in RGGI, and the contractor make no warranties or representations, expressed or implied, as to the fitness for particular purpose or merchantability of any product, apparatus, or service, or the usefulness, completeness, or accuracy of any processes, methods, or other information contained, described, disclosed, or referred to in this report. RGGI, Inc., the states participating in RGGI, and the contractor make no representation that the use of any product, apparatus, process, method, or other information will not infringe privately owned rights and will assume no liability for any loss, injury, or damage resulting from, or occurring in connection with, the use of information contained, described, disclosed, or referred to in this report.

The Regional Greenhouse Gas Initiative (RGGI) is the first mandatory market-based regulatory program in the U.S. to reduce greenhouse gas emissions. RGGI is a cooperative effort of Northeast and Mid-Atlantic states to reduce emissions of carbon dioxide (CO₂) from the power sector.

RGGI, Inc. is a non-profit corporation created to provide technical and administrative services to the states participating in the Regional Greenhouse Gas Initiative.



MARKET MONITOR REPORT FOR AUCTION 35

As the Market Monitor for the RGGI CO₂ allowance market, Potomac Economics monitors the conduct of market participants in the auctions and in the secondary market to identify indications of market manipulation or collusion. We also review the administration of the auctions by EnerNOC, Inc. This report summarizes our findings regarding RGGI Auction 35, which was held on March 8, 2017.

We observed the auction as it occurred and have completed our review and analysis of its results. Based on our review of bids in the auction, we find no material evidence of collusion or manipulation by bidders.

Thirty-six bidders participated in the offering of CO₂ allowances. Bids were submitted to purchase 2.2 times the available supply of allowances, resulting in a clearing price of \$3.00 per ton. Compliance-Oriented Entities purchased 34 percent of the allowances in the offering. There was no indication of barriers to participation in the auction.

Based on our review of the administration of the market, we found that:

- The auction was administered in a fair and transparent manner in accordance with the noticed auction procedures and limitations.
- The auction results were consistent with the market rules and the bids received.
- Sensitive information was treated appropriately by the auction administrator.
- There were no indications of issues with the auction platform such as hardware or software problems, communications issues, or security breaches.

In summary, the results of our monitoring of RGGI Auction 35 raise no material concerns regarding the auction process, barriers to participation in the auction, or the competitiveness of the auction results. The appendix provides additional information about the market for RGGI CO_2 allowances and outcomes of the auction.



APPENDIX

A. DISPERSION OF PROJECTED DEMAND

The wide dispersion of projected demand for RGGI allowances across compliance entities facilitates the competitive performance of the auction.

The following figure shows the relative shares of projected demand for RGGI allowances by compliance entity in the current control period. The largest compliance entity represents only 14 percent of the total projected demand for allowances. Half of the projected demand is composed of entities that each account for less than 5 percent of the total demand. Participation by a large number of entities facilitates the competitive performance of the auction.

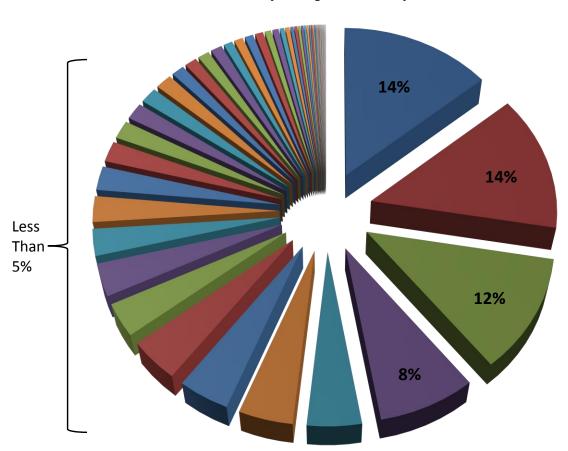


Figure 1: Projected Demand for RGGI Allowances Shares by Compliance Entity



B. SUMMARY OF PURCHASES OF ALLOWANCES IN AUCTION 35

Awards were distributed across 34 bidders with six bidders purchasing one million tons or more and eleven bidders purchasing 300,000 tons or more.

This report summarizes participation for three categories: Compliance Entities¹; Compliance-Oriented Entities and Other Entities.

- *Compliance Entities* Includes all firms with compliance obligations.
- *Compliance-Oriented Entities* are made up entirely of compliance entities that appear to acquire and hold allowances primarily to satisfy their own compliance obligations.
- Other Entities Includes:
 - ✓ Firms without any compliance obligations, and
 - ✓ Firms that have compliance obligations but which hold a number of allowances that exceeds their estimated compliance obligations by a margin that suggests they are also buying for re-sale or some other investment purpose.²

In Auction 35, Compliance Entities purchased 47 percent of the allowances sold. In the first 35 RGGI auctions, Compliance Entities purchased 76 percent of the allowances sold. In Auction 35, Compliance-Oriented Entities purchased 34 percent of the allowances sold.

After settlement of allowances sold in Auction 35:

- Fifty-four percent of the allowances in circulation will be held by Compliance-Oriented Entities.
- Fifty-five percent of the allowances in circulation are believed to be held for compliance purposes. The number of allowances that are believed to be held for compliance purposes includes 100 percent of the allowances held by Compliance-Oriented Entities and a portion of allowances held by Other Entities that have compliance obligations.

This includes affiliates of the compliance entity, including firms that: (i) have a parent-subsidiary relationship with a compliance entity, (ii) are subsidiaries of a parent company that has a large interest in a compliance entity, (iii) have substantial control over the operation of a budget source and/or responsibility for acquiring RGGI allowances to satisfy its compliance obligations.

The assessment of whether a compliance entity holds a number of allowances that exceeds its compliance obligations by a margin that suggests they are also buying for re-sale or some other investment purpose is based on: (a) the entity's forecasted share of the total compliance obligations for the entire RGGI footprint through 2020, (b) the total number of allowances in circulation, and (c) the entity's pattern of activity in the secondary market.



The following table shows the quantity of allowances purchased by each bidder. The identity of each bidder is masked, and the bidders are ranked according to the amount of allowances awarded, from largest to smallest.

Table 1: Quantity of Allowances Awarded by Bidder

Bidder	Number of Allowances Awarded
Bidder 1	2,100,000
Bidder 2	1,951,000
Bidder 3	1,700,000
Bidder 4	1,500,000
Bidder 5	1,445,000
Bidder 6	1,250,000
Bidder 7	650,000
Bidder 8	625,000
Bidder 9	400,000
Bidder 10	367,000
Bidder 11	350,000
Bidder 12	250,000
Bidder 13	214,000
Bidder 14	175,000
Bidder 15	162,000
Bidder 16	150,000
Bidder 17	140,000
Bidder 18	125,000
Bidder 19	112,000
Bidder 20	106,300
Bidder 21	100,000
Bidder 22	75,000
Bidder 23	75,000
Bidder 24	73,000
Bidder 25	60,000
Bidder 26	50,000
Bidder 27	50,000
Bidder 28	45,000
Bidder 29	34,000
Bidder 30	10,000
Bidder 31	8,000
Bidder 32	7,000
Bidder 33	6,000
Bidder 34	6,000



C. DISPERSION OF BIDS IN AUCTION 35

Bids were submitted by 22 Compliance-Oriented Entities and 14 Other Entities. In our review of the bids and the qualification process, we found no material evidence of anti-competitive conduct or inappropriate barriers to participation.

The following figure summarizes the quantity of allowances for which bids were submitted by each bidder. One Compliance-Oriented Entity and five Other Entities submitted bids for a large quantity of allowances (i.e., at least 2 million tons). Overall, Compliance-Oriented Entities accounted for 34 percent of the quantity of allowances for which bids were submitted. The quantity of allowances for which bids were submitted was 2.2 times the available supply. In Auction 34, the quantity of allowances for which bids were submitted was 2.4 times the Initial Offering.

The bid quantities were widely distributed among the 36 bidders. The concentration of bids, using the Herfindahl-Hirschman Index ("HHI"), is relatively low at 719, consistent with recent auctions. The HHI is a standard measure of concentration calculated by squaring each entity's share and then summing the squares across all entities (i.e., the index ranges from 0 to 10,000).

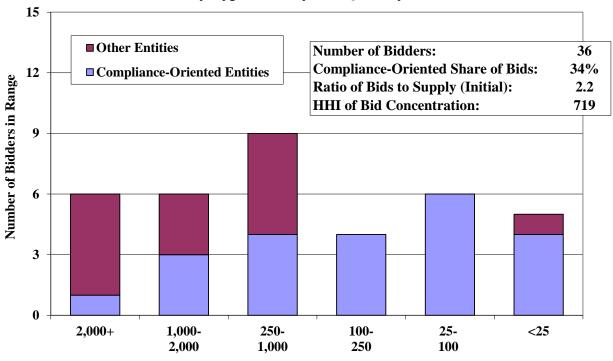


Figure 2: Quantity of Bids Submitted by Entity By Type of Entity and Quantity Bid

Quantity of Bids Submitted (in Thousands of Tons)

D. SUMMARY OF BID PRICES IN AUCTION 35

Bids were submitted across a wide range of prices in the auction and the clearing price of \$3.00 was relatively consistent with average bid prices submitted.

The following table reports several statistics regarding the bid prices for bids submitted in Auction 35. The median and mean bid prices are weighted by the quantity of each bid.

Bid Prices:	
Minimum	\$2.15
Maximum	\$13.75
Average (Median)	\$2.91
Average (Mean)	\$2.96
Clearing Price:	\$3.00



E. NAMES OF POTENTIAL BIDDERS IN AUCTION 35

In accordance with Sections 2.8 and 3 of the Auction Notice for CO₂ Allowance Auction 35, the Participating States are releasing the names of Potential Bidders in Auction 35. The states defined potential bidders as: "Each Applicant that has been qualified and submitted a complete *Intent to Bid.*" The list of 48 Potential Bidders is as follows:

Astoria Energy, LLC

Berkshire Power Company, LLC

Biourja Nehme Commodities, LLC

BP Products North America Inc. Brookfield Energy Marketing LP

Brooklyn Navy Yard Cogen Partners, LP

Caithness Long Island, LLC Calpine Energy Services, LP Carbon Lighthouse Association Cayuga Operating Company, LLC

City of Dover

Consolidated Edison Comp. of NY, Inc. Delaware City Refining Company, LLC

Direct Energy Business Marketing, LLC

Dominion Energy Marketing, Inc.

DRW Commodities, LLC DTE Energy Trading, Inc.

Exelon Generation Company, LLC GDF SUEZ Energy Marketing NA, Inc.

GenOn Energy Management, LLC

Hawkeye Energy Greenport

Indeck-Corinth Limited Partnership Jamestown Board of Public Utilities J-Power USA Development Co., Ltd. Kendall Green Energy, LLC

KMC Thermo, LLC

Koch Supply & Trading, LP

Luminus Energy Partners Master Fund, Ltd.

Macquarie Energy, LLC

Massachusetts Muni. Wholesale Elec. Co.

Maxim Power (USA), Inc.
Mercuria Energy America, Inc.
Morgan Stanley Capital Group, Inc.
National Grid Gen. dba National Grid
NextEra Energy Marketing, LLC
Noble Americas Gas & Power Corp.

NRG Power Marketing, LLC

Old Dominion Electric Cooperative Power Authority of the State of New York PSEG Energy Resources & Trade, LLC Public Service Company of New Hampshire

RBC

Selkirk Cogen Partners, LP

Shell Energy North America (US), LP

Statkraft Markets GmbH Verso Corporation Village of Freeport

Vitol Inc.