
RGGI Inc.



**MARKET MONITOR REPORT
FOR AUCTION 35**

Prepared for:

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

Prepared By:

**POTOMAC
ECONOMICS**

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

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 CO₂ allowances and outcomes of the auction.

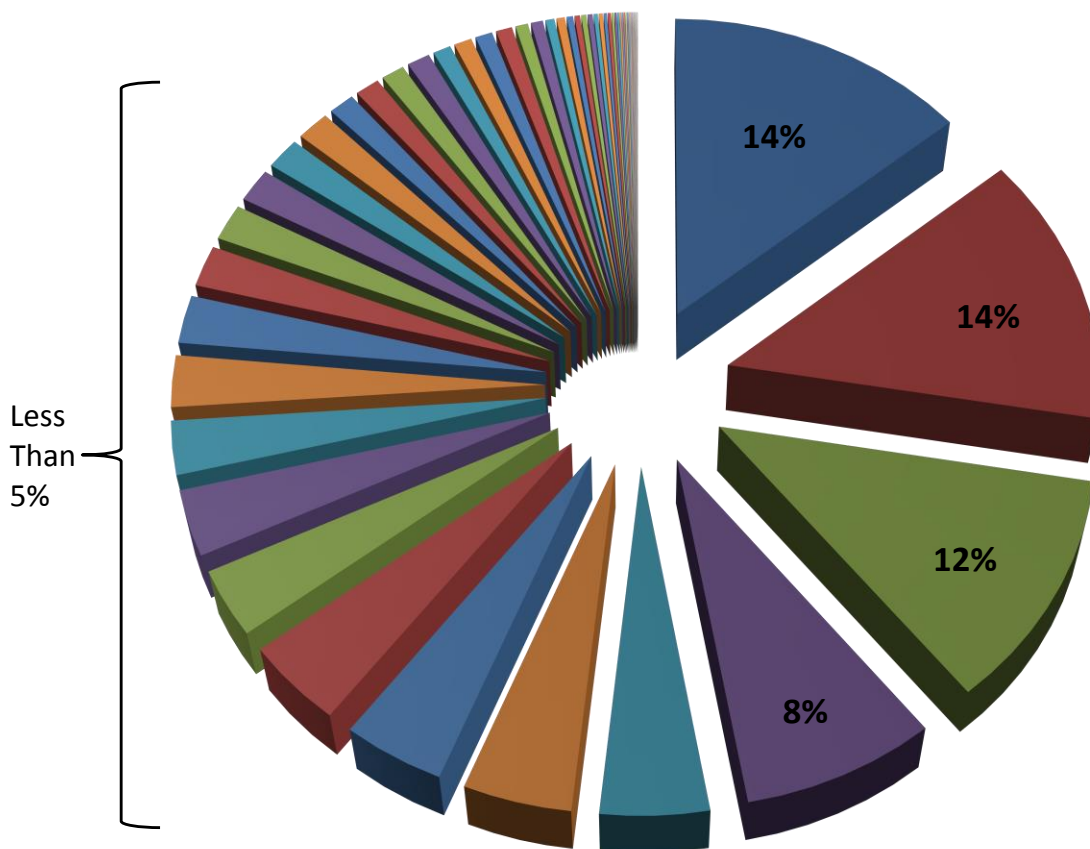
APPENDIX

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**



Market Monitor Report for Auction 35

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.

¹ 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.

² 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.

Market Monitor Report for Auction 35

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

Market Monitor Report for Auction 35

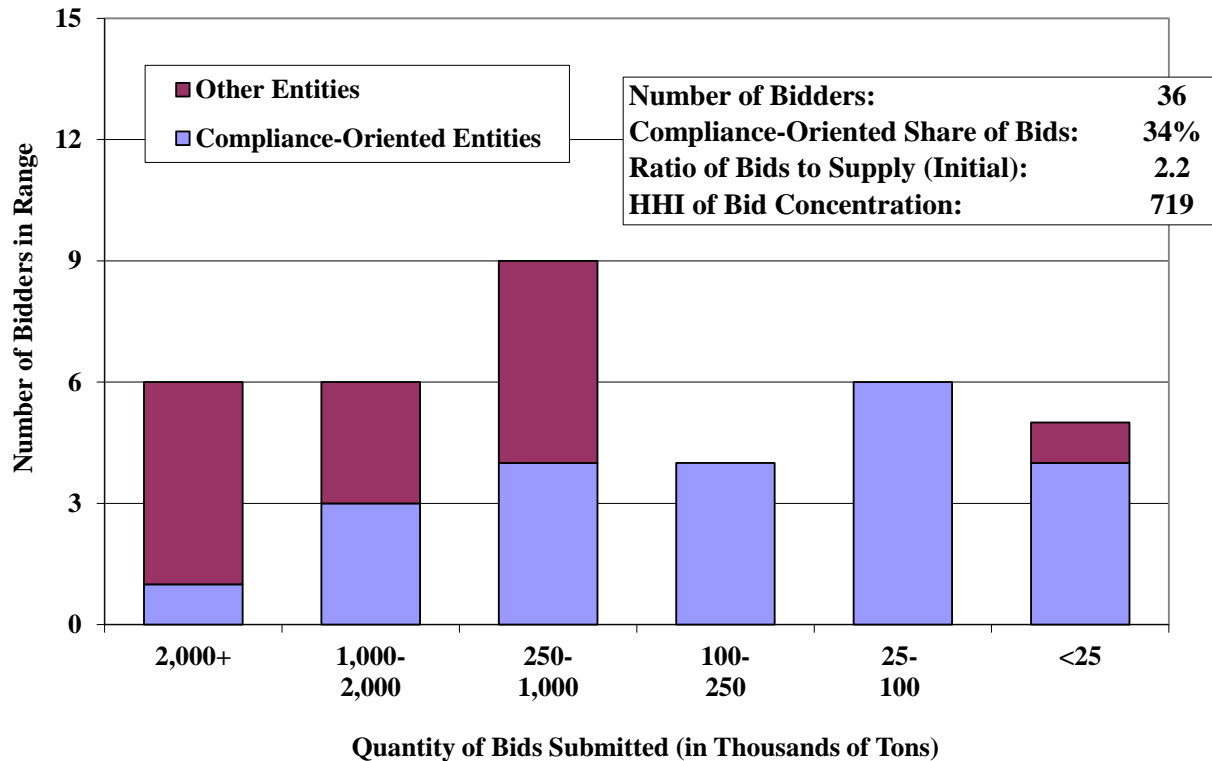
C. DISPERSION OF BIDS IN AUCTION 35

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



Market Monitor Report for Auction 35

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

Market Monitor Report for Auction 35

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	Kendall Green Energy, LLC
Berkshire Power Company, LLC	KMC Thermo, LLC
Biourja Nehme Commodities, LLC	Koch Supply & Trading, LP
BP Products North America Inc.	Luminus Energy Partners Master Fund, Ltd.
Brookfield Energy Marketing LP	Macquarie Energy, LLC
Brooklyn Navy Yard Cogen Partners, LP	Massachusetts Muni. Wholesale Elec. Co.
Caithness Long Island, LLC	Maxim Power (USA), Inc.
Calpine Energy Services, LP	Mercuria Energy America, Inc.
Carbon Lighthouse Association	Morgan Stanley Capital Group, Inc.
Cayuga Operating Company, LLC	National Grid Gen. dba National Grid
City of Dover	NextEra Energy Marketing, LLC
Consolidated Edison Comp. of NY, Inc.	Noble Americas Gas & Power Corp.
Delaware City Refining Company, LLC	NRG Power Marketing, LLC
Direct Energy Business Marketing, LLC	Old Dominion Electric Cooperative
Dominion Energy Marketing, Inc.	Power Authority of the State of New York
DRW Commodities, LLC	PSEG Energy Resources & Trade, LLC
DTE Energy Trading, Inc.	Public Service Company of New Hampshire
Exelon Generation Company, LLC	RBC
GDF SUEZ Energy Marketing NA, Inc.	Selkirk Cogen Partners, LP
GenOn Energy Management, LLC	Shell Energy North America (US), LP
Hawkeye Energy Greenport	Statkraft Markets GmbH
Indeck-Corinth Limited Partnership	Verso Corporation
Jamestown Board of Public Utilities	Village of Freeport
J-Power USA Development Co., Ltd.	Vitol Inc.