
RGGI Inc.



**MARKET MONITOR REPORT
FOR AUCTION 27**

Prepared for:

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

Prepared By:

**POTOMAC
ECONOMICS**

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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 27

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 World Energy Solutions. This report summarizes our findings regarding RGGI Auction 27, which was held on March 11, 2015.

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.

Forty-five bidders participated in the offering of CO₂ allowances. Bids were submitted to purchase 2.8 times the available supply of allowances, resulting in a clearing price of \$5.41 per ton. Compliance entities or their affiliates purchased 100 percent of the allowances in the offering. There was no indication of barriers to participation in the auction.

An additional ten million CO₂ allowances were available for sale in Auction 27 from the Cost Containment Reserve (“CCR”). Allowances are sold from the CCR when the auction clearing price reaches the level of the CCR Trigger Price. The CCR Trigger Price is \$6.00 per ton in 2015, so none of the CCR allowances were sold in Auction 27. These allowances will be available in the next 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 27 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.

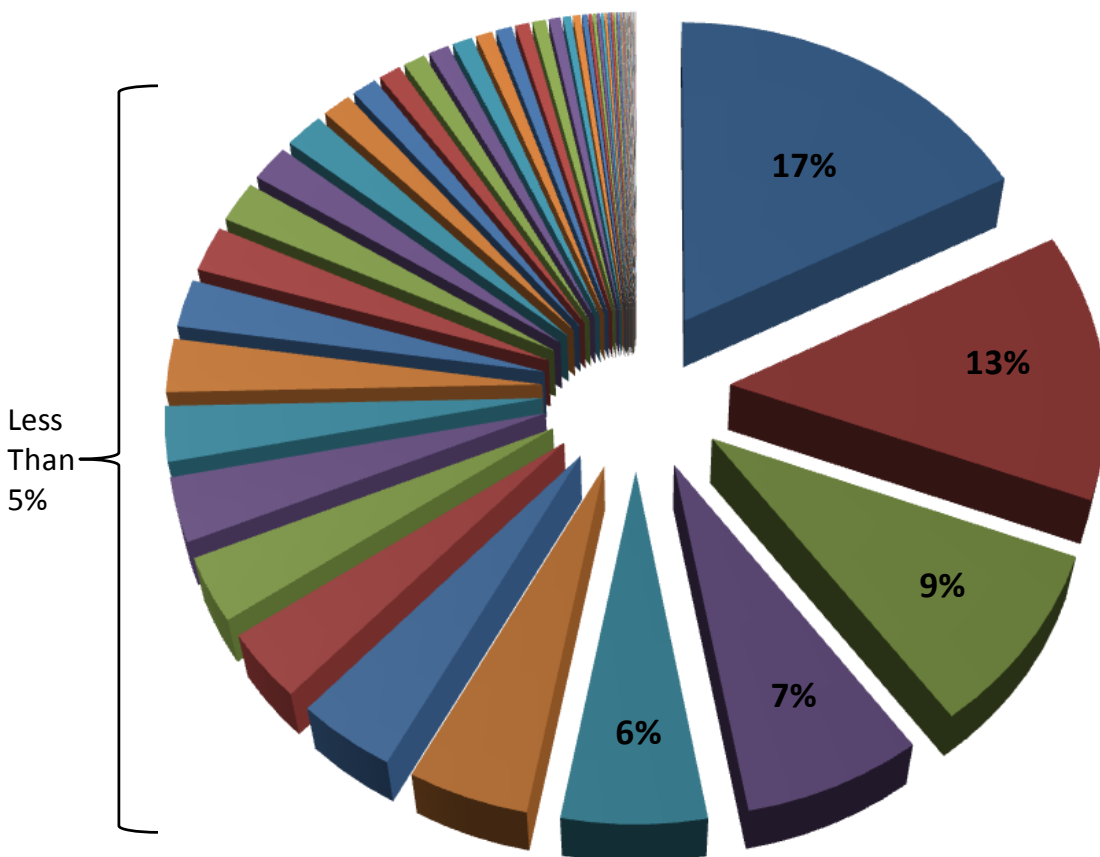
APPENDIX

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 17 percent of the total projected demand for allowances. Nearly 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



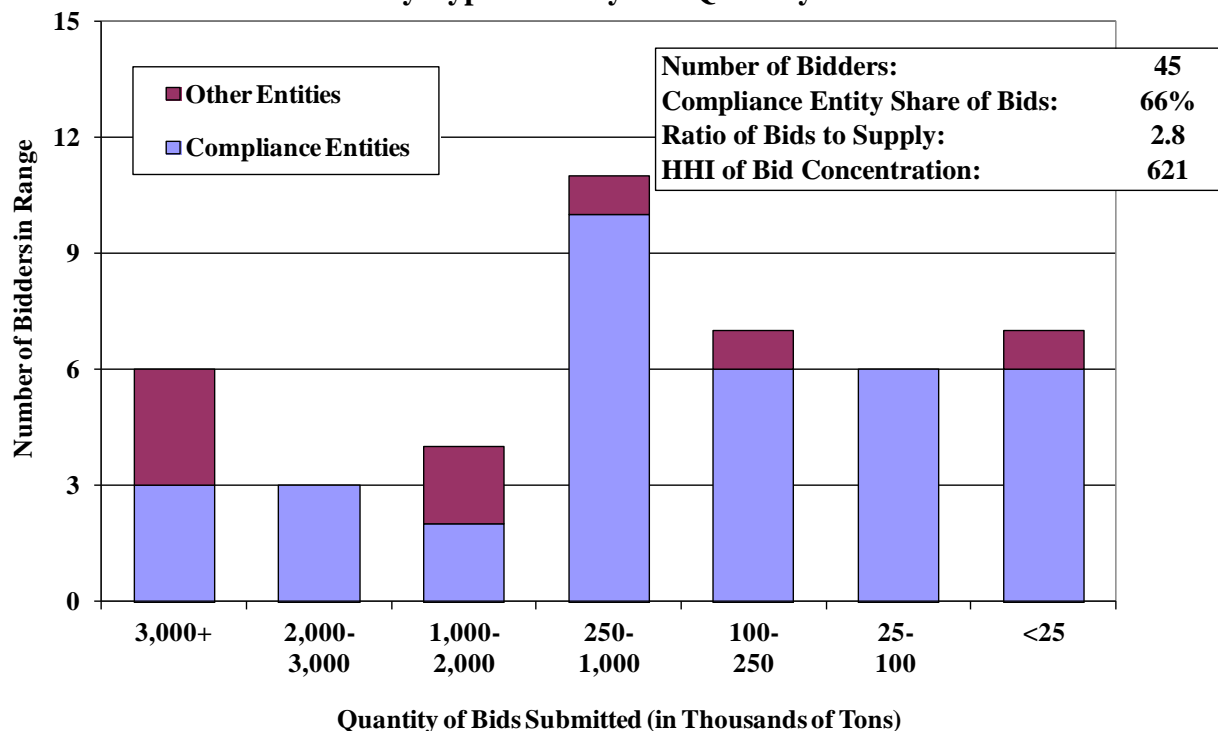
B. DISPERSION OF BIDS IN AUCTION 27

In the offering of allowances for the current control period, bids were submitted by 37 compliance entities and eight 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. Six compliance entities and three other entities submitted bids for a large quantity of allowances (i.e., at least 2 million tons). Overall, compliance entities accounted for 66 percent of the quantity of allowances for which bids were submitted. The quantity of allowances for which bids were submitted was 2.8 times the Initial Offering of 15,272,670 allowances. In Auction 26, the quantity of allowances for which bids were submitted was 2.5 times the Initial Offering of 18,198,685 allowances.

The bid quantities were widely distributed among the 45 bidders. The concentration of bids, using the Herfindahl-Hirschman Index (“HHI”), is relatively low at 621, 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 (hence, the index ranges from 0 to 10,000).

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



C. SUMMARY OF PURCHASES OF ALLOWANCES IN AUCTION 27

In the offering of allowances for the current control period, awards were distributed across 35 bidders with four bidders purchasing one million tons or more and 12 bidders purchasing 300,000 tons or more.

The share of allowances purchased and several other quantities are reported for two types of entities:

- *Compliance Entities:* This includes all compliance entities and their affiliates. In this report, affiliated firms are firms that: (i) have a parent-subsidary 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.
- *Other Entities:* This includes all other entities without compliance obligations.

The following statistics summarize the purchases and holdings of allowances by compliance entities and their affiliates under the RGGI program:

- In Auction 27, compliance entities and their affiliates purchased 100 percent of the allowances sold.
- In the first 27 RGGI auctions, compliance entities and their affiliates purchased 78 percent of the allowances sold.
- Compliance entities and their affiliates will hold 62 percent of the allowances in circulation following the settlement of allowances sold in Auction 27 (excluding allowances that will be surrendered for Second Control Period compliance).

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	3,818,000
Bidder 2	3,126,000
Bidder 3	1,100,000
Bidder 4	1,000,000
Bidder 5	812,000
Bidder 6	750,000
Bidder 7	650,000
Bidder 8	620,000
Bidder 9	587,000
Bidder 10	552,670
Bidder 11	503,000
Bidder 12	300,000
Bidder 13	214,000
Bidder 14	200,000
Bidder 15	180,000
Bidder 16	115,000
Bidder 17	110,000
Bidder 18	100,000
Bidder 19	80,000
Bidder 20	75,000
Bidder 21	64,000
Bidder 22	53,000
Bidder 23	50,000
Bidder 24	40,000
Bidder 25	36,000
Bidder 26	30,000
Bidder 27	30,000
Bidder 28	25,000
Bidder 29	13,000
Bidder 30	10,000
Bidder 31	9,000
Bidder 32	9,000
Bidder 33	6,000
Bidder 34	4,000
Bidder 35	1,000

D. SUMMARY OF BID PRICES IN AUCTION 27

Bids were submitted across a wide range of prices in the auction and the clearing price of \$5.41 was relatively consistent with average bid prices submitted.

The following table reports several statistics regarding the bid prices for bids submitted in Auction 27. The median and mean bid prices are weighted by the quantity of each bid.

Bid Prices:	
Minimum	\$2.05
Maximum	\$12.50
Average (Median)	\$5.26
Average (Mean)	\$4.78
Clearing Price:	\$5.41

E. NAMES OF POTENTIAL BIDDERS IN AUCTION 27

In accordance with Sections 2.8 and 3 of the Auction Notice for CO₂ Allowance Auction 27 on March 11, 2015, the Participating States are releasing the names of Potential Bidders in Auction 27. The states defined potential bidders as: “Each Applicant that has been qualified and submitted a complete *Intent to Bid*.” The list of 50 Potential Bidders is as follows:

Adirondack Council Inc.	Indeck-Oswego Limited Partnership
Astoria Energy, LLC	Indeck-Yerkes Limited Partnership
Brookfield Energy Marketing LP	Jamestown Board of Public Utilities
Brooklyn Navy Yard Cogen Partners, LP	J-Power USA Development Co., Ltd.
Caithness Long Island, LLC	Kendall Green Energy, LLC
Calpine Energy Services, LP	Kleen Energy Systems, LLC
Carbon Lighthouse Association	Koch Supply & Trading, LP
Castleton Commodities Merchant Trading, LP	Luminus Energy Partners Master Fund, Ltd.
Castleton Power, LLC	Maxim Power (USA), Inc.
CE2 Carbon Capital, LLC	Mercuria Energy America, Inc.
City of Dover	Millennium Power Partners, LP
Consolidated Edison Comp. of NY, Inc.	Morgan Stanley Capital Group, Inc.
Delaware City Refining Company, LLC	National Grid Gen. dba National Grid
Direct Energy Business Marketing, LLC	New Athens Generating Company, LLC
Dominion Energy Marketing, Inc.	NextEra Energy Power Marketing, LLC
DTE Energy Trading, Inc.	NRG Power Marketing, LLC
EDF Trading North America, LLC	Old Dominion Electric Cooperative
Empire Generating Co., LLC	Power Authority of the State of New York
Entergy Rhode Island State Energy, LP	PSEG Energy Resources & Trade, LLC
Essential Power, LLC	Public Service Company of New Hampshire
Exelon Generation Company, LLC	RBC
GDF SUEZ Energy Marketing NA, Inc.	Upstate New York Power Producers, LLC
GenOn Energy Management, LLC	Verso Corporation
Granite Ridge Energy, LLC	Village of Freeport
Indeck-Corinth Limited Partnership	Vitol Inc.