

MARKET MONITOR REPORT FOR AUCTION 30

Prepared for:

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

Prepared By:



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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 30

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 30, which was held on December 2, 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.

Fifty-one bidders participated in the offering of CO₂ allowances. Bids were submitted to purchase 3.0 times the available supply of allowances, resulting in a clearing price of \$7.50 per ton. Compliance-oriented entities purchased 23 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 30 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 15 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.

Less Than 5%

11%

7%

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



B. SUMMARY OF PURCHASES OF ALLOWANCES IN AUCTION 30

Awards were distributed across 24 bidders with five bidders purchasing one million tons or more and ten bidders purchasing 300,000 tons or more.

This report summarizes participation by compliance entities and their affiliates. ¹ In Auction 30, compliance entities and their affiliates purchased 80 percent of the allowances sold. In the first 30 RGGI auctions, all compliance entities and their affiliates purchased 77 percent of the allowances sold.

We also separately report the purchases and holdings of allowances for:

- Compliance-Oriented Entities: This includes most compliance entities and their affiliates. This category excludes 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
- Other Entities: This includes all other entities.

The following statistics summarize the purchases and holdings of allowances by type of participant under the RGGI program:

- In Auction 30, compliance-oriented entities purchased 23 percent of the allowances sold.
- After settlement of allowances sold in Auction 30, 55 percent of the allowances in circulation will be held by firms that are believed to hold them for compliance purposes.³

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.

In this report, affiliated firms are 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 and (b) the total number of allowances in circulation.

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 compliance entities (i.e., compliance entities that are not included in the compliance-oriented category).



Table 1: Quantity of Allowances Awarded by Bidder

Bidder	Number of Allowances Awarded
Bidder 1	3,643,000
Bidder 2	3,113,000
Bidder 3	2,000,000
Bidder 4	1,900,000
Bidder 5	1,000,000
Bidder 6	872,274
Bidder 7	450,000
Bidder 8	400,000
Bidder 9	354,000
Bidder 10	332,000
Bidder 11	250,000
Bidder 12	184,000
Bidder 13	175,000
Bidder 14	155,000
Bidder 15	153,000
Bidder 16	120,000
Bidder 17	106,000
Bidder 18	50,000
Bidder 19	45,000
Bidder 20	30,000
Bidder 21	18,000
Bidder 22	15,000
Bidder 23	7,000
Bidder 24	2,000



C. DISPERSION OF BIDS IN AUCTION 30

Bids were submitted by 35 compliance-oriented entities and 16 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. Three compliance-oriented entities and six 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 3.0 times the available supply. In Auction 29, the quantity of allowances for which bids were submitted was 3.4 times the Initial Offering.

The bid quantities were widely distributed among the 51 bidders. The concentration of bids, using the Herfindahl-Hirschman Index ("HHI"), is relatively low at 507, 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).

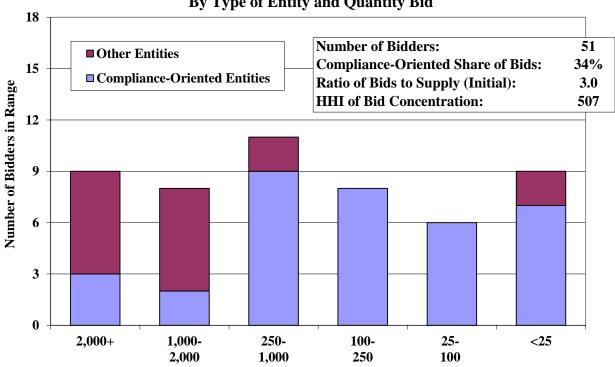


Figure 2: Quantity of Bids Submitted by Entity By Type of Entity and Quantity Bid

Quantity of Bids Submitted (in Thousands of Tons)



D. SUMMARY OF BID PRICES IN AUCTION 30

Bids were submitted across a wide range of prices in the auction and the clearing price of \$7.50 was relatively consistent with average bid prices submitted.

The following table reports several statistics regarding the bid prices for bids submitted in Auction 30. The median and mean bid prices are weighted by the quantity of each bid.

Bid Prices:	
Minimum	\$2.05
Maximum	\$10.01
Average (Median)	\$7.25
Average (Mean)	\$7.03
Clearing Price:	\$7.50



E. NAMES OF POTENTIAL BIDDERS IN AUCTION 30

In accordance with Sections 2.8 and 3 of the Auction Notice for CO₂ Allowance Auction 30, the Participating States are releasing the names of Potential Bidders in Auction 30. The states defined potential bidders as: "Each Applicant that has been qualified and submitted a complete *Intent to Bid.*" The list of 57 Potential Bidders is as follows:

Astoria Energy, LLC

Biourja Nehme Commodities, LLC

Blue Delta Energy, LLC

Brooklyn Navy Yard Cogen Partners, LP

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

Castleton Commodities Merchant Trading, LP

Castleton Power, LLC CE2 Carbon Capital, LLC

Consolidated Edison Comp. of NY, Inc. Delaware City Refining Company, LLC Delaware Municipal Electric Corp. Direct Energy Business Marketing, LLC

DRW Commodities, LLC DTE Energy Trading, Inc.

EDF Trading North America, LLC Entergy Rhode Island State Energy, LP

Essential Power, LLC

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

Granite Ridge Energy, LLC

Indeck Energy Serv. of Silver Springs Indeck-Corinth Limited Partnership Indeck-Olean Limited Partnership Indeck-Oswego Limited Partnership Indeck-Yerkes Limited Partnership Jamestown Board of Public Utilities J-Power USA Development Co., Ltd.

Kendall Green Energy, LLC Kleen Energy Systems, LLC

KMC Thermo, LLC

Koch Supply & Trading, LP

Luminus Energy Partners Master Fund, Ltd. Massachusetts Muni. Wholesale Elec. Co.

Maxim Power (USA), Inc.
Mercuria Energy America, Inc.
Millennium Power Partners, LP
Morgan Stanley Capital Group, Inc.
National Grid Gen. dba National Grid
New Athens Generating Company, LLC
NextEra Energy Power 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

TransCanada Power Marketing, Ltd. Upstate New York Power Producers, LLC

Verso Corporation Village of Freeport

Vitol Inc.

Wallingford Energy, LLC