

# MARKET MONITOR REPORT FOR AUCTION 17

**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 ( $CO_2$ ) 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 17

As the Market Monitor for the RGGI  $CO_2$  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 17, which was held on September 5, 2012.

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.

Twenty-two bidders participated in the offering of  $CO_2$  allowances for the current control period. Bids were submitted to purchase 65 percent of the available supply of allowances, resulting in a clearing price equal to the reserve price of \$1.93 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.

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 17 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.

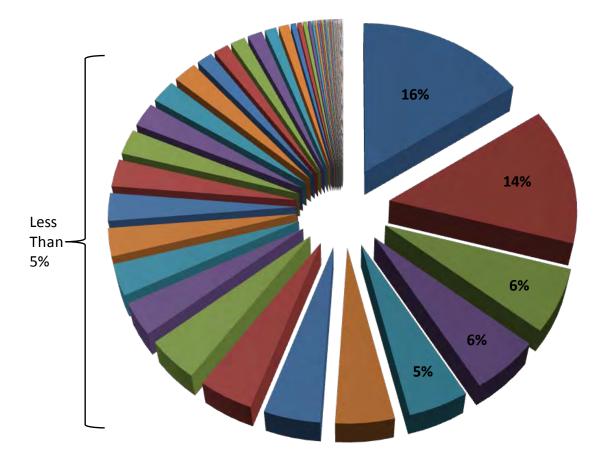


## APPENDIX

## 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 16 percent of the total projected demand for allowances. More than 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

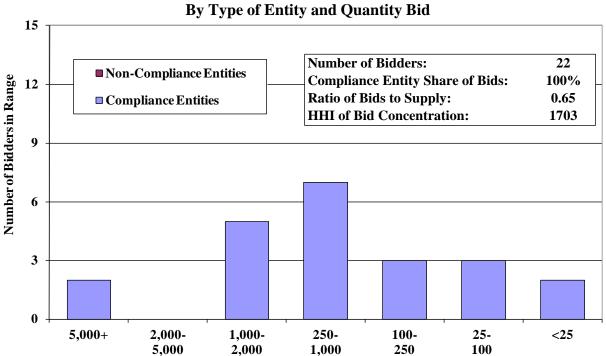


## B. DISPERSION OF BIDS IN AUCTION 17

In the offering of allowances for the current control period, bids were submitted by 22 compliance entities and no non-compliance entities. In our review of the bids and the qualification process, we found no material evidence of anti-competitive conduct or significant barriers to participation.

The following figure summarizes the quantity of allowances for which bids were submitted by each bidder. Two compliance entities submitted bids for a large quantity of allowances (e.g., at least 5 million tons). Overall, compliance entities accounted for 100 percent of the quantity of allowances for which bids were submitted. The quantity of allowances for which bids were submitted increased to 0.65 times the available supply in Auction 17 from 0.57 times the available supply in Auction 16 and 0.62 times the available supply in Auction 15.

The bid quantities were widely distributed among the 22 bidders. The concentration of bids, using the Herfindahl-Hirschman Index ("HHI"), fell from 2046 in Auction 16 to 1703 in Auction 17. 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

Quantity of Bids Submitted (in Thousands of Tons)



#### C. SUMMARY OF PURCHASES OF ALLOWANCES IN AUCTION 17

In the offering of allowances for the current control period, awards were distributed across 22 bidders with two bidders purchasing two million tons or more and 14 bidders purchasing 250,000 tons or more. Compliance entities or their affiliates purchased 100 percent of the allowances in the auction.

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-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.
- Non-Compliance Entities: Other firms.

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

- In Auction 17, compliance entities and their affiliates purchased 100 percent of the allowances sold.
- In the first seventeen RGGI auctions, compliance entities and their affiliates purchased 88 percent of the allowances sold.
- Compliance entities and their affiliates will hold 92 percent of the allowances in circulation following the settlement of allowances sold in Auction 17.

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.

Bidder	Number of Allowances Awarded	
Bidder 1	8,000,000	
Bidder 2	5,128,000	
Bidder 3	1,900,000	
Bidder 4	1,615,000	
Bidder 5	1,350,000	
Bidder 6	1,085,000	
Bidder 7	1,000,000	
Bidder 8	850,000	
Bidder 9	800,000	
Bidder 10	550,000	
Bidder 11	500,000	
Bidder 12	450,000	
Bidder 13	397,000	
Bidder 14	273,000	
Bidder 15	190,000	
Bidder 16	173,000	
Bidder 17	120,000	
Bidder 18	97,000	
Bidder 19	40,000	
Bidder 20	31,000	
Bidder 21	20,000	
Bidder 22	20,000	

# Table 1: Quantity of Allowances Awarded by Bidder



## D. SUMMARY OF BID PRICES IN AUCTION 17

The distribution of bid prices submitted in the auction indicates that the demand for allowances was relatively elastic, which is a signal that the results were competitive.

The following table reports several statistics regarding the bid prices for bids submitted in Auction 17. The median and mean bid prices are weighted by the quantity of each bid.

Bid Prices:	
Minimum	\$1.93
Maximum	\$6.51
Average (Median)	\$1.95
Average (Mean)	\$2.02
<b>Clearing Price:</b>	\$1.93



### E. NAMES OF POTENTIAL BIDDERS IN AUCTION 17

In accordance with Sections 2.8 and 3 of the Auction Notice for  $CO_2$  Allowance Auction 17 on September 5, 2012, the Participating States are releasing the names of Potential Bidders in Auction 17. The states defined potential bidders as: "Each Applicant that has been qualified and submitted a complete *Intent to Bid*." The list of 29 Potential Bidders is as follows:

Astoria Energy, LLC Berkshire Power Company, LLC Brooklyn Navy Yard Cogen Partners, LP Caithness Long Island, LLC Calpine Energy Services, LP Castleton Power, LLC Consolidated Edison Comp. of NY, Inc. Constellation Energy Commodities Group Dominion Energy Marketing, Inc. EDF Trading North America, LLC Empire Generating Co., LLC EquiPower Resources Essential Power, LLC GenOn Energy Management, LLC Granite Ridge Energy, LLC Indeck Energy Serv. of Silver Springs Indeck-Corinth Limited Partnership Indeck-Yerkes Limited Partnership IPR-GDF SUEZ Energy Marketing NA, Inc. J-Power USA Development Co., Ltd. Kleen Energy Systems, LLC Millennium Power Partners, LP National Grid Gen. dba National Grid New Athens Generating Company, LLC Power Authority of the State of New York Public Service Company of New Hampshire RBC Selkirk Cogen Partners, LP Verso Paper Corp.