



**MARKET MONITOR REPORT
FOR AUCTION 22**

Prepared for:

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

Prepared By:



December 6, 2013

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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 22

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 22, which was held on December 4, 2013.

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-nine bidders participated in the offering of CO₂ allowances for the current control period. Bids were submitted to purchase 2.7 times the available supply of allowances, resulting in a clearing price of \$3.00 per ton. Compliance entities or their affiliates purchased 43 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 22 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.

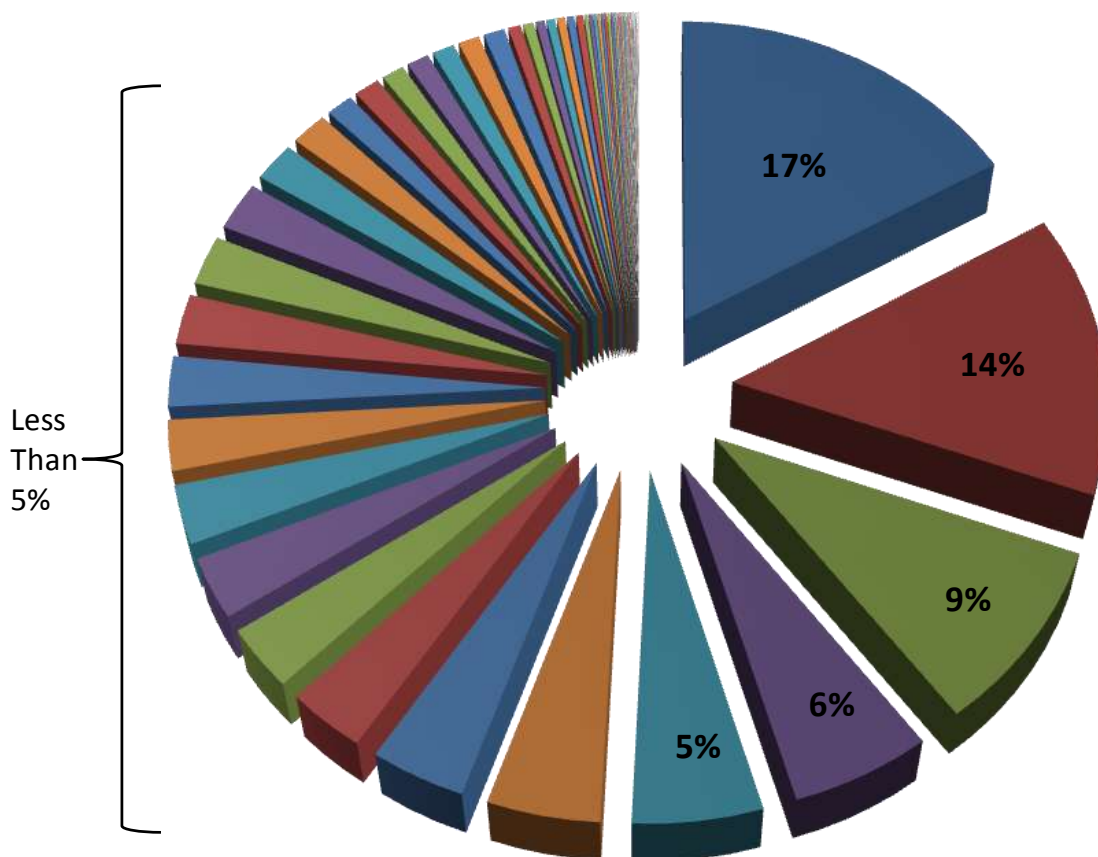
APPENDIX

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. Approximately 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



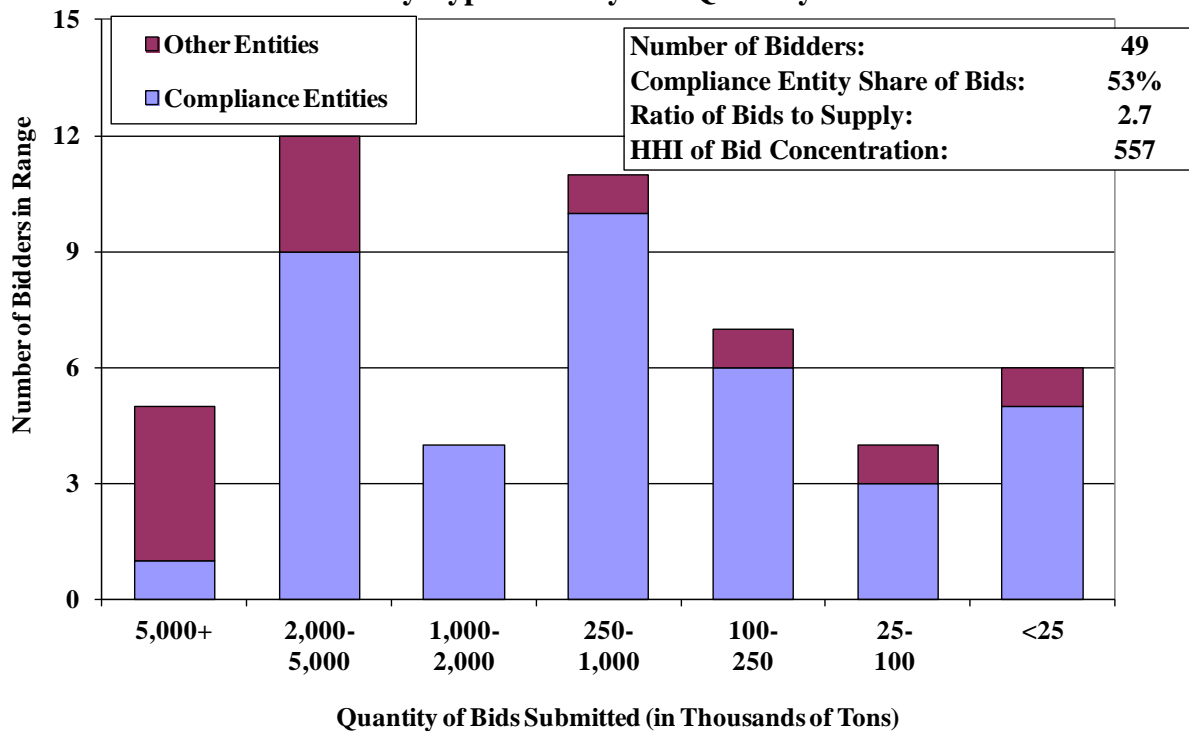
B. DISPERSION OF BIDS IN AUCTION 22

In the offering of allowances for the current control period, bids were submitted by 38 compliance entities and eleven 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. Ten compliance entities and seven other entities submitted bids for a large quantity of allowances (i.e., at least 2 million tons). Overall, compliance entities accounted for 53 percent of the quantity of allowances for which bids were submitted. The quantity of allowances for which bids were submitted was 2.7 times the available supply in Auction 22, up from 2.0 times the available supply in Auction 21 and 2.1 times the available supply in Auction 20.

The bid quantities were widely distributed among the 49 bidders. The concentration of bids, using the Herfindahl-Hirschman Index (“HHI”), was relatively low at 557 in Auction 22, down from 635 in Auction 21. 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 22

In the offering of allowances for the current control period, awards were distributed across 38 bidders with seven bidders purchasing two million tons or more and 18 bidders purchasing 300,000 tons or more. Compliance entities or their affiliates purchased 43 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.
- *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 22, compliance entities and their affiliates purchased 43 percent of the allowances sold.
- In the first 22 RGGI auctions, compliance entities and their affiliates purchased 81 percent of the allowances sold.
- Compliance entities and their affiliates will hold 77 percent of the allowances in circulation following the settlement of allowances sold in Auction 22.

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	6,500,000
Bidder 2	5,336,000
Bidder 3	4,770,000
Bidder 4	3,000,000
Bidder 5	2,683,000
Bidder 6	2,000,000
Bidder 7	2,000,000
Bidder 8	1,776,000
Bidder 9	1,600,000
Bidder 10	1,328,000
Bidder 11	1,140,000
Bidder 12	1,015,378
Bidder 13	934,000
Bidder 14	900,000
Bidder 15	692,000
Bidder 16	368,000
Bidder 17	350,000
Bidder 18	300,000
Bidder 19	252,000
Bidder 20	200,000
Bidder 21	171,000
Bidder 22	150,000
Bidder 23	146,000
Bidder 24	100,000
Bidder 25	100,000
Bidder 26	100,000
Bidder 27	100,000
Bidder 28	76,000
Bidder 29	75,000
Bidder 30	50,000
Bidder 31	36,000
Bidder 32	30,000
Bidder 33	30,000
Bidder 34	10,000
Bidder 35	4,000
Bidder 36	3,000
Bidder 37	3,000
Bidder 38	1,000

D. SUMMARY OF BID PRICES IN AUCTION 22

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 22. The median and mean bid prices are weighted by the quantity of each bid.

Bid Prices:	
Minimum	\$1.98
Maximum	\$12.00
Average (Median)	\$2.90
Average (Mean)	\$2.87
Clearing Price:	\$3.00

E. NAMES OF POTENTIAL BIDDERS IN AUCTION 22

In accordance with Sections 2.8 and 3 of the Auction Notice for CO₂ Allowance Auction 22 on December 4, 2013, the Participating States are releasing the names of Potential Bidders in Auction 22. The states defined potential bidders as: “Each Applicant that has been qualified and submitted a complete *Intent to Bid*.” The list of 55 Potential Bidders is as follows:

Astoria Energy, LLC	Indeck-Oswego Limited Partnership
AU Funding LLC	Indeck-Yerkes Limited Partnership
Brayton Point Energy, LLC	Jamestown Board of Public Utilities
Brooklyn Navy Yard Cogen Partners, LP	J-Power USA Development Co., Ltd.
Caithness Long Island, LLC	Kleen Energy Systems, LLC
Calpine Energy Services, LP	Koch Supply & Trading, LP
Carbon Lighthouse Association	Lakeside Energy, LLC
Castleton Commodities Merchant Trading, LP	Luminus Energy Partners QP, LP
Castleton Power, LLC	Massachusetts Muni. Wholesale Elec. Co.
CE2 Carbon Capital, LLC	Mercuria Energy America, Inc.
ClimeCo Corporation	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
Dominion Energy Marketing, Inc.	New Athens Generating Company, LLC
DTE Energy Trading, Inc.	NextEra Energy Power Marketing, LLC
Dynegy Marketing and Trade, LLC	NRG Power Marketing, LLC
EDF Trading North America, LLC	Panda Brandywine, LP
Empire Generating Co., LLC	Power Authority of the State of New York
Entergy Rhode Island State Energy, LP	PSEG Energy Resources & Trade, LLC
EquiPower Resources	Public Service Company of New Hampshire
Essential Power, LLC	RBC
Evolution Markets, Inc.	Selkirk Cogen Partners, LP
Exelon Generation Company, LLC	Shell Energy North America (US), LP
GDF SUEZ Energy Marketing NA, Inc.	Upstate New York Power Producers, LLC
GenOn Energy Management, LLC	Verso Paper Corp.
Granite Ridge Energy, LLC	Village of Freeport
Hess Energy Marketing LLC	Vitol Inc.
Indeck-Corinth Limited Partnership	