



**MARKET MONITOR REPORT  
FOR AUCTION 29**

**Prepared for:**

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

**Prepared By:**



September 11, 2015

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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<sub>2</sub>) 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 29**

As the Market Monitor for the RGGI CO<sub>2</sub> 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<sup>1</sup>. This report summarizes our findings regarding RGGI Auction 29, which was held on September 9, 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.

The Cost Containment Reserve (“CCR”) for 2015 was used for the first time in Auction 29. The demand for CO<sub>2</sub> allowances from bids submitted above the 2015 CCR Trigger Price of \$6.00 exceeded the Initial Offering of 15,374,294 allowances and was sufficient to purchase all 10 million 2015 CCR allowances. After the CCR was exhausted, the auction cleared at a price of \$6.02 per ton. There are no other CCR allowances available for sale in 2015.

Fifty-one bidders participated in the offering of CO<sub>2</sub> allowances. Bids were submitted to purchase 3.4 times the Initial Offering of CO<sub>2</sub> allowances and 2.1 times the total available supply (including allowances in the CCR). Compliance-oriented entities purchased 51 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 29 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<sub>2</sub> allowances and outcomes of the auction.

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<sup>1</sup> World Energy Solutions, Inc. was acquired by EnerNOC, Inc. in January 2015. World Energy Solutions, Inc. is now a wholly owned subsidiary of EnerNOC, Inc.

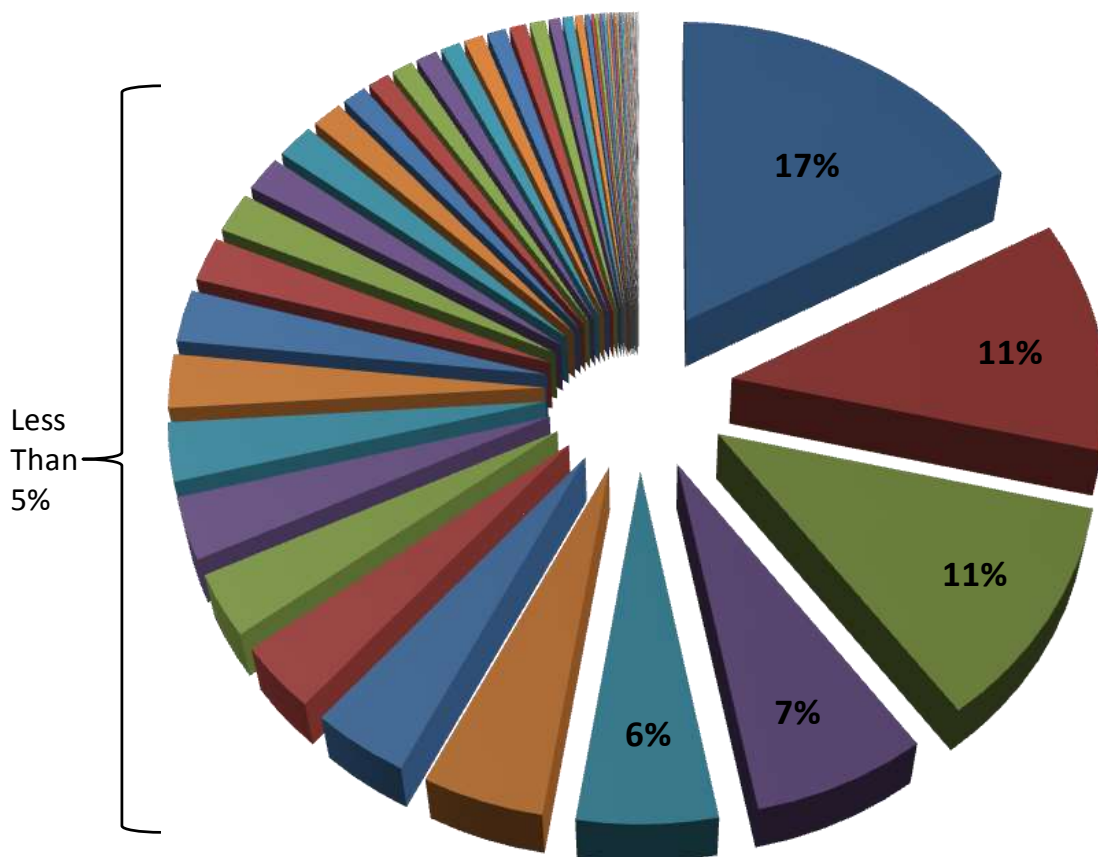
**APPENDIX**

**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. SUMMARY OF PURCHASES OF ALLOWANCES IN AUCTION 29**

*Awards were distributed across 45 bidders with eight bidders purchasing one million tons or more and 22 bidders purchasing 300,000 tons or more.*

This report summarizes participation by compliance entities and their affiliates.<sup>2</sup> In Auction 29, compliance entities and their affiliates purchased 74 percent of the allowances sold. In the first 29 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.<sup>3</sup>
- *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 29, compliance-oriented entities purchased 51 percent of the allowances sold.
- After settlement of allowances sold in Auction 29, 55 percent of the allowances in circulation will be held by firms that are believed to hold them for compliance purposes.<sup>4</sup>

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.

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<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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 that are not included in the compliance-oriented category.

**Table 1: Quantity of Allowances Awarded by Bidder**

Bidder	Number of Allowances Awarded
Bidder 1	3,843,000
Bidder 2	2,882,000
Bidder 3	2,792,294
Bidder 4	1,700,000
Bidder 5	1,575,000
Bidder 6	1,500,000
Bidder 7	1,200,000
Bidder 8	1,000,000
Bidder 9	960,000
Bidder 10	800,000
Bidder 11	600,000
Bidder 12	540,000
Bidder 13	532,000
Bidder 14	500,000
Bidder 15	410,000
Bidder 16	400,000
Bidder 17	400,000
Bidder 18	360,000
Bidder 19	341,000
Bidder 20	320,000
Bidder 21	319,000
Bidder 22	300,000
Bidder 23	250,000
Bidder 24	232,000
Bidder 25	225,000
Bidder 26	200,000
Bidder 27	200,000
Bidder 28	199,000
Bidder 29	134,000
Bidder 30	100,000
Bidder 31	80,000
Bidder 32	70,000
Bidder 33	65,000
Bidder 34	48,000
Bidder 35	45,000
Bidder 36	40,000
Bidder 37	40,000
Bidder 38	39,000
Bidder 39	30,000
Bidder 40	25,000
Bidder 41	25,000
Bidder 42	25,000
Bidder 43	23,000
Bidder 44	4,000
Bidder 45	1,000

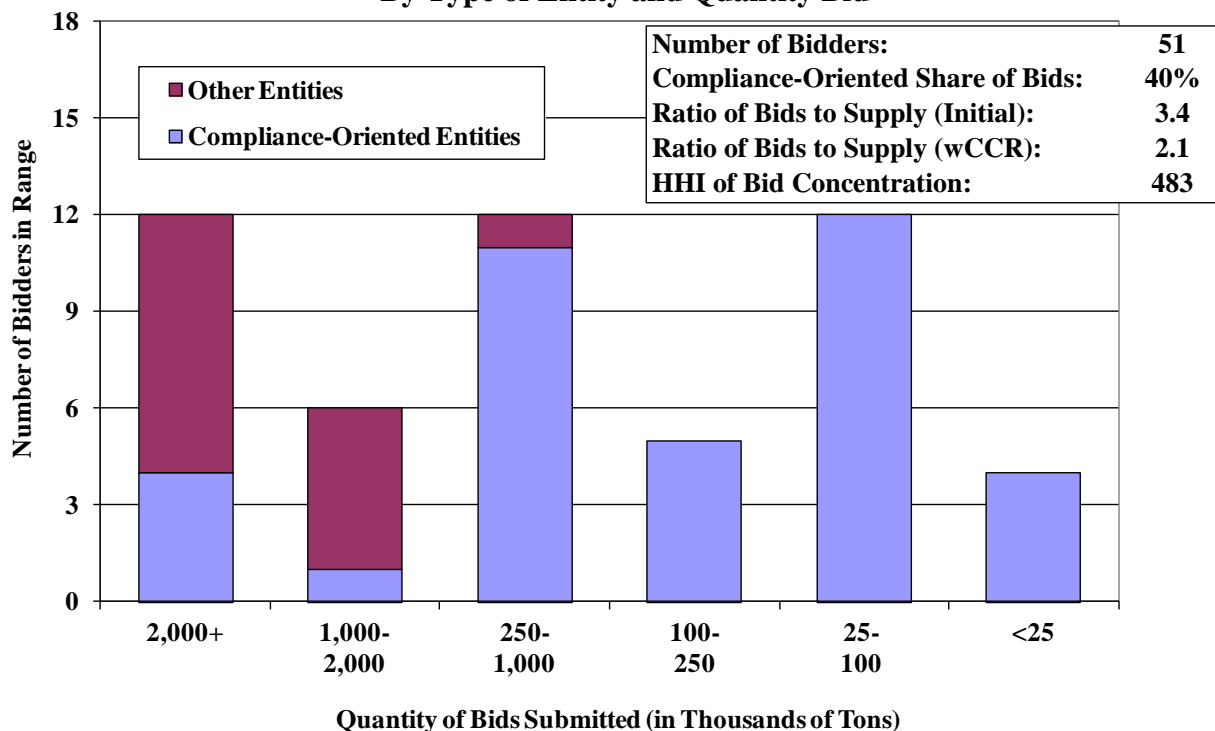
**C. DISPERSION OF BIDS IN AUCTION 29**

*Bids were submitted by 37 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. Four compliance-oriented entities and eight other entities submitted bids for a large quantity of allowances (i.e., at least 2 million tons). Overall, compliance-oriented entities accounted for 40 percent of the quantity of allowances for which bids were submitted. The quantity of allowances for which bids were submitted was 3.4 times the Initial Offering and 2.1 times the total available supply (including allowances in the CCR). In Auction 28, the quantity of allowances for which bids were submitted was 3.1 times the Initial Offering of 15,507,571 allowances.

The bid quantities were widely distributed among the 51 bidders. The concentration of bids, using the Herfindahl-Hirschman Index (“HHI”), is relatively low at 483, 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**



**D. SUMMARY OF BID PRICES IN AUCTION 29**

*Bids were submitted across a wide range of prices in the auction and the clearing price of \$6.02 was relatively consistent with average bid prices submitted.*

The following table reports several statistics regarding the bid prices for bids submitted in Auction 29. The median and mean bid prices are weighted by the quantity of each bid.

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<b>Bid Prices:</b>	
<b>Minimum</b>	<b>\$2.05</b>
<b>Maximum</b>	<b>\$10.00</b>
<b>Average (Median)</b>	<b>\$6.01</b>
<b>Average (Mean)</b>	<b>\$5.73</b>
<b>Clearing Price:</b>	<b>\$6.02</b>

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### **E. NAMES OF POTENTIAL BIDDERS IN AUCTION 29**

In accordance with Sections 2.8 and 3 of the Auction Notice for CO<sub>2</sub> Allowance Auction 29, the Participating States are releasing the names of Potential Bidders in Auction 29. 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	Jamestown Board of Public Utilities
Brooklyn Navy Yard Cogen Partners, LP	J-Power USA Development Co., Ltd.
Burlington Electric Department	Kendall Green Energy, LLC
Caithness Long Island, LLC	Kleen Energy Systems, LLC
Calpine Energy Services, LP	KMC Thermo, LLC
Castleton Commodities Merchant Trading, LP	Koch Supply & Trading, LP
Castleton Power, LLC	Luminus Energy Partners Master Fund, Ltd.
CE2 Carbon Capital, LLC	Maxim Power (USA), Inc.
City of Dover	Mercuria Energy America, Inc.
Consolidated Edison Comp. of NY, Inc.	Millennium Power Partners, LP
Delaware City Refining Company, LLC	Morgan Stanley Capital Group, Inc.
Delaware Municipal Electric Corp.	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
DRW Commodities, LLC	NRG Power Marketing, LLC
DTE Energy Trading, Inc.	Old Dominion Electric Cooperative
EDF Trading North America, 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.	Selkirk Cogen Partners, LP
GenOn Energy Management, LLC	TransCanada Power Marketing, Ltd.
Granite Ridge Energy, LLC	Upstate New York Power Producers, LLC
Indeck Energy Serv. of Silver Springs	Verso Corporation
Indeck-Corinth Limited Partnership	Village of Freeport
Indeck-Olean Limited Partnership	Vitol Inc.
Indeck-Oswego Limited Partnership	Wallingford Energy, LLC
Indeck-Yerkes Limited Partnership	