MARKET MONITOR REPORT
FOR AUCTION 15

Prepared for:
RGGI, Inc., on behalf of the states participating in RGGI

Prepared By:
POTOMAC ECONOMICS

March 16, 2012
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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 15

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 15, which was held on March 14, 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 bidders participated in the offering of CO₂ allowances for the 2012 allocation year. Bids were submitted to purchase 62 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 99 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 15 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 14 percent of the total projected demand for allowances. Almost half of the projected demand is composed of entities that each account for less than 6 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 15

In the offering of allowances for the 2012 allocation year, bids were submitted by 18 compliance entities and two 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. Three compliance entities submitted bids for a large quantity of allowances (e.g., at least 2 million tons). Overall, compliance entities accounted for 99 percent of the quantity of allowances for which bids were submitted. The quantity of allowances for which bids were submitted decreased to 0.62 times the available supply in Auction 15 from 0.63 times the available supply in Auction 14, but increased from 0.18 times the available supply in Auction 13.

The bid quantities were widely distributed among the 20 bidders. The concentration of bids, using the Herfindahl-Hirschman Index (“HHI”), fell from 2344 in Auction 14 to 2138 in Auction 15. 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](image-url)
C. SUMMARY OF PURCHASES OF ALLOWANCES IN AUCTION 15

In the offering of allowances for the 2012 allocation year, awards were widely distributed across 20 bidders with three bidders purchasing two million tons or more and eleven bidders purchasing 250,000 tons or more. Compliance entities or their affiliates purchased 99 percent of the allowances in the auction.

The share of allowances purchased and several other quantities are reported for each of three 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.

- **Environmental/Individuals**: This includes non-compliance entities describing themselves as “Environmental Groups” or “Individual Person” in their qualification application.

- **Other Non-Compliance Entities**: This includes all other non-compliance entities.

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

- In Auction 15, compliance entities and their affiliates purchased 99 percent of the allowances sold.

- In the first fifteen RGGI auctions, compliance entities and their affiliates purchased 87 percent of the allowances sold.

- Compliance entities and their affiliates will hold 90 percent of the allowances in circulation following the settlement of allowances sold in Auction 15 (and after compliance has been completed for the first control period).\(^1\)

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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\(^1\) Please note this is based upon the Market Monitor's estimate of first control period compliance obligations. States are currently evaluating compliance for the first control period. State evaluations of compliance will be released publically on June 2, 2012.
<table>
<thead>
<tr>
<th>Bidder</th>
<th>Number of Allowances Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bidder 1</td>
<td>8,710,000</td>
</tr>
<tr>
<td>Bidder 2</td>
<td>3,090,000</td>
</tr>
<tr>
<td>Bidder 3</td>
<td>2,510,000</td>
</tr>
<tr>
<td>Bidder 4</td>
<td>1,850,000</td>
</tr>
<tr>
<td>Bidder 5</td>
<td>1,554,000</td>
</tr>
<tr>
<td>Bidder 6</td>
<td>850,000</td>
</tr>
<tr>
<td>Bidder 7</td>
<td>615,000</td>
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<tr>
<td>Bidder 8</td>
<td>500,000</td>
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<td>Bidder 9</td>
<td>390,000</td>
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<tr>
<td>Bidder 10</td>
<td>337,000</td>
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<td>Bidder 11</td>
<td>280,000</td>
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<td>Bidder 12</td>
<td>200,000</td>
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<td>Bidder 13</td>
<td>187,000</td>
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<td>Bidder 14</td>
<td>154,000</td>
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<td>Bidder 15</td>
<td>150,000</td>
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<td>Bidder 16</td>
<td>121,000</td>
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<td>Bidder 17</td>
<td>28,000</td>
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<tr>
<td>Bidder 18</td>
<td>13,000</td>
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<tr>
<td>Bidder 19</td>
<td>12,000</td>
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<tr>
<td>Bidder 20</td>
<td>8,000</td>
</tr>
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</table>
D. SUMMARY OF BID PRICES IN AUCTION 15

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

<table>
<thead>
<tr>
<th>Bid Prices:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>$1.93</td>
</tr>
<tr>
<td>Maximum</td>
<td>$5.36</td>
</tr>
<tr>
<td>Average (Median)</td>
<td>$1.95</td>
</tr>
<tr>
<td>Average (Mean)</td>
<td>$2.00</td>
</tr>
<tr>
<td>Clearing Prices:</td>
<td>$1.93</td>
</tr>
</tbody>
</table>
E. NAMES OF POTENTIAL BIDDERS IN AUCTION 15

In accordance with Section 2.8 of the Auction Notice for CO2 Allowance Auction 15 on March 14, 2012, the Participating States are releasing the names of Potential Bidders in Auction 15. The states defined potential bidders as: “Each Applicant that has been qualified and submitted a complete Intent to Bid.” The list of 34 Potential Bidders is as follows:

Brooklyn Navy Yard Cogen Partners, LP
Caithness Long Island, LLC
CE2 Carbon Capital, LLC
Consolidated Edison Comp. of NY, Inc.
Constellation Energy Commodities Group
CP Energy Marketing (US) Inc.
Delaware Municipal Electric Corp.
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
H.Q. Energy Services (US) Inc.
Hawkeye Energy Greenport
Indeck-Corinth Limited Partnership
J-Power USA Development Co., Ltd.
Kleen Energy Systems, LLC
Koch Supply & Trading, LP
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
Power Authority of the State of New York
Public Service Company of New Hampshire
RBC
Rochester Gas and Electric Corporation
Selkirk Cogen Partners, LP
Sterling Planet, Inc.
Verso Paper Corp.
Vitol Inc.