



Regional Greenhouse Gas Initiative, Inc.  
90 Church Street, 4th Floor  
New York, NY 10007

Contact: [cooper.tamayo@rggi.org](mailto:cooper.tamayo@rggi.org)

Friday, March 10, 2023

## **CO<sub>2</sub> Allowances Sold for \$12.50 in 59<sup>th</sup> RGGI Auction**

*First Auction of 2023 raises \$269 Million for Reinvestment*

NEW YORK — The participating states in the Regional Greenhouse Gas Initiative (RGGI), the nation's first market-based regulatory effort to reduce greenhouse gas (GHG) pollution, today announced the results of their 59<sup>th</sup> auction of carbon dioxide (CO<sub>2</sub>) allowances.

21,522,877 CO<sub>2</sub> allowances were sold at the auction at a clearing price of \$12.50. Bids for the CO<sub>2</sub> allowances ranged from \$2.50 to \$17.57 per allowance. Additional details are available in the [Market Monitor Report for Auction 59](#), which is appended.

The auction generated \$269 million for states to reinvest in strategic programs, including energy efficiency, renewable energy, direct bill assistance, and GHG abatement programs.

11.25 million cost containment reserve (CCR) allowances were also available for sale. The CCR is a fixed additional supply of allowances that are made available for sale if an auction's interim clearing price exceeds a certain price level (\$14.88 in 2023). No CCR allowances were sold in Auction 59.

In addition, 10.62 million emissions containment reserve (ECR) allowances were available for withholding. The ECR is a designated quantity of allowances to be withheld if an auction's interim clearing price is below an established price level (\$6.87 in 2023). No ECR allowances were withheld in Auction 59.

"RGGI continues to provide critical resources for states to invest in energy efficiency, renewable energy, and other programs that lower energy bills, improve air quality, reduce our reliance on fossil fuels, and create jobs throughout the region," said Katie Dykes, Commissioner of the Connecticut Department of Energy & Environmental Protection and Chair of the RGGI, Inc. Board of Directors. "As of Auction 59, the program has provided more than \$6 billion for such investments through the sale of RGGI allowances, which shows the impact and enduring strength of this innovative state-led climate program."

RGGI's most recent [investment of proceeds report](#), released in May 2022, found that energy bill savings to households and businesses in the region will exceed \$14.8 billion as a result of states' investments of RGGI program proceeds through 2020.

"For 59 consecutive auctions, the RGGI states have shown that bipartisan cooperation and market-based systems can achieve important environmental and policy goals". said Terrence Gray, Director of the Rhode Island Department of Environmental Management and Vice Chair of the RGGI, Inc. Board of Directors. "RGGI is delivering efficient emissions reductions and broad regional benefits and will continue to do so for all participating states."

Auction 59 Results At-A-Glance	
Auction Date	March 8, 2023
Allowances Initially Offered for Sale	21,522,877
Total Allowances Sold	21,522,877
Ratio of Bids to Supply	2.4x
Clearing Price	\$12.50
Reserve Price	\$2.50
Proceeds from Auction 59	\$269,035,962.50
Total Cumulative Proceeds (All Auctions)	\$6,164,310,719.64
Number of Bidders in Auction 59	56
Percent of Allowances Purchased by Compliance-Oriented Entities in Auction 59	63%
Percent of Allowances Purchased by Compliance Entities in Auction 59	82%
Percent of Allowances Purchased by Compliance Entities in Auctions 1 - 59	73%

More auction data is also available at: <https://www.rggi.org/auctions/auction-results>. Market monitor reports are available at: <https://www.rggi.org/auctions/market-monitor-reports>. To receive announcements relating to future auctions and other RGGI news, please join the RGGI, Inc. mailing list at <http://eepurl.com/h2ICM>.

### **About the Regional Greenhouse Gas Initiative (RGGI)**

The Eastern states participating in the fifth RGGI control period have implemented the first mandatory market-based regulatory program in the U.S. to reduce greenhouse gas emissions.

RGGI is composed of individual CO<sub>2</sub> budget trading programs in each state, based on each state's independent legal authority. A CO<sub>2</sub> allowance represents a limited authorization to emit one short ton of CO<sub>2</sub>, as issued by a respective state. A regulated power plant must provide CO<sub>2</sub> allowances equal to its emissions for each three-year control period. RGGI's fifth control period began on January 1, 2021 and extends through December 31, 2023. For more information visit [www.rggi.org](http://www.rggi.org).

### **About the Regional Greenhouse Gas Initiative, Inc.**

The Regional Greenhouse Gas Initiative, Inc. (RGGI, Inc.) was created to provide technical and administrative services to the states participating in the Regional Greenhouse Gas Initiative. RGGI, Inc. is a 501(c)(3) nonprofit organization. For more information, visit: [www.rggi.org/rggi-inc/contact](http://www.rggi.org/rggi-inc/contact).

---

---

**RGGI Inc.**



**MARKET MONITOR REPORT  
FOR AUCTION 59**

**Prepared for:**

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

**Prepared By:**

**POTOMAC  
ECONOMICS**

March 10, 2023

---

---

This report was prepared by Potomac Economics (the contractor) in the course of performing work contracted for and sponsored by RGGI, Inc. on behalf of states participating in RGGI (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania,<sup>1</sup> Rhode Island, Vermont, and Virginia). The opinions expressed in this report do not necessarily reflect those of RGGI, Inc. or any of the states participating in RGGI, and reference to any specific product, service, process, or method does not constitute an implied or expressed recommendation or endorsement of it. Further, RGGI, Inc., the states participating in RGGI, and the contractor make no warranties or representations, expressed or implied, as to the fitness for particular purpose or merchantability of any product, apparatus, or service, or the usefulness, completeness, or accuracy of any processes, methods, or other information contained, described, disclosed, or referred to in this report. RGGI, Inc., the states participating in RGGI, and the contractor make no representation that the use of any product, apparatus, process, method, or other information will not infringe privately owned rights and will assume no liability for any loss, injury, or damage resulting from, or occurring in connection with, the use of information contained, described, disclosed, or referred to in this report.

The Regional Greenhouse Gas Initiative (RGGI) is the first mandatory market-based regulatory initiative in the U.S. to reduce greenhouse gas emissions. RGGI is a cooperative effort of New England 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.

---

<sup>1</sup> While technically a RGGI participating state, Pennsylvania is currently under order from the state's Commonwealth Court prohibiting it from actively participating in RGGI & RGGI Inc. related activities. Final adjudication of these matters is not expected until sometime in 2023.

## **MARKET MONITOR REPORT FOR AUCTION 59**

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 allowance auctions by Enel X. This report summarizes our findings regarding RGGI Auction 59, which was held on March 8, 2023.

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-six bidders participated in the auction for CO<sub>2</sub> allowances. Bids were submitted to purchase 2.4 times the initial offering of approximately 21.5 million allowances, resulting in a clearing price of \$12.50 per ton in the auction. The Cost Containment Reserve (“CRR”) Trigger Price is \$14.88 per ton for auctions held in 2023, so no CCR allowances were sold in the auction. Compliance-Oriented Entities purchased 63 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 59 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.

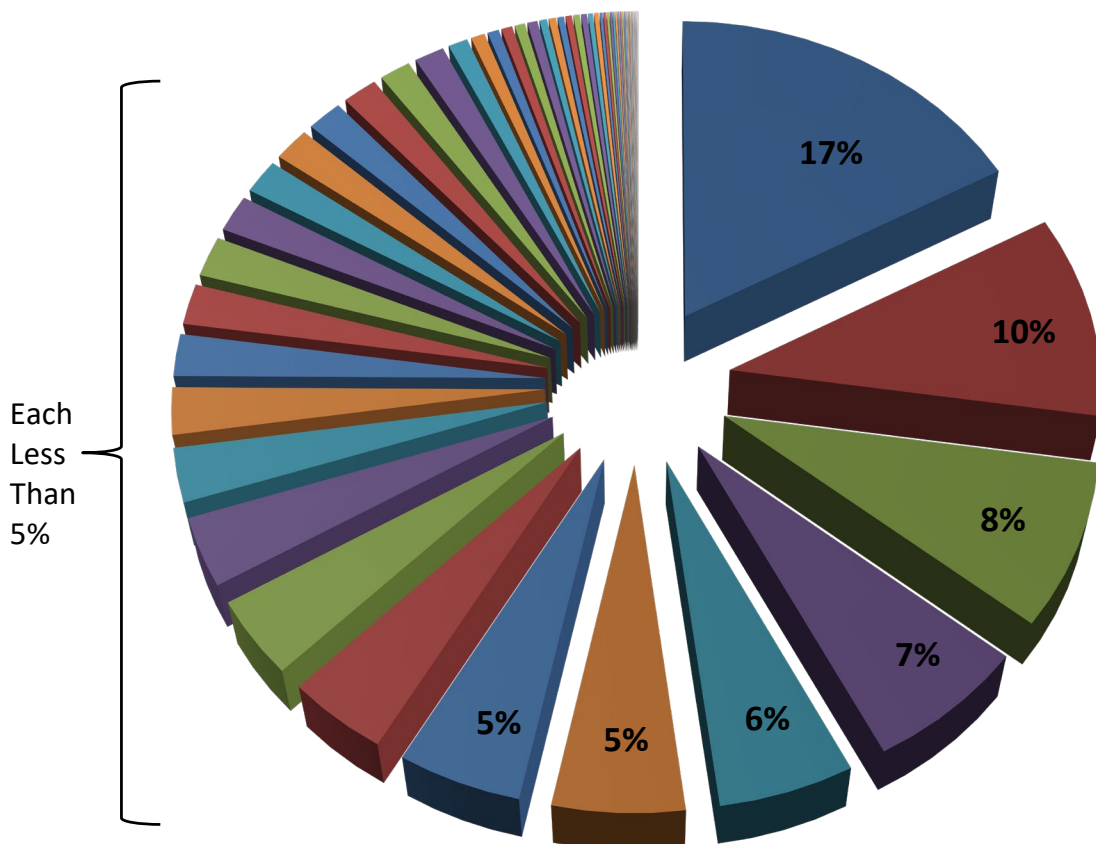
APPENDIX

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 demand for CO<sub>2</sub> allowances is based on the requirement for each compliance entity in the RGGI footprint to obtain one CO<sub>2</sub> allowance for each short ton of CO<sub>2</sub> that it emits from the sale of electricity. The following figure shows the relative shares of projected demand for RGGI allowances by compliance entity in the fifth control period. The largest compliance entity represents 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**

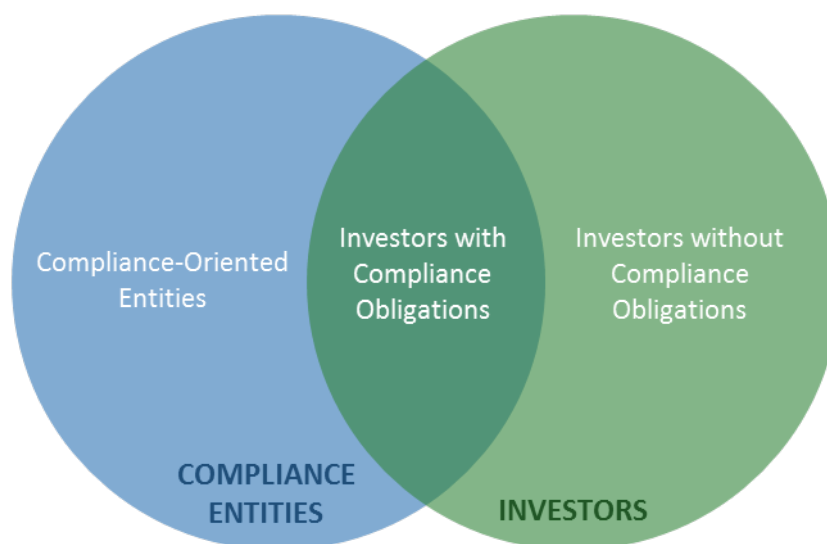


**B. SUMMARY OF PURCHASES OF ALLOWANCES IN AUCTION 59**

*Awards were distributed across 49 bidders with four bidders purchasing one million tons or more and 25 bidders purchasing 200,000 tons or more.*

This report summarizes participation in Auction 59. Participation in the RGGI market involves many different firms with various interests in RGGI allowances. Some participate in order to satisfy compliance obligations, others have investment interests, and still others participate for both purposes. To more effectively track the activity of different participants, we use several classifications for participant firms. Figure 2 summarizes the relationship between these classifications.

**Figure 2: Classifications of Participant Firms in the RGGI Marketplace**



- *Compliance-Oriented Entities* are compliance entities that appear to acquire and hold allowances primarily to satisfy their compliance obligations.
- *Investors with Compliance Obligations* are firms that have compliance obligations but which hold a number of allowances that exceeds their estimated compliance obligations by a margin suggesting they also buy for re-sale or some other investment purpose. These firms often transfer significant quantities of allowances to unaffiliated firms.<sup>2</sup>

<sup>2</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 in the RGGI footprint through 2026, (b) the total number of allowances in circulation, and (c) consideration of the pattern of the entity’s allowance transfers to unaffiliated firms versus affiliated firms. Since the designation of a compliance entity as an investor is based on a review of its transactions and holdings, the designation of a particular firm may change over time as more information becomes available.

- *Investors without Compliance Obligations* are firms without any compliance obligations.

These three categories form the basis for two overlapping groups.

- *Compliance Entities* – All firms with compliance obligations and their affiliates.<sup>3</sup> Combines the first and second of the above categories.
- *Investors* – All firms which are assessed to be purchasing for investment rather than compliance purposes. Combines the second and third of the above categories.

In Auction 59, Compliance Entities purchased 82 percent of the allowances sold. In the first 59 RGGI auctions, Compliance Entities purchased 73 percent of the allowances sold. In Auction 59, Compliance-Oriented Entities purchased 63 percent of the allowances sold.

After settlement of allowances sold in Auction 59:

- Fifty-five percent of the allowances in circulation will be held by Compliance-Oriented Entities.
- Sixty percent of the allowances in circulation are believed to be held for compliance purposes. 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 Investors with Compliance Obligations.

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.

---

<sup>3</sup> Affiliates 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.



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

<b>Bidder</b>	<b>Number of Allowances Awarded</b>	<b>Bidder</b>	<b>Number of Allowances Awarded</b>
<b>Bidder 1</b>	<b>4,120,000</b>	<b>Bidder 26</b>	<b>163,877</b>
<b>Bidder 2</b>	<b>3,900,000</b>	<b>Bidder 27</b>	<b>150,000</b>
<b>Bidder 3</b>	<b>1,200,000</b>	<b>Bidder 28</b>	<b>125,000</b>
<b>Bidder 4</b>	<b>1,190,000</b>	<b>Bidder 29</b>	<b>100,000</b>
<b>Bidder 5</b>	<b>988,000</b>	<b>Bidder 30</b>	<b>100,000</b>
<b>Bidder 6</b>	<b>801,000</b>	<b>Bidder 31</b>	<b>100,000</b>
<b>Bidder 7</b>	<b>800,000</b>	<b>Bidder 32</b>	<b>59,000</b>
<b>Bidder 8</b>	<b>800,000</b>	<b>Bidder 33</b>	<b>50,000</b>
<b>Bidder 9</b>	<b>764,000</b>	<b>Bidder 34</b>	<b>49,000</b>
<b>Bidder 10</b>	<b>750,000</b>	<b>Bidder 35</b>	<b>45,000</b>
<b>Bidder 11</b>	<b>708,000</b>	<b>Bidder 36</b>	<b>40,000</b>
<b>Bidder 12</b>	<b>637,000</b>	<b>Bidder 37</b>	<b>25,000</b>
<b>Bidder 13</b>	<b>450,000</b>	<b>Bidder 38</b>	<b>23,000</b>
<b>Bidder 14</b>	<b>400,000</b>	<b>Bidder 39</b>	<b>20,000</b>
<b>Bidder 15</b>	<b>399,000</b>	<b>Bidder 40</b>	<b>18,000</b>
<b>Bidder 16</b>	<b>346,000</b>	<b>Bidder 41</b>	<b>11,000</b>
<b>Bidder 17</b>	<b>300,000</b>	<b>Bidder 42</b>	<b>10,000</b>
<b>Bidder 18</b>	<b>275,000</b>	<b>Bidder 43</b>	<b>10,000</b>
<b>Bidder 19</b>	<b>255,000</b>	<b>Bidder 44</b>	<b>6,000</b>
<b>Bidder 20</b>	<b>250,000</b>	<b>Bidder 45</b>	<b>4,000</b>
<b>Bidder 21</b>	<b>250,000</b>	<b>Bidder 46</b>	<b>4,000</b>
<b>Bidder 22</b>	<b>220,000</b>	<b>Bidder 47</b>	<b>3,000</b>
<b>Bidder 23</b>	<b>200,000</b>	<b>Bidder 48</b>	<b>3,000</b>
<b>Bidder 24</b>	<b>200,000</b>	<b>Bidder 49</b>	<b>1,000</b>
<b>Bidder 25</b>	<b>200,000</b>		

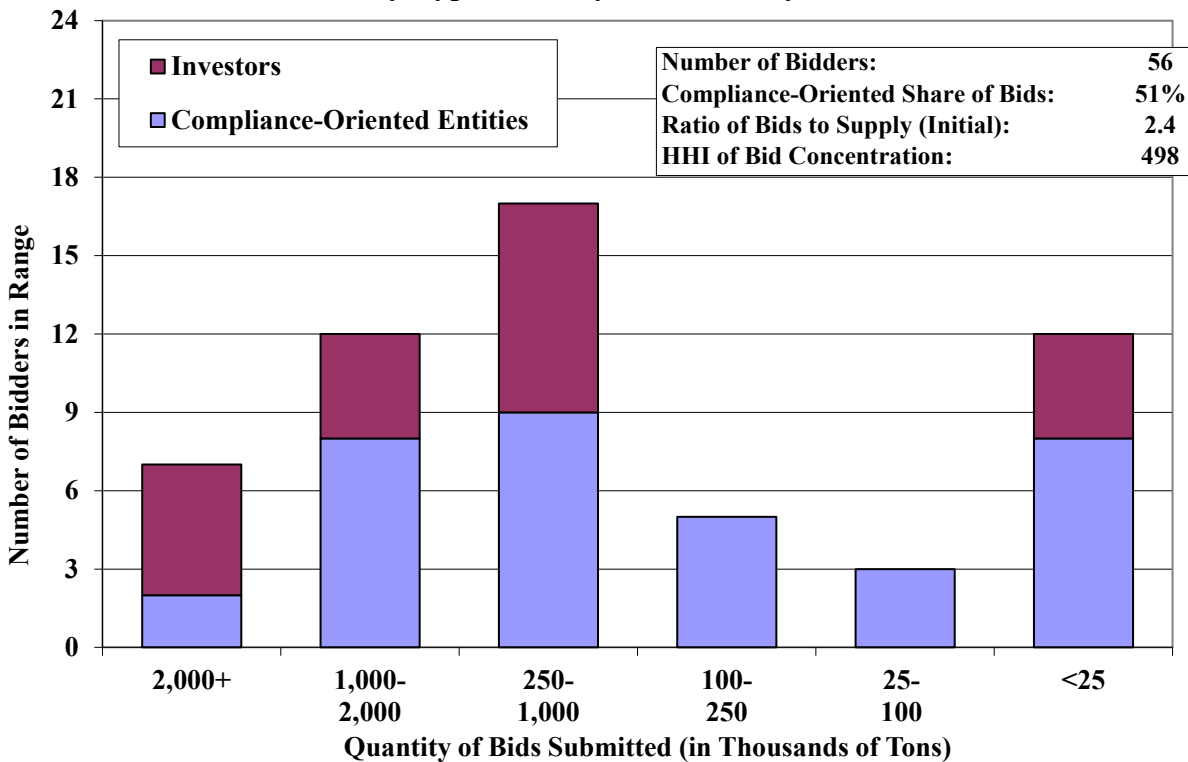
**C. DISPERSION OF BIDS IN AUCTION 59**

*Bids were submitted by 35 Compliance-Oriented Entities and 21 Investors. 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-Oriented Entities and nine Investors submitted bids for a large quantity of allowances (i.e., at least 1 million tons). Overall, Compliance-Oriented Entities accounted for 51 percent of the quantity of allowances for which bids were submitted. The quantity of allowances for which bids were submitted was 2.4 times the Initial Offering. In the previous auction, the quantity of allowances for which bids were submitted was also 2.4 times the Initial Offering.

The bid quantities were widely distributed among the 56 bidders. The concentration of bids, using the Herfindahl-Hirschman Index (“HHI”), was relatively low at 498. The HHI is a standard measure of concentration calculated by squaring each entity’s percent share and then summing the squares across all entities (i.e., the index ranges from 0 to 10,000).

**Figure 3: Quantity of Bids Submitted by Entity  
By Type of Entity and Quantity Bid**



**D. SUMMARY OF BID PRICES IN AUCTION 59**

*Bids were submitted across a wide range of prices in the auction and the clearing price of \$12.50 was relatively consistent with average bid prices submitted.*

The following table reports several statistics regarding the bid prices for bids submitted in Auction 59. The median and mean bid prices are weighted by the quantity of each bid.

---

<b>Bid Prices:</b>	
<b>Minimum</b>	<b>\$2.50</b>
<b>Maximum</b>	<b>\$17.57</b>
<b>Average (Median)</b>	<b>\$12.33</b>
<b>Average (Mean)</b>	<b>\$11.28</b>
<b>Clearing Price:</b>	<b>\$12.50</b>

---

**E. NAMES OF POTENTIAL BIDDERS IN AUCTION 59**

In accordance with Sections 2.8 and 3 of the Auction Notice for CO<sub>2</sub> Allowance Auction 59, the Participating States are releasing the names of Potential Bidders in Auction 59. The states defined potential bidders as: “Each Applicant that has been qualified and submitted a complete *Intent to Bid.*” The list of 75 Potential Bidders is as follows:

Anew Environmental, LLC	Jamestown Board of Public Utilities
Appalachian Power Company	Kcarbon Holdings LLC
Astoria Energy, LLC	Kendall Green Energy LLC
BP Products North America Inc.	Kleen Energy Systems, LLC
Braintree Electric Light Department	KMC Thermo, LLC
Buchanan Generation	Koch Supply & Trading, LP
Caithness Long Island, LLC	Lucid Clarity Master Fund LP
Calpine Energy Services, LP	Macquarie Energy, LLC
Canadian Imperial Bank of Commerce	Mercuria Energy America, LLC
Carbon Lighthouse Association	Morgan Stanley Capital Group, Inc.
Citadel Energy Marketing LLC	MV Global Carbon Fund LP
Clear Sky Enhanced Inflation Carbon Master Fund LP	National Grid Generation LLC dba National Grid
Coloma Strategies LLC	New Athens Generating Company, LLC
Commonwealth Chesapeake Company, LLC	Newark Energy Center
Consolidated Edison Comp. of NY, Inc.	NextEra Energy Marketing, LLC
Constellation Energy Generation, LLC	NRG Power Marketing LLC
Cooler, Inc.	Ocean State Power, LLC
CPV Maryland, LLC	Old Dominion Electric Cooperative
CPV Shore, LLC	Pegasus Development Corporation
CPV Towantic, LLC	Pinelawn Power, LLC
CPV Valley, LLC	Pixelle Androscoggin LLC
Cricket Valley Energy Center, LLC	Potomac Energy Center, LLC
Delaware City Refining Company, LLC	Power Authority of the State of New York
Delaware Municipal Electric Corp.	RBC
DTE Energy Trading, Inc.	Rhode Island State Energy Center, LP
Dynegy Marketing and Trade, LLC	Selkirk Cogen Partners, LP
East Coast Environmental, LLC	Shell Energy North America (US), LP
Edgewood Energy, LLC	Shoreham Energy, LLC
Elbow River Marketing LTD.	Statkraft US, LLC
Empire Generating Co., LLC	STX Commodities LLC
Equus Power I, LP	Tenaska Pennsylvania Partners, LLC
Footprint Power Salem Harbor Development LP	Tenaska, Inc.
Gen IV Investment Opportunities, LLC	Trafigura Trading LLC
Hartree Partners, LP	Village of Freeport
Hawkeye Energy Greenport	Virginia Electric and Power Company
Helix Ravenswood Energy, LLC	Vitol Inc.
Indeck-Corinth Limited Partnership	Wallingford Energy, LLC
J. Aron & Company	