Guest Panel

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Scott Hernandez - Moderator  
Climate Action Reserve
Discussion Agenda

Introduction and Auction Information
Auction Results – how did it go?
Auction Format – how it worked?
Who participated – Why?
Who gets the money?

Open Discussion
Panelists will discuss will continue to discuss these questions while opening up to questions from the audience
• What do the auction results say about the future of the program and the market for offsets and allowances?.
• Legal challenges and market confidence?
• What does the settlement price indicate?

Question & Answer
California Carbon Allowances
Post-Auction Webinar

Emilie Mazzacurati
Four Twenty Seven LLC
November 28, 2012
California’s First Allowance Auction Results

- On November 14, California held its first auction of carbon allowances (CCAs)

- 23M allowances Vintage 2013 were offered for sale
  - All allowances sold at a clearing price of $10.09
  - 3 times as many bids as allowances offered

- 39.5M allowances Vintage 2015 were offered for sale
  - 5.6M allowances sold (14%) at a price of $10.00

- Total revenue raised: $289.1 million

- 73 companies and government agencies were approved to participate in the auction
How the Auction Works

- The auction is a single-round, sealed bid, single clearing price format
  - Participants bid only once, but they can place multiple bids
    e.g. 10,000 allowances at $10, 5,000 at $12, 2,000 at $15
- All bids are secret (during and after the auction)
- Everybody pays the same price, regardless of what they bid

Example of a bid curve:
- 10,000 at $10.05
- 5,000 at $12.75
- 2,000 at $15.00

Result for bidder:
- 7,000t at $10.09

Vol: 23 million

Highest bid: $91.13
Mean price: $13.75
Median price: $12.96
Clearing price: $10.09
Unfulfilled bids
Vol: 48.5 M (between $10.00 and $10.09)
Qualified Bidders: 73 entities qualified to participate in the first auction. A publicly available list of these bidders can be found in CARB’s summary results report. Below is a bar graph of qualified bidders by industry category and compliance status. As expected, industries with the largest compliance obligations had the largest representation.
What Happens With the Auction Revenues?

<table>
<thead>
<tr>
<th>Allowance owner</th>
<th># of allowances sold</th>
<th>Value</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of California</td>
<td>0 M V13* 5.6 M V15</td>
<td>$0 M $ 55.8 M</td>
<td>GHG Reduction Fund – 3-yr investment plan towards GHG reductions. 25% towards disadv. communities</td>
</tr>
<tr>
<td>Investor-Owned Utilities</td>
<td>22 M*</td>
<td>$220.60 M</td>
<td>Neutralization of GHG costs in rates, compensation to trade exposed industries and small businesses, climate dividend.</td>
</tr>
<tr>
<td>Publicly-Owned Utilities</td>
<td>1.3 M</td>
<td>$13.3 M</td>
<td>Benefit of retail customers</td>
</tr>
</tbody>
</table>

* Final number provided by the California Air Resources Board after the webinar
Thank you!
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Questions Submitted Online

• Where will the income from the carbon sales go?
  – How will it be distributed?

• What explains the clearing price, at $10, just above the floor for vintage 2013 allowances?
  – Is it good or bad, or neither?

• What explains price volatility in the secondary market, both long-term and reportedly immediately after the close of the auction?

• Does the difference between the results of the auction, compared with prices the secondary market, represent restrictions in the auction that were not at play in the secondary market?
Open Discussion

**Fraud**
Any indication of fraud or market collusion?
*Fears justified? Necessary “Lessons Learned”?*

**Utilities**
*What does it mean that all the 2013 allowances sold during the auction were ‘consigned’ by the utilities?*
- Why? Did utilities buy back their own allowances?

**Politics**
Experts seem to agree that the auction was a success. Yet, this week there have been reports of disappointment from those who'd hoped a higher allowance price would bring greater revenues to the state.
- *Is this a double-edge sword for the state and CARB?*

**Market**
What does the fact that 97% of bids came from compliance entities say about the market for allowances and offsets?
*Secondary market? Traders/speculators?*
Open Discussion

Legal: How do you see the last minute legal challenges having affected (or not) on the market? So many lawsuits, are we seeing diminishing returns in reactions in the market? Nothing new for CARB? A more resilient program?

Program: What does this first auction tell us about the state being able to meet the goals of AB32, while growing the economy?

Price How did they arrive at the $10.09 settlement price, if they average bid was $13.75? Does the $10.09 price indicate confidence among businesses that they can reduce GHGs internally at lower cost?
Questions & Answer?

Please submit questions into the webinar software, and we will answer them in the order they are received.
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