Nova Scotia Cap-and-Trade Program

June 2020 Auction of Emission Allowances

Summary Results Report

Background

Nova Scotia Environment held the June 2020 Auction of Emission Allowances on June 10, 2020. The auction included 2019 vintage allowances. The information in this report provides program transparency while also maintaining the confidentiality of individual auction participants’ market positions.

Prior to the certification of the auction, Nova Scotia Environment and the independent Market Monitor carefully evaluated the bids and determined that the auction process and procedures complied with the requirements of the Cap-and-Trade Program Regulations (the Regulations). As provided below, the Market Monitor made the following determination:

The Market Monitor found the auction results to be competitive, based on the data available at the time of the auction. The Market Monitor did not find evidence of market manipulation, based on the data available at the time of the auction.

The Market Monitor found that the auction was cleared consistent with the auction clearing rules in the Regulations and appropriate economic logic. The Market Monitor confirmed the clearing price and clearing quantities by qualified bidder for the Current Auction of 2019 current vintage allowances. The auction algorithm correctly applied requirements of the Regulations covering the bid guarantee.

Auction proceeds figures are not shown in this document. The Financial Services Administrator will distribute auction proceeds to Nova Scotia Environment after all qualified bidder payments are received. Nova Scotia will receive auction proceeds by July 7, 2020. Information regarding auction proceeds will be published after the auction is final.

Auction Results

The first and the second tables below provide key data and information on the results of the auction. The third table provides qualified bid summary statistics from the auction. Please see Explanatory Notes after the list of qualified bidders for descriptions of all summary information.

Table 1: Auction results for the June 2020 Auction

<table>
<thead>
<tr>
<th>Description of Allowances</th>
<th>Allowances Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowances offered by Nova Scotia Environment</td>
<td>640,000</td>
</tr>
<tr>
<td>Allowances offered by entity consignment</td>
<td>0</td>
</tr>
<tr>
<td>Total allowances offered</td>
<td>640,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description of Allowances</th>
<th>Allowances Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowances sold for Nova Scotia Environment</td>
<td>640,000</td>
</tr>
<tr>
<td>Allowances sold for entity consignment</td>
<td>0</td>
</tr>
<tr>
<td>Total allowances sold</td>
<td>640,000</td>
</tr>
</tbody>
</table>
### Table 2: Auction data for the June 2020 Auction

<table>
<thead>
<tr>
<th>Auction Data Description</th>
<th>Auction Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Qualified Bids Divided by Total Allowances Available for Sale</td>
<td>1.58</td>
</tr>
<tr>
<td>Herfindahl-Hirschman Index</td>
<td>4439</td>
</tr>
</tbody>
</table>

### Table 3: Qualified Bid Summary Statistics for the June 2020 Auction

<table>
<thead>
<tr>
<th>Auction Statistic Description</th>
<th>Auction Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auction Reserve Price</td>
<td>$20.00</td>
</tr>
<tr>
<td>Settlement Price</td>
<td>$24.00</td>
</tr>
<tr>
<td>Maximum Bid Price</td>
<td>$30.00</td>
</tr>
<tr>
<td>Minimum Bid Price</td>
<td>$20.00</td>
</tr>
<tr>
<td>Mean Bid Price</td>
<td>$23.61</td>
</tr>
<tr>
<td>Median Bid Price</td>
<td>$20.79</td>
</tr>
<tr>
<td>Median Allowance Price</td>
<td>$24.00</td>
</tr>
</tbody>
</table>

### List of qualified bidders for the June 2020 Auction

A qualified bidder is an entity that completed an auction application, submitted a financial guarantee that was accepted by the Financial Services Administrator, and was approved by Nova Scotia Environment to participate in the auction. Qualified bidders may or may not have participated in the auction.

### Table 4: Qualified Bidders for the June 2020 Auction

<table>
<thead>
<tr>
<th>CITSS Entity ID</th>
<th>Entity Legal Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>NS2856</td>
<td>NGL Supply Co. Ltd.</td>
</tr>
<tr>
<td>NS2859</td>
<td>Suncor Energy Products Partnership</td>
</tr>
<tr>
<td>NS2860</td>
<td>Plains Midstream Canada ULC</td>
</tr>
<tr>
<td>NS2867</td>
<td>Parkland Fuel Corporation</td>
</tr>
<tr>
<td>NS2869</td>
<td>Heritage Gas Limited</td>
</tr>
<tr>
<td>NS2870</td>
<td>Valero Energy Inc.</td>
</tr>
<tr>
<td>NS2873</td>
<td>Superior Plus LP</td>
</tr>
<tr>
<td>NS2880</td>
<td>Nova Scotia Power Incorporated</td>
</tr>
<tr>
<td>NS2881</td>
<td>Imperial Oil</td>
</tr>
<tr>
<td>NS2884</td>
<td>Wilson Fuel Company Limited</td>
</tr>
<tr>
<td>NS2892</td>
<td>Elbow River Marketing Ltd.</td>
</tr>
<tr>
<td>NS2893</td>
<td>Irving Oil Commercial G.P.</td>
</tr>
<tr>
<td>NS2927</td>
<td>Sterling Fuels Limited</td>
</tr>
<tr>
<td>NS2982</td>
<td>Scotia Propane Limited</td>
</tr>
<tr>
<td>NS2990</td>
<td>Supreme Tank Inc.</td>
</tr>
</tbody>
</table>
## Explanatory Notes: Qualified Bid Summary Statistics

<table>
<thead>
<tr>
<th>General Term</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Allowances Available for Sale:</td>
<td>Total allowances available, by vintage, for purchase in the auction, including allowances offered by Nova Scotia Environment and consigned by consigning entities.</td>
</tr>
<tr>
<td>Total Allowances Sold at Auction:</td>
<td>Total allowances purchased at the auction.</td>
</tr>
<tr>
<td>Total Qualified Bids Divided by Total Allowances Available for Sale:</td>
<td>Total number of emission allowances included in all the qualified bids for the auction divided by the total number of emission allowances available in the auction.</td>
</tr>
<tr>
<td>Herfindahl–Hirschman Index (HHI):</td>
<td>The HHI is a measure of the concentration of allowances purchased by winning bidders relative to the total sale of emission allowances in the auction. The percentage of emission allowances purchased by each winning bidder is squared and then summed across all winning bidders. The HHI can range up to 10,000, representing 100% of the emission allowances purchased by a single bidder (i.e., 100x100=10,000).</td>
</tr>
<tr>
<td>Qualified Bid Summary Statistics:</td>
<td>Statistics are calculated from all the qualified bids for the auction.</td>
</tr>
<tr>
<td>Qualified Bids:</td>
<td>The bids that remain after a qualified bidder’s submitted bids have been evaluated and reduced to meet all bidding limitations.</td>
</tr>
<tr>
<td>Auction Reserve Price:</td>
<td>The minimum acceptable auction bid price for emission allowances.</td>
</tr>
<tr>
<td>Settlement Price:</td>
<td>The emission allowance price that resulted from the auction.</td>
</tr>
<tr>
<td>Maximum Bid Price:</td>
<td>Highest qualified bid price.</td>
</tr>
<tr>
<td>Minimum Bid Price:</td>
<td>Lowest qualified bid price.</td>
</tr>
<tr>
<td>Mean Bid Price:</td>
<td>Average qualified bid price calculated as the sum of the qualified bid prices times the bid allowances at each qualified bid price divided by the sum of all qualified bid allowances.</td>
</tr>
<tr>
<td>General Term</td>
<td>Explanation</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Median Bid Price:</td>
<td>The price per emission allowance calculated so that 50% of the qualified bid prices fall above and 50% fall below the median bid price.</td>
</tr>
<tr>
<td>Median Allowance Price:</td>
<td>The price per emission allowances calculated so that 50% of the qualified bid allowances fall above and 50% fall below the median allowance price.</td>
</tr>
</tbody>
</table>