California Cap-and-Trade Program and Québec Cap-and-Trade System February 2015 Joint Auction #2

Summary Results Report

Background

The California Air Resources Board (ARB) and Québec's ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC)¹ held the second joint auction of greenhouse gas allowances (GHG) on February 18, 2015. The auction included a Current Auction of 2015 vintage allowances and an Advance Auction of 2018 vintage allowances. The information provided in this report is a balance between the need for program transparency and protection of individual auction participants' market positions.

Prior to the certification of the auction, ARB and MDDELCC staff and the Market Monitor carefully evaluated the bids and determined that the auction process and procedures complied with the requirements of the California and Québec Cap-and-Trade Regulations. As provided below, the Market Monitor made the following determination:

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 participant for the auction for 2015 vintage allowances and for the auction for 2018 vintage allowances. The auction algorithm correctly applied the regulation requirements covering the bid guarantee. The tie breaker logic was needed in this auction. The Market Monitor did not observe any breaches of security or communication protocols. The Market Monitor recommends that ARB and MDDELCC approve the February Auction results.

Unlike in past California-specific and Québec-specific auctions, auction proceeds figures are not shown in this report because of the exchange rate process for determining final auction proceeds in a joint auction. Winning bids are submitted in one of two currencies – U.S. dollars (USD) or Canadian dollars (CAD). After receiving payment from the winning bidders, and based on instructions from California and Québec, the financial services administrator will exchange some amount of currency at then-prevailing market rates prior to transferring the auction proceeds to the jurisdictions. Proceeds to the jurisdictions are paid after all bidder payments are received, which is 28 days after the bid window closes. As provided in the California Cap-and-Trade Regulation, sellers who consigned allowances in this auction will be paid the auction settlement price in USD for every consigned allowance sold. Jurisdiction proceeds information will be published after the auction is final.

¹ Ministry of Sustainable Development, Environment and the Fight against Climate Change.







California must receive auction proceeds only in USD and Québec must receive auction proceeds only in CAD. Thus, the total amount of auction proceeds received by California and by Québec from the sale of state- and province-owned allowances may vary (upwards or downwards) depending on the prevailing exchange rates in effect at the time of distribution of auction proceeds. A Post Joint Auction Public Proceeds Report will be issued subsequent to this report providing the final amount of proceeds transferred.



California Cap-and-Trade Program and Québec Cap-and-Trade System February 2015 Joint Auction #2

The California Air Resources Board (ARB) and Québec's ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC) held the second joint auction of greenhouse gas allowances (GHG) on February 18, 2015. The auction included a Current Auction of 2015 vintage allowances and an Advance Auction of 2018 vintage allowances. Below are key data and information on the results of the auction. Please see Explanatory Notes after the list of Qualified Bidders for descriptions of all summary information.

Qualified Bid Summary Statistics

Current Auction of 2015 Vintage Allowances

Total 2015 Allowances Available for Sale:	73,610,528
Total 2015 Allowances Sold at Auction:	73,610,528
Total Qualified Bids Divided by	
Total 2015 Allowances Available for Sale:	1.14

All Qualified Bid Summary Statistics are determined in USD including all bids submitted in USD and CAD. The CAD equivalent of the USD Qualified Bid Summary Statistics is based on the Auction Exchange Rate. USD statistics are converted into CAD in whole cents to be able to compare statistics on a common basis.

Auction Exchange Rate (USD to CAD):	1.2403	
Auction Reserve Price:	\$12.10 USD	\$15.01 CAD
Settlement Price Per Allowance:	\$12.21 USD	\$15.14 CAD
Bid Price Summary Statistics		
Maximum Price:	\$45.20 USD	\$56.06 CAD
Minimum Price:	\$12.10 USD	\$15.01 CAD
Mean Price:	\$14.03 USD	\$17.40 CAD
Median Bid Price:	\$12.55 USD	\$15.57 CAD
Median Allowance Price:	\$12.75 USD	\$15.81 CAD
Allowances Purchased by Compliance Entities:	93.5%	
Hirschman-Herfindahl Index:	524	



Advance Auction of 2018 Vintage Allowances

Total 2018 Allowances Available for Sale:	10,431,500
Total 2018 Allowances Sold at Auction:	10,431,500
Total Qualified Bids Divided by	
Total 2018 Allowances Available for Sale:	1.02

All Qualified Bid Summary Statistics are determined in USD, including all bids submitted in USD and CAD. The CAD equivalent of the USD Qualified Bid Summary Statistics is based on the Auction Exchange Rate. USD statistics are converted into CAD in whole cents to be able to compare statistics on a common basis.

Auction Exchange Rate (USD to CAD): Auction Reserve Price:	1.2403 \$12.10 USD	\$15.01 CAD
Settlement Price Per Allowance:	\$12.10 USD	\$15.01 CAD
Bid Price Summary Statistics		
Maximum Price:	\$20.00 USD	\$24.81 CAD
Minimum Price:	\$12.10 USD	\$15.01 CAD
Mean Price:	\$12.58 USD	\$15.61 CAD
Median Bid Price:	\$12.38 USD	\$15.35 CAD
Median Allowance Price:	\$12.25 USD	\$15.19 CAD
Allowances Purchased by Compliance Entities: Hirschman-Herfindahl Index:	95.1% 1,436	



List of Qualified Bidders for the Current Auction of 2015 Vintage Allowances and the Advance Auction of 2018 Vintage Allowances

A Qualified Bidder is an entity that completed an auction application or confirmed an intent to bid for the auction, submitted an acceptable bid guarantee, and was approved by ARB and MDDELCC to participate in the auction.

AltaGas Power Holdings (U.S.), Inc. Ambiente Group, Inc. Blue Delta Energy, LLC **BNSF** Railway Company **BP Energy Company** California Department of Water Resources California State University Calpine Energy Services, LP Cargill Power Markets, LLC Chevron U.S.A., Inc. City of Azusa City of Banning City of Colton City of Long Beach, Gas and Oil Department **City Of Needles** City of Roseville City of Shasta Lake City of Vernon, Vernon Gas & Electric CP Energy Marketing (US), Inc. CPV Sentinel, LLC EDF Trading North America, LLC Énergie Valero, Inc. Exelon Generation Company, LLC Exxon Mobil Corporation Flyers Energy, LLC Freeport-McMoRan Oil & Gas, LLC Fresno Cogeneration Partners, LP Gazifère, Inc. Gestion Energie Québec, Inc. High Desert Power Project, LLC Hydro-Québec Idemitsu Apollo IPC (USA), Inc. J. Aron & Company J.P. Morgan Ventures Energy Corporation Jaco Oil Company



Kildair Service ULC Les Pétroles Irving Commercial s.e.n.c Les Pétroles Irving Marketing s.e.n.c. Liberty Utilities (CalPeco Electric), LLC Los Angeles Department of Water & Power Luminus Energy Partners QP, LP Luminus Energy Partners, LLC Macquarie Energy, LLC Modesto Irrigation District Morgan Stanley Capital Group, Inc. Morgan Stanley Capital Group, Inc. NextEra Energy Power Marketing, LLC Noble Americas Gas & Power Corporation Northern California Power Agency NRG Power Marketing, LLC Pacific Gas and Electric Company PacifiCorp Pasadena Water & Power Petro Diamond, Inc. Pétrolière Impériale Phillips 66 Company Plumas-Sierra Rural Electric Cooperative Produits Suncor Énergie S.E.N.C. Propane Québec, Inc. Rio Tinto Minerals, Inc. Robinson Oil Supply & Transport, Inc. Royal Bank of Canada Sacramento Municipal Utility District (SMUD) San Diego Gas & Electric Company San Joaquin Refining Company, Inc. Sempra Generation Shell Energy North America (US), LP Shiralian Enterprises Silicon Valley Power (SVP), City of Santa Clara Société en Commandite Gaz Métro Société en Commandite Revenu Noranda Southern California Edison Company Southern California Gas Company Southern Counties Oil Company, a California Limited Partnership Southwest Gas Corporation Stan Boyett & Son, Inc.

California Environmental Protection Agency



TEMBEC The Bank of Nova Scotia The Morning Star Packing Company TransAlta Energy Marketing (U.S.), Inc. Turlock Irrigation District Twin Rivers Technologies Entreprises De Transformation De Graines Oléagineuses du Québec, Inc. Vitol, Inc. Vitol, Inc. Walnut Creek Energy, LLC Yuba City Cogeneration Partners, LP





Explanatory Notes: Qualified Bid Summary Statistics Current Auction of 2015 Vintage Allowances

Total 2015 Allowances Available for Sale:	Total 2015 vintage allowances available for purchase in the auction in metric tons, including allowances consigned by consigning entities and allowances sold by the State of California and the Province of Québec.
Total 2015 Allowances Sold at Auction:	Total 2015 vintage allowances purchased in the auction in metric tons.
Total Qualified Bids Divided by Total 2015 Allowances Available for Sale:	Total number of allowances included in all the qualified bids for the current vintage (regardless of bid price) divided by the total number of current vintage allowances available in the auction.
Auction Exchange Rate (USD to CAD):	The most recently available noon daily buying rate for U.S. and Canadian dollars as published by the Bank of Canada the day before the auction.
Auction Reserve Price:	The minimum acceptable auction bid price for current vintage allowances shown in both U.S. and Canadian dollars per metric ton.
Settlement Price Per Allowance:	The current vintage allowance price that resulted from the auction, in U.S. and Canadian dollars per metric ton.
Allowances Won by Compliance Entities:	The total number of current vintage allowances purchased in the auction by compliance entities divided by the total number of current vintage allowances sold in the auction. A Compliance Entity is a Covered Entity or Opt-in Covered Entity as defined in the Cap-and-Trade Regulation or an Emitter as defined in Québec's Cap-and-
Bid Price Summary Statistics	Trade Regulation. Statistics are calculated from all the qualified bids for the current vintage (regardless of bid price). All price statistics are shown in both U.S. and Canadian dollars.
Maximum Price:	Highest submitted bid
Minimum Price: Mean Price:	Lowest submitted bid Average qualified bid calculated as the sum
MEAN FILE.	of the bid price times the bid quantity of



Page 9	CA-QC Joint Auction Summary Results Report February 25, 2015
Median Bid Price:	each qualified bid divided by the sum of the bid quantities across all qualified bids. The price per metric ton calculated so that 50% of the qualified bids fall above and below the median bid price.
Median Allowance Price:	The price per metric ton calculated so that 50% of the quantity of allowances in the qualified bids fall above and below that price median value.
Herfindah⊢Hirschman Index (HHI):	The HHI is a measure of the concentration of allowances purchased by winning bidders relative to the total sale of current vintage allowances in the auction. The percentage of 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 current vintage allowances purchased by a single bidder (i.e., 100x100=10,000).

Advance Auction of 2018 Vintage Allowances

The data for the future vintage allowance auction are computed in the same manner as computed for the current vintage allowance auction. No allowances are consigned to the future vintage auction.

