505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

September 8, 2016

PUBLIC UTILITIES COMMISSION

Advice Letter 5011

Ronald van der Leeden Director, Regulatory Affairs Southern California Gas 555 W. Fifth Street, GT14D6 Los Angeles, CA 90013-1011

Subject: Request for Approval to Procure GHG Cap-and-Trade Compliance Instruments from New Exchanges and Brokers (Amending Advice No. 4755)

Dear Mr. van der Leeden:

Advice Letter 5011 is effective as of September 11, 2016.

Sincerely,

Edural Randoph

Edward Randolph Director, Energy Division



Ronald van der Leeden Director Regulatory Affairs

555 W. Fifth Street, GT14D6 Los Angeles, CA 90013-1011 Tel: 213.244.2009 Fax: 213.244.4957 RvanderLeeden@semprautilities.com

August 11, 2016

<u>Advice No. 5011</u> (U 904 G)

Public Utilities Commission of the State of California

Subject: Request for Approval to Procure Greenhouse Gas (GHG) Cap-and-Trade Compliance Instruments from New Exchanges and Brokers (Amending Advice No. 4755)

Southern California Gas Company (SoCalGas) is filing this Amendment to Advice Letter (AL) 4755 to correct in the Purpose section the name of one of the included brokers and to clarify the usage of a subsidiary for another. Since this filing is limited to just this change, the Commission's Energy Division has informed SoCalGas that no new protest period is opened; the Protest Section has been modified accordingly. With the exception of the Purpose and Protest sections, the rest of this AL is identical to AL 4755.

<u>Purpose</u>

Pursuant to Decision (D.) 14-12-040 in Phase 1 of Rulemaking (R.) 14-03-003, SoCalGas hereby requests California Public Utilities Commission (CPUC, or Commission) approval to use a market provided by Intercontinental Exchange, Inc. and the voice brokers of Evolution Markets Inc. (Evolution),¹ Amerex Brokers LLC (Amerex), and TFS Energy Futures, LLC (TFS), to procure authorized GHG compliance instruments, including carbon allowance derivatives, to satisfy its compliance obligation under the California Air Resources Board's (ARB) GHG Capand-Trade program.

Background

On March 19, 2014, the Commission issued R.14-03-003 to address issues related to GHG cost and revenues resulting from the implementation of ARB's GHG Cap-and-

¹ Including Evolution Markets Futures LLC, which is a wholly-owned subsidiary of Evolution Markets Inc.

Trade program for natural gas corporations. On July 25, 2014, SoCalGas was among five parties² who filed a Joint Motion to Adopt Settlement (Settlement Agreement) to approve ratemaking standards and mechanisms on cost forecasting, cost recovery, purchasing limits, consignment and proposed 2015 forecast revenue requirements for the gas utilities' compliance with Assembly Bill (AB) 32 natural gas supplier GHG Cap-and-Trade program obligations beginning January 1, 2015. D.14-12-040 approved, with modifications, the Settlement Agreement, which included the following provision related to how gas utilities should request Commission approval to purchase GHG compliance instruments on an exchange or from a brokerage firm not previously approved by the CPUC for such procurement:

Prior to purchasing GHG compliance instruments on an exchange or from a brokerage firm not previously approved by the Commission for such procurement, each utility must submit a one-time Tier 2 AL detailing: (1) what exchange or brokerage firm it seeks to use, (2) the liquidity and transparency of the pricing offered by the exchange or brokerage firm, specifically for California GHG compliance instruments, including an explanation of how the price of products procured on the exchange or through the brokerage is market-based, and (3) the regulatory authority or authorities to which the brokerage firm is subject.

SoCalGas explains below how its request meets each of these requirements.

Liquidity and Transparency of the Pricing Offered by the Exchange and Brokerage Firms

Liquidity

Most of the secondary market trade in California Carbon Allowances (CCA) occurs in futures and options contracts listed on the ICE Futures U.S. exchange (ICE). ICE is the second largest futures exchange in the United States. ICE offers futures and options contracts for agricultural commodities, equity indexes, currencies, energy and emissions. Trading in ICE CCA emissions futures began in 2011.

Liquidity refers to the ease of entering a marketplace and locating counterparties to transact. Liquid markets are markets where many buyers and sellers exist and a high level of trading occurs. In liquid markets, due to the high level of trading activity, traders can enter the market and transact without significantly influencing prices. Trading volume and open interest are metrics often used to gauge liquidity. As indicated by ICE trading volume data, the liquidity of the secondary market continues to grow. As illustrated by Figure 1, cleared volume on ICE grew significantly in 2014. Total futures and options volume traded during the year was 179 million metric tons (MMt), an 80% increase in volume over 2013.

² SoCalGas, San Diego Gas & Electric Company, Pacific Gas & Electric Company, Southwest Gas Corporation, and the Office of Ratepayer Advocates.

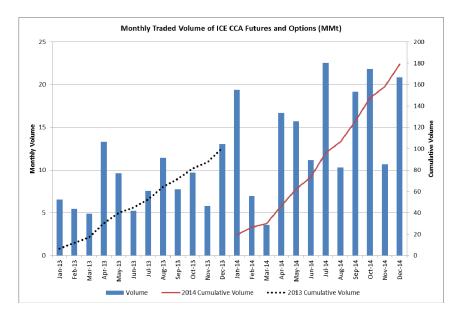
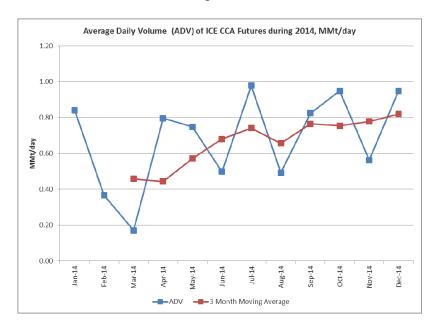


Figure 1

Another metric indicative of liquidity growth in the CCA market is Average Daily Volume (ADV) of ICE futures. Figure 2 plots ADV of traded ICE CCA futures during 2014. In addition, a three-month moving average of this data is plotted as a means to smooth the month-to-month volatility of the data and better illustrate the growth in volume throughout the year. Note that the three-month moving average increases from 0.46 MMt/day in March, to 0.68 MMt in June, to 0.76 MMt in September, to 0.82 MMt in December. This graphic illustrates the growth in volume experienced by the ICE CCA futures contract during 2014, an indication of increased liquidity in the marketplace.

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ICE currently lists CCA futures with allowance vintages from 2013 to 2018. Currently, there are two means to execute an ICE futures or options trade: (1) the trader uses the ICE internet trading platform (WebICE), or (2) traders use the services of a voice broker. Voice brokers direct their executed trades to ICE using the "ICE Block" functionality of WebICE. Voice broker executed trades are submitted as "block trades," with a minimum volume of 10,000 metric tons. In either means of execution, once a trade is executed, it rests with the exchange until the close of the market for the day. At the close of the market, the trade is directed to the trader's Futures Commission Merchant (FCM) account.

The FCM is an important part of the clearing process. Examples of FCMs include divisions of Barclays, Bank of America, and Wells Fargo. FCMs are highly capitalized entities. The FCM provides the means to warehouse, margin, and mark-to-market held trades. The mark-to-market process entails valuing the trade against the day's settlement price published by the exchange and assessing a gain or loss to the trader's FCM account.

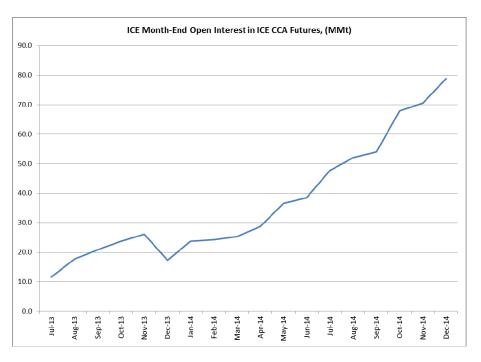
The voice broker market, including Evolution, Amerex, and TFS, assists in creating liquidity by allowing numerous buyers and sellers to anonymously share and access pricing information at the same time. These three brokers have been found to be particularly skilled at locating and showing competitive bids and offers for CCA and California Carbon Offset instruments.

Voice brokers canvass the market daily, searching for bids and offers of various instruments. These prices are then made available to the market through phone, instant messenger (e.g., AOL's AIM), and email. Voice brokers effectively create a diverse marketplace of CCA buyers and sellers, often at a narrower bid-ask spread than is available on the WebICE trading platform.

Voice broker assisted trades account for the majority of the volume of CCA futures traded to-date. The use of a voice broker at times is attractive due to its ability to find either more competitive bids or offers than found on WebICE, or due to its ability to find a larger volume bid or offer than found on WebICE. Voice brokers also are valued for their ability to provide market intelligence and price discovery.

Open Interest, a metric quantifying the number of open positions between buyers and sellers, has also grown. As illustrated by Figure 3, open interest in ICE CCA futures grew from 11.5 MMt at month-end July 2013 to 78.9 MMt prior to the December 2014 delivery.





Entering 2015, the market continues to show signs of increasing liquidity. In January 2015, trading activity was robust, with ICE cleared CCA futures and options volume being 46.8 MMt, approximately 26% of all 2014 volume.

In addition to cleared trades, voice brokers facilitate pure bilateral trades by matching customer bids and offers. These trades are usually more challenging to close due to the matched entities being required to accept the creditworthiness of the counterparty. Once matched, counterparties are expected to work in good faith to solve any credit or contracting issues. At times, this hurdle is prohibitive and trades get canceled. Bilateral trades for CCA futures are thought to be much fewer in number when compared to cleared trades.

Transparency and Clearing

ICE and the voice broker community provide an important price discovery function. The WebICE electronic trading platform is a transparent Central Limit Order Book available to market participants daily.³ On most days, there are posted bids and offers for several vintage allowances. Traders may immediately execute a trade with any bid or offer in the market, they can improve the market by bidding higher or offering lower, or they may add to market depth by adding bids or offers to what is

³A Central Limit Order Book is a trading method used by most exchanges globally. It is a transparent system that matches customer orders (e.g., bids and offers) on a "price time priority" basis. The highest (best) bid order and the lowest (cheapest) offer order constitute the best market in a given contract. Customers can see market depth or the "stack" by comparing bid orders for various sizes and prices on one side against offer orders at various sizes and prices on the other side.

shown. Thus, prices are both visible to any interested market participant and representative of the market at the time of the transaction.

Deals executed on WebICE or via voice brokers (and cleared using ICE) are guaranteed by the ICE clearinghouse. For example, a purchase of CCA futures for December delivery at \$13/Mt secures the purchase price at \$13/Mt and delivery in December to the buyer's Compliance Instrument Tracking System Service account is assured by the clearinghouse if the futures contract is held to expiration.

A basic role of the clearinghouse is to take money from FCMs that warehouse losing trades and direct it to FCMs with winning trades. This daily process of requiring FCMs to cover losses insures that the commodity is valued at a market price and enhances the creditworthiness of the clearinghouse.

Cleared ICE trades are deemed attractive by many traders due to the creditworthiness of the ICE clearinghouse that stands between all trades and guarantees performance. CCA futures traded on ICE are cleared at the ICE Clear Europe clearinghouse.

ICE Clear Europe has access to a guarantee fund (\$1.85 billion minimum in value) to ensure all trades are valued properly at the close of trading and deliveries occur when elected. In contrast to the highly creditworthy ICE clearing arrangement, bilateral trading may entail providing credit guarantees and other non-performance contract provisions directly between counterparties.

The ICE clearinghouse and WebICE are distinctly different entities, with different regulatory requirements (discussed below). ICE Clear Europe is ICE's clearinghouse for its many energy futures contracts. By using this clearinghouse for its energy and emission futures contracts, ICE is able to offer co-margining when correlation exists amongst customers' held contracts, thereby reducing margining costs for traders.

All traded CCA futures which are cleared by ICE are displayed following execution on the ICE ticker. Thus, by trading and clearing on ICE, traders are effectively enhancing price transparency in the marketplace. Voice brokers, including Evolution, Amerex, and TFS, are required to submit trades to ICE within 15 minutes of execution (per exchange rules). Also per the exchange rules, traders' identities are known only to the brokers, enabling traders to remain anonymous.

Market participants can watch the ICE ticker during the trading day to see price and volume information about traded allowances. A key benefit of clearing is the resulting transparency of market activity due to the trade posting requirements. Figure 4 shows the ICE ticker late in the trading day on January 9, 2015. The means of execution (e.g., trades tagged as "block" are voice broker executed, trades tagged with squares are WebICE executed), price, and volume information are reported. Note that at the time of this observation, 10 broker trades had been submitted (cleared ICE) and 15

WebICE executed trades had occurred that day. In terms of volume, 1.805 MMt had been executed by voice brokers and 0.305 MMt had been executed on WebICE.

Ticker Options
CCA Futures - CCA V14 - Jun15, 300 @ 12.93 🎻 12:23:40 PST 🛛 << BLOCK>>
CCA Futures - CCA V15 - Jun15, 300 @ 12.88 🌏 12:23:40 PST 🛛 << BLOCK>>
CCA Futures - CCA V14 - Jun15, 250 @ 12.93 🌏 12:00:56 PST 🛛 << BLOCK>>
CCA Futures - CCA V15 - Jun15, 250 @ 12.87 🧹 12:00:54 PST < <block>></block>
CCA Futures - CCA V14 - Jun15, 250 @ 12.93 🌏 12:00:04 PST 🛛 << BLOCK>>
CCA Futures - CCA V15 - Dec15, 40 @ 12.95 📕 08:34:48 PST
CCA Futures - CCA V15 - Jan15, 10 @ 12.80 📕 08:02:57 PST
CCA Futures - CCA V15 - Dec15, 10 @ 12.95 📕 08:02:57 PST
CCA Spr - CCA V15 - Jan15/Dec15, 10 @ -0.15 📕 08:02:57 PST
CCA Futures - CCA V15 - Jan15, 25 @ 12.88 📕 07:51:16 PST
CCA Futures - CCA V15 - Dec15, 25 @ 12.75 📕 07:51:16 PST
CCA Spr - CCA V15 - Jan15/Dec15, 25 @ 0.13 📕 07:51:16 PST
CCA Futures - CCA V15 - Jan15, 25 @ 12.95 📕 07:51:16 PST
CCA Futures - CCA V15 - Dec15, 25 @ 12.82 💻 07:51:16 PST
CCA Spr - CCA V15 - Jan15/Dec15, 25 @ 0.13 📕 07:51:16 PST
CCA Futures - CCA V15 - Dec15, 25 @ 12.95 🌏 07:44:17 PST < <block>></block>
CCA Futures - CCA V15 - Jan15, 5 @ 12.80 📕 07:38:11 PST
CCA Futures - CCA V15 - Dec15, 370 @ 13.00 🏈 07:19:56 PST 🛛 < <block>></block>
CCA Futures - CCA V13 - Jan15, 25 @ 12.79 📕 07:18:28 PST
CCA Futures - CCA V13 - Jan15, 10 @ 12.81 🌏 06:57:25 PST 🛛 < <block>></block>
CCA Futures - CCA V13 - Jan15, 50 @ 12.80 📕 06:49:13 PST
CCA Futures - CCA V13 - Jan15, 25 @ 12.80 📕 06:42:51 PST
CCA Futures - CCA V13 - Jan15, 25 @ 12.85 🎻 06:36:37 PST 🛛 < <block>></block>
CCA Futures - CCA V13 - Jan15, 25 @ 12.85 📕 06:35:17 PST
CCA Futures - CCA V13 - Jan15, 25 @ 12.85 🌏 06:35:00 PST 🛛 < <block>></block>

Figure 4

At the close of each trading day, ICE provides settlement prices for its many futures and options contracts. With regard to CCA prices, these settlement prices provide a transparent valuation for market participants interested in the current market value of the various CCA vintages. ICE's daily settlement process is based on a published and standardized methodology for determining fair value for all the traded products. The daily settlement sets the reference price against which all open positions in clearing accounts are trued up in the above mentioned mark-to-market process.

Market-Based Pricing

Markets are places where buyers and sellers can meet and trade. WebICE and the voice broker community provide such places, facilitating the meeting of competitive bids and offers so trading can occur. Using WebICE, or by engaging voice brokers, market participants can choose to purchase a current offer (or sell to a current bidder) or list a more competitive bid or offer.

One of the key functions of a futures market is to provide a fair and transparent settlement price at the conclusion of each trading day. This settlement price provides

a reference point against which parties true up their open positions to a fair and representative market value. ICE settles the CCA market each day during the settlement window. The settlement window for CCA trading is the period between 12:45-1:00pm PT. The primary consideration for settlement price for each vintage and expiry date will be the average price of deals that occur during the window with a weighting by volume. In the absence of trading during the window, ICE considers live bids and offers in setting the daily settlement. ICE will also consider other information in setting the daily settlements, including spread relationships between vintages.

Regulatory Authorities to which the Brokerage Firms are Subject

ICE is a Designated Contract Market (DCM) pursuant to the Commodity Exchange Act, registered and regulated by the Commodity Futures Trading Commission (CFTC). The principal functions of the CFTC are to prevent manipulation of futures markets, enact and enforce customer protection rules, prohibit the spread of misinformation, approve new contracts, and regulate exchanges. As mentioned above, CCA futures traded on ICE are cleared at the ICE Clear Europe clearinghouse. ICE Clear Europe is overseen by the Bank of England, and regulated in the United States by both the CFTC and the Securities and Exchange Commission.

ICE is required to comply with the access, reporting and record-keeping requirements of the CFTC. Both the CFTC and the Federal Energy Regulatory Commission have real-time view access to the WebICE trading platform and see details on voice broker submitted trades. In addition, ICE is required to record and report to the CFTC complaints of alleged fraud or manipulative trading behavior.

Voice brokers in futures markets, including Evolution, Amerex, and TFS, are subject to the regulatory supervision of several entities. These voice brokers are subject to direct regulatory oversight by the CFTC. ICE also regulates voice brokers with a primary focus on trade operations, transparency, and fairness. Voice brokers are also subject to the supervision of the National Futures Association (NFA). The NFA is a self-regulatory body with the principal functions of policing members, auditing members for minimum financial requirements, enforcing trading rules and ethical standards, provide arbitration between customers and NFA members, and establish training and proficiency standards.

Protest

In accordance with General Order 96-B, Section 7.5.1 and at the direction of Commission Staff, SoCalGas hereby requests that the protest period be waived, as the updates included in this AL were done strictly to correct the Purpose section as described above.

Effective Date

Per D.14-12-040, this filing is classified as Tier 2 (effective 30 days after filing) and as such, is subject to Energy Division disposition. SoCalGas requests that this AL be effective on March 11, 2015, which is the date requested and approved by AL 4755.

Notice

A copy of this AL is being sent to SoCalGas' General Order (GO) 96-B and R.14-03-003 service lists. Address change requests to the GO 96-B service list should be directed by electronic mail to <u>tariffs@socalgas.com</u>, or call 213-244-3387. For changes to all other service lists, please contact the Commission's Process Office at 415-703-2021 or by electronic mail at <u>Process Office@cpuc.ca.gov</u>.

> Ronald van der Leeden Director - Regulatory Affairs

Attachments

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY

MUCT DE COMDU	ENERGY UTILITY					
MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)						
Company name/CPUC Utility No. SOL	THERN CALIFORNIA GAS COMPANY (U 904G)					
Utility type:	Contact Person: <u>Sid Newsom</u>					
\Box ELC \Box GAS	Phone #: (213) <u>244-2846</u>					
PLC HEAT WATER E-mail: SNewsom@semprautilities.com						
EXPLANATION OF UTILITY TYPE (Date Filed/ Received Stamp by CPUC)						
ELC = Electric GAS = Gas						
PLC = Pipeline HEAT = Heat V	ATER = Water					
Advice Letter (AL) #: <u>5011</u>						
Subject of AL: Request for Approval to	Procure Greenhouse Gas (GHG) Cap-and-Trade Compliance					
Instruments from New Exchanges and Brokers (Amending Advice No. 4755)						
Keywords (choose from CPUC listing): <u>Greenhouse Gas</u>						
AL filing type: 🗌 Monthly 🗌 Quarterly 🗌 Annual 🖾 One-Time 🗌 Other						
If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #:						
D.14-12-040						
Does AL replace a withdrawn or rejected	ed AL? If so, identify the prior AL: No					
I U	and the prior withdrawn or rejected AL ¹ : <u>N/A</u>					
Summarize unterences between the ri						
Does AL request confidential treatment? If so, provide explanation: <u>No</u>						
Resolution Required? 🗌 Yes 🖾 No	Tier Designation: 1 2 3					
Requested effective date: <u>3/11/15</u>	No. of tariff sheets: 0					
Estimated system annual revenue effective	ct: (%): <u>N/A</u>					
Estimated system average rate effect (%): <u>N/A</u>					
When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).						
Tariff schedules affected: None						
Service affected and changes proposed ¹ : <u>See Advice Letter</u>						
Pending advice letters that revise the same tariff sheets: <u>None</u>						
0						
	e regarding this AL are due no later than 20 days after the date of d by the Commission, and shall be sent to:					
this filing, unless otherwise authorize CPUC, Energy Division	d by the Commission, and shall be sent to: Southern California Gas Company					
this filing, unless otherwise authorize CPUC, Energy Division Attention: Tariff Unit	d by the Commission, and shall be sent to: Southern California Gas Company Attention: Sid Newsom					
this filing, unless otherwise authorize CPUC, Energy Division Attention: Tariff Unit 505 Van Ness Ave.,	d by the Commission, and shall be sent to: Southern California Gas Company Attention: Sid Newsom 555 West 5 th Street, GT14D6					
this filing, unless otherwise authorize CPUC, Energy Division Attention: Tariff Unit 505 Van Ness Ave., San Francisco, CA 94102	d by the Commission, and shall be sent to: Southern California Gas Company Attention: Sid Newsom 555 West 5 th Street, GT14D6 Los Angeles, CA 90013-1011					
this filing, unless otherwise authorize CPUC, Energy Division Attention: Tariff Unit 505 Van Ness Ave.,	d by the Commission, and shall be sent to: Southern California Gas Company Attention: Sid Newsom 555 West 5 th Street, GT14D6					

 $^{^{\}scriptscriptstyle 1}$ Discuss in AL if more space is needed.