From: Redacted

Sent: 9/23/2011 5:03:40 PM

To: 'Turhal, Cem' (cem.turhal@cpuc.ca.gov)

Cc: Redacted
Redacted Schwartz, Andrew (andrew.schwartz@cpuc.ca.gov)

Bcc:

Subject: RE: Follow up question on FEPA Application

Confidential Protected Material Enclosed
Not for Public Disclosure

Hi Cem,

Please find our responses to your questions on the FEPA Application that came up during our discussion on Thursday, September 15 and the email you sent later that day.

Please let us know if you have additional questions.

Thanks,
Redacted
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Q:1) What are the sources of the gas forwards?

A1: The Gas Forwards are from PG&E's Market Data System (MDS). The MDS forward curves are developed using proprietary and confidential broker quotes and a proprietary vendor supplied CurveDeveloper program. Broker quotes are obtained from Amerex and TFS .

Q:2) Is the escalator in the monthly SRAC forward price and the 2% annual escalator in the Fixed Energy Price being double counted?

A:2) No. The escalation factor is not double counted. PG&E used the gas forwards from MDS to calculate a SRAC forward price for each month of the amendment term. PG&E then solved for a fixed price, that if escalated 2% per annum, results in an average over the life of contract term that equals the average of the monthly SRAC. This price was $53.83/MWh. Had PG&E chosen a higher escalation rate, the initial year contract price would have been lower than $53.83/MWH. Similarly, had PG&E chosen a lower escalation rate, the initial year contract price would have been higher than $53.83/MWh.

PG&E then reduced the fixed price offered to Sellers from from $53.83/MWh to $53.70/MWh. The $53.70/MWh price is lower than the average SRAC price and matches the pricing that Seller's had previously received per D. 01-06-015.

This explanation supplements the language on Page 4 of the Application, which described the process used to determine the forward prices is less precise terms. The language reads,

"[t]o create a gas price that is valid for five years, PG&E obtained gas price forecasts, applied the escalation factor that was used in the most recent calculation of the Market Price Referent ("MPR") and levelized the price over the period beginning on September 1, 2011 and ending on August 31, 2016. " To be more specific, the language could read, "[t]o create a fixed price that is valid for five years, PG&E obtained (burner tip) gas price forecasts, (in which PG&E applied the escalation factor to the G-AAOFF and G-EG tariff of the Intrastate Transportation (GTn) component, as used in the most recent calculation of the RPS Market Price Referent ("MPR")) and levelized the resulting SRAC price beginning on September 1, 2011 and ending on August 31, 2016."

Q:3) Provide the capacity prices and all-in price, but based on historical performance.

A:3) See Attached.

Q:4) How did PG&E incorporate GHG charges?

A:4) PG&E incorporated GHG charges as a gas price adder in the Option A formula. The "GHG Charges per MWh" were calculated as GHG costs per MMBtu multiplied by the Applicable Heat Rate and TOD factors in the Option A formula. GHG Charges were only applied to the period from 2012 to 2014, which is the assumed the Floor Test Period in the Option A formula.

Q:4a) How does the Fixed Price compare to the SRAC with and without GHG charges in the Option A SRAC?

A:4a) Without GHG charges, the Fixed Price becomes $51.42/MWh. With GHG charges that PG&E assumed, the Fixed Price was $53.83/MWh, which, as stated in the answer to question 2, was reduced to $53.70/MWh.

Q:4b) Are the GHG charges included in the market heat rate after 2015?

A:4b) GHG charges were included in the market heat rate to the extent that the market forward prices for power include the GHG charges. In other words, PG&E didn't add GHG charges to the market forward prices for power when calculating the market heat rate, assuming that the market already prices GHG charges in the forward prices for power.

Q:4c) If so, what happens to the GHG charges in the Option A SRAC calculations? Finally how are the numbers in the box below calculated/derived (Y4:Z6 in your QF-PPA FEPA excel sheet)?

A:4c) 0.907194 MT/ton = (2000 lbs/ton) / (2204.6 lbs/MT) : this is conversion factor from ton to MT.

10 $/MT = This is the assumed GHG costs per MT. The $10/MT is the proposed allowance market price floor of the first year of the Market in the proposed CARB's Proposed Cap and Trade regulation.

9.0719405 $/ton = (0.907194 MT/ton) * ($10/MT) : this is the assumed GHG costs per ton using the conversion factor from ton to MT and $10/MT.

From: Turhal, Cem [mailto:cem.turhal@cpuc.ca.gov]
Sent: Thursday, September 15, 2011 2:16 PM
To: Redacted Schwartz, Andrew; Redacted
Subject: RE: Follow up question on FEPA Application

Sounds good. Thanks.

Cheers,

Cem Turhal

(415) 703-3196

From Redacted
Sent: Thursday, September 15, 2011 12:44 PM
To: Turhal, Cem; Schwartz, Andrew; Redacted
Subject: RE: Follow up question on FEPA Application

Hi Cem,

We will address your GHG question in addition to the questions raised on our call today. As we mentioned, we will try to provide as much information as possible before the Prehearing Conference on September 20, but we will provide all of the requested information by September 23.

Thanks,

Redacted

From: Turhal, Cem [mailto:cem.turhal@cpuc.ca.gov]
Sent: Thursday, September 15, 2011 12:14 PM
To: Schwartz, Andrew Redacted
Subject: Follow up question on FEPA Application

Hi Redacted

Thank you for walking through our questions in regards to the FEPA application with us earlier. We had one additional question in regards to the GHG Charges associated with the Option A SRAC price compared to the FEP. Could you please provide us with an explanation on how you incorporated the GHG charges in your calculations? It would also be helpful for us to understand if you explained how the Fixed Price compares to the SRAC with and without GHG charges in the Option A SRAC. Are the GHG charges included in the market heat rate after 2015, if so what happens to the GHG charges in the Option A SRAC calculations? Finally how are the numbers in the box below calculated/derived (Y4:Z6 in your QF-PPA FEPA excel sheet)?

0.907194	MT/ton
10	$/MT
9.0719405	$/ton

The reason why I am asking you all these questions is to understand the methodological difference, in terms of how GHG charges effect the price calculations, between the 5th year prices of $60.33 for Option A SRAC and $58.27 for FEPA.

If you could provide us with an email explaining all the questions we talked about earlier during our phone conversation and the GHG charge question addressed above this would greatly help us with our decision in regards to the FEPA application. Thank you.

Cheers,

Cem Turhal

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