June 3, 2010

Nat Skinner
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: Comments of Pacific Gas and Electric Company on the Utilities Audit Finance and Compliance Branch's Quarter 3 2009 Audit Findings dated April 27, 2010

Dear Nat:

PG&E appreciates the opportunity to comment on the Utilities Audit Finance and Compliance Branch's (UAFCB) Quarter 3 and Quarter 4, 2009, audit report findings for Pacific Gas and Electric Company (PG&E).

The Quarter 3, 2009, audit findings identified two exceptions:

1. In violation of D. 02-10-062, Appendix B, PG&E's Quarterly Compliance Report (QCR) filing contains data errors associated with its non-compliance with the North American Electric Reliability Corporation's (NERC) policy regarding holiday transactions.

2. In violation of D.03-12-062, Section III. (E) 2., PG&E does not have any documented comparison process for comparing the price equivalency of the exchange to the non-standard products that PG&E transacts either over-the-counter (OTC) or bilaterally.

PG&E believes that these findings are incorrect and below addresses the errors in each finding.

1. FINDING 1

PG&E agrees with the factual issue noted but objects to the characterization that PG&E is in violation of a Commission order or that PG&E is non-compliant with NERC policy. PG&E does, however, agree that some of the transactional data provided in PG&E's QCR had incorrectly calculated amounts for volume and notional values and this created errors in the summary tables presented in Appendix B.

Attached, PG&E has provided a mark-up of this finding and suggests deletion of those portions that suggest data errors are a violation of Commission Decisions. Additionally, given the Commission staff is not in a position to determine PG&E's compliance with NERC policy and that the designation of certain days as "NERC holidays" simply allows for definition of a standard energy product and does not constitute a policy or requirement that requires compliance, the phrase "non-compliance with . . . NERC policy regarding" should also be deleted from the finding.

2. FINDING 2

The UAFCB staff's assertion that PG&E is in violation of D.03-12-062 is unfounded and PG&E objects to the characterization that it is not compliant with the directives approved for non-standard products. Below, PG&E rebuts Finding 2 by demonstrating the following:

A. UAFCB staff misinterpreted D.03-12-062.

B. PG&E includes a showing of relevant market data in the reformatted QCR.

C. UAFCB's assertion that PG&E has no documentation to evaluate the reasonableness of non-standard transactions ignores the Market Data System (MDS) pricing tables included in the transaction file.

A. UAFCB Staff Misinterpreted Decision 03-12-062 Directive

UAFCB has inadvertently misinterpreted the Commission's directive in D.03-12-062 that utilities must "demonstrate OTC brokers provide prices that are equivalent to those of exchanges."[1] UAFCB has interpreted this mean the utilities must document and compare the exchange price to the prices paid OTC or bilaterally. Implicit in the UAFCB interpretation is that reasonableness of a transaction will be established if "the exchange" price equals the OTC / bilateral price. UAFCB's assertion in the finding and interpretation of D.03-12-062 directive is incorrect for the reasons articulated below.

1. Reviewing Decision 03-12-062 Directive together with Decision 02-10-062 Authorizations Clarify the Standard for Review

UAFCB asserts that the violation of D.03-12-062 stems from the fact that PG&E had no "documented comparison process for comparing the price equivalency of the exchange to the non-standard products that PG&E transacts over-the-counter (OTC) or bilaterally." Subsequently on page 4 of the report, UAFCB restates their finding in a slightly different way:

> **Finding:** PG&E does not maintain exchange price equivalency comparisons for non-standard products that it transacted either OTC or bilaterally. PG&E's practice with regards to purchasing non-standard products without an exchange price equivalency comparison is not in compliance with D.03-12-062, Section III. (E) 2.

PG&E reviewed D.03-12-062 looking for Commission criteria that required the utilities to:

1. ". . have a documented process comparing the price equivalency of the exchange to non-standard products" or

2. " . . maintain exchange price equivalency comparisons for non-standard products"

[1] D.03-12-062, p. 27

Nowhere in D.03-12-062 is there a requirement that the utilities' compare the price equivalency of "the exchange" to non-standard products. The only thing that comes remotely close to the UAFCB's finding is the following statement at p. 27 of D.03-12-062 where the Commission states:

> We recognize that there may be a pro-competitive effect from broadening our understanding of transparent exchanges to include reputable OTC brokers. We will hold the utilities to the same high standards for transactions consummated through OTC brokers as we do for exchange transactions. That is, the utilities shall demonstrate that the identified ***OTC brokers provide prices that are equivalent to those of exchanges."*** (emphasis added)

UAFCB has taken the last sentence out of context. This was not intended to mean that the utilities must compare OTC broker prices to exchange prices and that they should be equal. This sentence, when read in context of the entire discussion in Section III.E.2, says that the ***same (equivalent) high standard*** is used for ***OTC broker transactions*** as that used for ***exchange transactions*** and the ***standard*** is a demonstration that the prices are transparent. The upfront standard for exchange prices is that the exchange needs to provide transparent prices. This standard is articulated in the table on page 25 of the same section, Section III.E.2, of D.03-12-062. Thus, the statement quoted above, when read in context, intends that the utilities demonstrate that that exchanges (and/or brokers) provide transparent prices. The equivalency requirement is not that OTC brokers and exchanges provide equal prices.

Exchanges are an authorized transaction process which was originally approved in D.02-10-062. Specifically, D.02-10-062 authorized purchases through ***transparent markets*** and direct contracting with counterparties that includes a showing that transaction represent ***a reasonable approximation of what a transparent competitive market*** would produce.[2] With respect to an exchange, D.02-10-062 had the following criteria / requirement in order for an exchange to be considered a transparent exchange:

- ***Approved utility plans*** will identify and describe the various electronic energy trading exchanges that each utility proposes to use (Bloomberg, TradeSpark, Intercontinental Exchange). (emphasis added).

- The ***procurement plan*** shall demonstrate that the identified electronic trading exchanges the utility intends to use provides transparent prices. (emphasis added)

2. PG&E's Commission-approved 2006 Conformed Long-Term Procurement Plan Transaction Authority and Guidelines Additionally Clarify Appropriate Standards for Evaluating Non-standard Products

[2] D.02-10-062, p. 30

The UAFCB Finding implies that the criteria for demonstrating that the non-standard products are reasonable is limited to a comparison to "the exchange." This characterization conflicts with the transaction process guidelines outlined in Decision 03-12-062, Section III.E.2, and it conflicts with the language in PG&E's Commission approved Conformed Long-Term Procurement Plan ("LTPP"), Table II-6, Procurement Methods and Practices. Specifically, from D.03-12-062, the guidelines for direct bilateral contracts with counterparties for short-term products as shown on page 26 is:

Transaction Process	Guidelines
Direct bilateral contracting with counterparties for short-term (i.e., less than 90 days) products	D.02-10-062 authorized such contracting subject to a "strong showing" that these transactions represent a reasonable approximation of what a transparent competitive market would produce. D.02-12-074 added that the strong showing can be met by a "comparison to Requests for Offers completed within a month of the transaction." *In D.03-06-067, the Commission waived the "strong showing" standard for negotiated bilaterals for non-standard products procured 31 days or less in advance of delivery and with terms of one-calendar month or less. "Although we waive the strong showing standard for these transactions, the* <u>*utilities should demonstrate that such transactions are reasonable based on available and relevant market data supporting the transaction. This may include, showing competing price offers, result of market surveys, broker and online quotes, and/or other source of price information such as published indices, historical price information for similar time blocks, and comparison to RFOs completed within one month of the transaction*</u>. Additionally, we stated that in instances when a utility knows that it will have a need for non-standard products on a forward and recurring basis, "we strongly encourage the utilities to transact for such products using an RFO process."

Emphasis added.

PG&E's Conformed 2006 LTPP, Table II-6, Items 2 and 5 have the following Commission-approved "Procurement Methods and Practices":

Item #	Transaction Process	Description	Prior Authorization
2	Direct bilateral contracting with counterparties for short-term (e.g., three months or less)	Bilateral process for products procured with a term of three months or less. <u>*Investor-owned utilities ("IOU") demonstrate that such transactions are reasonable based on available and relevant market data supporting the transaction. The demonstration may include showing competing price offers, results of market surveys, broker and online quotes, and / or other source of price information such as published indices, historical price*</u>	D.02-10-062

		information for similar time blocks, and comparison to RFOs competed with one month of the transaction.	
5	Transparent exchanges, such as Bloomberg and Intercontinental Exchange, voice and on-line brokers	Electronic trading exchanges for transparent prices	D.02-10-062 D.03-12-062 D.04-12-048 AL 2615-E
9	Transparent exchanges to include voice and on-line brokers	Transparent price products from voice and on-line brokers	D.04-12-048

Emphasis Added

The items emphasized above from PG&E's 2006 Conformed LTPP indicate that the demonstration of reasonableness of the non-standard transaction should be based on ***available and relevant market data.*** This data includes: (1) competing price offers, (2) results of market surveys, (3) broker and online quotes, (4) published indices, (5) historical price information, and (6) comparison to RFOs completed within one month of transaction.

PG&E's 2006 Conformed LTPP, approved by the Commission, clearly authorizes PG&E to transact with voice and online brokers that provide transparent prices. The authorizations and guidelines in PG&E's 2006 Conformed LTPP are identical to those for exchange traded transactions. Neither transaction method mandates prices equivalent to those of "the exchange" primarily because this was not the criteria that was mandated and approved. Nor does the 2006 Conformed LTPP require a demonstration that non-standard products be equivalent to "the exchange."

3. UAFCB's Interpretation of D.03-12-062 Directive as a Strict Price Comparison Neglects Standard of Conduct 4's Least Cost Dispatch Standard

As noted above, the 2006 Conformed LTPP includes transactions in the spot market that are traded through brokers, exchanges, and bilaterally simultaneously where the selection is made based on product availability, credit terms, credit availability, and price. For the three available transaction processes, the criteria are transparent (known) and evaluated simultaneously. The evaluation of all three are considered in the context of Standard of Conduct 4.[3]

That is, all else being equal, if the counterparties are offering similar products and have similar credit profiles (terms & availability), the least cost transaction is executed, where least cost is determined based some combination of cost, need (portfolio fit), and reliability, if applicable. The implication is that least cost, as measured against standard articulated in Standard of Conduct 4, does not mean the lowest dollar per MWh. The lowest dollar per MWh product is not necessarily the least cost from the ratepayer point-of-view. Other aspects a transaction's economics need to be considered to fully evaluate the reasonableness of the transaction. Thus, UAFCB's interpretation of the criteria at p. 27 of D.03-12-062 that non-standard products need to be equivalent to "the exchange" falls short simply because it does not consider the least cost dispatch criteria articulated in Standard of Conduct 4.

The Standard of Conduct 4 mandate for least cost dispatch directly contravenes the narrow assessment UFACB recommends and the solution Energy Division is implementing to resolve the perceived need to compare the prices to "the exchange." Comparing non-standard transactions to the California Independent System Operation (CAISO) day-ahead hourly prices or real-time hourly prices will more often than not, not be equivalent.[4] Customized non-standard products that are priced at a premium and better fit the portfolio need would meet the Standard of Conduct 4 test in terms of least cost dispatch when compared to a standard product option.

The primary evaluation of the reasonableness of a transaction should not hinge entirely on an after-the-fact evaluation (comparison) against ex-post published prices (posted CAISO hourly prices) for dissimilar products (non-standard transactions vs. day-ahead or real-time transaction). The evaluation of the transaction's reasonableness should be based on whether the transaction was executed through a transparent process that allowed evaluation of against other competing offers that were available at the time. PG&E has explained this concept to the UAFCB Staff in previous QCR reviews. A transparent exchange is where market participants can see and evaluate competing bids and offers that are available in the market. These services, provided by brokers and exchanges, are available and transparent to market participants but this information is not publicly available to persons and entities that do not subscribe to these services. Many of these exchanges and brokers also have published price indices that may not be available to non-market participants that have not paid the relevant subscription fee. However, this data is available to anyone that wants to purchase the subscription services offered. Below, is PG&E's response to a UAFCB staff question on price equivalency where PG&E explains the concept that transparent prices are the standard for review. This question was asked in 2008:

[3] The Commission's Standard of Conduct No. 4, adopted in D.02-10-062, and modified in D.02-12-069, D.02-12-074, D.03-06-076, and D.05-01-054, requires PG&E to meet its electric load obligations in a least-cost manner. In addition, D.04-07-028 ordered that system reliability and deliverability of power be included as part of least-cost dispatch.

[4] D.03-06-067, p.12, states: "In D.02-12-074, we adopted procurement standards that are sufficiently detailed and measurable to ensure our policy objectives are met, but avoided prescriptive approaches that prevent utility management from having the flexibility necessary to manage their portfolio for ratepayers' benefit. Each utility's compliance with its adopted plan is reviewed in a timely and broad manner through quarterly advice letter filings. In our compliance review, we do not intend to nickel and dime the utilities with a narrow assessment of each transaction. . . . "

QUESTION 13

Over OTC transactions, how did PG&E demonstrate prices are equivalent to exchanges?

ANSWER 13

To clarify the question, PG&E notes that D.03-12-062's requirement that it demonstrate that prices for a transaction are equivalent to those of exchange transactions applies to transactions <u>executed with OTC brokers</u>. The question asks for a demonstration for "OTC transactions", which technically would include transactions executed through exchanges.

PG&E uses three methods for transacting over-the-counter products, the Intercontinental Exchange (ICE), voice brokers and bilateral transactions. **ICE sets a visible benchmark that is <u>available to any market participant</u>. This ensures, each of the methods of transacting are conducted in an environment whereby the market price at any given time is established and <u>known to traders in the market</u>.** Traders are keenly aware of offers, bids and executed transaction prices. The various methods for transacting provide a check and balance for market prices. Utilizing these methods, traders transact at the current market price.

<u>ICE and voice brokers publish daily reports that list prices of standard products.</u> PG&E collects this information, houses it in a data store and averages those numbers to produce prices for standard products for that particular day. In the previous audits conducted by Virchow Krause, PG&E provided this information upon request for a selected sample group of transactions. PG&E can provide this data for any of the Q1 2008 OTC broker executed transactions the audit team wishes to explore further. (Emphasis added).

B. PG&E Does Include Relevant Market Data in Reformatted QCR

PG&E does include some, but not necessarily all, relevant market data in the reformatted QCR.[5] The data sets PG&E now includes in the reformatted QCR provides aggregated / blended data and is derived based on inputs such as: (1) competing price offers; (2) results of market surveys; (3) broker and online quotes; (4) published indices; and (5) historical price information for the following products: Electric Day-ahead, Electric Balance of the Month (BOM), and Electric Term products. The data is presented in the form of pricing tables which are embedded as tabs in the transaction file.

The pricing table development is discussed in more detail in item 3 below. Physical gas is transacted at the gas daily market index and the relevant index data is embedded in the analytical spreadsheet that support the physical gas transactions.

[5] The reformatted QCR had no requirement that all relevant market data would be provided in the Confidential Appendices. The reformatted QCR struck a balance between the competing objectives to streamline the QCR review and improve efficiency while balancing the need for relevant data and preserving the confidentiality of market sensitive information.

For gas or electric financial products that require a showing of broker quotes, PG&E provides this information on a sample basis, traditionally through a data request served upon PG&E requesting data supporting the transaction samples under review. The reason the data is provided only upon request in the context of an audit and not included in the QCR is due to the proprietary nature of broker quotes and published price indexes provided by exchange and broker services. The exchange and broker service agreements place strict restrictions on how, where, and to whom this information is disseminated. PG&E does provide data to Commission staff which is relevant to the transactions under review the context of audit data requests.

C. Market Data System Pricing Tables

Referring to the PG&E's response to the 2008 UAFCB data request noted above, the last part of the response states:

> ICE and voice brokers publish daily reports that list prices of standard products. PG&E collects this information, houses it in a data store and averages those numbers to produce prices for standard products for that particular day. In the previous audits conducted by Virchow Krause, PG&E provided this information upon request for a selected sample group of transactions. PG&E can provide this data for any of the Q1 2008 OTC broker executed transactions the audit team wishes to explore further.

While PG&E's response at the time didn't emphasize the "data store" or the "average prices" that are generated, it is important to understand what is housed in the data store system. The data store system is PG&E's Market Data System also referred to as "MDS." The average prices that are generated for the pricing tables PG&E noted are extracted from MDS.

PG&E's MDS data is managed and distributed by the middle office, PG&E's Market Risk Management Department. MDS is a centralized repository and distributor of key market data for Market Risk Management (MRM). MDS is built around an Oracle RDBMS and uses Java, FTP and HTTP to collect pricing information and a web-based presentation system for client input and standard reports.

MDS data includes broker quotes, forward curves, settled prices, volatilities and correlations. MDS consolidates, manages and distributes market data for both MRM and other business units to use in structuring, pricing, valuation, reporting and risk analysis. MDS automates the flow of data across various models and systems, and maintains audit records of all data stored and managed thereby ensuring data integrity and security. In addition, other downstream systems may map to MDS such as the Risk Data Control (RDC) system which uses the pricing data to calculate credit exposure and validate settlement data.

PG&E's subject matter experts in MRM spent a considerable amount of time with Virchow Krause's Audit Team in 2006 and 2007 providing an overview of the market pricing data, describing how it was derived, what the inputs and assumptions were, and the various controls that were in place to ensure the integrity of the system. Virchow Krause Audit staff understood the MDS data was the best available and relevant market data to evaluate standard products and in most cases, non-standard products, whether the transactions were executed through an exchange, through a broker, or executed bilaterally. PG&E is uncertain whether UAFCB staff was briefed on the role the pricing tables played in evaluating the transactions. However, PG&E is willing to review MDS data sets and development with UAFCB staff and Energy Division staff, if needed.

3. Prior Outstanding Findings

The UAFCB memo noted two outstanding prior audit findings related to: (1) transacting with non-investment grade counterparties and (2) PG&E's compliance with D.02-12-074, Ordering Paragraph (OP) 24.b.

PG&E recommends that these two "findings" be deleted as they were not related to PG&E's Qtr03 2009 but rather recommendations from UAFCB staff to Energy Division to assess whether aspects of PG&E's Conformed 2006 LTPP meet criteria articulated in previous Commission decisions.

These recommendations by the UAFCB staff have no bearing PG&E's Qtr 03 2009 QCR and technically not findings specific to the Qtr 03 2009 QCR review. PG&E's credit and collateral activities and its enforcement of its comprehensive code of conduct policy were both compliant with the standards articulated in its Commission-approved 2006 Conformed LTPP.

4. Other Comments on UAFCB Memo

PG&E has attached marked-up versions of the audit reports for Qtr03 2009 and Qtr 04 2009 which includes the substantive recommendations noted above, as applicable. In addition, PG&E has included redlines to correct Staff's narrative write-up to correct the characterization about what PG&E presented in Advice 3550-E or Advice 3606-E. The analysis noted was generated by UAFCB, with PG&E's assistance, based partially on the data provided in the original QCR advice letters. However, the data and analysis discussed in the memo was not the same form, format, or content presented in the QCR. The memo write-up attributed the analysis to the QCRs and the redlines are intended to correct and clarify the source of the data / analysis.

Lastly, PG&E has grey-shaded items that should be redacted in the public report. The redactions relate to PG&E's volume of purchases, quarter-over-quarter change in transaction purchases by type and quantity, and year-over-year changes in transaction purchases by type and quantity as well as the underlying reason, strategy, and rationale the driving the change(s). Whether the change in transaction purchase patterns is driven by a change in the structural market (MRTU implementation) or is simply a change in strategy due to load changes or risk mitigation measures intended to lower cost or exposure, the trends, rationale, and underlying reasons for the change are market sensitive. Publicly revealing the drivers motivating the utilities short and intermediate term open position and purchasing strategy puts PG&E at a competitive disadvantage if the market and counterparties have a sense of PG&E's need and strategies employed for closing its open positions.

PG&E appreciates the opportunity to comment on the draft audit findings and hopes that these comments have been helpful.

Very truly yours,

/ S /

Charles Middlekauff

cc: Trina Horner
Redacted