Docket: A.96-08-043

Commissioner: Admin. Law Judge:



OFFICE OF RATEPAYER ADVOCATES California Public Utilities Commission

MONITORING AND EVALUATION REPORT

November 1, 2014 through October 31, 2015

Pacific Gas and Electric Company's
Core Procurement Incentive Mechanism
Performance Results
(CPIM Year 22)

Application 96-08-043

San Francisco, California February 17, 2017

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Exhibits for CPIM Report

CHAPTER 1 SUMMARY AND RECOMMENDATIONS

1.1 Introduction and Summary

The Office of Ratepayer Advocates (ORA) performed an audit and evaluation of the data and documents submitted by Pacific Gas and Electric Company (PG&E) for its Core Procurement Incentive Mechanism (CPIM) Annual Performance Reports for the period November 1, 2014 through October 31, 2015 (Year 22). The details and results of ORA's review are presented in Chapter 2 of this ORA CPIM Monitoring and Evaluation Report. ORA's evaluation of PG&E's recorded natural gas costs confirms that PG&E's costs were below the benchmark for CPIM Year 22 which resulted in ratepayer savings.

For Year 22, PG&E submitted its CPIM Performance Report on April 28, 2016 which covered the period of November 1, 2014 through October 31, 2015. ORA's examination of PG&E's recorded costs for Year 22 shows that PG&E's costs were below the benchmark lower tolerance band, which results in a reward of \$5,679,371¹ to PG&E's shareholders and a ratepayer benefit of \$27,994,520.²

1.2 Background

The objective of the CPIM is to provide PG&E an incentive to reduce natural gas procurement costs. These costs include fixed transportation costs for Canadian and U.S. interstate, intrastate, and reservation costs. Other procurement costs include pipeline volumetric transportation costs and natural gas storage. The incentive mechanism is used as a ratemaking tool and is designed to increase efficiency in administering regulatory controls.

The CPIM structure establishes procedures on performance evaluation and

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¹ ORA Monitoring and Evaluation Report CPIM Year 22, Table 1-1.

² ld.

reporting for PG&E's gas procurement costs. It sets forth guidelines for standard operating conditions and for special circumstances. The allowed monthly benchmark dollars are totaled over the annual CPIM period and compared to actual costs for the year to determine PG&E's performance. A tolerance band is constructed around the benchmark, and is defined as a range of costs considered reasonable. If PG&E's actual gas costs as measured against the CPIM benchmark, are between the upper and lower limit specifications for the tolerance band, there is no shareholder reward or penalty for the CPIM period. If actual costs fall outside the tolerance band, there will be sharing between ratepayers and PG&E shareholders of the gains or losses that occur outside the tolerance band. Detailed results of the tolerance band calculation are reported in Chapter 2 of this report.

The CPIM program was originally approved by the Commission in Decision (D.) 97-08-055 as set forth in the PG&E/ORA Post-1997 CPIM Agreement and PG&E's Supplemental Report describing the Post-1997 CPIM. The program established the framework to recover core gas procurement and transportation costs through rates. Since then, numerous changes and extensions have been made to modify and refined the CPIM program structure and incentives.

In D.07-06-013, the Commission approved a settlement agreement between PG&E, ORA, The Utility Reform Network (TURN), and Aglet Consumer Alliance (Aglet). The settlement modified the CPIM to increase benefits to ratepayers in situations where natural gas purchases are less than the lower range of the tolerance band. The specific CPIM changes included are as follows:

- A 20/80 shareholder/ratepayer sharing of savings below the tolerance band, in contrast to the previous 25/75 shareholder/ratepayer sharing;
- The 2.5 Bcf un-sequenced storage withdrawal adjustment was eliminated and is included proportionately to the storage withdrawal sequence;
- Sequencing steps for San Juan Basin and AECO changed for natural gas purchases;
- Savings of five-percent (5%) from full tariff rates on pipeline or storage contracts are to offset CPIM gas costs;

- The index used to calculate the benchmark for daily swing purchases changed from the NGI daily Topock index to using the NGI daily PG&E CityGate index;
- For storage acquired via the Incremental Storage Capacity Request for Offers process, the daily benchmark will be adjusted to accommodate the incremental storage injection and withdrawal requirements to improve savings in gas costs.

In D.10-01-023, the Commission adopted a settlement agreement between PG&E, DRA (now ORA), and TURN which addressed the treatment of hedging costs for PG&E. The key provisions of the adopted settlement call for the following treatment of hedging transactions:

- 80% of net realized gains or losses and associated transaction costs will be included in the CPIM Benchmark.
- 100% of the net hedging realized gains or losses and associated transaction costs will be included in the cost side of the CPIM calculation.
 Any gains will be subtracted and losses will be added to CPIM costs.
- The CPIM sharing mechanism is modified such that total shareholders earnings will be capped solely at 1.5 percent of annual gas commodity costs. The hard dollar cap of \$25 million on shareholder gains was removed effective November 1, 2009.

1.3 Procurement and Sales

PG&E's actual commodity costs (including commodity, transportation, hedging, and storage costs) for Year 22 totaled \$727,460,116 which was associated with a volume of 303,519,002 MMBtus.

PG&E utilized gas sales to help manage its assets and reduce gas costs. It purchases and sells gas supplies to comply with daily pipeline balancing requirements, to respond to changes in core loads, and to capture price arbitrage opportunities. For CPIM Year 22, PG&E reported total gas sales of \$353,313,660 in revenue with an associated sales volume of 110,390,320 MMBtus.

1.4 Financial Hedging Activities

Per D.07-06-013, before CPIM Year 18, all derivative gains, losses and related transaction costs associated with PG&E's winter hedge plan were excluded from CPIM costs. These costs flowed directly to PG&E's retail customers. D.07-06-013 authorized PG&E, under the terms of the settlement, to place financial hedges on a rolling three-year basis via an Annual Plan filing. PG&E was required to file five Annual Plans beginning with the 2007/2008 winter season that authorized a hedging plan for the current winter season and the subsequent two winter seasons. In addition, the settlement created a Core Hedging Advisory Group where ORA, Aglet, TURN and PG&E met quarterly to discuss PG&E's Annual Plan, and related hedging operations. By April 1 of each year, PG&E is required to report financial results of its Annual Plan including total funds spent on hedging instruments, total losses and gains for each category of hedging instrument, amount of monthly natural gas supplies hedged, and the impact of hedging results on customer rates.³

Pursuant to D.10-01-023, PG&E remains responsible to manage hedges proactively to ensure stability in customer rates. This includes implementing controls and selecting appropriate hedging instruments to mitigate derivative risks. PG&E is also required to take proactive steps by adjusting its hedging positions in response to changing market conditions.

On January 25, 2010, the Commission approved D.10-01-023 and the associated Settlement Agreement which requires eighty percent (80%) of winter hedging gains and losses and related transaction costs to be included in the CPIM benchmark. Also, one hundred percent (100%) of winter hedging gains and losses and related transaction costs would be included in the CPIM actual commodity costs. These CPIM changes would be incorporated starting in CPIM Year 18.

For current Year 22, the total costs of Winter Hedge included in CPIM were \$7,925,487, which was comprised of \$7,915,770 in option premiums, and \$9,717 in fees.

³ Settlement Agreement – Regarding PG&E Long-Term Core Hedge Program (A.06-05-007), the Core Procurement Incentive Mechanism (CPIM), and Transportation Capacity held on Behalf of Core Customers, December 15, 2006.

1.5 Natural Gas Storage

Under the CPIM, PG&E has a daily injection and withdrawal schedule. During CPIM Year 22, as beginning inventory excluding incremental storage was reported at 28,262,669 MMBtus, and ending inventory was 27,903,901 MMBtus.

Pursuant to D.06-017-010 and D.07-06-013, PG&E is authorized to acquire incremental storage to meet a 1-day-in-10-year peak-planning standard for its core customers. The incremental storage costs are included in the benchmark and inventory schedules are adjusted by the amount of daily injections and withdrawals on a daily basis. This enables PG&E to track costs for the benchmark and adjust the amount of daily actual incremental natural gas injection and withdrawals.

Pursuant to D. 06-07-010, and modified by D.08-07-009, PG&E acquired additional incremental storage capacity for future winter season periods for 2011 through 2015. This capacity became effective in Year 18 for the purpose of injection activity.

On August 7, 2009, the Commission approved Advice Letter 3031-G, which authorized PG&E to acquire additional incremental storage capacity to improve its reliability during peak demand periods. These acquisition costs will be reported in CPIM Years 18 through 22.

A change of firm storage injection and withdrawal requirements used to calculate the CPIM benchmark was agreed to in a Memorandum of Understanding (MOU) between PG&E and ORA on October 19, 2009. These changes provide an updated storage profile beginning in Year 17 and will be adjusted for allocations to Core Transport Agents (CTAs) as detailed in Tariff G-CT. This MOU will remain in effect until both parties agree to make changes.⁴

1.6 Core Intrastate Capacity

Pursuant to D.04-12-050, the Commission allowed the Core Procurement Department of PG&E to recover costs for firm reservation of intrastate backbone

⁴ CPIM - ORA and PG&E Memorandum of Understanding, dated October 19, 2009.

pipeline capacity. PG&E should not favor shareholder interests at the expense of ratepayer interests in the execution of CPIM.

In the Gas Accord V Settlement, PG&E was allowed to retain existing quantities on the Baja Path and eliminate Silverado capacity that expired on 04/30/2011 in CPIM Year 18. Currently, PG&E holds Redwood and Baja intrastate capacity which providing approximately 956 MDth/d of capacity and an additional of 321 MDth/d during December to February.⁵

1.7 Core Interstate Capacity

PG&E holds interstate capacity for the core on NOVA Gas Transmission Ltd. (NGTL), Foothills Pipe Lines, Ltd. (Foothills), Gas Transmission Northwest (GTN), El Paso Natural Gas Company (EPNG), Transwestern Pipeline Company (TW), Ruby Pipeline, L.L.C. (Ruby), and Kern River Gas Transmission Company (Kern River).

For Year 22, core interstate capacity was reported at approximately 370 MDth/d for NOVA, 366 MDth/d on the Foothills, 360 MDth/d on GTN, 167 MDth/d on EPNG, 194 MDth/d on TW, 250 MDth/d on Ruby, and 55 MDth/d on Kern River.⁶

Pursuant to D.04-09-022, the Commission authorized PG&E to seek preapproval and expedited advice letter treatment for interstate capacity contracts that meet specified criteria. Prior to seeking pre-approval, PG&E is required to consult with ORA, TURN, and the Energy Division (ED) to obtain agreement.

In Year 22, pursuant to Advice Letter 3626-G, PG&E extended two contracts on Foothills for 284,810 Dth/d and 81,384 Dth/d, and a contract on NGTL for 287,745 Dth/d through October 31, 2017. Per Advice Letter 3588-G, PG&E renewed GTN's one year term contracts for 265,358 Dth/d.

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⁵ PG&E Annual Performance Report, Year 22, Table IV.

⁶ ld.

1.8 Review of CPIM Performance

Table 1-1 below compares benchmark gas costs to actual costs of natural gas (including commodity, transportation, reservation and storage costs) in total dollars. The result of variance between ORA's audited total saving and PG&E's reported saving was due to adjustment of winter hedge commissions and fees, see Section 2.9.

Table 1-1								
Pacific Gas & Electric Company								
CPIM Year 22								
Gas Cost Compariso	n							
November 1, 2014 - October	r 31	, 2015						
CPIM Year 22	_							
Actual Gas Cost	\$	727,460,116						
Benchmark Gas Cost	\$	761,134,007						
ORA's Audited Total Savings	;		\$	33,673,891				
PG&E Reported Savings	;		\$	33,672,107				
Variance			\$	1,784				
Savings and Reward	_							
Ratepayer Saving			\$	27,994,520				
Shareholder Reward			\$	5,679,371				
			\$	33,673,891				

1.9 Conclusion

Based on the foregoing, ORA recommends a shareholder reward to PG&E for Year 22 of \$5,679,371 to be recovered through PG&E's Purchased Gas Account.

ORA will continue monitoring and evaluating the CPIM and collaborate with PG&E and other parties to identify any modifications needed to enhance CPIM effectiveness.

CHAPTER 2 MONITORING AND EVALUATION AUDIT **YEAR 22**

2.1 **ORA's CPIM Reward Evaluation**

Pacific Gas and Electric Company (PG&E) filed its Core Procurement Incentive Mechanism (CPIM) Performance Report, Year 22 Application (A.96-08-043), which reports on natural gas procurement results for the period from November 1, 2014 through October 31, 2015. ORA conducted a review and evaluation of PG&E's accompanying performance report. The results from this evaluation include working papers from our compilations, which are incorporated as exhibits in Appendix A. This report filing is in compliance with the Gas Accord Decision, D.97-08-055, dated August 1, 1997, which approved the CPIM method for PG&E's recovery of core gas procurement and transportation costs. On August 22, 2002, the Commission issued D.02-08-070, (Gas Accord II Decision), extending the initial Gas Accord market structure including the CPIM, through 2003. On December 18, 2003, the Commission issued D.03-12-061, extending the CPIM through Year 2005, or until a revised CPIM is adopted by the Commission. Pursuant to D.07-06-013, the Commission adopted a Settlement Agreement that address long-term hedging for PG&E's core customers, as well as related CPIM modifications.

The CPIM summarizes gas costs, tolerance band limits, and performance results that compare actual costs to the benchmark. The CPIM benchmark consists of four components: a) variable costs which include commodity costs, Canadian and U.S. interstate, and California intrastate pipeline fuel and volumetric capacity costs; b) fixed transportation costs which include Canadian, U.S. interstate, and California intrastate reservation costs; c) storage costs for fixed reservation charges and variable costs; and d) Hedging costs which included 80% of net realized gains or losses and

⁷ In D.97-08-055, the Commission approved a CPIM mechanism for core gas costs incurred after December 31, 1997. In this decision, the Commission ordered PG&E to file quarterly and annual reports on core procurement operations starting after completion of one year of Gas Accord operations.

associated transaction costs of winter hedges. The total cost of these four components serve as the benchmark to compare to the actual costs.

The actual commodity costs of gas are measured on an annual basis against the benchmark and the calculated tolerance band. The benchmark commodity cost is based on the prevailing published natural gas price indices for gas delivered from the gas production areas, borders and PG&E's CityGate.

ORA's evaluation of PG&E's CPIM Year 22 performance in Table 2-1 shows benchmark costs of \$761,134,007 and PG&E's actual cost is \$727,460,116. The difference between the benchmark cost and PG&E's actual cost results in \$33,673,891 of total natural gas procurement savings. Results show the upper tolerance band benchmark (benchmark plus 2.0% of commodity benchmark plus reservation charges) is \$771,688,077, and the lower tolerance band benchmark (benchmark minus 1.0% of commodity benchmark plus reservation charges) is \$755,856,972.

The actual cost of \$727,460,116 is \$28,396,856 less than the lower tolerance band cost of \$755,856,972. This is below the CPIM benchmark, which reflects PG&E's gas savings performance. The lower limit of the tolerance band is used to calculate the ratepayers saving and shareholder reward. These results provide savings to be shared between PG&E customers and shareholders, as shown in Table 2-1.

ORA's review shows PG&E's Year 22 savings below the lower tolerance band, and results in total savings of \$28,396,856. Based on the CPIM, this saving is shared between ratepayers of \$22,717,485 and a shareholder reward of \$5,679,371. The total ratepayer savings is \$27,994,520.

TABLE 2-1 Pacific Gas & Electric Company Ratepayer Savings and Shareholder Award Calculation CPIM 22

November 1, 2014 Through October 31, 2015

CPIM Reward Calculation	
Total Benchmark Costs	\$ 761,134,007
Total Actual Costs	 727,460,116
Under/(Over)	33,673,891
Upper Tolerance Band (Benchmark + 2% of Commodity Cost)	771,688,077
Low er Tolerance Band (Benchmark - 1% of Commodity Cost)	755,856,972
Low er Tolerance Band Less Actual Commodity Cost	28,396,856
Ratepayer Shared Savings (80%)	22,717,485
Shareholder Shared Savings (20%)	 5,679,371
	\$ 28,396,856
Total Ratepayer Savings	\$ 27,994,520

2.2 Summary of Benchmark and Actual Costs

Table 2-2 shows the overall annual result of the actual commodity cost compared to the benchmark commodity cost of gas operation in CPIM Year 22.

ORA examined and reconciled all gas commodity costs, hedge costs, and transportation reservation charges that were reported in the CPIM Year 22 period. The natural gas sale and miscellaneous costs and revenues are included in the actual costs as costs or credits depending on the result of natural gas operation. ORA's examination of PG&E's records for miscellaneous costs, winter hedge, reservation and transportation costs, and regulatory balancing accounts is performed to highlight variances in the reporting of gas costs. The following sections in this chapter will provide a detailed review and breakdown of these related costs.

Table 2-2
Pacific Gas & Electric Company
Summary of Benchmark and Actual Costs
CPIM 22
November 1, 2014 Through October 31, 2015

	Actual	Benchmark		Difference
Purchased Natural Gas Cost	\$ 825,056,584	\$521,363,120	* \$	(303,693,464)
Volumetric Transportation Costs	\$ 28,299,885	\$ -	\$	(28,299,885)
Natural Gas Sales	\$ (353,313,660)	\$ -	\$	(303,693,464)
Other Costs and Revenues	\$ (4,283,232)	\$ -	\$	4,283,232
Hedge Cost	\$ 7,925,487	\$ 6,340,390	\$	(1,585,097)
Reservation Charges	\$ 223,775,052	\$233,430,497	\$	9,655,445
Total Commodity Cost	\$ 727,460,116	\$761,134,007	\$	(623,333,233)

^{*} Included Volumetric Transportation Costs

2.3 Review of Benchmark Commodity and Reservation (Demand) Charges

The CPIM benchmark is based on published indices for natural gas commodity costs at PG&E's Citygate. This CPIM benchmark consists of three main components, the total gas purchase cost, 80% of winter hedging cost, and reservation charges. Table 2-3 provides a breakdown for each pipeline costs that represent PG&E's commodity costs for the period. For this period, total benchmark costs including purchased gas costs, winter hedging cost, reservation costs and other costs, totaled \$761,134,007. The benchmark commodity costs are \$521,363,120; the benchmark winter hedge costs are \$6,340,390 and benchmark pipeline reservation charges are \$233,430,497.

TABLE 2-3
Benchmark Commodity Costs and Reservation Charges
CPIM Year 22
November 1, 2014 Through October 31, 2015

	Market				
Benchmark Purchased Gas Costs - by Pipelines:	Benchmark				
Ruby Rockies	\$ 121,590,437				
AECO	\$ 263,623,418				
San Juan	\$ 99,956,162				
Kern River	\$ 21,660,539				
Topock	\$ 12,747,627				
PG&E Citygate	\$ 1,784,937				
Total Benchmark Gas Costs:	\$ 521,363,120				
Hedging Cost					
80% of Winter Hedging Cost	\$ 6,340,390				
Benchmark Reservation Charges:					
Foothills Pipelines Ltd	8,302,752				
Nova Gas Transmission Ltd	15,470,889				
Gas Transmission Northwest Corp	38,402,010				
El Paso Natural Gas Company	1,497,038				
Kern River Gas Transmission	1,225,382				
Ruby Pipeline	53,211,333				
Transwestern Pipeline Company	13,692,375				
California Gas Transmission	56,700,695				
CGT Storage	43,239,023				
Incremental Storage Costs	1,689,000				
Total Benchmark Reservation Charges:	\$ 233,430,497				
Total Benchmark Commodity Costs:	\$ 761,134,007				

2.4 Actual Natural Gas Costs

A review of actual costs for commodity purchases and reservation charges reported by PG&E is summarized in Table 2-4. On a monthly basis, PG&E would sell some of its un-used assets. The net sale is treated as a credit to the procurement cost. In addition to the calculation of actual commodity costs of CPIM Year 22, one hundred percent of winter hedging realized gain or losses and associated transaction costs are included in the actual. Reservation charges include intrastate and interstate charges

for California Gas Transmission, El Paso Natural Gas Company, Ruby Pipeline LLC, Kern River Gas Transmission, Transwestern Pipeline Company, Nova Gas Transmission, Ltd., Gas Transmission Northwest Corporation, and Transwestern Pipeline Company.⁸

PG&E's net total actual commodity costs are \$684,221,093, which include interstate and intrastate purchased gas costs of \$495,759,577, winter hedging cost of \$7,925,487, reservation charges for interstate and California intrastate capacity of \$180,536,029.

⁸ PG&E Annual Performance Report, CPIM Year 22, dated April 28, 2016.

TABLE 2-4
Summary of Actual Commodity Costs & Reservation Charges
CPIM Year 22
November 1, 2014 Through October 31, 2015

Actual Purchased Gas Costs - by Pipeli	ne:	 Actual Costs
CGT - Citygate		\$ 8,299,116
CGT - El Paso		\$ 114,971,502
El Paso		\$ 25,777,081
GTN		\$ 9,770,525
Kern		\$ 23,036,312
Nova		\$ 281,243,107
Ruby		\$ 217,761,154
TW		\$ 144,197,787
Volumetric Transportation Cost		\$ 28,299,885
Gas Sale		\$ (353,313,660)
Miscellaneous Costs & Revenues		\$ (4,283,232)
	Total Purchased Gas Costs:	\$ 495,759,577
Hedging Costs 100% Winter Hedging Cost		\$ 7,925,487
Actual Reservation Charges:		
Foothills Pipelines Ltd		\$ 8,302,752
Nova Gas Transmission Ltd		\$ 15,470,889
Gas Transmission Northwest Corp		\$ 38,402,010
El Paso Natural Gas Company		\$ 1,497,038
Kern River Gas Transmission		\$ 1,225,382
Ruby Pipeline		\$ 53,211,333
Transwestern Pipeline Company		\$ 13,692,375
California Gas Transmission		\$ 56,700,695
Incremental Storage Costs		\$ 1,689,000
Discount Demand Charges		\$ (535,485)
Capacity Release Revenue		\$ (9,119,960)
	Total Reservation Charges:	\$ 180,536,029
	Net Actual Commodity Costs:	\$ 684,221,093

2.5 Natural Gas Storage Costs

In accordance with D.06-07-010, a monthly distribution of winter storage withdrawals and summer storage injections is used in the calculation of the monthly benchmark purchase volumes. PG&E reports managing storage so that impacts to CPIM metrics can be attained while ensuring adequate capacity is available for reliability. A schedule is used to establish daily benchmark allocations of injections and

withdrawals and to ensure distributions are allocated evenly throughout the period. When it becomes necessary to balance portfolio supplies with core loads, PG&E will generally make exceptions from its planned schedules in order to meet interstate and intrastate pipeline tolerances, balancing rules, and most importantly, conservation of gas for storage and peak requirements.⁹

For the benchmark, the storage cost component includes volumetric storage charges as well as storage reservation costs at the as-billed rate for a) 33.5 MMdth of annual inventory, b) 115 to 207 Mdth per day of summer injection, and c) 970 to 1,253 Mdth per day of winter withdrawal capacity, which is adjusted for core aggregation elections.¹⁰

In Table 2-5, a summary of storage inventory shows the status of physical inventories (measured in MMBtus) for beginning and ending balances as of October 31, 2015. PG&E reported beginning storage inventory levels as of November 1, 2014 at 29,762,669 MMBtus and ending inventory as of October 31, 2015 at 28,903,901 MMBtus. In this CPIM period, it shows overall 253,168 MMBtus of withdrawals.

TABLE 2-5
Pacific Gas and Electric Company
Summary of Storage Inventory Injections and Withdrawals
CPIM Year 22
November 1, 2014 through October 31, 2015

Gas Storage Providers	Beginning Inventory 11/01/14 (MMBtus)	Ending Inventory 10/31/15 (MMBtus)
Firm Storage CGT	28,262,669	27,903,901
Incremental Storage	1,500,000	1,000,000
Total Storage Inventory	29,762,669	28,903,901

2.6 Review of Purchase Gas Account (PGA)

⁹ PG&E Annual Performance Report, CPIM Year 22, dated April 28, 2016.

¹⁰ The actual ratemaking treatment of the core storage reservation provides for a fully bundled cost with no variable charge. However, for CPIM calculation purposes, a variable storage cost has been assumed in order to provide an appropriate economic incentive to use storage services efficiently.

PG&E submitted its reconciliation of its regulatory balancing account, Purchase Gas Account (PGA). For the reporting period, PG&E's accounting entries represent amounts expected to be received from or refunded to PG&E's customers through authorized adjustments within a twelve-month period. The PGA shows the tracking of gas related costs and revenues for recovery. The under-or-over collected position of this account is dependent on seasonality and volatility in gas volumes. Table 2-6 below shows net commodity costs, which shows immaterial timing difference with supporting documentation presented in PG&E's Performance Report, for actual natural gas purchases.

A sample of purchase invoices were randomly selected in addition to the PGA audit. PG&E provided copies of supporting documents and purchase invoices for the purpose of the verification. Costs of these purchase invoices were traced to the monthly statement and then to the annual report. The selected purchase invoices reconciled with recorded amounts in the annual report.

TABLE 2-6
Pacific Gas and Electric Company
Purchase Gas Account Review
CPIM Year 22
November 1, 2014 through October 31, 2015

COURS Developed Courts	,		Volumetric		Subtract	Add	Total
CPIM Purchase Costs	Purchases	ır	ansportation		True-up	True-up	CPIM
CPIM Costs:							
Purchases and Sales:							
EPNG, Kern River, and Transwes \$	192,212,428	\$	904,546				\$ 193,116,974
CGT \$	90,473,267	\$	22,739,250				\$ 113,212,517
GTNC and NGTL \$	284,596,042	\$	1,259,368				\$ 285,855,410
Ruby Pipeline \$	215,329,907	\$	3,396,720				\$ 218,726,627
Citygate (Mission Path) \$	(310,868,721)	\$	-				\$ (310,868,721)
SubTotal \$	471,742,923	\$	28,299,884	\$	-	\$ -	\$ 500,042,807
Misc. Revenues and Expenses _\$	(2,183,206))					\$ (2,183,206)
Total \$	469,559,717	\$	28,299,884	\$	-	\$ -	\$ 497,859,601
SAP Journal Entries:							
SAP Total \$	462,647,803	\$	28,769,270	\$	(51,315,793)	\$ 57,834,875	\$ 497,936,155
Costs not recorded in SAP \$	13,076						\$ 13,076
Costs included in CPDCA \$	10,149						\$ 10,149
Cost Over-stated in SAP \$	(74,525))					\$ (74,525)
Timing difference finanacial tra \$	(25,000)	1					\$ (25,000)
Total PGA \$	462,571,503	\$	28,769,270	\$	(51,315,793)	\$ 57,834,875	\$ 497,859,855
_							
Timing Diffrence \$	6,988,214	\$	(469,386)	\$	51,315,793	\$ (57,834,875)	\$ (254)

2.7 Review of Core Pipeline Demand Charge Account (CPDCA)

PG&E submitted its reconciliation for regulatory balancing account Core Pipeline Demand Charge Account (CPDCA). This account is used to record costs associated with backbone transmission, interstate capacity, and Canadian capacity for core procurement. ORA reviewed PG&E documentation, which shows total charges by pipeline for the period to be \$223,776,347.

The audit shows the CPIM demand costs was \$223,776,352 which included the demand charges, discount demand charges, capacity release revenue and release revenue charges. Comparing the reported CPIM demand costs and SAP journal entries, the total difference was \$5.

TABLE 2-7
Pacific Gas and Electric Company
CPDCA Account Review
CPIM Year 22

November 1, 2014 through October 31, 2015

		Demand	Subtract	Add	Total
CPIM Demand Costs		Charges	True-up	True-up	CPIM
Foothills Pipe Lines Ltd	\$	8,302,755			\$ 8,302,755
California Gas Transmission	\$	47,767,395			\$ 47,767,395
El Paso Natural Gas	\$	1,402,693			\$ 1,402,693
RubyPipeline	\$	53,211,333			\$ 53,211,333
NOVA Gas Transmission	\$	15,470,889			\$ 15,470,889
Gas Transmission N.W.	\$	38,402,011			\$ 38,402,011
Transwestern Pipeline Company	\$	13,196,447			\$ 13,196,447
Kern River Gas	\$	1,094,511			\$ 1,094,511
Firm Storage Costs	\$	43,239,023			\$ 43,239,023
Incremental Storage costs	\$	1,689,000			\$ 1,689,000
GST Cost not included	\$	295			\$ 295
Total Demand Charges:	\$	223,776,352	\$ -	\$ -	\$ 223,776,352
SAP Journal Entries					
SAP Total	\$	227,965,382	\$ (20,051,224)	\$ 19,579,698	\$ 227,493,856
EPNG, TW & Kern Reservation Discount	\$	(535,481)			\$ (535,481)
Exchange Rate Variance	\$	26,903			\$ 26,903
Costs Not Recorded in SAP	\$	(10,150)			\$ (10,150)
Prior Period Adjustments	\$	(2,708,744)			\$ (2,708,744)
Capacity Release Correction	\$	155,880			\$ 155,880
Duplicate Entry in SAP	\$	(645,909)			\$ (645,909)
Entry Posted Backward	\$	(8)			\$ (8)
Total CPDCA:	\$	224,247,873	\$ (20,051,224)	\$ 19,579,698	\$ 223,776,347
			* • • • • • • • • • • • • • • • • • • •		
Timing Difference:	- \$	(471,521)	\$ 20,051,224	\$ (19,579,698)	\$ 5

2.8 Review of Miscellaneous Costs and Revenues

Table 2-8 shows a summary of miscellaneous costs and credits that agree with reporting from PG&E's Annual Performance Report for the period. Results show total annual miscellaneous costs and revenues at \$4,283,232. This amount consists of Cochrane Extraction Revenue of \$2,449,296, Non-Winter Hedge Cost and Revenues of \$2,107,659, and Miscellaneous Costs and Revenues of \$273,723. These revenues

offset reported procurement costs and assist management in managing net costs that impact CPIM performance.

TABLE 2-8
Pacific Gas and Electric Company
Miscellaneous Costs and Revenues
CPIM Year 22
November 1, 2014 through October 31, 2015

	Coc	hrane Extraction	No	n-Winter Hedge	Mis	scellaneous Costs	
Month		Revenue	Co	st and Revenues		and Revenues	Total
Nov-14	\$	(429,122)	\$	-	\$	18,749	\$ (410,373)
Dec-14	\$	(196,405)	\$	3,383	\$	15,891	\$ (177,131)
Jan-15	\$	(182,135)	\$	(73,105)	\$	78,046	\$ (177,194)
Feb-15	\$	(268,900)	\$	(527,304)	\$	24,690	\$ (771,514)
Mar-15	\$	(260,018)	\$	(12,400)	\$	32,543	\$ (239,875)
Apr-15	\$	(251,376)	\$	(213,150)	\$	18,158	\$ (446,368)
May-15	\$	(195,698)	\$	(242,885)	\$	11,065	\$ (427,518)
Jun-15	\$	(120,973)	\$	(80,175)	\$	11,802	\$ (189,346)
Jul-15	\$	(125,992)	\$	(136,129)	\$	16,870	\$ (245,251)
Aug-15	\$	(77,048)	\$	(110,941)	\$	11,760	\$ (176,229)
Sep-15	\$	(154,492)	\$	(241,350)	\$	16,393	\$ (379,449)
Oct-15	\$	(187,137)	\$	(473,603)	\$	17,756	\$ (642,984)
Total	\$	(2,449,296)	\$	(2,107,659)	\$	273,723	\$ (4,283,232)

2.9 Examination of Financial Derivatives

Pursuant to D.07-06-013, the Commission authorized PG&E's Annual Core Hedge Implementation Plan for 2008 for long term hedging for purchases of call options and swaps for a three-year period. This decision provided highlights for the long-term core hedge program for its requirements of reporting.

The Commission in D.10-01-023, approved a policy incorporating winter hedging transactions into the CPIM. The winter hedging transactions executed on or after November 1, 2009 would be included in PG&E's CPIM calculation beginning on or after November 1, 2010. CPIM Year 18 was the first year to include the winter hedge costs and this change was adopted for future CPIM calculations. The financial results for the current CPIM Year 22, winter 2014-2015 are summarized in Table 2-9.

PG&E reported \$7,934,418 in CPIM Year 22 for actual winter Hedge Cost. After audit, the adjustment for the Commissions and Fees is \$8,931 covering April 2015 to September 2015; the adjustment is to allocate these Commission and Fees to the future months when these covered hedges expire. The adjusted actual winter hedge costs for current year is \$7,925,487.

Table 2-9
Pacific Gas and Electric Company
Actual Winter Hedge Costs
CPIM Year 22
November 1, 2014 - October 31, 2015

		Option		CPIM Reported Option Option Commissions Premiums and Fees		Adjustment For Reallocation		Audited Winter Hedge Cost Total		
		Α		В		С		D=A+B-C		
Nov-14	\$	-	\$	-	\$	-	\$	-		
Dec-14	\$	2,726,543	\$	3,347	\$	-	\$	2,729,890		
Jan-15	\$	2,726,543	\$	3,347	\$	-	\$	2,729,890		
Feb-15	\$	2,462,684	\$	3,023	\$	-	\$	2,465,707		
Mar-15	\$	-	\$	-	\$	-	\$	-		
Apr-15	\$	-	\$	1,178	\$	1,178	\$	-		
May-15	\$	-	\$	913	\$	913	\$	-		
Jun-15	\$	-	\$	1,992	\$	1,992	\$	-		
Jul-15	\$	-	\$	1,270	\$	1,270	\$	-		
Aug-15	\$	-	\$	1,450	\$	1,450	\$	-		
Sep-15	\$	-	\$	2,129	\$	2,129	\$	-		
Oct-15	\$	-	\$	-	\$	-	\$	-		
Total	\$	7,915,770	\$	18,648	\$	8,931	\$	7,925,487		

2.10 Review of Sales and Volume Transactions

Table 2-10 shows PG&E total sales of \$353,313,660, and reported volume of 110,390,320 MMBtus. A breakdown by pipeline shows sales for CGT CityGate of \$327,610,620, CGT-All of \$2,164,349, EPNG-Basin of \$4,273,953, GTN-All of \$2,021,191, Kern River of \$3,664,322, Nova of \$4,396,399, Ruby of \$2,693,842,Transwestern of \$6,488,984.

The same period shows sales volume for CGT CityGate of 101,315,923 MMBtus, CGT-All of 558,944, EPNG-Basin of 1,734,811 MMBtus, GTN-All of 629,176 MMBtus, Kern River of 1,173,599 MMBtus, Nova of 1,977,715 MMBtus, Ruby of 773,690 MMBtus, and Transwestern of 2,226,462 MMBtus.

Table 2-10
Pacific Gas and Electric Company
Gas Sale and Volume
CPIM Year 22
November 1, 2014 through October 31, 2015

Sale by Pipeline:	Volume (MMBtus)	Dollars			
CGT CityGate	(101,315,923)	\$ (327,610,620)			
CGT - All	(558,944)	\$ (2,164,349)			
EPNG	(1,734,811)	\$ (4,273,953)			
GTN All	(629,176)	\$ (2,021,191)			
Kern	(1,173,599)	\$ (3,664,322)			
Nova	(1,977,715)	\$ (4,396,399)			
Ruby	(773,690)	\$ (2,693,842)			
TW	(2,226,462)	\$ (6,488,984)			
Tota	I: (110,390,320)	\$ (353,313,660)			

2.11 Review of Volumetric Transport Costs

Table 2-11 provides a summary of PG&E's reported volumetric transportation costs by pipeline. Trends in transport activity are consistent with purchase and sales transactions.

The total volumetric transport costs were \$28,299,885. In addition, costs were broken down by pipeline to identify changes: PG&E CGT \$22,739,250, EPNG-Basin \$231,085, Kern River \$34,928, GTN-All \$1,258,037, Ruby Pipeline \$3,396,721, Transwestern-Basin \$638,533, and Transcanada \$1,331. These costs are included in the CPIM and are part of the reconciliation of the PGA balancing account.

TABLE 2-11
Pacific Gas and Electric Company
Commodity Volumetric Transport Costs
CPIM Year 22
November 1, 2014 through October 31, 2015

	Pipeline	Costs
PG&E CGT		\$ 22,739,250
EPNG		\$ 231,085
Kern River		\$ 34,928
GTN-ALL		\$ 1,258,037
Ruby Pipeline		\$ 3,396,721
Transwestern		\$ 638,533
Transcanada		\$ 1,331
	Total Volumetric Transport Costs:	\$ 28,299,885

2.12 Review of Reservation Charges

ORA completed a reconciliation of the benchmark to actual reservation charges reported in PG&E's Annual Performance Report for the subject period to identify any variances. Table 2-12 provides a summary of adjustments that were offset against the benchmark. The results show no discrepancies. The reconciliation accounts for actual reservation charges was \$223,775,052 which included demand charges of \$188,502,474, adjustments of discounted demand charges of \$535,485, capacity release revenue of \$9,119,960, and storage cost of \$44,928,023.

TABLE 2-12 Pacific Gas and Electric Company Reconciliation of Reservation Charges CPIM Year 22 November 1, 2014 through October 31, 2015

Benchmark Demand Charges: Actual Demand Charges by Pipeline System: Canadian 188,502,474 Foothills Pipelines Ltd. 8,302,752 Nova Gas Transmission Ltd. 15,470,889 Canadian Subtotal \$ 23,773,641 Interstate Gas Transmission Northwest Corporation 38,402,010 El Paso Natural Gas Company 1,497,038 Kern River Gas Transmission 1,225,382 Ruby Pipeline 53,211,333 Transwestern Pipeline Company 13,692,375 Interstate Subtotal \$ 108,028,138 Intrastate California Gas Transmission 56,700,695 Intrastate Subtotal \$ 56,700,695 **Total Actual Demand Charges: \$** 188,502,474 188,502,474 **Discount Demand Charges:** (94,348)El Paso Natural Gas Company Transwesten Pipeline Company (310,266)Kern River Gas Transmission (130,871)Demand Charge Discount Subtotal: \$ (535,485)Capacity Release Revenue: Canadian Pipeline Interstate Pipeline (186,660)Intrastate (8,933,300)Total Capacity Release Revenue: \$ (9,119,960)**Storage Cost:** California Gas Transmission Firm Storage 43,239,023 Incremental Storage Costs 1,689,000 Storage Cost Subtotal: \$ 44,928,023 44,928,023

2.13 Review of Benchmark Commodity Indices

Reconciliation of Reservation Charges: \$

The benchmark gas price indices are published by various natural gas publications. Each index is then adjusted with fuel costs from supplying regions to

223,775,052

233,430,497

PG&E's Citygate. The adjusted gas indices are used to calculate the benchmark of the monthly commodity costs.

The Canadian benchmark commodity indices are established using the exchange rates in effect when the indices are issued prior to the availability of closing currency exchange rates. However, the final indices, which determine the actual gas supply prices, reflect closing exchange rates.

For the reporting period, PG&E's gas operations apply a pipeline sequencing methodology for purposes of purchasing gas at the lowest cost. PG&E however has the discretion to change the sequence to select a pipeline at any time in order to meet reliability requirements.

2.14 Examination of Benchmark Storage Charges and Transportation Costs

PG&E reported its benchmark reservation (demand) and fixed storage charges. Based on this report, ORA reviewed the costs and identified changes in activity from the prior year report. The total transportation and storage costs are \$233,430,497, which consisted of the Canadian pipeline demand charges of \$23,773,641, U.S. interstate pipeline reservation costs of \$108,028,138, California intrastate pipeline costs of \$56,700,695, and storage costs of \$44,928,023. Table 2-14 provides a summary of these costs.

TABLE 2-14 Pacifc Gas and Electric Company Summary of Fixed Transport and Storage Costs CPIM Year 22 November 1, 2014 through October 31, 2015

Benchmark Demand Charges		
Canadian		
Foothills Pipelines Ltd.		8,302,752
Nova Gas Transmission Ltd.		15,470,889
	Canadian Subtotal	\$ 23,773,641
Interstate	•	
Gas Transmission Northwest Corporation		38,402,010
El Paso Natural Gas Company		1,497,038
Kern River Gas Transmission		1,225,382
Ruby Pipeline		53,211,333
Transwestern Pipeline Company		13,692,375
	Interstate Subtotal	108,028,138
Intrastate		
California Gas Transmission		 56,700,695
	Intrastate Subtotal	\$ 56,700,695
	Total Demand Charges	\$ 188,502,474
CA Intrastate Storage Costs:		
California Gas Transmission Firm Storage		43,239,023
Incremental Storage Costs		1,689,000
	Total Storage Costs	\$ 44,928,023
Total Transportation & Storage Costs:		\$ 233,430,497

2.15 Utilization of Firm Interstate and Intrastate Pipeline Assets

PG&E has short and long term contracts for purchases of natural gas resources transported from Canadian, U.S. interstate and California intrastate pipeline systems to meet core gas demand. During Year 22, PG&E transported these resources using firm transportation contracts. The summary in Table 2-15 below shows PG&E's estimated utilization for the period and noted changes in contract activity from prior year.

PG&E estimates utilization proportionally based on capacity available to transport supplies and/or releases to other parties.

Pursuant to D.04-09-022, PG&E is authorized to recover the costs associated with its Canadian and U.S. interstate capacity, allocate firm intrastate capacity and recover associated costs.

Pursuant to D.07-07-002, PG&E can also allocate firm intrastate capacity and recover associated costs. In CPIM Year 19, PG&E added the Ruby pipeline to PG&E's core supply portfolio effective November 1, 2011. The Ruby pipeline provides contracted quantities of 250,000 Dth/d.¹¹

¹¹ PG&E Annual Performance Report, CPIM Year 21, dated May 21, 2015.

Table 2-15 Pacific Gas and Electric Company Core Gas Supply - Utilization of Interstate, Intrastate and Canadian Pipeline Assets CPIM Year 22

November 1, 2014 through October 31, 2015

	Quantity	Contract Expiration	Utilization
Pipeline Capacity:	(Dth/d)	Date	Rate
TransCanada Pipelines:			
NGTL	287,745	10/31/17	
	82,223	10/31/20	
Total NOVA:	369,968		100%
Foothills-BC System	284,810	10/31/17	
	81,384	10/31/17	
Total Foothills-BC System:	366,194		100%
nterstate Pipelines:			
Gas Transmission Northwest	279,968	10/31/17	
	80,000	10/31/20	
Total Gas Transmission Northwest:	359,968		97%
El Paso Natural Gas	118,032	06/30/16	
	49,390	06/30/15	
Total El Paso Natural Gas:	Varies		94%
Transwestern Pipeline Co.	142,970	03/31/15	94%
Ruby	250,000	10/31/26	97%
Kern River	125,219	03/31/16	
	19,390	04/30/15	
	49,390	varies	
_	Varies		97%
ntrastate Pipelines:			
Redwood Path	608,766	No expiration	99%
Baja Path	348,000	No expiration	
Seasonal (Dec-Feb)	321,000	No expiration	
Total Baja Path Capacity:	Varies		97%

Exhibits

2-1
Pacific Gas and Electric Company
CPIM Year 22
November 1, 2014 - October 31, 2015

CPIM	Ca	CH	lation

	Interstate and Intrastate Gas Purchase Pipeline Reservation Charge									CPIM Perfo	orma	ance		
	Actual	Benchmark		Actual		Benchmark		Total	Total	Benchmark		Upper Limit	Lower Limit	(Over)/Under
	Commodity	Commodity	Re	servation Charge		Reservation Charge		Actual Cost	Benchmark Cost	Less Actuals		(2%)	(1%)	Tolerance Band
Nov-14 \$	57,974,908 \$	62,054,804	\$	18,637,723	\$	19,161,705	\$	76,612,631	\$ 81,216,509	\$ 4,603,878	\$	82,457,605	\$ 80,595,961	\$ 3,983,330
Dec-14 \$	93,039,936 \$	78,725,419	\$	21,955,544	\$	22,036,229	\$	114,995,480	\$ 100,761,648	\$ (14,233,832)	\$	102,336,156	\$ 99,974,394	\$ (15,021,086)
Jan-15 \$	64,000,903 \$	63,995,328	\$	22,450,553	\$	22,531,238	\$	86,451,456	\$ 86,526,566	\$ 75,110	\$	87,806,473	\$ 85,886,613	\$ (564,843)
Feb-15 \$	49,301,334 \$	40,862,328	\$	21,954,498	\$	22,029,078	\$	71,255,832	\$ 62,891,406	\$ (8,364,426)	\$	63,708,653	\$ 62,482,783	\$ (8,773,049)
Mar-15 \$	36,146,630 \$	37,384,941	\$	20,120,068	\$	20,200,753	\$	56,266,698	\$ 57,585,694	\$ 1,318,996	\$	58,333,393	\$ 57,211,845	\$ 945,147
Apr-15 \$	43,634,229 \$	47,780,918	\$	18,212,596	\$	18,230,105	\$	61,846,825	\$ 66,011,023	\$ 4,164,198	\$	66,966,641	\$ 65,533,214	\$ 3,686,389
May-15 \$	38,061,970 \$	41,296,983	\$	17,031,314	\$	18,317,665	\$	55,093,284	\$ 59,614,648	\$ 4,521,364	\$	60,440,588	\$ 59,201,678	\$ 4,108,394
Jun-15 \$	32,544,579 \$	35,240,871	\$	16,169,941	\$	18,182,568	\$	48,714,520	\$ 53,423,439	\$ 4,708,919	\$	54,128,256	\$ 53,071,030	\$ 4,356,510
Jul-15 \$	26,831,776 \$	30,220,720	\$	16,127,204	\$	18,206,918	\$	42,958,980	\$ 48,427,638	\$ 5,468,658	\$	49,032,052	\$ 48,125,431	\$ 5,166,451
Aug-15 \$	25,369,797 \$	30,250,009	\$	17,058,687	\$	18,211,779	\$	42,428,484	\$ 48,461,788	\$ 6,033,304	\$	49,066,788	\$ 48,159,288	\$ 5,730,804
Sep-15 \$	17,324,697 \$	29,593,870	\$	16,982,215	\$	18,096,413	\$	34,306,912	\$ 47,690,283	\$ 13,383,371	\$	48,282,160	\$ 47,394,344	\$ 13,087,432
Oct-15 \$	19,454,305 \$	30,297,319	\$	17,074,709	\$	18,226,046	\$	36,529,014	\$ 48,523,365	\$ 11,994,351	\$	49,129,311	\$ 48,220,392	\$ 11,691,378
Total \$	503,685,064 \$	527,703,510	\$	223,775,052	\$	233,430,497	\$	727,460,116	\$ 761,134,007	\$ 33,673,891	\$	771,688,077	\$ 755,856,972	\$ 28,396,856

2-2
Pacific Gas and Electric Company
CPIM Year 22
November 1, 2014-October 31, 2015

CPIM Performance

	 Actual	Benchmark	Difference			
Commodity Cost	\$ 825,056,584	\$ 521,363,120	\$	(303,693,464)		
Volumetric Transportation Costs	\$ 28,299,885	\$ -	\$	(28,299,885)		
Commodity Sales	\$ (353,313,660)	\$ -	\$	353,313,660		
Total Gas Purchase Cost	\$ 500,042,809	\$ 521,363,120	\$	21,320,311		
Other Costs and Revenues	\$ (4,283,232)	\$ -	\$	4,283,232		
Winter Hedging Cost	\$ 7,925,487	\$ 6,340,390	\$	(1,585,097)		
Total Commodity Cost	\$ 503,685,064	\$ 527,703,510	\$	24,018,446		
Demand Charge	\$ 188,502,474	\$ 188,502,474	\$	-		
Discount Demand Charges	\$ (535,485)	\$ -	\$	535,485		
Capacity Release Revenue	\$ (9,119,960)	\$ -	\$	9,119,960		
Firm Storage Cost	\$ 44,928,023	\$ 44,928,023	\$	<u>-</u>		
Total Reservation Cost	\$ 223,775,052	\$ 233,430,497	\$	9,655,445		
Total	\$ 727,460,116	\$ 761,134,007	\$	33,673,891		

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Pacific Gas and Electric Company CPIM Year 22 November 1, 2014 - October 31, 2015

Month		

	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Total
Commodity Cost	\$ 84,115,946 \$	137,592,345 \$	106,489,491 \$	82,550,280 \$	64,408,356 \$	58,178,996 \$	46,709,365 \$	43,020,569 \$	45,927,228 \$	53,572,699 \$	50,444,218 \$	52,047,091 \$	825,056,584
Volumetric Transportation Costs	\$ 2,040,893 \$	3,159,343 \$	3,401,501 \$	3,059,090 \$	2,486,854 \$	2,346,142 \$	2,024,842 \$	1,722,264 \$	1,793,930 \$	2,110,255 \$	2,034,109 \$	2,120,662 \$	28,299,885
Commodity Sales	\$ (27,771,558) \$	(50,264,511) \$	(48,442,785) \$	(38,002,229) \$	(30,508,705) \$	(16,444,541) \$	(10,244,719) \$	(12,008,908) \$	(20,644,131) \$	(30,136,928) \$	(34,774,181) \$	(34,070,464) \$	(353,313,660)
Total Gas Purchase Cost	\$ 58,385,281 \$	90,487,177 \$	61,448,207 \$	47,607,141 \$	36,386,505 \$	44,080,597 \$	38,489,488 \$	32,733,925 \$	27,077,027 \$	25,546,026 \$	17,704,146 \$	20,097,289 \$	500,042,809
Other Costs and Revenues	\$ (410,373) \$	(177,131) \$	(177,194) \$	(771,514) \$	(239,875) \$	(446,368) \$	(427,518) \$	(189,346) \$	(245,251) \$	(176,229) \$	(379,449) \$	(642,984) \$	(4,283,232)
100% Winter Hedging Cost*	\$ - \$	2,729,890 \$	2,729,890 \$	2,465,707 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	7,925,487
Total Commodity Cost	\$ 57,974,908 \$	93,039,936 \$	64,000,903 \$	49,301,334 \$	36,146,630 \$	43,634,229 \$	38,061,970 \$	32,544,579 \$	26,831,776 \$	25,369,797 \$	17,324,697 \$	19,454,305 \$	503,685,064
Demand Charge	\$ 15,378,851 \$	18,252,375 \$	18,666,175 \$	18,172,015 \$	16,540,190 \$	14,660,957 \$	14,598,517 \$	14,463,420 \$	14,487,770 \$	14,492,631 \$	14,329,970 \$	14,459,603 \$	188,502,474
Discount Demand Charges	\$ (24,482) \$	(80,685) \$	(80,685) \$	(74,580) \$	(80,685) \$	(17,509) \$	(28,991) \$	(28,427) \$	(29,374) \$	(31,512) \$	(28,798) \$	(29,757) \$	(535,485)
Capacity Release Revenue	\$ (499,500) \$	- \$	- \$	- \$	- \$	- \$	(1,257,360) \$	(1,984,200) \$	(2,050,340) \$	(1,121,580) \$	(1,085,400) \$	(1,121,580) \$	(9,119,960)
Firm Storage Cost	\$ 3,782,854 \$	3,783,854 \$	3,865,063 \$	3,857,063 \$	3,660,563 \$	3,569,148 \$	3,719,148 \$	3,719,148 \$	3,719,148 \$	3,719,148 \$	3,766,443 \$	3,766,443 \$	44,928,023
Total Reservation Cost	\$ 18,637,723 \$	21,955,544 \$	22,450,553 \$	21,954,498 \$	20,120,068 \$	18,212,596 \$	17,031,314 \$	16,169,941 \$	16,127,204 \$	17,058,687 \$	16,982,215 \$	17,074,709 \$	223,775,052
Actual Costs	\$ 76,612,631 \$	114,995,480 \$	86,451,456 \$	71,255,832 \$	56,266,698 \$	61,846,825 \$	55,093,284 \$	48,714,520 \$	42,958,980 \$	42,428,484 \$	34,306,912 \$	36,529,014 \$	727,460,116

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Pacific Gas and Electric Company
CPIM Year 22
November 1, 2014 - October 31, 2015

Monthly Benchmark Cost

	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Total
Commodity Cost	\$ 62,054,804	\$ 76,541,507 \$	61,811,416 \$	38,889,762 \$	37,384,941 \$	47,780,918 \$	41,296,983 \$	35,240,871 \$	30,220,720 \$	30,250,009 \$	29,593,870 \$	30,297,319 \$	521,363,120
Volumetric Transportation Costs	\$ -	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Commodity Sales	\$ -	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	
Total Gas Purchase Cost	\$ 62,054,804	\$ 76,541,507 \$	61,811,416 \$	38,889,762 \$	37,384,941 \$	47,780,918 \$	41,296,983 \$	35,240,871 \$	30,220,720 \$	30,250,009 \$	29,593,870 \$	30,297,319 \$	521,363,120
Other Costs and Revenues	\$ -	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
100% Winter Hedging Cost	\$ -	\$ 2,183,912 \$	2,183,912 \$	1,972,566 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	6,340,390
Total Commodity Cost	\$ 62,054,804	\$ 78,725,419 \$	63,995,328 \$	40,862,328 \$	37,384,941 \$	47,780,918 \$	41,296,983 \$	35,240,871 \$	30,220,720 \$	30,250,009 \$	29,593,870 \$	30,297,319 \$	527,703,510
Demand Charge	\$ 15,378,851	\$ 18,252,375 \$	18,666,175 \$	18,172,015 \$	16,540,190 \$	14,660,957 \$	14,598,517 \$	14,463,420 \$	14,487,770 \$	14,492,631 \$	14,329,970 \$	14,459,603 \$	188,502,474
Discount Demand Charges	\$ -	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Capacity Release Revenue	\$ -	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Firm Storage Cost	\$ 3,782,854	\$ 3,783,854 \$	3,865,063 \$	3,857,063 \$	3,660,563 \$	3,569,148 \$	3,719,148 \$	3,719,148 \$	3,719,148 \$	3,719,148 \$	3,766,443 \$	3,766,443 \$	44,928,023
Total Reservation Cost	\$ 19,161,705	\$ 22,036,229 \$	22,531,238 \$	22,029,078 \$	20,200,753 \$	18,230,105 \$	18,317,665 \$	18,182,568 \$	18,206,918 \$	18,211,779 \$	18,096,413 \$	18,226,046 \$	233,430,497
Benchmark CPIM Commodity Cost	\$ 81,216,509	\$ 100,761,648 \$	86,526,566 \$	62,891,406 \$	57,585,694 \$	66,011,023 \$	59,614,648 \$	53,423,439 \$	48,427,638 \$	48,461,788 \$	47,690,283 \$	48,523,365 \$	761,134,007

2-5
Pacific Gas and Electric Company
CPIM Year 22
November 1, 2014 - October 31, 2015

			_
Actual	Commodity	/ Purchases	Summary

	CGT-											
	PGE Citygate		CGT		El Paso		GTN	Kern	Nova	Ruby	TW	Total
Nov-14 \$	389,466	\$	11,058,983	\$	171,182	\$	1,082,086	\$ -	\$ 32,850,683	\$ 20,929,645	\$ 17,633,901	\$ 84,115,946
Dec-14 \$	2,920,317	\$	28,529,908	\$	6,818,559	\$	259,135	\$ 7,547,044	\$ 36,124,988	\$ 29,513,754	\$ 25,878,640	\$ 137,592,345
Jan-15 \$	1,225,375	\$	22,905,124	\$	4,668,155	\$	819,826	\$ 7,424,281	\$ 27,095,917	\$ 21,383,170	\$ 20,967,643	\$ 106,489,491
Feb-15 \$	1,304,609	\$	19,521,634	\$	3,693,977	\$	447,391	\$ 4,376,197	\$ 20,114,890	\$ 16,588,565	\$ 16,503,017	\$ 82,550,280
Mar-15 \$	84,000	\$	1,550,965	\$	3,465,963	\$	496,950	\$ 3,688,790	\$ 21,945,636	\$ 16,938,983	\$ 16,237,069	\$ 64,408,356
Apr-15 \$	965,679	\$	13,653,257	\$	-	\$	351,042	\$ -	\$ 20,685,597	\$ 14,703,075	\$ 7,820,346	\$ 58,178,996
May-15 \$	544,641	\$	2,641,796	\$	-	\$	383,994	\$ -	\$ 19,900,460	\$ 14,780,048	\$ 8,458,426	\$ 46,709,365
Jun-15 \$	209,472	\$	935,213	\$	-	\$	509,988	\$ -	\$ 20,765,156	\$ 16,511,142	\$ 4,089,598	\$ 43,020,569
Jul-15 \$	192,300	\$	1,078,258	\$	-	\$	3,432,806	\$ -	\$ 19,233,125	\$ 17,434,682	\$ 4,556,057	\$ 45,927,228
Aug-15 \$	320,225	\$	4,653,581	\$	4,211,828	\$	858,185	\$ -	\$ 20,873,810	\$ 17,285,014	\$ 5,370,056	\$ 53,572,699
Sep-15 \$	143,032	\$	4,287,698	\$	-	\$	797,020	\$ -	\$ 20,660,134	\$ 15,773,688	\$ 8,782,646	\$ 50,444,218
Oct-15 \$	-	\$	4,155,085	\$	2,747,417	\$	332,102	\$ -	\$ 20,992,711	\$ 15,919,388	\$ 7,900,388	\$ 52,047,091
Total \$	8,299,116	\$	114,971,502	\$	25,777,081	\$	9,770,525	\$ 23,036,312	\$ 281,243,107	\$ 217,761,154	\$ 144,197,787	\$ 825,056,584

2-6
Pacific Gas and Electric Company
CPIM Year 22
November 1, 2014 - October 31, 2015
Volumetric Transportation Costs

_						· oranicano mai	.opo	Ttation costs						
<u>-</u>		Gas Transmission			Kern River									
	El Paso Natural		Northwest	(as Transmission	PG&E California Gas			Transcanada-	Tr	anscanada NOVA Gas	Tra	answestern Pipeline	
	Gas Company, LLC		LLC		Company	Transmission	Rι	uby Pipeline, LLC	Foothills		Transmission Ltd		Company	Total
Nov-14	\$ -	\$	111,019	\$	-	\$ 1,662,510	\$	204,928	\$ -	\$	-	\$	62,436	\$ 2,040,893
Dec-14	\$ 48,140	\$	109,676	\$	9,398	\$ 2,688,871	\$	230,652	\$ -	\$	1,331	\$	71,275	\$ 3,159,343
Jan-15	\$ 51,044	\$	109,693	\$	9,237	\$ 2,857,244	\$	300,725	\$ -	\$	-	\$	73,558	\$ 3,401,501
Feb-15	\$ 40,716	\$	98,940	\$	7,939	\$ 2,573,731	\$	272,434	\$ -	\$	-	\$	65,330	\$ 3,059,090
Mar-15	\$ 40,353	\$	109,821	\$	8,354	\$ 1,982,190	\$	274,241	\$ -	\$	-	\$	71,895	\$ 2,486,854
Apr-15	\$ -	\$	101,398	\$	-	\$ 1,904,881	\$	291,871	\$ -	\$	-	\$	47,992	\$ 2,346,142
May-15	\$ -	\$	104,609	\$	-	\$ 1,567,133	\$	301,620	\$ -	\$	-	\$	51,480	\$ 2,024,842
Jun-15	\$ -	\$	100,690	\$	-	\$ 1,306,536	\$	292,037	\$ -	\$	-	\$	23,001	\$ 1,722,264
Jul-15	\$ -	\$	102,012	\$	-	\$ 1,361,334	\$	303,790	\$ -	\$	-	\$	26,794	\$ 1,793,930
Aug-15	\$ 50,832	\$	104,473	\$	-	\$ 1,626,619	\$	296,151	\$ -	\$	-	\$	32,180	\$ 2,110,255
Sep-15	\$ -	\$	101,569	\$	-	\$ 1,583,579	\$	293,532	\$ -	\$	-	\$	55,429	\$ 2,034,109
Oct-15	\$ -	\$	104,137	\$	-	\$ 1,624,622	\$	334,740	\$ -	\$	-	\$	57,163	\$ 2,120,662
Total	\$ 231,085	\$	1,258,037	\$	34,928	\$ 22,739,250	\$	3,396,721	\$ -	\$	1,331	\$	638,533	\$ 28,299,885

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Pacific Gas and Electric Company
CPIM Year 22
November 1, 2014 - October 31, 2015

Commodity Sales Revenue

	CGT-										
	PG&E Citygate	CGT -AII	El Paso	GTN	Kern		Nova	Ruby		TW	Total
Nov-14 \$	(23,707,885) \$	(1,093,512)	\$ (171,182)	\$ (1,204,415)	\$ -	\$	(92,725)	\$ (1,458,539)) \$	(43,300)	\$ (27,771,558)
Dec-14 \$	(48,106,161) \$	(643,573)	\$ (355,834)	\$ -	\$ (300,900)) \$	-	\$ (358,435)	\$	(499,608)	\$ (50,264,511)
Jan-15 \$	(42,856,609) \$	(195,253)	\$ (41,978)	\$ -	\$ (2,582,008)) \$	-	\$ (94,992)	\$	(2,671,945)	\$ (48,442,785)
Feb-15 \$	(34,014,817) \$	(232,011)	\$ (520,309)	\$ (20,470)	\$ (676,411)) \$	(174,366)	\$ (30,280)	\$	(2,333,565)	\$ (38,002,229)
Mar-15 \$	(28,552,659) \$	-	\$ (440,331)	\$ (74,978)	\$ (105,003)) \$	(10,285)	\$ (446,508)	\$	(878,941)	\$ (30,508,705)
Apr-15 \$	(16,014,140) \$	-	\$ -	\$ (335,853)	\$ -	\$	(51,583)	\$ (42,965)	\$	- :	\$ (16,444,541)
May-15 \$	(9,951,010) \$	-	\$ -	\$ (49,814)	\$ -	\$	(182,270)	\$ -	\$	(61,625)	\$ (10,244,719)
Jun-15 \$	(11,744,001) \$	-	\$ -	\$ (26,400)	\$ -	\$	(238,507)	\$ -	\$	- :	\$ (12,008,908)
Jul-15 \$	(17,921,484) \$	-	\$ -	\$ -	\$ -	\$	(2,722,647)	\$ -	\$	- :	\$ (20,644,131)
Aug-15 \$	(29,529,456) \$	-	\$ -	\$ (222,111)	\$ -	\$	(183,111)	\$ (202,250)	\$	- :	\$ (30,136,928)
Sep-15 \$	(34,308,671) \$	-	\$ -	\$ (2,650)	\$ -	\$	(462,860)	\$ -	\$	- :	\$ (34,774,181)
Oct-15 \$	(30,903,727) \$	= :	\$ (2,744,319)	\$ (84,500)	\$ -	\$	(278,045)	\$ (59,873)	\$	- :	\$ (34,070,464)
Total \$	(327,610,620) \$	(2,164,349)	\$ (4,273,953)	\$ (2,021,191)	\$ (3,664,322)) \$	(4,396,399)	\$ (2,693,842)	\$	(6,488,984)	\$ (353,313,660)

2-8
Pacific Gas and Electric Company
CPIM Year 22
November 1, 2014 - October 31, 2015
Demand Charges Summary

	El Paso Natural Gas	Gas Transmission		Kern River Gas	PG&E California			Tr	anscanada-Foothills	Tr	anscanda Nova Gas	Tr	ranswestern Pipeline	
	Company LLC	Northwest LLC	Tra	nsmission Company	Transmission	F	Ruby Pipeline, LLC		Pipelines Itd		Transmission Itd		Company	Total
Nov-14 \$	-	\$ 3,263,836	\$	-	\$ 3,970,852	\$	4,541,135	\$	784,310	\$	1,417,413	\$	1,401,305	\$ 15,378,851
Dec-14 \$	334,585	\$ 3,372,630	\$	323,950	\$ 5,853,999	\$	4,541,135	\$	760,237	\$	1,373,907	\$	1,691,932	\$ 18,252,375
Jan-15 \$	334,585	\$ 3,372,630	\$	323,950	\$ 6,399,340	\$	4,541,135	\$	704,568	\$	1,321,892	\$	1,668,075	\$ 18,666,175
Feb-15 \$	334,585	\$ 3,046,246	\$	292,600	\$ 6,399,340	\$	4,541,135	\$	706,965	\$	1,326,388	\$	1,524,756	\$ 18,172,015
Mar-15 \$	294,241	\$ 3,377,944	\$	284,882	\$ 4,338,867	\$	4,547,655	\$	703,275	\$	1,319,460	\$	1,673,866	\$ 16,540,190
Apr-15 \$	-	\$ 3,120,285	\$	-	\$ 4,214,547	\$	4,340,181	\$	699,849	\$	1,313,033	\$	973,062	\$ 14,660,957
May-15 \$	-	\$ 3,224,294	\$	-	\$ 4,237,035	\$	4,340,930	\$	681,024	\$	1,277,715	\$	837,519	\$ 14,598,517
Jun-15 \$	-	\$ 3,120,285	\$	-	\$ 4,237,035	\$	4,340,181	\$	682,445	\$	1,280,380	\$	803,094	\$ 14,463,420
Jul-15 \$	-	\$ 3,136,691	\$	-	\$ 4,265,135	\$	4,369,638	\$	654,375	\$	1,227,727	\$	834,204	\$ 14,487,770
Aug-15 \$	199,042	\$ 3,151,379	\$	-	\$ 4,265,135	\$	4,369,638	\$	642,973	\$	1,206,336	\$	658,128	\$ 14,492,631
Sep-15 \$	-	\$ 3,064,410	\$	-	\$ 4,265,135	\$	4,368,924	\$	636,821	\$	1,194,794	\$	799,886	\$ 14,329,970
Oct-15 \$	-	\$ 3,151,380	\$	-	\$ 4,254,275	\$	4,369,646	\$	645,910	\$	1,211,844	\$	826,548	\$ 14,459,603
Total \$	1,497,038	\$ 38,402,010	\$	1,225,382	\$ 56,700,695	\$	53,211,333	\$	8,302,752	\$	15,470,889	\$	13,692,375	\$ 188,502,474

2-9 Pacific Gas and Electric Company CPIM Year 22 November 1, 2014 - October 31, 2015

|--|

•			Non-Winter Hedge Costs	Miscellaneous Costs	
	Coc	hrane Extraction	and	and	
_		Revenue	Revenues	Revenues	Total
Nov-14	\$	(429,122)	\$ -	\$ 18,749	\$ (410,373)
Dec-14	\$	(196,405)	\$ 3,383	\$ 15,891	\$ (177,131)
Jan-15	\$	(182,135)	\$ (73,105)	\$ 78,046	\$ (177,194)
Feb-15	\$	(268,900)	\$ (527,304)	\$ 24,690	\$ (771,514)
Mar-15	\$	(260,018)	\$ (12,400)	\$ 32,543	\$ (239,875)
Apr-15	\$	(251,376)	\$ (213,150)	\$ 18,158	\$ (446,368)
May-15	\$	(195,698)	\$ (242,885)	\$ 11,065	\$ (427,518)
Jun-15	\$	(120,973)	\$ (80,175)	\$ 11,802	\$ (189,346)
Jul-15	\$	(125,992)	\$ (136,129)	\$ 16,870	\$ (245,251)
Aug-15	\$	(77,048)	\$ (110,941)	\$ 11,760	\$ (176,229)
Sep-15	\$	(154,492)	\$ (241,350)	\$ 16,393	\$ (379,449)
Oct-15	\$	(187,137)	\$ (473,603)	\$ 17,756	\$ (642,984)
Total	\$	(2,449,296)	\$ (2,107,659)	\$ 273,723	\$ (4,283,232)

2-10
Pacific Gas and Electric Company
CPIM Year 22
November 1, 2014 - October 31, 2015

Winter Hedge Transaction

		Reported				
Reported		Commision			Δ	udited Winter
Option		and				Hedge Costs
Premiums		Fees		Adjustment		Total
\$ -	\$	-	\$	-	\$	-
\$ 2,726,543	\$	3,347	\$	-	\$	2,729,890
\$ 2,726,543	\$	3,347	\$	-	\$	2,729,890
\$ 2,462,684	\$	3,023	\$	-	\$	2,465,707
\$ -	\$	-	\$	-	\$	-
\$ -	\$	1,178	\$	(1,178)	\$	-
\$ -	\$	913	\$	(913)	\$	-
\$ -	\$	1,992	\$	(1,992)	\$	-
\$ -	\$	1,270	\$	(1,270)	\$	-
\$ -	\$	1,450	\$	(1,450)	\$	-
\$ -	\$	2,129	\$	(2,129)	\$	-
\$ -	\$	-	\$	-	\$	-
\$ 7,915,770	\$	18,649	\$	(8,932)	\$	7,925,487
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Option Premiums \$	Option Premiums \$	Reported Option Option Premiums Commision and Fees \$ - \$ - \$ - \$ \$ 2,726,543 \$ 3,347 \$ 2,726,543 \$ 3,347 \$ 2,462,684 \$ 3,023 \$ - \$ - \$ 1,178 \$ - \$ 1,178 \$ - \$ 1,270 \$ - \$ 1,270 \$ - \$ 2,129 \$ - \$ - \$ - \$	Reported Option Option Premiums Commission and Fees \$ - \$ - \$ \$ 2,726,543 \$ 3,347 \$ \$ 2,726,543 \$ 3,347 \$ \$ 2,462,684 \$ 3,023 \$ \$ - \$ - \$ \$ - \$ 1,178 \$ \$ - \$ 1,178 \$ \$ - \$ 1,270 \$ \$ - \$ 2,129 \$ \$ - \$ - \$ - \$	Reported Option Option Premiums Commision and Fees Adjustment \$ - \$ - \$ - \$ - \$ - \$ - \$ 2,726,543 \$ 3,347 \$ - \$ - \$ 2,726,543 \$ 3,347 \$ - \$ - \$ 2,462,684 \$ 3,023 \$ - \$ - \$ - \$ - \$ - \$ - \$ 1,178 \$ (1,178) \$ (1,178) \$ (913) \$ (913) \$ (913) \$ (913) \$ (1,270) \$ (1,270) \$ (1,270) \$ (1,270) \$ (1,270) \$ (1,270) \$ (1,270) \$ (1,450) \$ (2,129) \$ - \$ 2,129 \$ (2,129) \$	Reported Option Option Premiums Fees Adjustment \$ - \$ - \$ - \$ Adjustment \$ 2,726,543 \$ 3,347 \$ - \$ \$ \$ 2,726,543 \$ 3,347 \$ - \$ \$ \$ \$ \$ 2,462,684 \$ 3,023 \$ - \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

2-11 Pacific Gas and Electric Company CPIM Year 22

November 1, 2014 - October 31, 2015 Demand Charge Discounts Summary

-				•	
	El Paso Natural Gas		Kern River Gas	Transcanda Nova Gas	
	Company LLC	Т	ransmission Company	Transmission Itd	Total
Nov-14	\$ -	\$	-	\$ (24,482)	\$ (24,482)
Dec-14	\$ (17,598)	\$	(33,529)	\$ (29,558)	\$ (80,685)
Jan-15	\$ (17,598)	\$	(33,529)	\$ (29,558)	\$ (80,685)
Feb-15	\$ (17,598)	\$	(30,284)	\$ (26,698)	\$ (74,580)
Mar-15	\$ (17,598)	\$	(33,529)	\$ (29,558)	\$ (80,685)
Apr-15	\$ -	\$	-	\$ (17,509)	\$ (17,509)
May-15	\$ -	\$	-	\$ (28,991)	\$ (28,991)
Jun-15	\$ -	\$	-	\$ (28,427)	\$ (28,427)
Jul-15	\$ -	\$	-	\$ (29,374)	\$ (29,374)
Aug-15	\$ (23,956)	\$	-	\$ (7,556)	\$ (31,512)
Sep-15	\$ -	\$	-	\$ (28,798)	\$ (28,798)
Oct-15	\$ -	\$	-	\$ (29,757)	\$ (29,757)
Total	\$ (94,348)	\$	(130,871)	\$ (310,266)	\$ (535,485)

2-12 Pacific Gas and Electric Company CPIM Year 22

November 1, 2014 - October 31, 2015

Capacity Release Revenue

						Kern River					Tr	ranscanada -					
	El Paso Natur	al	Gas	Transmission	(as Transmission	PG	&E California Gas				Foothills	Tr	anscanada Nova Gas	Tra	nswestern Pipeline	
	Gas Company	LLC	No	orthwest LLC		Company		Transmission	Ru	by Pipeline LLC	P	Pipelines Ltd		Transmission Ltd		Company	Total
Nov-14	\$	-	\$	-	\$	-	\$	(499,500)	\$	-	\$	-	\$	-	\$	-	\$ (499,500)
Dec-14	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Jan-15	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Feb-15	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Mar-15	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Apr-15	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
May-15	\$	-	\$	-	\$	-	\$	(1,257,360)	\$	-	\$	-	\$	-	\$	-	\$ (1,257,360)
Jun-15	\$	-	\$	-	\$	-	\$	(1,892,400)	\$	-	\$	-	\$	-	\$	(91,800)	\$ (1,984,200)
Jul-15	\$	-	\$	-	\$	-	\$	(1,955,480)	\$	-	\$	-	\$	-	\$	(94,860)	\$ (2,050,340)
Aug-15	\$	-	\$	-	\$	-	\$	(1,121,580)	\$	-	\$	-	\$	-	\$	-	\$ (1,121,580)
Sep-15	\$	-	\$	-	\$	-	\$	(1,085,400)	\$	-	\$	-	\$	-	\$	-	\$ (1,085,400)
Oct-15	\$	-	\$	-	\$	-	\$	(1,121,580)	\$	-	\$	-	\$	-	\$	-	\$ (1,121,580)
Total	\$	-	\$	-	\$	-	\$	(8,933,300)	\$	-	\$	-	\$	-	\$	(186,660)	\$ (9,119,960)

2-13
Pacific Gas and Electric Company
CPIM Year 22
November 1, 2014-October 31, 2015
Firm Incremental Storage

	CGT	Incremental	Incremental	Incremental	
_	Firm Storage	Storage	Storage	Storage	Total
Nov-14	\$ 3,589,354	\$ 193,500	\$ -	\$ -	\$ 3,782,854
Dec-14	\$ 3,589,354	\$ 194,500	\$ -	\$ -	\$ 3,783,854
Jan-15	\$ 3,660,563	\$ 204,500	\$ -	\$ -	\$ 3,865,063
Feb-15	\$ 3,660,563	\$ 196,500	\$ -	\$ -	\$ 3,857,063
Mar-15	\$ 3,660,563	\$ -	\$ -	\$ -	\$ 3,660,563
Apr-15	\$ 3,569,148	\$ -	\$ -	\$ -	\$ 3,569,148
May-15	\$ 3,569,148	\$ -	\$ 75,000	\$ 75,000	\$ 3,719,148
Jun-15	\$ 3,569,148	\$ -	\$ 75,000	\$ 75,000	\$ 3,719,148
Jul-15	\$ 3,569,148	\$ -	\$ 75,000	\$ 75,000	\$ 3,719,148
Aug-15	\$ 3,569,148	\$ -	\$ 75,000	\$ 75,000	\$ 3,719,148
Sep-15	\$ 3,616,443	\$ -	\$ 75,000	\$ 75,000	\$ 3,766,443
Oct-15	\$ 3,616,443	\$ -	\$ 75,000	\$ 75,000	\$ 3,766,443
Total	\$ 43,239,023	\$ 789,000	\$ 450,000	\$ 450,000	\$ 44,928,023

2-14
Pacific Gas and Electric Company
CPIM Year 22
November 1, 2014 - October 31, 2015
Benchmark Commodity Cost

	Ruby Opal	NOVA Aeco	Т	W San Juan	G	TN Kingsgate	KR Opal	Т	opock-Baja	Citygate	Total
Nov-14	\$ 16,956,296	\$ 31,710,033	\$	11,670,022	\$	-	\$ -	\$	1,682,847	\$ 35,606	\$ 62,054,804
Dec-14	\$ 15,741,173	\$ 31,315,176	\$	17,222,519	\$	-	\$ 7,548,586	\$	3,890,537	\$ 823,516	\$ 76,541,507
Jan-15	\$ 14,691,606	\$ 27,619,052	\$	11,379,114	\$	-	\$ 5,608,438	\$	2,513,206	\$ -	\$ 61,811,416
Feb-15	\$ 7,938,033	\$ 19,960,910	\$	6,657,363	\$	-	\$ 4,333,456	\$	-	\$ -	\$ 38,889,762
Mar-15	\$ 5,819,647	\$ 19,017,681	\$	8,161,387	\$	-	\$ 4,170,059	\$	137,115	\$ 79,052	\$ 37,384,941
Apr-15	\$ 14,296,179	\$ 21,374,838	\$	7,166,701	\$	-	\$ -	\$	4,096,437	\$ 846,763	\$ 47,780,918
May-15	\$ 13,817,377	\$ 20,483,042	\$	6,569,079	\$	-	\$ -	\$	427,485	\$ -	\$ 41,296,983
Jun-15	\$ 7,739,083	\$ 21,338,150	\$	6,163,638	\$	-	\$ -	\$	-	\$ -	\$ 35,240,871
Jul-15	\$ 6,371,607	\$ 17,406,525	\$	6,442,588	\$	-	\$ -	\$	-	\$ -	\$ 30,220,720
Aug-15	\$ 6,464,607	\$ 17,157,505	\$	6,627,897	\$	-	\$ -	\$	-	\$ -	\$ 30,250,009
Sep-15	\$ 5,807,112	\$ 17,821,993	\$	5,964,765	\$	-	\$ -	\$	-	\$ -	\$ 29,593,870
Oct-15	\$ 5,947,717	\$ 18,418,513	\$	5,931,089	\$	-	\$ -	\$	-	\$ -	\$ 30,297,319
Total	\$ 121,590,437	\$ 263,623,418	\$	99,956,162	\$	-	\$ 21,660,539	\$	12,747,627	\$ 1,784,937	\$ 521,363,120

2-15
Pacific Gas and Electric Company
CPIM Year 22
November 1, 2014 - October 31, 2015

Benchmark Winter Hedge Costs

•		Commision		
	Option	and	Adjustment for	
	Premiums	Fees	Reallocation	Total
Nov-14	\$ -	\$ -	\$ -	\$ -
Dec-14	\$ 2,181,234	\$ 2,678	\$ -	\$ 2,183,912
Jan-15	\$ 2,181,234	\$ 2,678	\$ -	\$ 2,183,912
Feb-15	\$ 1,970,147	\$ 2,419	\$ -	\$ 1,972,566
Mar-15	\$ -	\$ -	\$ -	\$ -
Apr-15	\$ -	\$ 942	\$ 942	\$ -
May-15	\$ -	\$ 730	\$ 730	\$ -
Jun-15	\$ -	\$ 1,594	\$ 1,594	\$ -
Jul-15	\$ -	\$ 1,016	\$ 1,016	\$ -
Aug-15	\$ -	\$ 1,160	\$ 1,160	\$ -
Sep-15	\$ -	\$ 1,703	\$ 1,703	\$ -
Oct-15	\$ -	\$ -	\$ -	\$ -
Total	\$ 6,332,615	\$ 14,920	\$ 7,145	\$ 6,340,390

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November 1, 2014 - October 31, 2015

Actual Commodity Purchases Volume Summary in MMBtu

	CGT-								
_	PGE Citygate	CGT	El Paso	GTN	Kern	Nova	Ruby	TW	Total
Nov-14	87,200	2,678,959	42,959	259,400	-	9,738,820	6,003,075	5,106,792	23,917,205
Dec-14	831,490	8,234,076	1,594,493	73,987	1,749,925	10,075,752	6,834,531	5,961,097	35,355,351
Jan-15	383,600	7,794,011	1,592,994	291,900	2,443,083	10,072,262	6,837,760	6,882,713	36,298,323
Feb-15	431,800	7,563,071	1,438,519	176,124	1,629,428	9,116,104	6,172,600	6,198,560	32,726,206
Mar-15	30,000	615,360	1,408,439	185,387	1,518,367	10,063,430	6,372,788	6,174,169	26,367,940
Apr-15	336,295	5,633,721	-	150,377	-	9,281,498	6,300,000	3,296,723	24,998,614
May-15	168,400	971,819	-	144,987	-	9,636,455	6,500,422	3,561,342	20,983,425
Jun-15	67,600	340,470	-	194,600	-	9,246,523	6,293,890	1,580,010	17,723,093
Jul-15	60,000	372,000	-	1,241,862	-	9,634,465	6,547,200	1,669,636	19,525,163
Aug-15	100,000	1,638,584	1,573,746	312,010	-	9,632,190	6,467,564	2,005,284	21,729,378
Sep-15	46,100	1,593,382	-	306,270	-	9,351,162	6,326,120	3,454,093	21,077,127
Oct-15	-	1,645,580	1,239,495	145,979	-	9,684,036	6,539,966	3,562,121	22,817,177
Total	2,542,485	39,081,033	8,890,645	3,482,883	7,340,803	115,532,697	77,195,916	49,452,540	303,519,002

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Pacific Gas and Electric Company
CPIM Year 22

November 1, 2014 - October 31, 2015

Actual Commodity Sale Volume in MMBtu Summary

	CGT-	CGT-							
_	PGE Citygate	All	El Paso	GTN	Kern	Nova	Ruby	TW	Total
Nov-14	(5,261,356)	(247,200)	(42,959)	(289,324)	-	(28,908)	(343,000)	(10,000)	(6,222,747)
Dec-14	(12,494,412)	(177,824)	(102,559)	-	(84,938)	-	(96,500)	(142,770)	(13,099,003)
Jan-15	(13,237,176)	(57,523)	(12,698)	-	(827,400)	-	(31,600)	(878,000)	(15,044,397)
Feb-15	(11,575,450)	(76,397)	(177,952)	(8,900)	(223,789)	(79,996)	(10,200)	(865,500)	(13,018,184)
Mar-15	(9,764,884)	-	(159,148)	(30,698)	(37,472)	(4,739)	(160,488)	(305,192)	(10,462,621)
Apr-15	(5,571,400)	-	-	(149,516)	-	(23,695)	(19,380)	-	(5,763,991)
May-15	(3,199,400)	-	-	(19,748)	-	(87,673)	-	(25,000)	(3,331,821)
Jun-15	(3,776,500)	-	-	(10,000)	-	(110,326)	-	-	(3,896,826)
Jul-15	(5,622,504)	-	-	-	-	(1,206,761)	-	-	(6,829,265)
Aug-15	(9,291,774)	-	-	(79,990)	-	(83,313)	(85,000)	-	(9,540,077)
Sep-15	(11,071,585)	-	-	(1,000)	-	(207,572)	-	-	(11,280,157)
Oct-15	(10,449,482)	-	(1,239,495)	(40,000)	-	(144,732)	(27,522)	-	(11,901,231)
Total	(101,315,923)	(558,944)	(1,734,811)	(629,176)	(1,173,599)	(1,977,715)	(773,690)	(2,226,462)	(110,390,320)

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Pacific Gas and Electric Company
CPIM Year 22
November 1, 2014 - October 31, 2015

Benchmark Load

	Ruby Opal	NOVA Aeco	TW San Juan	GTN Kingsgate	KR Opal	Topock-Baja	Citygate	Total
Nov-14	4,735,934	8,884,838	3,156,985	-	-	372,241	7,707	17,157,705
Dec-14	3,534,010	8,231,242	3,722,946	-	1,664,245	1,215,167	233,738	18,601,348
Jan-15	4,509,872	9,610,443	3,430,062	-	1,686,245	760,847	-	19,997,469
Feb-15	2,824,079	8,462,829	2,277,861	-	1,523,060	-	-	15,087,829
Mar-15	5,819,647	19,017,681	8,161,387	-	4,170,059	137,115	79,052	37,384,941
Apr-15	5,841,380	8,965,080	2,850,441	-	-	1,621,089	295,642	19,573,632
May-15	5,789,250	9,263,916	2,690,263	-	-	147,715	-	17,891,144
Jun-15	2,813,461	8,891,622	2,174,070	-	-	-	-	13,879,153
Jul-15	2,299,425	8,124,701	2,249,980	-	-	-	-	12,674,106
Aug-15	2,299,425	7,382,674	2,249,980	-	-	-	-	11,932,079
Sep-15	2,225,649	7,519,447	2,177,400	-	-	-	-	11,922,496
Oct-15	2,301,838	7,914,840	2,249,980	-	-	-	-	12,466,658
Total	44,993,970	112,269,313	37,391,355	-	9,043,609	4,254,174	616,139	208,568,560