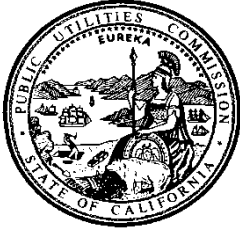


Docket: A.96-08-043

Commissioner:

Admin. Law Judge:



PUBLIC ADVOCATES OFFICE
California Public Utilities Commission

MONITORING AND EVALUATION REPORT

November 1, 2018 through October 31, 2019

**Pacific Gas and Electric Company's
Core Procurement Incentive Mechanism
Performance Results
(CPIM Year 26)**

Application 96-08-043

**San Francisco, California
January 25, 2022**

TABLE OF CONTENTS

1	SUMMARY AND RECOMMENDATIONS	
1.1	Introduction and Summary	1
1.2	Background	1
1.3	Procurement and Sales	3
1.4	Financial Hedging Activities	4
1.5	Natural Gas Storage	5
1.6	Core Intrastate Capacity	6
1.7	Core Interstate Capacity	6
1.8	Review of CPIM Performance	7
1.9	Conclusion	8
2	MONITORING AND EVALUATION AUDIT	
2.1	Cal Advocates' CPIM Reward Evaluation	9
2.2	Summary of Benchmark and Actual Costs	11
2.3	Review of Benchmark Commodity and Reservation Charges	12
2.4	Actual Natural Gas Costs	13
2.5	Natural Gas Storage Costs	15
2.6	Review of Purchase Gas Account (PGA)	16
2.7	Review of Core Pipeline Demand Charge Account (CPDCA)	17
2.8	Review of Miscellaneous Costs and Revenue	18
2.9	Examination of Hedging Costs	19
2.10	Review of Sales and Volume Transactions	20
2.11	Review of Volumetric Transport Costs	21
2.12	Review of Reservation Charges	22
2.13	Review of Benchmark Commodity Indices	23
2.14	Review of Fixed Storage and Transportation Costs	24
2.15	Utilization of Firm Interstate and Intrastate Pipeline Assets	25

Exhibits for CPIM Report

CHAPTER 1

SUMMARY AND RECOMMENDATIONS

1.1 Introduction and Summary

The Public Advocates Office at the California Public Utilities Commission (Cal Advocates) 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, 2018, through October 31, 2019 (Year 26). Chapter 2 of this report presents the details and results of Cal Advocates' review. Cal Advocates' evaluation of PG&E's recorded natural gas costs confirms that PG&E's costs were below the benchmark for CPIM Year 26, which resulted in ratepayer savings.

PG&E submitted its CPIM Performance Report on April 1, 2021, which covered the period of November 1, 2018, through October 31, 2019. Cal Advocates' examination of PG&E's recorded costs for CPIM Year 26 shows that PG&E's actual gas costs were below the benchmark's lower tolerance band, which results in a reward of \$8,095,519 to PG&E's shareholders and a ratepayer benefit of \$45,142,555.¹

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 charges. Other procurement costs include pipeline volumetric transportation costs, natural gas storage costs, and hedge costs. 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 reporting for PG&E's gas procurement costs. It sets forth guidelines for standard operating conditions and for special circumstances. The allowed monthly benchmark

¹ See calculation on Cal Advocates CPIM Year 26 Report, Table 1-1.

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 defines 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 of the gains or losses that occur outside the tolerance band between ratepayers and PG&E shareholders. In Chapter 2 of this report, Cal Advocates presents detailed results of the tolerance band calculation.

The CPIM program was originally approved by the California Public Utilities Commission (Commission) in Decision (D.) 97-08-055 as set forth in the PG&E/ORAs² Post-1997 CPIM Agreement and PG&E's Supplemental Report describing the Post-1997 CPIM. This decision 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, Cal Advocates, 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 that resulted from the settlement agreement included:

- 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 Billion cubic feet (Bcf) of un-sequenced storage withdrawal adjustment was eliminated and is included proportionately to the storage withdrawal sequence;

² The Office of Ratepayer Advocates (ORA) was renamed the Public Advocates Office of the California Public Utilities Commission pursuant to Senate Bill No. 854, which was signed by the Governor on June 27, 2018 (Chapter 51, Statutes of 2018).

- A change in the sequencing steps for San Juan Basin and AECO for natural gas purchases;
- A savings of five-percent (5%) from full tariff rates on pipeline or storage contracts in order to offset CPIM gas costs;
- A change in the index used to calculate the benchmark for daily swing from the NGI daily Topock index to 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, Cal Advocates, 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;
- A modification to the CPIM sharing mechanism such that total shareholders earnings will be capped solely at 1.5 percent of annual gas commodity costs and a removal of the dollar cap of \$25 million on shareholder gains effective November 1, 2009.

1.3 Procurement and Sales

For the CPIM Year 26 period, PG&E's recorded actual commodity gas costs (excluding transportation, hedging, and storage costs) for core customers totaled

\$633,724,399, which was associated with a purchase volume of 279,490,270 MMBtus.³

On daily basis, PG&E utilizes gas sales to help manage its assets and reduce gas costs. It purchases and sells gas supplies to comply with daily pipeline balancing requirements, responds to changes in core loads, and captures price arbitrage opportunities. For CPIM Year 26, PG&E reported total gas sales of (\$117,426,904) in revenue with an associated sales volume of (38,960,608) MMBtus.⁴

1.4 Financial Hedging Activities

Per D.07-06-013, all derivative gains, losses, and related transaction costs associated with PG&E's winter hedging 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 Cal Advocates, 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.⁵

Pursuant to D.10-01-023, PG&E remains responsible for managing hedges proactively to ensure stability in customer rates. This includes implementing controls and selecting appropriate hedging instruments to mitigate derivative risks. PG&E is

³ See Cal Advocates CPIM Year 26, Exhibits 2-5 and 2-16.

⁴ Id., Exhibits 2-7 and 2-17.

⁵ 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.

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. The Settlement Agreement also requires one hundred percent (100%) of winter hedging gains and losses and related transaction costs be included in the CPIM actual commodity costs. These CPIM changes was incorporated starting in CPIM Year 18.

For the current CPIM Year 26, the total costs of winter hedges included in the CPIM were (\$2,621,041), which was comprised of \$1,040,469 in option premiums, (\$3,669,600) in option and swap settlements, and \$11,837 in commissions and fees.⁶

1.5 Natural Gas Storage

Under the CPIM, PG&E would use a daily injection and withdrawal schedule for managing core customer demands and balancing purposes. For CPIM Year 26, beginning inventory including incremental storage was reported at 28,407,621 MMBtus, and ending inventory was 28,626,019 MMBtus.⁷

Pursuant to D.06-07-010 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.

⁶ See Cal Advocates CPIM Year 26, Exhibits 2-10.

⁷ See calculation on Cal Advocates CPIM Year 26 Report, Table 2-5.

In a Memorandum of Understanding (MOU) between PG&E and Cal Advocates on October 19, 2009, the parties agreed to a change of firm storage injection and withdrawal requirements used to calculate the CPIM benchmark. These changes provided an updated storage profile beginning in Year 17 and are adjusted for allocations to Core Transport Agents (CTAs) as detailed in Tariff G-CT. This MOU remains in effect until both parties agree to make changes.⁸

1.6 Core Intrastate Capacity

Pursuant to D.04-12-050, the Commission allowed PG&E's Core Procurement Department to recover costs for firm reservation of intrastate backbone pipeline capacity. Effective July 1, 2016, to December 31, 2018, PG&E holds Redwood intrastate capacity providing approximately 605 MDth/d and Baja intrastate capacity providing 182 MDth/d with an additional seasonal capacity of 157 MDth/d during November 1 to March 31. The PG&E's 2019 GT&S Rate Case was not concluded prior the end of 2018, therefor the PG&E CGT Redwood Path and Baja Path extended until March 31, 2020.⁹

1.7 Core Interstate Capacity

PG&E holds interstate capacity for the core on NOVA Gas Transmission Ltd. (NGTL/NOVA), Foothills Pipelines, Ltd. (Foothills), Gas Transmission Northwest (GTN), Transwestern Pipeline Company (TW), and Ruby Pipeline, L.L.C. (Ruby).

For CPIM Year 26, core interstate capacity was reported as approximately 370 MDth/d for NOVA, 366 MDth/d for Foothills, 360 MDth/d for GTN 181 MDth/d for TW, and 250 MDth/d for Ruby.¹⁰

Pursuant to D.04-09-022, the Commission authorized PG&E to seek pre-approval and expedited advice letter treatment for interstate capacity contracts that

⁸ CPIM - ORA and PG&E Memorandum of Understanding, dated October 19, 2009.

⁹ See PG&E Annual Performance Report, Year 26, page 17-18.

¹⁰ See PG&E Annual Performance Report, Year 26, page 19.

meet specified criteria. Prior to seeking pre-approval, PG&E is required to consult with Cal Advocates, TURN, and the Energy Division (ED) to obtain agreement.

Pursuant to Advice Letter 3747-G-A, PG&E extended two contracts with Foothills for 284,810 Dth/d and 81,384 Dth/d, and a contract with NGTL for 287,745 Dth/d and the GTN contract for 279,968 Dth/d through October 31, 2020.¹¹

Pursuant to Advice Letter 3868-G, PG&E signed one year contract on Transwestern Pipeline for 23,000 Dth/d during summer and 181,000 Dth/d during winter months.¹²

1.8 Review of CPIM Performance

Table 1-1 below compares benchmark gas costs to actual costs of natural gas (including commodity, transportation, hedges, reservation and storage costs) in total dollars.

Table 1-1		
Pacific Gas and Electric Company		
CPIM Year 26		
Gas Costs Comparison		
November 1, 2018 - October 31, 2019		
Benchmark Gas Costs	\$	845,298,026
Actual Gas Costs	\$	792,059,952
Cal Advocates Audited Total Savings		\$ 53,238,074
PG&E Reported Savings		53,238,066
Variance		8
Rounding		(8)
Total Variance		\$ -
Savings and Rewards		
Ratepayer Savings		\$ 43,775,931
Shareholder Rewards		\$ 9,462,143
CPIM Savings		\$ 53,238,074
	Ratepayer Savings:	\$ 45,142,555
	Shareholder Reward Cap After 1.5% of Total Commodity Costs:	\$ 8,095,519
		\$ 53,238,074

Source: See Cal Advocates CPIM Report, Exhibits 2-1.

¹¹ PG&E Annual Performance Report, Year 26, page 17.

¹² Id.

For the CPIM Year 26, Cal Advocates found no material variance for PG&E reported savings and Cal Advocates audited total savings. For this period, the total saving for the period is \$ 53,238,074. The ratepayer benefit associated with the total savings amounts to \$45,142,555 and PG&E's shareholder savings amount to \$8,095,519.

1.9 Conclusion

Based on the foregoing, Cal Advocates recommends a shareholder reward in the amount of \$8,095,519 for CPIM Year 26 to be recovered through PG&E's Purchased Gas Account. Cal Advocates will continue to monitor and evaluate the CPIM and collaborate with PG&E and other parties to identify any modifications needed to enhance the CPIM's effectiveness.

CHAPTER 2
MONITORING AND EVALUATION AUDIT
YEAR 26

2.1 Cal Advocates' CPIM Reward Evaluation

PG&E filed CPIM Performance Report, Year 26 Application (A.96-08-043), which reports on natural gas procurement results for the period from November 1, 2018 through October 31, 2019. Cal Advocates conducted a review and evaluation of PG&E's accompanying performance report. The results from this evaluation include work papers from Cal Advocates' 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.¹³ On August 22, 2002, the Commission issued D.02-08-070, the 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 CPIM related 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

¹³ 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 combined cost of these four components serves 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.

PG&E's CPIM Year 26 performance as set forth in Table 2-1 shows total benchmark costs of \$845,298,026 and PG&E's total actual costs of \$792,059,952. The difference between the total benchmark costs and PG&E's total actual costs results in a total of \$53,238,074 in natural gas procurement savings. The ratepayer benefits total \$45,142,555 and the shareholder reward is \$8,095,519 after the 1.5% cap of the commodity costs. The calculation of the shared savings between PG&E's customers and shareholders is shown in Table 2-1.

TABLE 2-1
Pacific Gas & Electric Company
Ratepayer Savings and Shareholder Award Calculation
CPIM 26
November 1, 2018 Through October 31, 2019

CPIM Reward Calculation	
Total Benchmark Costs	\$ 845,298,026
Total Actual Costs	<u>\$ 792,059,952</u>
Under/(Over)	\$ 53,238,074
Upper Tolerance Band (Benchmark + 2% of Commodity Cost)	\$ 857,152,739
Lower Tolerance Band (Benchmark - 1% of Commodity Cost)	\$ 839,370,670
Add Amount of Lower Tolerance Band (Not Subject to Share: 0%-1%)	\$ 5,927,357
Lower Tolerance Band Less Actual Commodity Cost (Subject to Share)	\$ 47,310,717
Ratepayer Shared Savings (80%)	\$ 37,848,574
Shareholder Shared Savings (20%)	<u>\$ 9,462,143</u>
	<u>\$ 47,310,717</u>
Cap On Shareholder Reward=1.5% of commodity costs:	
Total Commodity Costs	<u>\$ 539,701,272</u>
CPIM Year 26 Shareholder Award After 1.5% Cap	<u>\$ 8,095,519</u>
Total Shareholders' share:	\$ 9,462,143
Total Ratepayers' share:	<u>\$ 43,775,931</u>
Total Savings:	<u>\$ 53,238,074</u>
Total Shareholders' share after 1.5% Cap	\$ 8,095,519
Total Ratepayers' share after Cap	<u>\$ 45,142,555</u>
Total Savings after Cap:	<u>\$ 53,238,074</u>

Source: See Cal Advocates CPIM Report, Exhibits 2-1.

2.2 Summary of Benchmark and Actual Costs

The overall annual results of the actual commodity costs compared to the benchmark commodity costs of gas operation are summarized in Table 2-2. Cal Advocates examined and reconciled all gas commodity costs, hedging costs, and transportation reservation charges that were reported in the current CPIM 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. The

following sections in this chapter provides a detailed review and breakdown of these related costs.

Table 2-2 Pacific Gas & Electric Company Summary of Benchmark and Actual Costs CPIM 26 November 1, 2018 Through October 31, 2019			
	Actual Costs	Benchmark Costs	Under/(Over)
Purchased Gas Costs	\$ 633,724,399	\$ 594,686,481	\$ (39,037,918)
Volumetric Transportation Costs	\$ 27,154,147	\$ -	\$ (27,154,147)
Natural Gas Sales	\$ (117,426,904)	\$ -	\$ 117,426,904
Other Costs and Revenues	\$ (1,275,329)	\$ -	\$ 1,275,329
Hedge Cost	\$ (2,621,041)	\$ (2,096,831)	\$ 524,210
Reservation Charges	\$ 183,336,541	\$ 183,336,541	\$ -
Custom and Border Protection Fee	\$ 146,000	\$ 146,000	\$ -
Discount	\$ (203,696)	\$ -	\$ 203,696
Storage Costs	\$ 69,225,835	\$ 69,225,835	\$ -
Total	\$ 792,059,952	\$ 845,298,026	\$ 53,238,074

Source: See Cal Advocates CPIM Report, Exhibits 2-2.

2.3 Review of Benchmark Commodity and Reservation (Demand) Charges

The total benchmark commodity costs consists of three main components, benchmark gas costs, other costs, and benchmark reservation costs. Table 2-3 shows a breakdown for total benchmark commodity costs. Cal Advocates confirmed the total benchmark gas costs of \$594,686,481, the other costs of (\$1,950,831), and total benchmark reservation charges of \$252,562,376.

TABLE 2-3
Benchmark Commodity Costs and Reservation Charges
CPIM Year 26
November 1, 2018 Through October 31, 2019

	Market		
	Benchmark	*Reference	
Benchmark Purchased Gas Costs - by Pipelines:			
Ruby Rockies	\$	202,459,426	
AECO	\$	133,211,538	
San Juan	\$	65,321,613	
Kingsgate	\$	1,005,357	
Topock	\$	56,259,857	
PG&E Citygate	\$	136,428,690	
Total Benchmark Gas Costs:	\$	594,686,481	2-14
Other Costs			
80% of Winter Hedging Cost	\$	(2,096,831)	2-15
MPF	\$	146,000	2-19
Total Other Costs	\$	(1,950,831)	
Benchmark Reservation Charges:			
Foothills Pipelines Ltd	\$	7,692,431	2-8
Nova Gas Transmission Ltd	\$	14,963,478	2-8
Gas Transmission Northwest Corp	\$	27,898,629	2-8
Ruby Pipeline	\$	48,909,330	2-8
Transwestern Pipeline Company	\$	5,506,810	2-8
California Gas Transmission	\$	78,365,863	2-8
Storage	\$	69,225,835	2-13
Total Benchmark Reservation Charges:	\$	252,562,376	
Total Benchmark Commodity Costs:	\$	845,298,026	

*Source: See Cal Advocates CPIM Report, Exhibits.

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 will sell some of its unused assets. The net sale is treated as a credit to the procurement costs. In addition to the calculation of actual commodity costs of CPIM, one hundred percent of winter hedging realized gains or losses and associated transaction costs are included in the actual costs. Reservation charges include intrastate and interstate charges for California Gas Transmission, Ruby Pipeline LLC, Foothills Pipe Line Ltd.,

Nova Gas Transmission, Ltd., Gas Transmission Northwest Corporation, and Transwestern Pipeline Company.¹⁴

PG&E's net total actual commodity costs are \$792,059,952, which include interstate and intrastate purchased gas costs of \$543,451,642, other costs of (\$3,750,370), and reservation charges of \$252,358,680.

<p>TABLE 2-4 Summary of Actual Commodity Costs & Reservation Charges CPIM Year 26 November 1, 2018 Through October 31, 2019</p>
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Actual Purchased Gas Costs - by Pipeline:	Actual Costs	*Reference
CGT - Citygate	\$ 119,777,995	2-5
CGT	\$ 111,449,419	2-5
El Paso	\$ 36,633	2-5
GTN	\$ 12,513,371	2-5
Nova	\$ 124,170,970	2-5
Ruby	\$ 105,564,518	2-5
TW	\$ 160,211,493	2-5
Volumetric Transportation Cost	\$ 27,154,147	2-6
Gas Sale	\$ (117,426,904)	2-7
Total Purchased Gas Costs:	\$ 543,451,642	
Other Costs:		
100% Winter Hedging Cost	\$ (2,621,041)	2-10
MPF	\$ 146,000	2-19
Miscellaneous Costs & Revenues	\$ (1,275,329)	2-9
Total Other Costs:	\$ (3,750,370)	
Actual Reservation Charges:		
Foothills Pipelines Ltd	\$ 7,692,431	2-8
Nova Gas Transmission Ltd	\$ 14,963,478	2-8
Gas Transmission Northwest Corp	\$ 27,898,629	2-8
Ruby Pipeline	\$ 48,909,330	2-8
Transwestern Pipeline Company	\$ 5,506,810	2-8
California Gas Transmission	\$ 78,365,863	2-8
Storage Costs	\$ 69,225,835	2-13
Discount Demand Charges	\$ (203,696)	2-11
Capacity Release Revenue	\$ -	2-12
Total Reservation Charges:	\$ 252,358,680	
Net Actual Commodity Costs:	\$ 792,059,952	

*Source: See Cal Advocates CPIM Report, Exhibits

¹⁴ PG&E Annual Performance Report, CPIM Year 26, page 12.

2.5 Natural Gas Storage Costs

In accordance with D.06-07-010, PG&E uses a monthly distribution of winter storage withdrawals and summer storage injections in the calculation of the monthly benchmark purchase volumes. PG&E reports on its managed storage so that impacts to CPIM metrics can be attained while ensuring adequate capacity is available for reliability. PG&E also uses a schedule 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.¹⁵

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) 720 to 1,355 Mdth per day of winter withdrawal capacity, which is adjusted for core aggregation elections.¹⁶

In Table 2-5, a summary of storage inventory shows the status of physical inventories (measured in MMBtus) for beginning and ending balances for core customers. PG&E reported beginning storage inventory levels as of November 1, 2018, at 28,407,621 MMBtus and ending inventory as of October 31, 2019 at 28,626,019 MMBtus.

¹⁵ See PG&E Annual Performance Report, Year 26, p.14-15.

¹⁶ Id., p.14.

TABLE 2-5 Pacific Gas and Electric Company Summary of Storage Inventory Injections and Withdrawals CPIM Year 26 November 1, 2018 Through October 31, 2019		
Gas Storage Providers	Beginning Inventory 11/01/18 (MMBtus)	Ending Inventory 10/31/19 (MMBtus)
Firm Storage CGT	28,257,621	28,476,019
Incremental Storage	150,000	150,000
Total Storage Inventory	28,407,621	28,626,019

Source: See Cal Advocates CPIM Report, Exhibits 2-20.

2.6 Review of Purchase Gas Account (PGA)

PG&E submitted its reconciliation of its regulatory balancing account, the 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 upon the seasonality and volatility in gas volumes. Table 2-6 below illustrates net commodity costs, which shows immaterial timing difference with supporting documentation presented in PG&E's Performance Report, for actual natural gas purchases.¹⁷

As part of the PGA audit, Cal Advocates selected three months in the CPIM period, December 2018, February 2019, and August 2019, to review PG&E's supporting records. PG&E provided copies of supporting documents and purchase invoices for the purpose of the verification. Cal Advocates traced the costs of these purchase invoices to the monthly statement and then to the annual report and determined that the selected purchase invoices reconciled with recorded amounts in the annual report.

¹⁷ See PG&E May 26, 2021 Response to Cal Advocates Date Request A.96-08-04_CPIM Year 26_001_Q06 issued May 12, 2021.

TABLE 2-6
Pacific Gas and Electric Company
Purchase Gas Account Review
CPIM Year 26
November 1, 2018 through October 31, 2019

CPIM Purchase Costs	Commodity Purchases	Volumetric Transportation	Subtract True-up	Add True-up	Total CPIM
CPIM Costs:					
Purchases and Sales:	\$ 516,297,506	\$ 27,154,579			\$ 543,452,085
Cochrane Extraction Rev	\$ (2,669,564)				\$ (2,669,564)
SubTotal	\$ 513,627,942	\$ 27,154,579	\$ -	\$ -	\$ 540,782,521
Misc. Revenues and Expenses	\$ 266,156				\$ 266,156
Total	\$ 513,894,098	\$ 27,154,579	\$ -	\$ -	\$ 541,048,677
SAP Journal Entries:					
SAP Total	\$ 507,975,917	\$ 27,862,540	\$ (47,199,810)	\$ 52,291,144	\$ 540,929,791
Prior Period Adjustment	\$ (59,575)	\$ -			\$ (59,575)
Costs Included in CPDCA	\$ 67,952	\$ -			\$ 67,952
Time Difference	\$ 110,434	\$ -			\$ 110,434
El Paso Refund	\$ -	\$ -			\$ -
Adjustment Error	\$ 6	\$ -			\$ 6
Total PGA	\$ 508,094,734	\$ 27,862,540	\$ (47,199,810)	\$ 52,291,144	\$ 541,048,608
Timing Difference	\$ 5,799,364	\$ (707,960)	\$ 47,199,810	\$ (52,291,144)	\$ 70

2.7 Review of Core Pipeline Demand Charge Account (CPDCA)

As part of the CPIM Year 26 filing, 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. Cal Advocates reviewed PG&E's documentation, which shows total charges by pipeline for the period to be \$252,358,681.¹⁸

Cal Advocates' audit showed the CPIM demand costs were \$252,358,679 which included demand charges, discount demand charges, capacity release revenue and release revenue charges. When Cal Advocates compared the reported CPIM demand costs to the SAP journal entries, no material difference is found.

¹⁸ See PG&E May 26, 2021 Response to Cal Advocates Date Request A.96-08-04_CPIM Year 26_001_Q07 issued May 26, 2021.

TABLE 2-7
Pacific Gas and Electric Company
CPDCA and CFSA Accounts Review
CPIM Year 26
November 1, 2018 through October 31, 2019

CPIM Demand Costs	Demand Charges	Subtract True-up	Add True-up	Total CPIM
Foothills Pipe Lines Ltd	\$ 7,692,431			\$ 7,692,431
California Gas Transmission	\$ 120,375,761			\$ 120,375,761
Firm Storage Costs	\$ 27,008,740			\$ 27,008,740
El Pas Natural Gas	\$ -			\$ -
Ruby Pipeline	\$ 48,909,330			\$ 48,909,330
Third Party Gas Storage	\$ 207,193			\$ 207,193
NOVA Gas Transmission	\$ 14,963,479			\$ 14,963,479
Gas Transmission	\$ 27,868,427			\$ 27,868,427
Transwestern Pipeline Company	\$ 5,333,318			\$ 5,333,318
Total Demand Charges:	\$ 252,358,679	\$ -	\$ -	\$ 252,358,679
SAP Journal Entries				
SAP Total	\$ 257,389,351	\$ (28,661,361)	\$ 23,894,791	\$ 252,622,782
Reservation Discount	\$ (215,008)			\$ (215,008)
Exchange Rate Variance	\$ 18,859			\$ 18,859
Costs Classified In PGA	\$ (67,952)			\$ (67,952)
Accounting Adj.	\$ -			\$ -
Total CPDCA:	\$ 257,125,250	\$ (28,661,361)	\$ 23,894,791	\$ 252,358,681
Timing Difference:	\$ (4,766,571)	\$ 28,661,361	\$ (23,894,791)	\$ (2)

2.8 Review of Miscellaneous Costs and Revenues

Table 2-8 shows a summary of miscellaneous costs and revenues from PG&E's Annual Performance Report for the period. The revenues in this section also offset reported procurement costs and assist management in managing net costs that impact CPIM performance. Results show total annual miscellaneous costs and revenues at (\$1,275,329). This amount consists of Cochrane extraction revenue of (\$2,669,564), non-winter hedge cost and revenues of \$1,143,567, and miscellaneous costs and revenues of \$250,668.

TABLE 2-8
Pacific Gas and Electric Company
Miscellaneous Costs and Revenues
CPIM Year 26
November 1, 2018 through October 31, 2019

Month	Cochrane Extraction Revenue	Non-Winter Hedge Cost and Revenues	Miscellaneous Costs and Revenues	Total
Nov-18	\$ (306,249)	\$ 739,920	\$ 22,796	\$ 456,467
Dec-18	\$ (287,462)	\$ 168,175	\$ 22,804	\$ (96,483)
Jan-19	\$ (270,869)	\$ -	\$ 14,471	\$ (256,398)
Feb-19	\$ (211,468)	\$ -	\$ 21,443	\$ (190,025)
Mar-19	\$ (230,297)	\$ 174,724	\$ 22,643	\$ (32,930)
Apr-19	\$ (248,994)	\$ -	\$ 19,524	\$ (229,470)
May-19	\$ (224,157)	\$ -	\$ 16,833	\$ (207,324)
Jun-19	\$ (208,245)	\$ -	\$ 14,818	\$ (193,427)
Jul-19	\$ (191,485)	\$ -	\$ 23,483	\$ (168,002)
Aug-19	\$ (166,677)	\$ -	\$ 29,317	\$ (137,360)
Sep-19	\$ (188,206)	\$ 40,125	\$ 19,221	\$ (128,860)
Oct-19	\$ (135,455)	\$ 20,623	\$ 23,315	\$ (91,517)
Total	\$ (2,669,564)	\$ 1,143,567	\$ 250,668	\$ (1,275,329)

Source: See Cal Advocates CPIM Report, Exhibits 2-9.

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 guidelines for the long-term core hedging program as well as reporting requirements.

In D.10-01-023, the Commission 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 hedging costs and this change was adopted for future CPIM calculations. The financial results for the winter 2018-2019 are summarized in Table 2-9.

PG&E reported (\$2,621,041) in CPIM Year 26 for actual winter hedging costs. The total option premiums costs are \$1,040,469, Option and Swap Settlement of (\$3,669,600), and commission and fees are \$8,090.

<p>Table 2-9 Pacific Gas and Electric Company Winter Hedge Costs CPIM Year 26 November 1, 2018 - October 31, 2019</p>
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	Option Premiums	Option and Swap Settlements	Commissions and Fees	Winter Hedge Cost Total
Nov-18	\$ -	\$ -	\$ -	\$ -
Dec-18	\$ 686,286	\$ (2,371,500)	\$ 1,267	\$ (1,683,947)
Jan-19	\$ (288,948)	\$ (1,261,700)	\$ 4,206	\$ (1,546,442)
Feb-19	\$ 643,131	\$ (36,400)	\$ 2,617	\$ 609,348
Mar-19	\$ -	\$ -	\$ -	\$ -
Apr-19	\$ -	\$ -	\$ -	\$ -
May-19	\$ -	\$ -	\$ -	\$ -
Jun-19	\$ -	\$ -	\$ -	\$ -
Jul-19	\$ -	\$ -	\$ -	\$ -
Aug-19	\$ -	\$ -	\$ -	\$ -
Sep-19	\$ -	\$ -	\$ -	\$ -
Oct-19	\$ -	\$ -	\$ -	\$ -
Total	\$ 1,040,469	\$ (3,669,600)	\$ 8,090	\$ (2,621,041)

Source: See Cal Advocates CPIM Report, Exhibits 2-10.

2.10 Review of Sales and Volume Transactions

Table 2-10 shows PG&E's total sales of (\$117,426,904), and total reported volume of (38,960,608) MMBtus. A breakdown by pipeline shows sales for CGT Citygate of (\$89,311,371), CGT-All of (\$3,627,746), GTN of (\$12,489,849) Kern River of (\$987,956), Nova of (\$1,458,838), Ruby of (\$1,241,479), TW of (\$1,612,332), and Williams Field Service (WFS) of (\$6,697,333).

The same period shows sales volumes for CGT Citygate of (29,344,605) MMBtus, CGT-All of (1,896,696) MMBtus, GTN of (1,732,405) MMBtus, Kern River of (157,103) MMBtus, Nova of (2,319,119) MMBtus, Ruby of (456,184) MMBtus, TW of (659,986) MMBtus, and WFS of (2,394,510) MMBtus.

Table 2-10
Pacific Gas and Electric Company
Gas Sales and Volumes
CPIM Year 26
November 1, 2018 through October 31, 2019

Sale by Pipeline:	Volume (MMBtus)	Dollars
CGT Citygate	(29,344,605)	(89,311,371)
CGT - All	(1,896,696)	(3,627,746)
GTN	(1,732,405)	(12,489,849)
Kern	(157,103)	(987,956)
Nova	(2,319,119)	(1,458,838)
Ruby	(456,184)	(1,241,479)
TW	(659,986)	(1,612,332)
WFS	(2,394,510)	(6,697,333)
Total:	(38,960,608)	\$ (117,426,904)
*Reference	2-17	2-7

*Source: See Cal Advocates CPIM Report, Exhibits.

2.11 Review of Volumetric Transport Costs

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

The total volumetric transport costs were \$27,154,147. In addition, costs were broken down by pipeline: PG&E CGT \$22,576,771, GTN \$1,109,095, Ruby Pipeline \$2,918,005, Transwestern \$376,980, and WFS \$173,296. 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 26
November 1, 2018 through October 31, 2019

Pipeline	Costs	*Reference
PG&E CGT	\$ 22,576,771	
GTN	\$ 1,109,095	
Ruby Pipeline	\$ 2,918,005	
Transwestern	\$ 376,980	
WFS	\$ 173,296	
Total Volumetric Transport Costs:	\$ 27,154,147	2-6

*Source: See Cal Advocates CPIM Report, Exhibits.

2.12 Review of Reservation Charges

To identify any variances, Cal Advocates performed a reconciliation of the benchmark reservation charges to the actual reservation charges reported in PG&E's Annual Performance Report for the subject period. Table 2-12 provides a summary of adjustments that were offset against the benchmark. The results show no discrepancies. The reconciliation account for actual reservation charges was \$252,358,680 which included total actual demand charges of \$183,336,541, adjustments of demand charges discount of (\$203,696), and storage costs of \$69,225,835.

TABLE 2-12
Pacific Gas and Electric Company
Reconciliation of Reservation Charges
CPIM Year 26
November 1, 2018 through October 31, 2019

Actual Demand Charges by Pipeline System:	Benchmark Demand Charges:
<u>Canadian</u>	\$ 183,336,541
Foothills Pipelines Ltd.	7,692,431
Nova Gas Transmission Ltd.	14,963,478
Canadian Subtotal	\$ 22,655,909
<u>Interstate</u>	
Gas Transmission Northwest Corporation	27,898,629
El Paso Natural Gas Company	-
Ruby Pipeline	48,909,330
Transwestern Pipeline Company	5,506,810
Interstate Subtotal	\$ 82,314,769
<u>Intrastate</u>	
California Gas Transmission	78,365,863
Intrastate Subtotal	\$ 78,365,863
Total Actual Demand Charges:	\$ 183,336,541 \$ 183,336,541
Discount Demand Charges:	
El Paso Natural Gas Company	-
Transwestern Pipeline Company	(30,204)
Gas Transmission Northwest LLC	(173,492)
Demand Charge Discount Subtotal:	\$ (203,696) \$ -
Capacity Release Revenue:	
Total Capacity Release Revenue:	\$ - \$ -
Storage Cost:	
California Gas Transmission Firm Storage	69,015,985
Other Storage Costs	209,850
Storage Cost Subtotal:	\$ 69,225,835 \$ 69,225,835
Reconciliation of Reservation Charges:	\$ 252,358,680 \$ 252,562,376

2.13 Review of Benchmark Commodity Indices

The benchmark gas price indices are published by various natural gas publications. Each index is then adjusted with fuel costs from supplying regions to PG&E's Citygate and the adjusted gas indices are used to calculate the monthly commodity costs benchmark.

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 applied a pipeline sequencing methodology for purposes of purchasing gas at the lowest cost. PG&E has the discretion to change the sequence to select a different pipeline at any time to meet reliability requirements.

Cal Advocates reviewed and verified gas price in each publication that PG&E used to compute the benchmark. Cal Advocates has not found any discrepancies.

2.14 Examination of Benchmark Storage Charges and Transportation Costs

Cal Advocates reviewed PG&E's reported benchmark reservation (demand) and fixed storage charges and identified any changes in activity in the report. The total transportation and storage costs are \$252,562,376, which consisted of Canadian pipeline demand charges of \$22,655,909, U.S. interstate pipeline reservation costs of \$82,314,769, California intrastate pipeline costs of \$78,365,863, and storage costs of \$69,225,835. Table 2-14 provides a summary of these costs.

TABLE 2-14
Pacific Gas and Electric Company
Summary of Fixed Transport and Storage Costs
CPIM Year 26
November 1, 2018 through October 31, 2019

Benchmark Demand Charges	
<u>Canadian</u>	
Foothills Pipelines Ltd.	7,692,431
Nova Gas Transmission Ltd.	14,963,478
Canadian Subtotal	<u>\$ 22,655,909</u>
<u>Interstate</u>	
Gas Transmission Northwest Corporation	27,898,629
El Paso Natural Gas Company	-
Ruby Pipeline	48,909,330
Transwestern Pipeline Company	5,506,810
Interstate Subtotal	<u>82,314,769</u>
<u>Intrastate</u>	
California Gas Transmission	78,365,863
Intrastate Subtotal	<u>\$ 78,365,863</u>
Total Demand Charges	<u>\$ 183,336,541</u>
 CA Intrastate Storage Costs:	
California Gas Transmission Firm Storage	69,015,985
Other Storage Costs	209,850
Total Storage Costs	<u>\$ 69,225,835</u>
Total Transportation & Storage Costs:	<u>\$ 252,562,376</u>

2.15 Utilization of Firm Interstate and Intrastate Pipeline Assets

PG&E has short and long-term contracts to meet core gas demand for purchases of natural gas resources transported from Canadian, U.S. interstate and California intrastate pipeline systems. During CPIM Year 26, PG&E transported natural gas resources using firm transportation contracts. PG&E estimates its utilization proportionally based on capacity available to transport supplies and/or releases to other parties. The summary in Table 2-15 below shows PG&E's estimated utilization for the period and notes changes in contract activity from prior years.¹⁹

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

¹⁹ PG&E Annual Performance Report, CPIM Year 26, page 19.

interstate 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 and the contract expires on October 31, 2026.

Table 2-15 Pacific Gas and Electric Company Core Gas Supply - Utilization of Interstate, Intrastate and Canadian Pipeline Assets CPIM Year 26 November 1, 2018 through October 31, 2019			
Pipeline Capacity:	Quantity (Dth/d)	Contract Expiration Date	Utilization Rate
TransCanada Pipelines:			
NGTL	287,745	10/31/2020	
	82,223	10/31/2020	
Total NOVA:	369,968		99%
Foothills-BC System			
	284,810	10/31/2020	
	81,384	10/31/2020	
Total Foothills-BC System:	366,194		99%
Interstate Pipelines:			
Gas Transmission Northwest	279,968	10/31/2020	
Seasonal	80,000	10/31/2020	
Total Gas Transmission Northwest:	359,968		99%
Transwestern Pipeline Co.			
Total TW:	181,000	3/31/2019	99%
Ruby			
Total Ruby:	250,000	10/31/2026	94%
PG&E Core Gas Supply- Intrastate Pipelines:			
Redwood Path			
Total Redwood:	605,088	3/31/2020	98%
Baja Path			
Seasonal	157,000	10/31/2019	
Total Baja:	Varies		97%

Exhibits