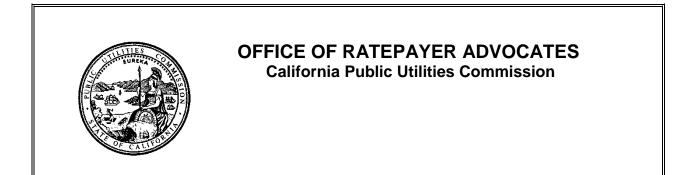
Docket	:	<u>A.16-06-009</u>
Exhibit Number	:	
Reference Number	:	ORA-01
Commissioner	:	Carla Peterman
Admin. Law Judge	:	Melissa Semcer



## MONITORING AND EVALUATION REPORT

## Southern California Gas Company's Gas Cost Incentive Mechanism

April 1, 2015 through March 31, 2016 GCIM Year 22

Application (A.) 16-06-009

San Francisco, California October 14, 2016

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## CHAPTER 1 SUMMARY AND RECOMMENDATIONS

## 1.1 Introduction and Summary

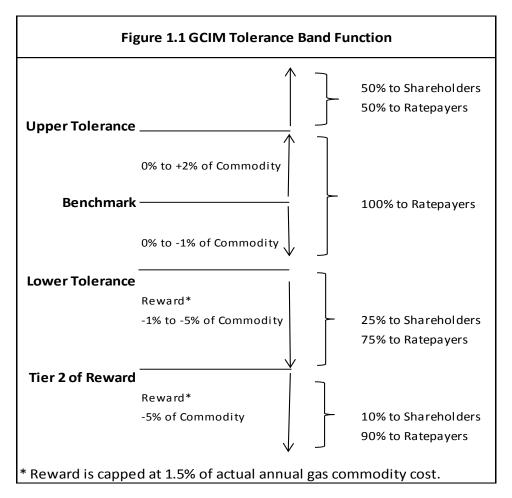
On June 15, 2016, Southern California Gas Company (U 904 G), (SoCalGas) filed and served Application (A.) 16-06-009 for Gas Cost Incentive Mechanism (GCIM) Year 22; April 1, 2015 through March 31, 2016. The Office of Ratepayer Advocates (ORA) audited and evaluated the Application and SoCalGas' GCIM Year 22 Annual Report (Annual Report). Chapter 2 of this ORA Monitoring and Evaluation Report (ORA Report) presents the details and results of ORA's review. The attached Appendix A includes the work papers (e.g., records or information produced by SoCalGas' data responses) supporting ORA's findings.

ORA found that SoCalGas' recorded gas costs were \$28,162,512 below the benchmark, which results in a reward of \$5,039,787 to SoCalGas' shareholders and a ratepayer benefit of \$23,122,725. Table 1-1 below summarizes SoCalGas' Year 22 performance which is based on the detailed GCIM monthly reports of core commodity transaction activities.

	Table 1-1.						
	Summary of SoCalGas GCIM Year 22 Performance (\$ Millions)						
1	Benchmark Costs	996.29					
2	Actual Costs	968.12					
3	GCIM Total Savings	28.16					
4	Ratepayer Savings	23.12					
5	Shareholder Reward	5.04					

## 1.2 Background

The objective of the GCIM is to provide an incentive for reducing natural gas procurement costs and other related costs such as: transportation, storage capacity, financial hedging, and retail core gas sales. The GCIM is used as a ratemaking tool to increase efficiency in administering regulatory controls. For gas utilities, it provides a framework of benchmarks to indicate when actual purchase costs are within a stated range referred to as a "tolerance band." If SoCalGas' actual costs—as measured by the GCIM benchmark—are between the upper and lower range limitations of the tolerance band, there is no shareholder penalty or reward for the GCIM period. If actual gas costs fall below or above the tolerance band, then both SoCalGas ratepayers and shareholders share in the resulting gains or losses. Chapter 2 of this ORA Report presents the results of the tolerance band calculations. The following graph, Figure 1.1, illustrates how the tolerance band functions in determining the shared costs for SoCalGas' shareholders and ratepayers:



The upper limit of the tolerance band is set at two percentage points above the benchmark commodity costs. The lower limit of the tolerance band is set at one percentage point below this benchmark. When SoCalGas' actual costs fall within this tolerance band, the benefits or losses accrued go to the ratepayers.<sup>1</sup>

In cases where actual costs fall outside the tolerance band, the benefits or losses are shared between shareholders and ratepayers. The amounts of these benefits or losses are based on whether the actual costs are outside the upper or lower limits of the

<sup>&</sup>lt;sup>1</sup> See SoCalGas, D.02-06-023, 2002 Cal. PUC LEXIS 352, at \*10 and \*37–38 (respectively, Settlement and Ord. Para. 1) (dated June 6, 2002).

tolerance band. For example, if actual costs were to exceed the upper two-percent (2%) tolerance limit, the excess costs are shared 50-50 between ratepayers and shareholders. If actual costs were below the benchmark commodity costs and between the lower one-percent (1%) tolerance limit and the five-percent (5%) range, this would produce savings that are shared at twenty-five percent (25%) for shareholders and seventy-five percent (75%) for ratepayers. If actual costs were more than five percentage points below the benchmark commodity costs, the savings are shared as ninety-percent (90%) savings for ratepayers and a ten-percent (10%) reward for shareholders. The SoCalGas reward is capped at 1.5% of actual commodity costs.

Commission Decision (D.) 94-03-076 originally approved the GCIM program, with subsequent changes and extensions that essentially enhanced the current program incentives. D.10-01-023 changed the treatment of winter hedging costs by allowing twenty-five percent (25%) of net hedging gains and losses related to winter gas purchases to flow through to the GCIM calculation, and seventy five percent (75%) of costs to be passed through directly to core customers.

## 1.3 GCIM Summary

Table 1-2 below provides a summary of GCIM results over the past five years. Chapter 2 of the ORA Report presents ORA's supporting calculations for GCIM Year 22.

GCIM Year	Period	Total Cost Savings (\$ Millions)	Ratepayer Savings (\$ Millions)	Shareholder Reward (\$ Millions)
18	2011-2012	37.50	32.09	5.41
19	2012-2013	34.74	28.91	5.83
20	2013-2014	70.40	56.69	13.71
21	2014-2015	43.11	35.86	7.25
22	2015-2016	28.16	23.12	5.04

Table 1-2. Summary of Ratepayer Savings and Shareholder Rewards

## 1.4 Natural Gas Storage

To ensure dedicated core storage capacity, in D.06-10-029, the Commission authorized SoCalGas to revise its Preliminary Statement, Part VIII, and GCIM, to reflect

changes in its mid-season minimum core inventory targets. Prior to making a revision, SoCalGas is required to seek agreement from ORA and The Utility Reform Network (TURN).<sup>2</sup> SoCalGas obtained agreements from ORA for a mid-season minimum storage target of 47 Bcf as of July 31, 2015 and filed Advice Letter 4806.<sup>3</sup> SoCalGas also obtained agreements from ORA for a winter season target for October 31, 2015 of 83 +0/-2 Bcf and filed Advice Letter 4499. Chapter 2 of this ORA Report provides a review of the minimum targets compared to actual capacity holdings. The results show that SoCalGas met the mid-season and winter season minimum core inventory storage targets.

In D.08-12-020, the Commission adopted the Phase One Settlement Agreement (dated August 22, 2008),<sup>4</sup> which eliminates the upper tolerance band for core storage. By combining San Diego Gas & Electric Company's (SDG&E) and SoCalGas' balancing requirements, this ensures sufficient storage for core customers in southern California. As of April 1, 2009, SoCalGas has implemented the core balancing requirements. For this reporting period, SoCalGas reported no core imbalance charges.

## 1.5 Financial Hedging in GCIM

In accordance with D.10-01-023, Ordering Paragraph 5, effective April 2010, SoCalGas is not required to file a Winter Hedging Plan Report. Instead, SoCalGas includes 25% of its winter hedging transactions in the GCIM. ORA reviewed SoCalGas' financial derivative gains and losses based on the methodology which is described in Chapter 2, Sections 2.10 and 2.11 of ORA's Report, and according to Commission policies and practices.

In GCIM, SoCalGas performed its winter hedging based on a ratio of twenty-five percent (25%) of all net gains and losses, which was included in the GCIM. The remaining seventy-five percent (75%) was excluded, which resulted in costs passed through to core customers.

<sup>&</sup>lt;sup>2</sup> See SoCalGas, D. 06-10-029, 2006 Cal. PUC LEXIS 398, at \*15 (Ord. Para. 3 approving and adopting "Joint Recommendations" [id. at \*11] to allow changes in mid-season minimum core inventory targets).

<sup>&</sup>lt;sup>3</sup> Letter from E. F. Randolph, Dir. of Comm. Energy Div., to R. Prince, SoCalGas Dir. of Reg. Affairs, (June 14, 2015, approving SoCalGas, Adv. Letr 4806, dated May 15, 2015).

<sup>&</sup>lt;sup>4</sup> See SoCalGas, D.08-12-020, 2008 Cal. PUC LEXIS 482, at \*47 (Ord. Para. 1 adopting) (dated Dec. 4, 2008).

In addition to core winter hedges, SoCalGas also transacted non-winter hedges. For this period SoCalGas' non-winter hedges results are also included in the GCIM.<sup>5</sup> Table 1-3 below shows the results of SoCalGas' hedging activities for the most recent five-year GCIM periods.

GCIM Year	Losses/(Gains) outside the GCIM (\$Millions)	Losses/(Gains) inside the GCIM (\$Millions)	Total Hedging Losses/(Gains) (\$Millions)
18	1.06	0.28	1.34
19	0.75	0.25	1.00
20	(1.18)	.20	(0.98)
21	1.52	.45	1.97
22	0.52	.26	.78

 Table 1-3. Southern California Gas Company Financial Hedging

## 1.6 Interstate Capacity

In D.04-09-022, the Commission established interstate pipeline contract approval procedures for SoCalGas, SDG&E, and Pacific Gas and Electric Company (PG&E).<sup>6</sup> These procedures included authorized capacity planning ranges to provide flexibility in meeting the utilities' regional market demands and regulatory compliance requirements regarding their Biennial Cost Allocation Proceedings (BCAP) or advice letter filings.<sup>7</sup>

In accordance with the capacity guideline procedures established by D.04-09-022, SoCalGas, ORA, TURN, and the Energy Division conduct on-going discussions regarding interstate capacity requirements and SoCalGas' acquisition of interstate capacity. ORA serves as a resource for addressing compliance issues that impact acquisition and/or reduction of interstate capacity.<sup>8</sup>

 $<sup>\</sup>frac{5}{5}$  See infra at sec. 2.10 ("Financial Derivatives Included in the GCIM").

<sup>&</sup>lt;sup>6</sup> OIR, D.04-09-022, 2004 Cal. PUC LEXIS 522, at \*140 (Ord. Para. 2) (dated Sept. 2, 2004).

<sup>&</sup>lt;sup><u>7</u></sup> *Id.* at \*137 (Concl. of Law 6).

<sup>&</sup>lt;sup>8</sup> *Id.* at \*18 ("SoCalGas' Gas Acquisition Department will consult with ORA, the Energy Division and TURN on a monthly basis.").

Effective September 6, 2014, Advice Letter 4679 governs SoCalGas' capacity planning range for its combined gas portfolio with SDG&E for its winter and non-winter requirements.<sup>9</sup> The updated minimum capacity for non-winter requires 987 MDth/d, and maximum capacity of 1,316 MDth/d. For winter, the combined portfolio minimum capacity is 1097 MDth/d and maximum capacity is 1,316 MDth/d. <sup>10</sup>

The GCIM Year 22 reported by SoCalGas for actual monthly activities of core firm transportation capacity holdings, shows that the minimum capacity requirements established by D.04-09-022 were met. The reported capacity holdings varied from a minimum of 1,097 MDth/d to maximum of 1,316 MDth/d during the period.<sup>11</sup>

### 1.7 Secondary Market Services Transactions

Secondary Market Services (SMS) produce revenues from core gas supplies and resources not needed for reliability requirements. SoCalGas meets this regional market demand, while simultaneously applying these revenues to directly offset core commodity costs. As a result, this reduces core gas costs, which achieves SoCalGas' primary objectives of ensuring supply and service reliability at a low cost.<sup>12</sup>

For the GCIM Year 22 period, SoCalGas shows net SMS revenues in the GCIM of \$11,891,805.<sup>13</sup> These revenues offset part of the gas cost and enable SoCalGas to lower its core commodity costs.

## 1.8 Conclusion

ORA's review verified that for GCIM Year 22, SoCalGas' total savings amount was \$28,162,512. ORA recommends that SoCalGas' shareholder receive a reward in the amount of \$5,039,787. ORA confirms that for the same reporting period ratepayer benefits amounted to \$23,122,725. In collaboration with SoCalGas and other parties, ORA will continue monitoring and evaluating the GCIM to identify any changes needed

<sup>&</sup>lt;sup>9</sup> See Letter from E. F. Randolph, Dir. of Comm. Energy Div., to R. Prince, SoCalGas Dir. of Reg. Affairs, (Sept. 6, 2014, approving SoCalGas, Adv. Letr 4679, (Aug. 7, 2014).

<sup>&</sup>lt;sup>10</sup> See SoCalGas GCIM Yr. 22 Rept. at Southern California Gas Company Firm Transportation Capacity Holdings as of March 31, 2016.

<sup>&</sup>lt;sup>11</sup> See infra at sec.2.14.

<sup>&</sup>lt;sup>12</sup> See A.12-06-005, at pp. 3-4.

<sup>&</sup>lt;sup>13</sup> See infra at sec. 2.12.

to improve the GCIM's effectiveness, which SoCalGas and ORA would submit to the Commission for approval and adoption.

## CHAPTER 2 MONITORING AND EVALUATION AUDIT

### 2.1 ORA's GCIM Reward Evaluation

On June 15, 2016, SoCalGas filed the Gas Cost Incentive Mechanism (GCIM) Year 22 Application (A.) 16-06-009, which reports core gas procurement results for the period April 1, 2015 through March 31, 2016. ORA conducted a review and evaluation of SoCalGas' accompanying annual report. The results from this evaluation include work papers from its compilations, which are incorporated as exhibits in Appendix A.

ORA's evaluation of SoCalGas' GCIM performance for the year ending March 31, 2016, confirmed total savings in gas costs of \$28,162,512. These savings are based on the difference between the actual commodity costs of gas of \$968,124,520 and the GCIM benchmark commodity costs of \$996,287,032, which are shared between SoCalGas' ratepayers and shareholders. ORA verified that the GCIM sharing mechanism resulted in ratepayer savings of \$23,122,725 and a shareholder reward of \$5,039,787. Table 2-1 below summarizes the SoCalGas GCIM Year 22 savings based on the calculated tolerance band levels shown in Table 2-2 and GCIM benchmark dollars.

TABLE 2-1
Southern California Gas Company
Reward Calculation
GCIM Year 22
April 1, 2015 Through March 31, 2016

		SCG	Annual Report
Benchmark Commodity Costs		\$	996,287,032
Actual Commodity Costs		\$	968,124,520
GCIM Year 22 Annual Report: Total Savings Below Benchmark	:	\$	28,162,512
Amount of Lower Tolerance Band Not Subject to Sharing (0%-1%)		\$	8,003,365
Ratepayers' share:		\$	8,003,365
Amount Subject to 75%-25% Sharing (1%-5%)		\$	20,159,147
Ratepayers' share: 75%	75%	\$	15,119,360
Shareholders' share: 25%	25%	\$	5,039,787
Amount Subject to 90%/10% Sharing (> 5%)		\$	-
Ratepayers' share: 90%	0%	\$	-
Shareholders' share: 10%	0%	\$	-
Cap on Shareholder Rewards = 1.5% of commodity costs:			
Total Commodity costs:		\$	772,173,967
Shareholder Reward Cap:	1.50%	\$	11,582,610
Total Ratepayers' Share:		\$	23,122,725
Total Shareholders' Share:		\$	5,039,787
Total Savings:		\$	28,162,512

### 2.2 Summary of Benchmark and Actual Costs

Table 2-2 below shows an annual summary of monthly gas commodity costs that are the basis for the 1.5% cap of the shareholder reward shown in Table 2-1. The calculated tolerance bands and the related actual commodity cost of gas are measured annually against a benchmark. The benchmark is based on the prevailing published natural gas price indices for gas delivered from the mainline to the California border.

TABLE 2-2 Southern California Gas Company Tolerance Band Review GCIM Year 22 April 1, 2015 Through March 31, 2016									
Month	Benchmark Dollars*	Actual Dollars*	(Over)/Under Benchmark	Upper Tolerance 2%	Lower Tolerance 1%	Lower Tolerance 5%	Actual Commodity Cost		
Apr-15	\$ 69,691,643	\$ 68,956,611	\$ 735,032	\$ 1,079,718	\$ 539,859	\$ 2,699,295	\$ 53,250,865		
May-15	\$ 43,525,891	\$ 39,393,237	\$ 4,132,653	\$ 563,569	\$ 281,784	\$ 1,408,922	\$ 24,045,786		
Jun-15	\$ 76,879,760	\$ 75,465,956	\$ 1,413,804	\$ 1,231,089	\$ 615,544	\$ 3,077,722	\$ 60,140,637		
Jul-15	\$ 106,550,862	\$ 105,295,314	\$ 1,255,549	\$ 1,811,010	\$ 905,505	\$ 4,527,526	\$ 89,294,970		
Aug-15	\$ 112,052,427	\$ 110,993,902	\$ 1,058,525	\$ 1,897,475	\$ 948,738	\$ 4,743,688	\$ 93,815,237		
Sep-15	\$ 89,549,907	\$ 88,594,022	\$ 955,886	\$ 1,460,327	\$ 730,163	\$ 3,650,817	\$ 72,060,458		
Oct-15	\$ 79,648,895	\$ 78,543,509	\$ 1,105,386	\$ 1,266,211	\$ 633,105	\$ 3,165,527	\$ 62,205,145		
Nov-15	\$ 52,553,521	\$ 49,931,949	\$ 2,621,572	\$ 709,899	\$ 354,949	\$ 1,774,747	\$ 32,873,366		
Dec-15	\$ 106,191,134	\$ 106,405,709	\$ (214,575)	\$ 1,784,124	\$ 892,062	\$ 4,460,309	\$ 89,420,757		
Jan-16	\$ 114,366,295	\$ 109,126,941	\$ 5,239,353	\$ 1,957,327	\$ 978,663	\$ 4,893,317	\$ 92,626,995		
Feb-16	\$ 96,085,468	\$ 93,379,944	\$ 2,705,524	\$ 1,592,513	\$ 796,256	\$ 3,981,282	\$ 76,920,122		
Mar-16	\$ 49,191,229	\$ 42,037,426	\$ 7,153,803	\$ 653,468	\$ 326,734	\$ 1,633,671	\$ 25,519,620		
Apr-16	\$ 996,287,032	\$968,124,520	\$ 28,162,512	\$16,006,729	\$ 8,003,365	\$40,016,823	\$772,173,957		
	*Included transp	ortation costs an	d reservation cos	sts.					

### 2.3 Review of Benchmark Volumes and Costs

Table 2-3 shows the components of mainline and border benchmark costs. ORA's review of GCIM Year 22 records confirms Total Benchmark Dollar Costs of \$996,287,032.

The Total Benchmark Commodity Costs consist of Mainline Benchmark Commodity Costs of \$810,586,341 and Benchmark Border Commodity Gains of \$10,249,871 which are calculated based on the Southern California Border Gains of \$15,131,459, and SoCalGas City-Gate Cost of \$4,881,587.

The Total Benchmark Dollar Costs include the flow through costs of volumetric interstate Transportation Cost from Mainline of \$8,273,583 and interstate capacity Benchmark Reservation Charges of \$187,676,980 plus the Total Benchmark Commodity Costs of \$800,336,469 for a total of \$996,287,032.

TABLE 2-3 Southern California Gas Company Benchmark Dollar Components GCIM Year 22 April 1, 2015 Through March 31, 2016						
		I	Benchmark			
Annual Report:			Dollars			
Mainline Benchmark Costs		\$	810,586,341			
Southern California Border Costs	(15,131,459)					
SoCalGas City-Gate Commodity Costs	4,881,587					
PG&E Topock/City-Gate Costs	-					
Sub-Total Border Benchmark Commodity Costs		\$	(10,249,872)			
Total Benchmark Commodity Costs		\$	800,336,469			
Flow-Through Costs						
Transport Costs from Mainline		\$	8,273,583			
Benchmark Reservation Charges			187,676,980			
Total Benchmark Dollar Costs:		\$	996,287,032			

Table 2-3A shows the Net Total Benchmark Volume is 345,978,639 MMBtus, which is comprised of the following: (i) 354,949,893 MMBtus, which is a total of the Benchmark Mainline Volumes from April 2015 through March 2016; (ii) minus 7,086,193 MMBtus, which is a total of the Benchmark Border Volumes for the same period; (iii) minus 1,885,061 MMBtus, which is a total of the Benchmark SoCalGas CityGate Volumes. The total Actual Transported Volume of 336,503,013 MMBtus is the actual total purchase volumes that SoCalGas received during the GCIM Year 22 period. The net total Benchmark Volumes minus the net total Actual Transported Volume results in a difference of 9,475,626 MMBtus or 2.74%, which is the shrinkage volume and represents gas uses and losses during the transportation of natural gas.

TABLE 2-3A Southern California Gas Company Benchmark Market Volumes (In MMBtus) GCIM Year 22 April 1, 2015 Through March 31, 2016									
Benchmark Benchmark Benchmark Net Total Actual Mainline Border Citygate Benchmark Transported Month Volumes Volumes Volumes Volumes Volumes									
Apr-15	30,064,617	641,910	(6,779,329)	23,927,198	23,099,925				
May-15	30,639,319	(3,561,521)	(12,576,742)	14,501,056	13,664,332				
Jun-15	30,001,438	(2,594,467)	(2,989,611)	24,417,360	23,575,301				
Jul-15	30,129,482	(305,037)	3,725,115	33,549,560	32,713,675				
Aug-15	31,257,910	2,228,721	1,284,009	34,770,640	33,911,547				
Sep-15	30,003,403	1,674,759	(2,372,000)	29,306,162	28,551,582				
Oct-15	30,237,048	(1,264,073)	(2,384,009)	26,588,966	25,826,759				
Nov-15	28,929,623	(131,828)	(9,450,222)	19,347,573	18,609,903				
Dec-15	28,568,198	(835,268)	11,146,281	38,879,211	38,117,798				
Jan-16	23,463,829	(478,044)	17,449,333	40,435,118	39,816,269				
Feb-16	30,124,845	(750,159)	8,030,843	37,405,529	36,585,545				
Mar-16	31,530,181	(1,711,186)	(6,968,729)	22,850,266	22,030,377				
Total	354,949,893	(7,086,193)	(1,885,061)	345,978,639	336,503,013				
		k Vol (MMBtus) Fransported Vol	345,978,639 336,503,013						

	-	-	-	'	-	-	-		-	-	
Shrinkage			9	١,	4	7	5	i,(	62	26	

#### 2.4 Actual Gas Costs and Volumes

Table 2-4 shows the Actual Gas Costs Components consist of Mainline Commodity Purchases, Border and CityGate Purchases, Gas Sales revenues, Other Revenues/Costs, Interstate Volumetric Transportation Costs, and Reservation Charges. ORA found that the volumes and corresponding dollar amounts for each of these Components in Table 2-4 were supported by SoCalGas' records.

Gas commodity costs for purposes of gas sales are deducted from core purchases. The adjustments to Mainline Commodity Purchases and Border and CityGate Purchases consist of (i) Net Secondary Market Service Revenues of \$11,891,805 and (ii) losses from GCIM Derivative Transactions of \$259,946 and an Off System Parking Fee of \$348,834, which are included as part of actual commodity costs. Therefore, the Total Commodity Costs are \$772,173,957. The net revenues from secondary market transactions using core assets, such as parks and loans, are included as a credit to actual commodity costs.<sup>14</sup> The gross revenues of \$12,997,583 were adjusted for related operating overhead costs of \$1,105,777, resulting in net revenues of \$11,891,805.<sup>15</sup>

SoCalGas' records show reasonable calculations of Interstate Volumetric Transportation Costs as \$8,273,583, and firm Reservation Charges as \$187,676,980. The total of these costs and charges were added to the Total Commodity Costs of \$772,173,957, which results in the corresponding total volume and costs of \$968,124,520, as shown on the last line in Table 2-4.

The volume of 447,285,760 MMBtus is comprised of the totals for two types of gas purchases and their corresponding volumes: (i) Total Mainline Purchases (379,212,242 MMBtus); and (ii) Total Border and City-Gate Purchases (68,073,518 MMBtus).

According to the same table, the Total Gas Sales Volumes of 101,307,121 MMBtus was subtracted from the Total Mainline and Border Purchases Volumes of 447,285,760 MMBtus. The Total Gas Sale Volumes is comprised of Gas Sales and their corresponding volumes: (i) Mainline (24,262,349 MMBtus); (ii) Border (19,608,638 MMBtus); and (iii) SoCalGas City-Gate (57,436,134 MMBtus).

<sup>&</sup>lt;sup>14</sup> See Adv. Let. 4089 (filed March 22, 2010, effective April 21, 2010).

<sup>&</sup>lt;sup>15</sup> See Appendix A, Secondary Market Revenue.

TABLE 2-4 Southern California Gas Company Actual Gas Costs Components GCIM Year 22							
	rough March 31, 2016 Volumes		Dollars				
Mainline Commodity Purchases	61,019,347	\$	137,826,990				
El Paso San Juan	157,757,803	Ψ	358,614,612				
Transwestern Permian	5,717,240		11,950,489				
Transwestern San Juan	34,831,397		79,994,508				
Kern River Pipeline	93,898,559		216,831,765				
Enterprise-Waha	5,018,281		11,198,370				
NOVA-AECO/NIT	20,951,983						
	20,951,985		40,654,608				
GTN: Kingsgate/Malin/Stanfield Total Mainline	379,212,242	\$	38,543				
	579,212,242	φ	857,109,885				
Border and City Gate Purchases							
Border and only Gate Fullehases	12,522,445	\$	32,791,095				
SoCalGas-City Gate	55,551,073	Ψ	143,747,471				
Total Border	68,073,518	\$	176,538,566				
	00,010,010	Ψ	110,000,000				
Total Mainline and Border Purchase	447,285,760	\$	1,033,648,451				
Gas Sales (deducting)							
Mainline	(24,262,349)	\$	(50,552,109)				
Border	(19,608,638)		(49,915,934)				
SoCalGas- City Gate	(57,436,134)		(149,723,426)				
Total Gas Sales	(101,307,121)	\$	(250,191,469)				
Other Revenues/Costs							
Net Secondary Market Revenue:		\$	(11,891,805)				
GCIM Derivative Transactions			259,946				
Off System Parking Fee			348,834				
Total Other Revenues/Costs		\$	(11,283,025)				
Total Commodity Costs		\$	772,173,957				
Interstate Reservation and Volumetric Transport	Cost						
Interstate Volumetric Transport Costs		\$	8,273,583				
Reservation Charges		Ψ	187,676,980				
Total Related Commodity Costs		\$					
Total Related Commonly Costs		φ	195,950,563				
Total Volume and Costs	345,978,639	\$	968,124,520				

## 2.5 Mainline and Border Gas Sales

Table 2-5 below provides a breakdown by pipeline for SoCalGas' gas sales. In addition, a compilation of gas sales and volumes for the period is shown in Appendix A.

SoCalGas reported gas purchases and sales transactions with affiliate Sempra Generation, SDG&E, and SoCalGas Capacity Products. SoCalGas reports that all purchases and sales were completed through arm's length transactions via brokerage firms and disclosed that there were no Secondary Market Services (SMS) and financial transactions with existing affiliates during GCIM Year 22.

TABLE 2-5 Southern California Gas Company Summary of Mainline and Border Sales GCIM Year 22 April 1, 2015 Through March 31, 2016										
Mainline Pipelines		Sales	Volume (MMBtus)							
El Paso Permian	\$	(12,966,849)	(6,394,618)							
El Paso San Juan		(14,220,429)	(6,796,609)							
Transwestern Permian		(3,633,699)	(1,697,670)							
Transwestern San Juan		(1,713,762)	(845,870)							
Kern River		(8,711,187)	(3,973,621)							
Enterprise Waha		(2,535,745)	(1,107,609)							
NOVA-AECO		(6,770,438)	(3,446,352)							
GTN-Kingsgate/Stanfield/Malin		-	-							
Total Mainline	\$	(50,552,109)	(24,262,349)							
Border Pipelines		Sales	Volume (MMBtus)							
Border	\$	(49,915,934)	(19,608,638)							
SoCal City-Gate		(149,723,426)	(57,436,134)							
Total Border	\$	(199,639,360)	(77,044,772)							
Total Sales to Volume	\$	(250,191,469)	(101,307,121)							

## 2.6 Interstate Volumetric Transport Costs

The volumetric transport costs are variable costs and based on the volume of interstate pipeline gas supplies delivered at the SoCal Border. The total interstate volumetric transportation costs for GCIM Year 22 are shown in Table 2-6.

The table shows the Summary of the Actual Pipeline Commodity Transported Costs: El Paso transport costs of \$6,789,147; Transwestern costs of \$622,752; Kern River costs of \$610,557; and Canadian Path cost of \$251,126. Total aggregate volumetric transport costs for the period were \$8,273,583.

	TABLE 2-6 Southern California Gas Company Summary of Actual Pipeline Commodity Transport Costs GCIM Year 22 April 1, 2015 Through March 31, 2016													
Month	El Paso	Trans- western	Kern River	Canadian Path	Tr	Total Transport Cost								
Apr-15	\$ 579,197	\$ 45,267	\$ 59,554	\$ 22,966	\$	706.984								
May-15	\$ 575,157 589,489	φ 43,207 47,656	φ 55,554 58,869	φ <u>22,360</u> 22,362	Ψ \$	718,376								
Jun-15	578,684	46,282	58,369	22,030	Ψ \$	705,365								
Jul-15	593,144	51,024	61,331	11,153	Ψ \$	716.652								
Aug-15	599,277	51,888	61,834	23,664	ֆ Տ	736,662								
	-			-	*	-								
Sep-15	577,827	49,311	59,359	22,786	\$	709,284								
Oct-15	590,171	50,834	57,613	21,752	\$	720,370								
Nov-15	572,484	55,128	35,404	18,896	\$	681,912								
Dec-15	532,555	52,213	35,359	16,627	\$	636,754								
Jan-16	463,339	47,540	37,384	22,874	\$	571,137								
Feb-16	563,026	61,116	41,499	22,276	\$	687,917								
Mar-16	549,952	64,494	43,982	23,741	\$	682,168								
Total:	\$ 6,789,147	\$ 622,752	\$ 610,557	\$ 251,126	\$	8,273,583								

#### 2.7 Interstate Reservation Charges

Table 2-7 shows monthly reservation charges by pipeline for the GCIM Year 22 period. The El Paso Pipeline reservation charges were \$70,068,323; Transwestern Pipeline \$11,051,000; Kern River Pipeline \$32,531,219; and Canadian Path Pipeline \$13,667,282. For GCIM Year 22, the contracting procedures for the interstate capacity purchase contracts remained unchanged.. For the GCIM Year 22 period, Backbone Transport Service contracts totaled \$60,359,157. The Total Reservation Charges for the period were \$187,676,980.

		Summary	of	GCIM Ye	a Ga Ch ar 2	arges By Pipe			
		Trans-		Kern		Canadian	Tr	Backbone ansportation	Total Reservation
Month	El Paso	western		River		Path		Service	Charges
Apr-15	\$ 5,644,519	\$ 813,000	\$	2,601,268	\$	1,172,445	\$	4,767,531	\$14,998,762
May-15	\$ 5,644,519	\$ 840,100	\$	2,687,977	\$	1,197,863	\$	4,258,618	\$14,629,076
Jun-15	\$ 5,651,081	\$ 813,000	\$	2,601,268	\$	1,174,688	\$	4,379,917	\$14,619,954
Jul-15	\$ 5,644,519	\$ 840,100	\$	2,687,977	\$	1,163,391	\$	4,947,704	\$15,283,691
Aug-15	\$ 5,644,719	\$ 840,100	\$	2,687,977	\$	1,156,123	\$	6,113,085	\$16,442,003
Sep-15	\$ 5,644,508	\$ 813,000	\$	2,601,268	\$	1,135,598	\$	5,629,906	\$15,824,279
Oct-15	\$ 5,644,894	\$ 840,100	\$	2,687,977	\$	1,156,682	\$	5,288,341	\$15,617,994
Nov-15	\$ 6,089,597	\$ 1,132,510	\$	2,762,152	\$	1,135,258	\$	5,257,155	\$16,376,671
Dec-15	\$ 6,147,031	\$ 1,071,050	\$	2,854,223	\$	1,142,903	\$	5,132,990	\$16,348,198
Jan-16	\$ 6,090,859	\$ 1,071,050	\$	2,847,617	\$	1,077,329	\$	4,841,955	\$15,928,810
Feb-16	\$ 6,094,736	\$ 1,001,950	\$	2,663,900	\$	1,055,061	\$	4,956,259	\$15,771,906
Mar-16	\$ 6,127,343	\$ 975,040	\$	2,847,617	\$	1,099,940	\$	4,785,697	\$15,835,638
Total:	\$ 70,068,323	\$ 11,051,000	\$	32,531,219	\$	13,667,282	\$	60,359,157	\$187,676,980

#### 2.8 Interstate Pipeline Utilization

In D.04-09-022, the Commission required SoCalGas to track pipeline's utilization of capacity.<sup>16</sup> Table 2-8 provides an overview of SoCalGas' nominated capacity for each pipeline listed. Total Core Capacity for all the pipelines was 444,241,055 MMBtus and Total Nominated Capacity was 406,954,040 MMBtus. The difference between these two total amounts is the unutilized capacity of 37,287,015 MMBtus, which is adjusted from core capacity.

Regarding the interstate pipelines, SoCalGas reported El Paso at 92% capacity; Foothills Pipeline, Ltd at 90%; Gas Transmission Northwest Corp. at 91%; Kern River Gas Transmission at 93%; NOVA at 91% (Canadian Path); Pacific Gas and Electric pipeline at 91%; and Transwestern Pipeline Company at 86%. The Capacity Cut of 3,556,946 MMBtus, is subtracted from nominated capacity, which resulted in total Actual Volume delivered of 403,397,094 MMBtus.

<sup>&</sup>lt;sup>16</sup> See OIR, D.04-09-022, 2004 Cal. PUC LEXIS 522, at \*140 (Ord. Para. 2) (dated Sept. 2, 2004).

	TABLE 2-8 Southern California Gas Company Cumulative Core Capacity Utilization By Pipeline (In MMBtus) GCIM Year 22 April 1, 2015 Through March 31, 2016													
Less: Capacity Actual Core Nominated Unutilized Utilization Nominated Volumes Capac Pipeline Capacity Capacity Percentage Capacity Received Cut														
El Paso Natural Gas Co	224,013,672	207,051,106	16,962,566	92%	207,051,106	205,237,069	1,814,037							
Foothills PipeLines Ltd	19,698,084	17,670,755	2,027,329	90%	17,670,755	17,344,787	325,968							
Gas Trans Northwest Corp	19,217,928	17,415,245	1,802,683	91%	17,415,245	17,092,891	322,354							
Kern River Gas Trans Co	94,725,910	88,438,557	6,287,353	93%	88,438,557	88,049,659	388,898							
NOVA Gas Trans Ltd	19,858,349	18,042,689	1,815,660	91%	18,042,689	18,042,607	82							
Pacific Gas & Electric	19,007,112	17,206,454	1,800,658	91%	17,206,454	16,938,796	267,658							
Transwesten Pipeline Co	47,720,000	41,129,234	6,590,766	86%	41,129,234	40,691,285	437,949							
Total:	444,241,055	406,954,040	37,287,015	92%	406,954,040	403,397,094	3,556,946							

### 2.9 Examination of the Purchase Gas Account (PGA)

Table 2.9 provides a PGA reconciliation of the GCIM gas commodity costs. Total PGA commodity costs were \$793,149,865, and reported GCIM commodity costs for SoCalGas' gas portfolio purchases was \$771,914,011 (excluding hedging costs), which results in a variance of \$21,235,854. The variance consists of \$9,354,699 in costs excluded from GCIM reported commodity costs and net Secondary Market Services revenue of \$11,891,805, which is unreported in the PGA gas costs. Other adjustments were for timing differences of \$10,649 recorded in fees and other costs.

TABLE 2-9											
Southern California Gas Company											
PGA & GCIM Reconciliation of C	com	modity Cost									
GCIM Year 22		1 2016									
April 1, 2015 Through Marc Total PGA Commodity Costs	n s	1, 2016	\$	793,149,865							
Total GCIM Commodity Costs			φ ¢	793,149,803							
		Variance:	\$	21,235,854							
Reconciliation:			•								
Total PGA Commodity Cost					\$	793,149,865					
PGA Costs Excluded from GCIM:											
Playa del Rey & Aliso Production		0									
Borrego Springs LNG		85,560									
Realized (Gain)/Loss from OTC Deriv. Trans.		2,379									
Realized (Gain)/Loss from Exchange-Traded Deriv. Trans.		777,163									
Realized (Gain)/Loss from Foreign Currency Exchange (GST & Demand Charges)		70,490									
Carrying Costs of Storage Inventory		145,524									
Interruptible Storage Charges		0									
Transportation Chg in PGA Market Gas not in GCIM Commodity Cost (1.8.2)		8,273,583									
Sub-Total PGA Excluded Costs				(9,354,699)							
GCIM Related Transactions Excluded from PGA:											
Net SMS Revenue	\$	(11,891,805)									
Timing differences for transaction fees and other gas											
costs excluded from GCIM	\$	10,649									
Sub-Total GCIM Costs Excluded in PGA			\$	(11,881,156)							
Total Reconciling Items	:				\$	(21,235,854)					
		Total PG	A Co	mmodity Cost :	\$	771,914,011					
		Less: GCII	M Co	mmodity Cost:		771,914,011					
				Difference:	\$	(0)					

In addition to the PGA audit, ORA conducted a sampling test by randomly selecting purchase invoice samples. SoCalGas provided copies of supporting documents and purchase invoices for the purpose of the verification. ORA traced costs of these purchase invoices to the monthly statement and then to the annual report. ORA found that the selected purchase invoices reconciled with recorded amounts in the annual report.

#### 2.10 Financial Derivatives

ORA performed a review of hedging transactions for financial derivative transactions reported in the PGA to confirm the appropriate GCIM calculation and to identify timing differences that were recognized within the GCIM period of April 1, 2015 through March 31, 2016.

Pursuant to D.10-01-023, twenty-five percent (25%) of winter hedging gains and losses were included in GCIM actual costs.<sup>17</sup> Table 2-10 shows SoCalGas PGA Reconciliation of Financial Gains and Losses for reported NYMEX transactions and over-the-counter (OTC) cleared transactions, as well as OTC swaps. Associated transaction fees are also included based on the date of contract when net results may be a financial gain or loss. Transactions that result in gains and/or cash receipts are offset against losses. Other adjustments include reversal of fees from previous GCIM years.

Total financial hedging losses for the period were \$779,542, which consisted of non-winter hedge loss of \$86,748 and winter hedge loss of \$692,794. All non-winter hedge losses are included in the GCIM calculation. According to the D.10-01-023, \$519,596 which represented the seventy-five percent of the winter hedge loss is excluded from the GCIM and \$173,199 of winter hedging loss is included in the GCIM calculation <sup>18</sup> In general, natural gas prices are determined through the interaction of two types of markets: cash/financial markets and physical quantities of natural gas. The market involves the purchase and sale of both, when the physical quantities and financial instrument prices are connected to the price of natural gas in the physical market.

Publishers of industry newsletters such as *Platts*, and *Natural Gas Intelligence* take surveys of the price of transactions at a hub or city-gate, where natural gas is sold or delivered. The surveyed prices are calculated into an average, which then results in an index of those prices. These index prices are used to base the price of gas at the hub, city-gate, or a specified location.

For hedging natural gas commodities, the most commonly used financial instruments are OTC and exchange derivatives often referred to as options and swaps. These financial instruments are traded in the form of standardized contracts. This standardization provides ease of transfer and the identification of prices.<sup>19</sup> These hedging transactions will generally incur related transaction fees, such as broker and premium fees to purchase the hedging contract.

SoCalGas claims to regularly assess and review on a real time basis natural gas market fundamentals. Based on its review and assessment, the utility uses price trends, market fundamentals, and/or risk avoidance to optimize hedge transactions. To forecast

<sup>&</sup>lt;sup>17</sup> OIR, D.10-01-023, 2010 Cal. PUC LEXIS 5, at \*99 (Ord. Para. 4) (Jan. 25, 2010).

<sup>&</sup>lt;sup>18</sup> See ORA GCIM Year 22 Report, Exhibits, Hedge Detail.

<sup>&</sup>lt;sup>19</sup> U.S. Senate Permanent Committee on Investigations: Excessive Speculation in the Natural Gas Market, July 9, 2007.

natural gas prices, SoCalGas uses current future prices and basis values provided by Intercontinental Exchange and/or NYMEX.

Southern California Gas Co PGA Reconciliation-Financial Gai GCIM Year 22 April 1, 2015 Through March	ns & Lo							
			Re	ecorded		, .		
NYMEX Traded/Cleared Transactions	¢	GCIM		PGA		Variance		
Exchange Traded Transactions (Gains)/Losses	\$	247,674						
Exchange Traded Transactions Costs	\$	11,394	•		•			
Total:	\$	259,068	\$	777,163	\$	518,095		
OTC Swaps								
OTC Swaps (Gains)/Losses	\$	-						
OTC Swap Transaction Costs	\$	879						
Total:	\$	879	\$	2,379	\$	1,500		
Year 22 Financial (Gain)/Losses:	\$	259,947	\$	779,542	\$	519,595		
Reconciliation:								
75% excluded Winter Hedge from GCIM	\$	519,595						
Other Reconciling Items Due to Timing Differences:								
Broker Fees		0						
Rounding (Pass)		0	_					
Total Timing Difference Items:	\$	-						
Reconciled Derivative PGA Account	<u> </u>	519,595	-					

## 2.11 Winter Hedges

SoCalGas reported \$692,794 of winter hedging net loss. Table 2-11 shows twenty-five percent (25%) of the net loss at \$173,198, which is included in the GCIM. ORA confirmed that \$519,595 or seventy-five percent (75%) of total winter hedge loss, was excluded from GCIM and included in the PGA for GCIM Year 22. These gains or losses are directly allocated to core customers for the period. In addition, SoCalGas reported winter hedging transactions for OTC swap/option gains and losses; contract costs that include premiums; and transaction costs for broker fees.

For purposes of reconciliation, ORA determined related hedging costs based on contract date. If the contract date is beyond March 31, it is excluded from the GCIM Year 22 reporting period.

	TABLE 2-11 Southern California Gas Company Winter Financial Derivatives (Gains) Losses GCIM Year 22 April 1, 2015 Through March 31, 2016												
Month		Winter Hedge (Gain)/Losses Included in GCIM		inter Hedge Fee cluded in GCIM	Ex	Winter Hedge (Gain)/Losses ccluded From GCIM		Vinter Hedge Fee Excluded From GCIM		Winter Hedge Total			
Apr-15	\$	-	\$	-	\$	-	\$	-	\$	-			
May-15	\$	-	\$	-	\$	-	\$	-	\$	-			
Jun-15	\$	-	\$	-	\$	-	\$	-	\$	-			
Jul-15	\$	-	\$	-	\$	-	\$	-	\$	-			
Aug-15	\$	-	\$	-	\$	-	\$	-	\$	-			
Sep-15	\$	59,625	\$	699	\$	178,875	\$	2,098	\$	241,297			
Oct-15	\$	41,875	\$	899	\$	125,625	\$	2,698	\$	171,097			
Nov-15	\$	47,188	\$	1,355	\$	141,563	\$	4,065	\$	194,169			
Dec-15	\$	19,175	\$	562	\$	57,525	\$	1,687	\$	78,949			
Jan-16	\$	(280)	\$	1,413	\$	(840)	\$	4,240	\$	4,533			
Feb-16	\$	(90)	\$	374	\$	(270)	\$	1,121	\$	1,135			
Mar-16	\$	-	\$	403	\$	-	\$	1,210	\$	1,613			
Totals:	\$	167,493	\$	5,706	\$	502,478	\$	17,118	\$	692,794			
				167,493				502,478					
				5,706				17,118					
		Rounding:		(1)				(1)					
		25% Winter Hedge Included in GCIM:		173,198	Ex	75% Winter Hedge cluded From GCIM:		519,595					

#### 2.12 Review of Secondary Market Services Revenues

SoCalGas manages its retail core using its assets of storage inventory, injection, withdrawal rights, and core supplies and by applying these assets to Secondary Market Services (SMS). In particular, SoCalGas generates revenue by using core assets to execute SMS transactions and fees that are based on market conditions. When SoCalGas management determines that core assets are not directly needed to meet core customer demand and reliability, it will utilize SMS transactions to offset core gas costs. For GCIM Year 22, SMS revenue totaled \$12,997,583 less \$1,105,777 in overhead costs which results in net revenues of \$11,891,805.

	TABLE 2-12         Southern California Gas Company         Summary of Secondary Market Service Revenues         GCIM Year 22         April 1, 2015 Through March 31, 2016         SMS       Less:														
Month	Month Revenue Overhead					Revenues									
Apr-15	\$	(403,609)	\$	69,118	\$	(334,492)									
May-15	\$	(1,086,011)	\$	248,469	\$	(837,542)									
Jun-15	\$	(30,713)	\$	65,171	\$	34,459									
Jul-15	\$	(204,681)	\$	69,845	\$	(134,835)									
Aug-15	\$	(188,713)	\$	70,324	\$	(118,388)									
Sep-15	\$	(468,475)	\$	62,705	\$	(405,770)									
Oct-15	\$	(224,665)	\$	82,664	\$	(142,001)									
Nov-15	\$	(1,896,611)	\$	55,462	\$	(1,841,149)									
Dec-15	\$	19,925	\$	89,046	\$	108,971									
Jan-16	\$	(1,340,202)	\$	157,754	\$	(1,182,448)									
Feb-16	\$	(666,340)	\$	57,146	\$	(609,194)									
Mar-16	\$	(6,507,488)	\$	78,073	\$	(6,429,415)									
Totals:	\$	(12,997,583)	\$	1,105,777	\$	(11,891,805)									

### 2.13 SoCalGas Core Storage Inventory Targets

In D.06-10-029, the Commission approved a Joint Recommendation by ORA, TURN and SoCalGas to modify the utility's management and use of mid-season gas storage capacity for core customers.<sup>20</sup> This recommendation requires more gas to enter storage during the summer for core customer use during the winter heating season. This decision requires SoCalGas to obtain agreement from ORA and TURN for midseason inventory targets. These targets must be maintained or an agreement from ORA and TURN is needed if inventory storage changes are made by SoCalGas. In either case, these changes are reflected in the GCIM.

In D.08-12-020, that became effective December 4, 2008, the Commission adopted Phase 1 of the 2009 SoCalGas' Biennial Cost Allocation Proceeding, (BCAP) Settlement Agreement, expanding gas storage by 7 Bcf during the period of 2009 to 2014. Core storage inventory would receive an additional 4 Bcf starting 2009. The Settlement Agreement required incremental inventory capacity to increase by 1.0 Bcf each year starting in April 1, 2010 until April 1, 2013.

<sup>&</sup>lt;sup>20</sup> SoCalGas, D.06-10-029, 2006 Cal. PUC LEXIS 398, at \*3 (Joint Recommendation adopted and approved) (dated Oct. 19, 2006).

SoCalGas filed Advice Letter 4436 on December 14, 2012, which was approved by the Commission on January 13, 2013. This update changed the storage target from 79 Bcf to 82 Bcf with variance allowance from +5/-2 Bcf to +0/-2 Bcf.

On May 29, 2013, SoCalGas filed Advice Letter 4499, which updated the core inventory target from 82 Bcf to 83 Bcf +0/-2 Bcf. The utility would retain the core inventory target until further notice in a filing advice letter.

ORA's review of SoCalGas' inventory records show that the core purchased inventory level as of July 31, 2015, was 52.9 Bcf, which meets the 47 Bcf inventory target. For GCIM Year 22, the October 31, 2015 core storage inventory target was 83 Bcf, with a variance allowance of +0/-2 Bcf. For October 31, 2015, SoCalGas reported core storage inventory at 82.4 Bcf, which is also within the variance allowance of -2 Bcf. All adjustments to the total system inventory were for non-core monthly imbalances, non-core inventories and SMS activities. The data shows that SoCalGas met the core inventory target requirements.

ORA has reviewed the rate that SoCalGas used to price retail core gas injected into and withdrawn from allocated inventory for core customers; In addition ORA obtained information regarding the total physical injection and withdrawals from Aliso Canyon storage.

TABLE 2-13 Southern California Gas Company Core Storage Inventory for Summer and Winter Targets GCIM Year 22 April 1, 2015 Through March 31, 2016											
System Inventory (Bcf)											
	7/31/15	10/31/15									
Bcf Target	47	83									
Total System Physical Inventory	111.5	125.0									
Month End Imbalances	(3.6)	(2.0)									
Less: Non-Core Inventory	(41.4)	(43.7)									
СТА	-	3.0									
Secondary Market Services	(13.6)	-									
Rounding		0.1									
Total Core Storage Inventory Results	52.9	82.4									

#### 2.14 Interstate Capacity Procurement

In Advice Letter 4679, effective September 6, 2014, the Commission authorized SoCalGas to update its Capacity Planning Range, which was based on the California

Gas Report for 2014.<sup>21</sup> The filing was to comply with D.04-09-022 and Advice Letter 3969 to update SoCalGas and SDG&E's combined portfolio capacity for GCIM Year 22 and 23 winter and non-winter seasons, beginning in April 2015 and ending March 2016. Table 2-14 provides a summary of the minimum and maximum capacity values by season for the reporting period.

Table 2-14         Winter and Non-Winter Capacity Range         GCIM Year 22											
Season	Maximum Capacity Value										
Non-Winter 04/2015 - 10/2015	987 MDth/d	1,316 MDth/d									
Winter 11/2015 - 03/2016	1,097 MDth/d	1,316 MDth/d									

The update enabled SoCalGas to hold firm interstate pipeline capacity at no less than 90% of its forecasted core average daily load during the spring and summer months, and no less than 100% during the fall and winter months. This established a minimum firm capacity for the period of April 2015 to October 2015 at 987 MDth/d, and 1,097 MDth/d for November 2015 to March 2016. SoCalGas' GCIM Year 22 Application (A.16-06-009) in Appendix C reports actual capacity performance.

Proportionally, SoCalGas maintained a gas supply portfolio consisting of approximately 65% of long-term supply agreements; 38% month-to-month base load agreements; and -3% daily transactions as result of net sale.<sup>22</sup>

<sup>&</sup>lt;sup>21</sup> See Letter from E. F. Randolph, Dir. of Comm. Energy Div., to R. Prince, Dir. of Reg. Affairs, SoCalGas (Sept 5, 2014, approving and made effective SoCalGas, Adv. Letr 4679, dated Aug 7, 2014).

<sup>&</sup>lt;sup>22</sup> See SoCalGas, A.16-06-009 at 3–4.

APPENDIX A

**EXHIBITS FOR ORA REPORT** 

## 2-1 Southern California Gas Company Total Actual Cost Summary GCIM Year 22

April 1, 2015 through March 31, 2016

	Actual Commodity		Transportation	Reservation	Total Actual		
		Cost	Cost	Charge		Cost	
Apr-15	\$	53,250,865	\$ 706,984	\$ 14,998,762	\$	68,956,611	
May-15	\$	24,045,786	\$ 718,376	\$ 14,629,076	\$	39,393,237	
Jun-15	\$	60,140,637	\$ 705,365	\$ 14,619,954	\$	75,465,956	
Jul-15	\$	89,294,970	\$ 716,652	\$ 15,283,691	\$	105,295,314	
Aug-15	\$	93,815,237	\$ 736,662	\$ 16,442,003	\$	110,993,902	
Sep-15	\$	72,060,458	\$ 709,284	\$ 15,824,279	\$	88,594,022	
Oct-15	\$	62,205,145	\$ 720,370	\$ 15,617,994	\$	78,543,509	
Nov-15	\$	32,873,366	\$ 681,912	\$ 16,376,671	\$	49,931,949	
Dec-15	\$	89,420,757	\$ 636,754	\$ 16,348,198	\$	106,405,709	
Jan-16	\$	92,626,995	\$ 571,137	\$ 15,928,810	\$	109,126,941	
Feb-16	\$	76,920,122	\$ 687,917	\$ 15,771,906	\$	93,379,944	
Mar-16	\$	25,519,620	\$ 682,168	\$ 15,835,638	\$	42,037,426	
Total	\$	772,173,957	\$ 8,273,583	\$ 187,676,980	\$	968,124,520	

## Southern California Gas Company Benchmark Cost Summary GCIM Year 22 April 1, 2015 through March 31, 2016

	С	Benchmark ommodity Cost	Transportation Cost	Reservation Charge	Total Benchmark Cost
Apr-15	\$	53,985,896	\$ 706,984	\$ 14,998,762	\$ 69,691,643
May-15	\$	28,178,439	\$ 718,376	\$ 14,629,076	\$ 43,525,891
Jun-15	\$	61,554,441	\$ 705,365	\$ 14,619,954	\$ 76,879,760
Jul-15	\$	90,550,519	\$ 716,652	\$ 15,283,691	\$ 106,550,862
Aug-15	\$	94,873,762	\$ 736,662	\$ 16,442,003	\$ 112,052,427
Sep-15	\$	73,016,344	\$ 709,284	\$ 15,824,279	\$ 89,549,907
Oct-15	\$	63,310,532	\$ 720,370	\$ 15,617,994	\$ 79,648,895
Nov-15	\$	35,494,938	\$ 681,912	\$ 16,376,671	\$ 52,553,521
Dec-15	\$	89,206,182	\$ 636,754	\$ 16,348,198	\$ 106,191,134
Jan-16	\$	97,866,348	\$ 571,137	\$ 15,928,810	\$ 114,366,295
Feb-16	\$	79,625,646	\$ 687,917	\$ 15,771,906	\$ 96,085,468
Mar-16	\$	32,673,423	\$ 682,168	\$ 15,835,638	\$ 49,191,229
Total	\$	800,336,469	\$ 8,273,583	\$ 187,676,980	\$ 996,287,032

2-2

#### 2-3 Southern California Gas Company Actual Commodity Purchases Costs GCIM Year 22 April 1, 2015 theorem

April 1, 2015 through March 31, 2016													
	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
Mainline Pruchases \$	71,185,069 \$	70,734,552 \$	78,954,402 \$	83,956,705 \$	84,899,583 \$	76,581,379 \$	76,169,115 \$	65,770,166 \$	75,161,871 \$	58,507,741 \$	62,716,978 \$	52,472,322 \$	857,109,884
Border Purchases \$	3,746,761 \$	2,020,648 \$	7,170,688 \$	22,925,880 \$	17,522,057 \$	9,588,872 \$	9,265,764 \$	2,389,005 \$	28,802,904 \$	50,483,626 \$	19,342,246 \$	3,280,115 \$	176,538,566
Total Commodity Purchases \$	74,931,830 \$	72,755,200 \$	86,125,090 \$	106,882,585 \$	102,421,641 \$	86,170,252 \$	85,434,879 \$	68,159,172 \$	103,964,776 \$	108,991,367 \$	82,059,224 \$	55,752,437 \$	1,033,648,451
Mainline Sales \$	(1,038,921) \$	(1,549,693) \$	(1,709,577) \$	(4,692,893) \$	(913,854) \$	(1,519,645) \$	(2,980,504) \$	(7,939,698) \$	(12,112,695) \$	(9,328,113) \$	(1,866,507) \$	(4,900,010) \$	(50,552,109)
Border Sales \$	(20,308,608) \$	(46,356,662) \$	(24,411,693) \$	(12,759,886) \$	(7,574,236) \$	(12,245,252) \$	(20,123,159) \$	(25,536,456) \$	(2,838,882) \$	(5,886,058) \$	(2,693,579) \$	(18,904,890) \$	(199,639,360)
Total Commodity Sales \$	(21,347,529) \$	(47,906,355) \$	(26,121,270) \$	(17,452,779) \$	(8,488,090) \$	(13,764,897) \$	(23,103,663) \$	(33,476,154) \$	(14,951,576) \$	(15,214,171) \$	(4,560,086) \$	(23,804,900) \$	(250,191,469)
Secondary Market Service Revenue \$	(334,492) \$	(837,542) \$	34,459 \$	(134,835) \$	(118,388) \$	(405,770) \$	(142,001) \$	(1,841,149) \$	108,971 \$	(1,182,448) \$	(609,194) \$	(6,429,415) \$	(11,891,805)
Financial (Gains)/Losses \$	1,055 \$	34,483 \$	102,358 \$	- \$	75 \$	60,873 \$	15,930 \$	31,497 \$	24,990 \$	(3,129) \$	(9,685) \$	1,498 \$	259,946
Other Costs \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	273,597 \$	35,375 \$	39,863 \$	- \$	348,834
Actual Commodity Purchase Cost \$	53,250,865 \$	24,045,786 \$	60,140,637 \$	89,294,970 \$	93,815,237 \$	72,060,458 \$	62,205,145 \$	32,873,366 \$	89,420,757 \$	92,626,995 \$	76,920,122 \$	25,519,620 \$	772,173,957

									N	Лаin	2-3a rn California Gas C Iline Purchase Sun GCIM Year 22	nmary							
April 1, 2015 through March 31, 2016           April 1, 2015 through March 31, 2016         April 2, 2015 through March 31, 2016           April 2, 2015 through March 31, 2016         April 2, 2015 through March 31, 2016           April 2, 2015 through March 31, 2016         April 2, 2015 through March 31, 2016           April 2, 2015 through March 31, 2016         April 2, 2016 through March 31, 2016           April 2, 2016 through March 31, 2016         April 2, 2016 through March 31, 2016           April 2, 2017 through March 31, 2016 through March 31, 2016         April 2, 2016 through March 31, 2016																			
El Paso - Permian \$	11,459,680	\$	10,389,419	\$	12,458,475	\$	14,403,495	\$	13,105,846	\$	11,656,229 \$	11,624,562	\$	13,628,411 \$	11,111,365 \$	8,747,871 \$	10,867,160	\$ 8,374,477 \$	137,826,990
El Paso - San Juan 🖇	31,294,816	\$	30,097,475	\$	32,495,365	\$	36,210,312	\$	36,925,837	\$	32,493,577 \$	32,532,947	\$	24,096,291 \$	32,573,436 \$	23,379,932 \$	25,243,456	\$ 21,271,166 \$	358,614,612
Transwestern - Permian \$	708,653	\$	681,127	\$	797,522	\$	800,603	\$	825,244	\$	729,288 \$	728,679	\$	1,148,344 \$	1,200,170 \$	1,209,217 \$	1,198,582	\$ 1,923,060 \$	11,950,489
Transwestern - San Juan \$	6,524,593	\$	6,501,671	\$	7,315,095	\$	8,205,858	\$	7,807,177	\$	7,166,364 \$	7,244,289	\$	6,030,631 \$	7,158,275 \$	5,385,164 \$	6,287,769	\$ 4,367,622 \$	79,994,508
Kern River \$	17,686,235	\$	17,610,568	\$	20,027,286	\$	21,073,095	\$	21,330,711	\$	19,033,804 \$	18,956,194	\$	16,303,158 \$	19,522,861 \$	16,695,514 \$	16,063,665	\$ 12,528,672 \$	216,831,765
Enterprise - Waha \$	-	\$	1,448,320	\$	1,833,068	\$	-	\$	1,264,479	\$	1,554,000 \$	1,491,720	\$	1,189,650 \$	649,450 \$	- \$	29,755	\$ 1,737,928 \$	11,198,370
NOVA-AECO/NIT \$	3,472,548	\$	4,005,972	\$	4,027,591	\$	3,263,343	\$	3,640,289	\$	3,948,117 \$	3,590,723	\$	3,373,680 \$	2,946,314 \$	3,090,042 \$	3,026,592	\$ 2,269,396 \$	40,654,608
GTN-Kingsgate \$	38,543	\$	-	\$	-	\$	-	\$	-	\$	- \$	-	\$	- \$	- \$	- \$	-	\$ - \$	38,543
GTN-Stanfield \$	-	\$	-	\$	-	\$	-	\$	-	\$	- \$	-	\$	- \$	- \$	- \$	-	\$ - \$	-
GTN-Malin \$	-	\$	-	\$	-	\$	-	\$	-	\$	- \$	-	\$	- \$	- \$	- \$	-	\$ - \$	-
otal Mainline Purchases S	71,185,069	\$	70,734,552	\$	78,954,402	\$	83,956,705	\$	84,899,583	\$	76,581,379 \$	76,169,115	\$	65,770,166 \$	75,161,871 \$	58,507,741 \$	62,716,978	\$ 52,472,322 \$	857,109,884

	2-3b Southern California Gas Company Border and Citygate Purchase Summary GCIM Year 22 April 1, 2015 through March 31, 2016 May-15 Jun-15 Jul-15 Aug-15 Sep-15 Oct-15 Nov-15 Dec-15 Jan-16												
							2-3b						
					Southern	n Cal	ifornia Gas Co	mp	any				
					Border and	City	gate Purchase	Sur	nmary				
						GC	IM Year 22						
					April 1, 20:	15 tł	nrough March	31,	2016				
		May-15	Jun-15	Jul-15	Aug-15		Sep-15		Oct-15	Nov-15	Dec-15	Jan-16	
37	\$	424,435	\$ 1,977,422	\$ 5,541,060	\$ 8,254,438	\$	6,692,149	\$	2,079,141	\$ 487,991	\$ 814,540	\$ 2,641,068	1

Purchase	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
Border Purchase \$	2,028,137 \$	424,435 \$	1,977,422 \$	5,541,060 \$	8,254,438 \$	6,692,149 \$	2,079,141 \$	487,991 \$	814,540 \$	2,641,068 \$	984,576 \$	866,138 \$	32,791,095
SoCal Citygate 🖇	1,718,624 \$	1,596,213 \$	5,193,266 \$	17,384,820 \$	9,267,620 \$	2,896,723 \$	7,186,623 \$	1,901,015 \$	27,988,364 \$	47,842,558 \$	18,357,670 \$	2,413,977 \$	143,747,471
Total Border and Citygate Purchases \$	3,746,761 \$	2,020,648 \$	7,170,688 \$	22,925,880 \$	17,522,057 \$	9,588,872 \$	9,265,764 \$	2,389,005 \$	28,802,904 \$	50,483,626 \$	19,342,246 \$	3,280,115 \$	176,538,566

2-3c
Southern California Gas Company
Mainline Sale Summary
GCIM Year 22
April 1, 2015 through March 31, 2016

	April 1, 2015 through March 31, 2016																						
		Apr-15		May-15	Jun-15		Jul-15		Aug-15		Sep-15		Oct-15		Nov-15		Dec-15	Jan-16	Feb-16		Mar-16		Total
El Paso - Permian	\$	(670,896)	\$	(211,219) \$	(370,735)	\$	(208,156)	\$	(50,295)	\$	(66,891)	\$	(888,164)	\$	(2,254,974) \$	,	(1,685,216)	\$ 2,605,721)	\$ (1,614,743)	\$ (	2,339,839)	\$	(12,966,849)
El Paso - San Juan	\$	(6,181)	\$	(353,816) \$	(56,032)	\$	(1,711,576)	\$	(41,823)	\$	(79,281)	\$	(168,502)	\$	(1,098,374) \$	;	(3,800,881)	\$ 4,986,519)	\$ (30,802)	\$ (	1,886,642)	\$	(14,220,429)
Transwestern - Permian	\$	(184,883)	\$	(104,930) \$	(211,142)	\$	(569,248)	\$	(40,196)	\$	(253,410)	\$	(286,601)	\$	(265,542) \$	;	(424,162)	\$ (740,682)	\$ (16,300)	\$	(536,604)	\$	(3,633,699)
Transwestern - San Juan	\$	-	\$	- \$	-	\$	(6,004)	\$	-	\$	-	\$	(81,740)	\$	(310,866) \$	;	(834,489)	\$ (480,664)	\$ -	\$	-	\$	(1,713,762)
Kern River	\$	(50,283)	\$	(25,198) \$	(355,977)	\$	(259,747)	\$	(31,920)	\$	(96,135)	\$	(826,889)	\$	(2,613,453) \$	;	(4,282,634)	\$ (168,951)	\$ -	\$	-	\$	(8,711,187)
Enterprise - Waha	\$	-	\$	- \$	-	\$	-	\$	(718,983)	\$	(638,385)	\$	(416,885)	\$	(468,606) \$	;	(292,886)	\$ -	\$ -	\$	-	\$	(2,535,745)
NOVA-AECO/NIT	\$	(126,679)	\$	(854,531) \$	(715,691)	\$	(1,938,162)	\$	(30,636)	\$	(385,543)	\$	(311,723)	\$	(927,883) \$	;	(792,428)	\$ (345,576)	\$ (204,663)	\$	(136,925)	\$	(6,770,438)
GTN-Kingsgate	\$	-	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	- \$	;	-	\$ -	\$ -	\$	-	\$	-
GTN-Stanfield	\$	-	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	- \$	;	-	\$ -	\$ -	\$	-	\$	-
GTN-Malin	\$	-	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	- \$	;	-	\$ -	\$ -	\$	-	\$	-
Total Mainline Sales	\$ (	1,038,921)	\$	(1,549,693) \$	6 (1,709,577)	\$	(4,692,893)	\$	(913,854)	\$	(1,519,645)	\$ (	2,980,504)	\$	(7,939,698) \$	5 (	(12,112,695)	\$ 9,328,113)	\$ (1,866,507)	\$ (	4,900,010)	\$	(50,552,109)

	Southern California Gas Company														
	Border and Citygate Sale Summary														
	GCIM Year 22														
	April 1, 2015 through March 31, 2016														
	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total		
Border Sales \$	(438,399)	\$ (10,005,210) \$	\$ (9,342,172) \$	(6,597,928)	\$ (1,839,941)	\$ (2,293,702)	\$ (5,342,497)	\$ (833,114)	\$ (2,556,617)	\$ (4,212,678)	\$ (2,693,579)	\$ (3,760,097)	\$ (49,915,934)		
SoCal Citygate Sales \$	(19,870,209)	\$ (36,351,452) \$	\$ (15,069,521) \$	(6,161,958)	\$ (5,734,295)	\$ (9,951,550)	\$ (14,780,661)	\$ (24,703,342)	\$ (282,265)	\$ (1,673,380)	\$-	\$ (15,144,792)	\$ (149,723,426)		
PG&E- Topock Sales \$	- 1	\$-\$	\$-\$	-	\$-	\$ -	\$ -	\$ -	\$ -	\$-	\$-	\$ -	\$ -		
Total Border and Citygate Sales \$	(20,308,608)	\$ (46,356,662) \$	\$ (24,411,693) \$	(12,759,886)	\$ (7,574,236)	\$ (12,245,252)	\$ (20,123,159)	\$ (25,536,456)	\$ (2,838,882)	\$ (5,886,058)	\$ (2,693,579)	\$ (18,904,890)	\$ (199,639,360)		

2-3d

2-3e Southern California Gas Company Secondary Market Service Revenue GCIM Year 22

April 1, 2015 through March 31, 2016														
	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total	
Secondary Market Service Revenue	\$ (403,609)	\$ (1,086,011)	\$ (30,713)	\$ (204,681)	\$ (188,713)	\$ (468,475)	\$ (224,665)	\$ (1,896,611)	\$ 19,925	\$ (1,340,202)	\$ (666,340)	\$ (6,507,488)	\$ (12,997,583)	
Overhead Cost	\$ 69,118	\$ 248,469	\$ 65,171	\$ 69,845	\$ 70,324	\$ 62,705	\$ 82,664	\$ 55,462	\$ 89,046	\$ 157,754	\$ 57,146	\$ 78,073	\$ 1,105,777	
Net Secondary Market Service Revenue	\$ (334,492)	\$ (837,542)	\$ 34,459	\$ (134,835)	\$ (118,388)	\$ (405,770)	\$ (142,001)	\$ (1,841,149)	\$ 108,971	\$ (1,182,448)	\$ (609,194)	\$ (6,429,415)	\$ (11,891,805)	

2-3f Southern California Gas Company Off-System Parking Fee GCIM Year 22 April 1, 2015 through March 31, 2016

	Apr-1	.5	Ma	y-15	J	lun-15	Jul-15	A	ug-15	9	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
Off System Parking Fee \$	5	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$ -	\$ -	\$ 273,596.65	\$ 35,375.00	\$ 39,862.50	\$-	\$ 348,834.15
Total \$	5	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$ -	\$ -	\$ 273,596.65	\$ 35,375.00	\$ 39,862.50	\$-	\$ 348,834.15

	Tot	2-3g outhern California Ga al Financial Derivati GCIM Year 2 il 1, 2015 through M	ves Summary 22	
	NYMEX & OTC Cleared	NYMEX & OTC Clear Transaction	OTC Swap	Total Financial
	Losses/(Gains)	Costs	Transaction Cost	Cost/(Gain)
Apr-15	(300.00)	1,354.59	-	1,054.59
May-15	34,375.00	108.06	-	34,483.06
Jun-15	102,200.00	158.40	-	102,358.40
Jul-15	-	-	-	-
Aug-15	-	36.27	38.75	75.02
Sep-15	59,625.00	970.83	277.50	60,873.33
Oct-15	13,631.25	1,986.72	312.50	15,930.47
Nov-15	28,337.50	2,909.70	250.00	31,497.20
Dec-15	24,212.50	777.60	-	24,990.10
Jan-16	(4,542.50)	1,413.36	-	(3,129.14)
Feb-16	(10,058.75)	373.73	-	(9,685.02)
Mar-16	193.75	1,304.26	-	1,498.01
Total	247,673.75	11,393.52	878.75	259,946.02

Recorded:	259,946
Difference	

2-3h									
Southern California G	as Company								
Hedge Deta	ail								
GCIM Year	22								
April 1, 2015 through March 31, 2016									

	Non-Winter Hedge												25% Winter Hedge													
	NYMEX Option			01	TC Clear Optio	n							N	YMEX Option		OTC Cleared	0	TC Clear Option								
	Premiums	C	TC Cleared Swaps		Premiums		Futur	e	E	xchange Traded	Fina	ancial Swap Broker		Premiums		Swaps		Premiums		Future	E	xchanged Traded	Fin	ancial Swap		
	(Gain)/Loss		(Gain)/Loss		(Gain)/Loss		(Gain)/L	oss		Broker Fee		Fee		(Gain)/Loss		(Gain)/Loss		(Gain)/Loss	(	Gain)/Loss		Broker Fee	E	roker Fee		Total
Apr-15 🖇	-	\$	(300.00)	\$	-	\$		-	\$	1,354.59	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	1,054.59
/lay-15 🖇	-	\$	34,375.00	\$	-	\$		-	\$	108.06	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	34,483.06
Jun-15 🖇	5 (5,200.00	)\$	107,400.00	\$	-	\$		-	\$	158.40	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	102,358.40
Jul-15 \$	-	\$	-	\$	-	\$		-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Aug-15 🖇	-	\$	-	\$	-	\$		-	\$	36.27	\$	38.75	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	75.02
Sep-15 💲	- 5	\$	-	\$	-	\$		-	\$	396.63	\$	152.50	\$	35,375.00	\$	-	\$	24,250.00	\$	-	\$	574.20	\$	125.00	\$	60,873.33
Oct-15 \$	-	\$	(28,243.75)	\$	-	\$		-	\$	1,212.54	\$	187.50	\$	31,875.00	\$	-	\$	10,000.00	\$	-	\$	774.18	\$	125.00	\$	15,930.47
Nov-15 \$	-	\$	(18,850.00)	\$	-	\$		-	\$	1,804.86	\$	-	\$	37,187.50	\$	-	\$	10,000.00	\$	-	\$	1,104.84	\$	250.00	\$	31,497.20
Dec-15 \$	- 5	\$	5,037.50	\$	-	\$		-	\$	215.28	\$	-	\$	19,625.00	\$	(56,650.00)	\$	-	\$	56,200.00	\$	562.32	\$	-	\$	24,990.10
Jan-16 \$	- 5	\$	(4,262.50)	\$	-	\$		-	\$	-	\$	-	\$	-	\$	(23,800.00)	\$	-	\$	23,520.00	\$	1,413.36	\$	-	\$	(3,129.14
Feb-16 🖇	-	\$	(9,968.75)	\$	-	\$		-	\$	-	\$	-	\$	-	\$	(4,905.00)	\$	-	\$	4,815.00	\$	373.73	\$	-	\$	(9,685.02
Mar-16 \$	- 5	\$	193.75	\$	-	\$		-	\$	900.90	\$	-	\$	-	\$	-	\$	-	\$	-	\$	403.36	\$	-	\$	1,498.01
Total 🔅	6 (5,200	1) \$	85,381	\$	-	\$		-	\$	6,188	\$	379	\$	124,063	\$	(85,355)	\$	44,250	\$	84,535	\$	5,206	\$	500	\$	259,946
_	А		В		С		D			E		F		G		Н		1		J		К		L		

Non-Winter Hedge:	A+B+C+D	80,181	
Non-Winter Transaction Cost:	E+F	6,566	
			86,748
Winter Hedge:	G+H+I+J	167,493	
Winter Hedge Transaction Cost:	K+L	5,706	
			173,198

Financial Cost Total Included in GCIM: 259,946

2-4
Southern California Gas Company
Benchmark Commodity Costs
GCIM Year 22
April 1, 2015 through March 31, 2016

	April 1, 2015 through March 31, 2016													
	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total	
Mainline Benchmark Commodity Cost \$	70,417,345.94	\$ 69,146,815.12	\$ 77,454,712.48 \$	79,671,389.25 \$	84,233,815.87	\$ 75,356,546.97	\$ 73,297,628.06	\$ 57,992,322.27	62,358,662.59	51,026,788.93	\$ 61,710,744.98	\$ 47,919,569.08 \$	810,586,341.54	
Border Commodity Cost \$	1,601,565.45	\$ (8,583,265.61) \$	\$ (7,095,867.25) \$	(892,233.23) \$	6,608,157.77	\$ 4,538,596.89	\$ (3,311,871.26)	\$ (289,362.46) \$	(2,021,348.56)	6 (1,233,353.52)	\$ (1,680,356.16)	\$ (2,772,121.32) \$	(15,131,459.26)	
Citygate Commodity Cost \$	(18,033,015.14)	\$ (32,385,110.65) \$	\$ (8,804,404.40) \$	11,771,363.40 \$	4,031,788.26	\$ (6,878,800.00)	\$ (6,675,225.20)	\$ (22,208,021.70) \$	28,868,867.79	48,072,912.42	\$ 19,595,256.92	\$ (12,474,024.91) \$	4,881,586.79	
PG&E Topock Commodity Cost _\$		\$-\$	\$ - \$	- \$	-	\$-	\$ -	\$ - \$		-	\$ -	\$ - \$	-	
Total Benchmark Commodity Costs \$	53,985,896.25	\$ 28,178,438.86	61,554,440.83 \$	90,550,519.42 \$	94,873,761.90	\$ 73,016,343.86	\$ 63,310,531.60	\$ 35,494,938.11	89,206,181.82	97,866,347.83	\$ 79,625,645.74	\$ 32,673,422.85 \$	800,336,469.07	

						2-5									
					Southern Cal	lifornia Gas Compa	ny								
					Reserv	vation Charges									
						CIM Year 22									
	April 1, 2015 through March 31, 2016														
	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total		
El Paso	\$ 5,644,518.67	\$ 5,644,518.67	\$ 5,651,081.36	\$ 5,644,519.11	\$ 5,644,718.67	\$ 5,644,507.68	\$ 5,644,893.61	\$ 6,089,596.91	\$ 6,147,030.77	\$ 6,090,858.99	\$ 6,094,735.50	\$ 6,127,342.77	\$ 70,068,322.71		
Transwestern	\$ 813,000.00	\$ 840,100.00	\$ 813,000.00	\$ 840,100.00	\$ 840,100.00	\$ 813,000.00	\$ 840,100.00	\$ 1,132,509.60	\$ 1,071,050.00	\$ 1,071,050.00	\$ 1,001,950.00	\$ 975,040.40	\$ 11,051,000.00		
Kern River	\$ 2,601,267.60	\$ 2,687,976.52	\$ 2,601,267.60	\$ 2,687,976.52	\$ 2,687,976.52	\$ 2,601,267.60	\$ 2,687,976.52	\$ 2,762,151.60	\$ 2,854,223.32	\$ 2,847,617.44	\$ 2,663,900.19	\$ 2,847,617.44	\$ 32,531,218.87		
Nova (A)	\$ 224,700.36	\$ 227,387.90	\$ 224,063.11	\$ 215,529.48	\$ 210,791.66	\$ 208,852.20	\$ 211,955.34	\$ 208,630.55	\$ 202,174.91	\$ 196,817.41	\$ 202,891.85	\$ 211,653.60	\$ 2,545,448.37		
Foothills (B)	\$ 120,023.35	\$ 121,458.89	\$ 119,682.96	\$ 115,124.74	\$ 112,594.04	\$ 111,558.08	\$ 113,215.61	\$ 111,439.69	\$ 107,991.42	\$ 103,149.50	\$ 106,333.04	\$ 110,924.96	\$ 1,353,496.28		
GTN (C)	\$ 542,230.81	\$ 560,305.18	\$ 542,230.81	\$ 544,026.23	\$ 544,026.23	\$ 526,477.00	\$ 544,026.23	\$ 526,477.00	\$ 544,026.23	\$ 488,650.99	\$ 457,125.67	\$ 488,650.99	\$ 6,308,253.37		
PG&E (D)	\$ 285,490.81	\$ 288,710.76	\$ 288,710.76	\$ 288,710.76	\$ 288,710.76	\$ 288,710.76	\$ 287,485.07	\$ 288,710.76	\$ 288,710.76	\$ 288,710.76	\$ 288,710.76	\$ 288,710.76	\$ 3,460,083.48		
Canadian Path (A)+(B)+( C)+ (D)	\$ 1,172,445.33	\$ 1,197,862.73	\$ 1,174,687.64	\$ 1,163,391.21	\$ 1,156,122.69	\$ 1,135,598.04	\$ 1,156,682.25	\$ 1,135,258.00	\$ 1,142,903.32	\$ 1,077,328.66	\$ 1,055,061.32	\$ 1,099,940.31	\$ 13,667,281.50		
Backbone Transportation Service Charges	\$ 4,767,530.59	\$ 4,258,617.71	\$ 4,379,917.43	\$ 4,947,703.80	\$ 6,113,085.09	\$ 5,629,906.12	\$ 5,288,341.20	\$ 5,257,154.64	\$ 5,132,990.33	\$ 4,841,954.73	\$ 4,956,258.61	\$ 4,785,696.77	\$ 60,359,157.02		
Total Reservation Charges	\$ 14,998,762.19	\$ 14,629,075.63	\$ 14,619,954.03	\$ 15,283,690.64	\$ 16,442,002.97	\$ 15,824,279.44	\$ 15,617,993.58	\$ 16,376,670.75	\$ 16,348,197.74	\$ 15,928,809.82	\$ 15,771,905.62	\$ 15,835,637.69	\$ 187,676,980.10		

	2-6 Southern California Gas Company Transportation Charges GCIM Year 22															
	April 1, 2015 through March 31, 2016															
	Apr-15 May-15 Jun-15 Jul-15 Aug-15 Sep-15 Oct-15 Nov-15 Dec-15 Jan-16 Feb-16 Mar-16 Total															Total
El Paso \$	579,197.39	\$	589,489.35	\$ 578,684.46	\$ 593,144.29	\$ 599,277.10	\$	577,827.47	\$ 590,170.87	\$ 572,483.64	\$ 532,555.48	\$ 463,339.15	\$ 563,026.28	\$ 549,951.95	\$	6,789,147.43
Transwestern \$	45,266.63	\$	47,655.59	\$ 46,281.52	\$ 51,024.37	\$ 51,887.83	\$	49,311.07	\$ 50,834.45	\$ 55,128.18	\$ 52,213.19	\$ 47,539.94	\$ 61,115.58	\$ 64,493.69	\$	622,752.04
Kern River \$	59,553.80	\$	58,869.19	\$ 58,369.48	\$ 61,330.88	\$ 61,833.59	\$	59,359.16	\$ 57,613.43	\$ 35,403.96	\$ 35,358.82	\$ 37,384.05	\$ 41,498.64	\$ 43,982.21	\$	610,557.21
Canadian Path \$	22,966.44	\$	22,362.03	\$ 22,029.89	\$ 11,152.83	\$ 23,663.95	\$	22,786.34	\$ 21,751.52	\$ 18,896.23	\$ 16,626.55	\$ 22,873.85	\$ 22,276.33	\$ 23,740.51	\$	251,126.47
Total \$	706,984.26	\$	718,376.16	\$ 705,365.35	\$ 716,652.37	\$ 736,662.47	\$	709,284.04	\$ 720,370.27	\$ 681,912.01	\$ 636,754.04	\$ 571,136.99	\$ 687,916.83	\$ 682,168.36	\$	8,273,583.15

2-7
uthern California Gas Compan
let Commodity Purchase Costs
GCIM Year 22

						2-7							
					Sc	outhern California Ga	s Company						
					n	Net Commodity Purcl	hase Costs						
						GCIM Year 2	2						
					Apr	il 1, 2015 through Ma	arch 31, 2016						
	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
Mainline Pruchases	\$ 71,185,069.08	\$ 70,734,552.23	\$ 78,954,402.16	\$ 83,956,705.13	\$ 84,899,583.28	\$ 76,581,379.47	\$ 76,169,114.55	\$ 65,770,166.15	\$ 75,161,871.19	\$ 58,507,740.71	\$ 62,716,978.41	\$ 52,472,322.06	\$ 857,109,884.42
Border Purchases	\$ 3,746,761.02	\$ 2,020,647.69	\$ 7,170,687.50	\$ 22,925,879.55	\$ 17,522,057.31	\$ 9,588,872.24	\$ 9,265,764.31	\$ 2,389,005.43	\$ 28,802,904.36	\$ 50,483,626.41	\$ 19,342,245.62	\$ 3,280,114.74	\$ 176,538,566.18
Total Commodity Purchases	\$ 74,931,830.10	\$ 72,755,199.92	\$ 86,125,089.66	\$ 106,882,584.68	\$ 102,421,640.59	\$ 86,170,251.71	\$ 85,434,878.86	\$ 68,159,171.58	\$ 103,964,775.55	\$ 108,991,367.12	\$ 82,059,224.03	\$ 55,752,436.80	\$ 1,033,648,450.60
Mainline Sales	\$ (1,038,920.92)	\$ (1,549,693.37)	\$ (1,709,576.96)	\$ (4,692,893.10)	\$ (913,853.99)	\$ (1,519,644.51)	\$ (2,980,504.02)	\$ (7,939,698.14)	\$ (12,112,694.99)	\$ (9,328,112.51)	\$ (1,866,506.86)	\$ (4,900,009.98)	\$ (50,552,109.35)
Border Sales	\$ (20,308,607.60)	\$ (46,356,661.84)	\$ (24,411,693.39)	\$ (12,759,885.80)	\$ (7,574,236.19)	\$ (12,245,252.03)	\$ (20,123,158.87)	\$ (25,536,455.53)	\$ (2,838,881.50)	\$ (5,886,058.18)	\$ (2,693,578.75)	\$ (18,904,889.85)	\$ (199,639,359.53)
Total Commodity Sales	\$ (21,347,528.52)	\$ (47,906,355.21)	\$ (26,121,270.35)	\$ (17,452,778.90)	\$ (8,488,090.18)	\$ (13,764,896.54)	\$ (23,103,662.89)	\$ (33,476,153.67)	\$ (14,951,576.49)	\$ (15,214,170.69)	\$ (4,560,085.61)	\$ (23,804,899.83)	\$ (250,191,468.88)
-													
Net Commodity Purchases	\$ 53,584,301.58	\$ 24,848,844.71	\$ 60,003,819.31	\$ 89,429,805.78	\$ 93,933,550.41	\$ 72,405,355.17	\$ 62,331,215.97	\$ 34,683,017.91	\$ 89,013,199.06	\$ 93,777,196.43	\$ 77,499,138.42	\$ 31,947,536.97	\$ 783,456,981.72

					So	uthern California G	as Company						
					Net	Mainline Purchase	s by Pipelines						
						GCIM Year	22						
					Apri	il 1, 2015 through N	larch 31, 2016						
	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
El Paso - Permian \$	10,788,783.85	\$ 10,178,199.98	\$ 12,087,740.30	\$ 14,195,338.35	\$ 13,055,551.32 \$	5 11,589,337.61	\$ 10,736,398.37	\$ 11,373,437.32	\$ 9,426,149.46	\$ 6,142,149.54 \$	9,252,416.75 \$	6,034,638.10	\$ 124,860,140.95
El Paso - San Juan 💲	31,288,635.95	\$ 29,743,658.93	\$ 32,439,332.50	\$ 34,498,735.91	\$ 36,884,014.01 \$	32,414,296.64	\$ 32,364,444.92	\$ 22,997,917.79	\$ 28,772,554.72	\$ 18,393,413.23 \$	25,212,654.88	19,384,524.01	\$ 344,394,183.49
Transwestern - Permian \$	523,770.83	\$ 576,197.43	\$ 586,379.70	\$ 231,354.97	\$ 785,047.65	475,877.78	\$ 442,078.39	\$ 882,801.67	\$ 776,008.29	\$ 468,535.60 \$	1,182,281.60 \$	1,386,456.19	\$ 8,316,790.10
Transwestern - San Juan 💲	6,524,593.30	\$ 6,501,670.59	\$ 7,315,094.88	\$ 8,199,854.69	\$ 7,807,176.76	7,166,364.33	\$ 7,162,548.67	\$ 5,719,765.10	\$ 6,323,785.99	\$ 4,904,500.42 \$	6,287,768.66	4,367,622.43	\$ 78,280,745.82
Kern River \$	17,635,951.89	\$ 17,585,370.61	\$ 19,671,309.34	\$ 20,813,347.71	\$ 21,298,791.31	18,937,669.08	\$ 18,129,305.24	\$ 13,689,705.07	\$ 15,240,226.98	\$ 16,526,563.14 \$	16,063,665.25 \$	12,528,672.47	\$ 208,120,578.09
Enterprise - Waha \$	-	\$ 1,448,320.00	\$ 1,833,068.00	\$-	\$ 545,495.48	915,615.19	\$ 1,074,834.84	\$ 721,043.76	\$ 356,564.50	\$-\$	29,755.00 \$	1,737,927.50	\$ 8,662,624.27
NOVA-AECO/NIT \$	3,345,869.58	\$ 3,151,441.32	\$ 3,311,900.48	\$ 1,325,180.40	\$ 3,609,652.76	3,562,574.33	\$ 3,279,000.10	\$ 2,445,797.30	\$ 2,153,886.26	\$ 2,744,466.27 \$	2,821,929.41	2,132,471.38	\$ 33,884,169.59
GTN-Kingsgate \$	38,542.76	\$-	\$-	\$-	\$ - \$	-	\$-	\$-	\$-	\$-\$	- Ş		\$ 38,542.76
GTN-Stanfield \$	-	\$-	\$-	\$-	\$ - \$	-	\$-	\$-	\$-	\$-\$	- Ş		\$-
GTN-Malin \$	-	\$-	\$-	\$-	\$ - \$	-	\$-	\$-	\$-	\$-\$	- Ş	-	\$ -
Total Mainline Purchases \$	70,146,148.16	\$ 69,184,858.86	\$ 77,244,825.20	\$ 79,263,812.03	\$ 83,985,729.29	5 75,061,734.96	\$ 73,188,610.53	\$ 57,830,468.01	\$ 63,049,176.20	\$ 49,179,628.20 \$	60,850,471.55	47,572,312.08	\$ 806,557,775.07

\*Net = purchases + Sale

2-9 Southern California Gas Company Net Border and Citygate Purchase Summary GCIM Year 22 April 1, 2015 through March 31, 2016

					April 1, 20	15 through whatch .	51, 2010						
	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
Total Border and Citygate Purchases	\$ 3,746,761.02	\$ 2,020,647.69	\$ 7,170,687.50	\$ 22,925,879.55 \$	17,522,057.31 \$	9,588,872.24	\$ 9,265,764.31 \$	2,389,005.43 \$	28,802,904.36	\$ 50,483,626.41	\$ 19,342,245.62	\$ 3,280,114.74 \$	176,538,566.18
Total Border Sales	\$ (20,308,607.60)	\$ (46,356,661.84)	\$ (24,411,693.39)	\$ (12,759,885.80) \$	(7,574,236.19) \$	(12,245,252.03)	\$ (20,123,158.87) \$	(25,536,455.53) \$	(2,838,881.50)	\$ (5,886,058.18)	\$ (2,693,578.75)	\$ (18,904,889.85) \$	(199,639,359.53)
Net Border and Citygate Purchases	\$ (16,561,846.58)	\$ (44,336,014.15)	\$ (17,241,005.89)	\$ 10,165,993.75 \$	9,947,821.12 \$	6 (2,656,379.79)	\$ (10,857,394.56) \$	(23,147,450.10) \$	25,964,022.86	\$ 44,597,568.23	\$ 16,648,666.87	\$ (15,624,775.11) \$	(23,100,793.35)

\*Net = purchases + sale

					:-2 Southern Califorı Actual Net Pur GCIM ۱ pril 1, 2015 throu	nia Gas Company Tchase Volume Year 22							
	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
Mainline Purchases	30,499,447	31,303,850	30,731,730	32,013,356	31,596,542	30,612,695	31,597,442	32,857,093	34,575,787	27,643,637	31,105,500	34,675,163	379,212,242
Mainline Sales	(434,830)	(664,531)	(730,292)	(1,883,874)	(338,632)	(609,292)	(1,360,394)	(3,927,470)	(6,007,589)	(4,179,808)	(980,655)	(3,144,982)	(24,262,349)
Net Mainline Purchase Volume	30,064,617	30,639,319	30,001,438	30,129,482	31,257,910	30,003,403	30,237,048	28,929,623	28,568,198	23,463,829	30,124,845	31,530,181	354,949,893
Border and Citygate Purchases	1,486,178	835,131	2,653,459	7,599,163	5,963,230	3,537,954	3,678,281	1,047,347	11,604,013	19,208,788	8,485,684	1,974,290	68,073,518
Border and Citygate Sales	(7,623,597)	(16,973,394)	(8,237,537)	(4,179,085)	(2,450,500)	(4,235,195)	(7,326,363)	(10,629,397)	(1,293,000)	(2,237,499)	(1,205,000)	(10,654,205)	(77,044,772)
Net Border and Citygate Purchase Volume	(6,137,419)	(16,138,263)	(5,584,078)	3,420,078	3,512,730	(697,241)	(3,648,082)	(9,582,050)	10,311,013	16,971,289	7,280,684	(8,679,915)	(8,971,254)
Net Commodity Purchase Volume	23,927,198	14,501,056	24,417,360	33,549,560	34,770,640	29,306,162	26,588,966	19,347,573	38,879,211	40,435,118	37,405,529	22,850,266	345,978,639

### 2-11 Southern California Gas Company Net Mainline Purchase Volume GCIM Year 22 April 1, 2015 through March 31, 2016

	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
Mainline Purchase Total	30,499,447	31,303,850	30,731,730	32,013,356	31,596,542	30,612,695	31,597,442	32,857,093	34,575,787	27,643,637	31,105,500	34,675,163	379,212,242
Mainline Sale Total	(434,830)	(664,531)	(730,292)	(1,883,874)	(338,632)	(609,292)	(1,360,394)	(3,927,470)	(6,007,589)	(4,179,808)	(980,655)	(3,144,982)	(24,262,349)
Net Mainline Purchase Volume	30,064,617	30,639,319	30,001,438	30,129,482	31,257,910	30,003,403	30,237,048	28,929,623	28,568,198	23,463,829	30,124,845	31,530,181	354,949,893

						2-12 fornia Gas Cor ne Purchase Vo M Year 22							
					April 1, 2015 th	rough March	31, 2016						
	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
El Paso - Permian	4,864,261	4,576,481	4,809,251	5,370,391	4,815,345	4,619,213	4,815,347	6,870,384	5,232,423	4,192,968	5,408,060	5,445,223	61,019,347
El Paso - San Juan	13,350,761	13,274,397	12,578,218	13,699,987	13,575,508	12,894,038	13,436,660	12,073,208	14,893,262	11,389,293	12,537,932	14,054,539	157,757,803
Transwestern - Permian	299,642	304,755	308,959	309,711	309,660	293,476	309,418	588,688	568,801	589,862	587,540	1,246,728	5,717,240
Transwestern - San Juan	2,746,186	2,835,896	2,810,387	3,048,031	2,847,902	2,821,721	2,968,610	2,996,404	3,260,762	2,589,631	3,055,362	2,850,505	34,831,397
Kern River	7,614,414	7,741,332	7,649,362	7,928,071	7,920,376	7,617,240	7,771,572	7,915,236	8,650,436	7,072,596	7,792,697	8,225,227	93,898,559
Enterprise - Waha	-	620,000	687,500	-	464,711	611,070	620,000	600,000	310,000	-	15,000	1,090,000	5,018,281
NOVA-AECO/NIT	1,606,551	1,950,989	1,888,053	1,657,165	1,663,040	1,755,937	1,675,835	1,813,173	1,660,103	1,809,287	1,708,909	1,762,941	20,951,983
GTN-Kingsgate	17,632	-	-	-	-	-	-	-	-	-	-	-	17,632
GTN-Stanfield	-	-	-	-	-	-	-	-	-	-	-	-	-
GTN-Malin	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Mainline Purchase Volume	30,499,447	31,303,850	30,731,730	32,013,356	31,596,542	30,612,695	31,597,442	32,857,093	34,575,787	27,643,637	31,105,500	34,675,163	379,212,242

#### Southern California Gas Company **Total Mainline Sale Volume** GCIM Year 22 April 1, 2015 through March 31, 2016 Apr-15 May-15 Jun-15 Jul-15 Nov-15 Dec-15 Feb-16 Aug-15 Sep-15 Oct-15 Jan-16 El Paso - Permian (280,710) (86,868) (137,399) (79,584) (409,923) (818,980) (1,129,101) (814,285) (1,486,289) (20,000) (26,610) (1,104,869) El Paso - San Juan (2,700) (133,750) (21,800) (627,359) (15,600) (31,850) (78,478) (557,327) (1,835,779) (2,266,467) (14,200) (1,211,299) Transwestern - Permian (80,000) (40,000) (85,973) (208,200) (15,000) (101,856) (127,015) (131,180) (227,274) (321,402) (10,000) Transwestern - San Juan --(2,100) --(40,000) (158,000) (452,170) (193,600) --Kern River (19,954) (10,000) (131,300) (86,393) (10,500) (33,700) (360,354) (1,250,850) (2,004,070) (66,500) -Enterprise - Waha ----(266,632) (251,777) (188,900) (232,000) (168,300) --NOVA-AECO/NIT (51,466) (393,913) (353,820) (880,238) (10,900) (163,499) (155,724) (493,244) (501,016) (142,170) (202,738)

Mar-16

(349,770)

-

-

-

(97,624)

Total

(6,394,618)

(6,796,609)

(1,697,670)

(3,973,621)

(1,107,609)

(3,446,352)

(845,870)

GTN-Kingsgate	-	-	-	-	-	-	-	-	-	-	-	-	-
GTN-Stanfield	-	-	-	-	-	-	-	-	-	-	-	-	-
GTN-Malin	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Mainline Sale Volume	(434,830)	(664,531)	(730,292)	(1,883,874)	(338,632)	(609,292)	(1,360,394)	(3,927,470)	(6,007,589)	(4,179,808)	(980,655)	(3,144,982)	(24,262,349)

				Sou	thern Californ	ia Gas Compan	у						
				Total Bo	rder and Cityg	ate Purchase V	olume						
					GCIM Y	ear 22							
				April	1, 2015 throug	h March 31, 20	16						
	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
Border Purchases	816,911	175,131	693,771	1,926,566	2,849,221	2,492,954	809,994	230,847	365,732	1,139,455	454,841	567,022	12,522,445
SoCal Citygate Purchases	669,267	660,000	1,959,688	5,672,597	3,114,009	1,045,000	2,868,287	816,500	11,238,281	18,069,333	8,030,843	1,407,268	55,551,073
PG&E Topock	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Border and Citygate Purchases	1,486,178	835,131	2,653,459	7,599,163	5,963,230	3,537,954	3,678,281	1,047,347	11,604,013	19,208,788	8,485,684	1,974,290	68,073,518

					Southern Califo	ornia Gas Com	pany						
				Actual	l Total Border a	and Citygate Sa	ale Volume						
					GCIN	1 Year 22							
				A	pril 1, 2015 thr	ough March 31	l, 2016						
	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
Border Sales	(175,001)	(3,736,652)	(3,288,238)	(2,231,603)	(620,500)	(818,195)	(2,074,067)	(362,675)	(1,201,000)	(1,617,499)	(1,205,000)	(2,278,208)	(19,608,638)
Socal Citygate Sales	(7,448,596)	(13,236,742)	(4,949,299)	(1,947,482)	(1,830,000)	(3,417,000)	(5,252,296)	(10,266,722)	(92,000)	(620,000)	-	(8,375,997)	(57,436,134)
PG&E Topock Sales	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Border and Citygate Sales	(7,623,597)	(16,973,394)	(8,237,537)	(4,179,085)	(2,450,500)	(4,235,195)	(7,326,363)	(10,629,397)	(1,293,000)	(2,237,499)	(1,205,000)	(10,654,205)	(77,044,772)

						nia Gas Compai	•						
				Net Bo	70	ate Purchase V	olume						
					GCIM Y								
					,	gh March 31, 2							
	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
Border Purchases	816,911	175,131	693,771	1,926,566	2,849,221	2,492,954	809,994	230,847	365,732	1,139,455	454,841	567,022	12,522,445
Border Sale	(175,001)	(3,736,652)	(3,288,238)	(2,231,603)	(620,500)	(818,195)	(2,074,067)	(362,675)	(1,201,000)	(1,617,499)	(1,205,000)	(2,278,208)	(19,608,638)
Net Border Purchases	641,910	(3,561,521)	(2,594,467)	(305,037)	2,228,721	1,674,759	(1,264,073)	(131,828)	(835,268)	(478,044)	(750,159)	(1,711,186)	(7,086,193)
SoCal Citygate Purchases	669,267	660,000	1,959,688	5,672,597	3,114,009	1,045,000	2,868,287	816,500	11,238,281	18,069,333	8,030,843	1,407,268	55,551,073
SoCal Citygate Sales	(7,448,596)	(13,236,742)	(4,949,299)	(1,947,482)	(1,830,000)	(3,417,000)	(5,252,296)	(10,266,722)	(92,000)	(620,000)	-	(8,375,997)	(57,436,134)
Net SoCal Citygate Purchases	(6,779,329)	(12,576,742)	(2,989,611)	3,725,115	1,284,009	(2,372,000)	(2,384,009)	(9,450,222)	11,146,281	17,449,333	8,030,843	(6,968,729)	(1,885,061)
PG&E Topock Purchases	-	-	-	-	-	-	-	-	-	-	-	-	-
PG&E Topock Sales	-	-	-	-	-	-	-	-	-	-	-	-	-
PG&E Topock Purchases	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Border and Citygate Purchases	(6,137,419)	(16,138,263)	(5,584,078)	3,420,078	3,512,730	(697,241)	(3,648,082)	(9,582,050)	10,311,013	16,971,289	7,280,684	(8,679,915)	(8,971,254)

# 2-17 Southern California Gas Company Benchmark Spot Prices GCIM Year 22 April 1, 2015 through March 31, 2016

\* Publications for each spot prices are reviewed.

## 2-18 Southern California Gas Company Core Capacity Utilization GCIM Year 22 April 1, 2015 through March 31, 2016

				Capacity			
	Core	Nominated	Unutilized	Utilization	Nominated	Actual Volume	Capacity
	Capacity	Capacity	Capacity	Percentage	Capacity	Delivered	Cut
El Paso Natural Gas Company	224,013,672	207,051,106	16,962,566	92%	207,051,106	205,237,069	1,814,037
Foothills Pipelines Ltd	19,698,084	17,670,755	2,027,329	90%	17,670,755	17,344,787	325,968
Gas Trans Northwest Corp	19,217,928	17,415,245	1,802,683	91%	17,415,245	17,092,891	322,354
Kern River Gas Transmission Company	94,725,910	88,438,557	6,287,353	93%	88,438,557	88,049,659	388,898
Nova Gas Trans Ltd	19,858,349	18,042,689	1,815,660	91%	18,042,689	18,042,607	82
Pacific Gas & Electric	19,007,112	17,206,454	1,800,658	91%	17,206,454	16,938,796	267,658
Transwesten Pipeline Company	47,720,000	41,129,234	6,590,766	86%	41,129,234	40,691,285	437,949
Total	444,241,055	406,954,040	37,287,015	92%	406,954,040	403,397,094	3,556,946

				South	nern	California Gas Com	par	y								
				Toleran	ce B	and Review GCIM	/ear	22								
				April 1,	201	5 through March 3	1, 20	)16								
	Benchmark	Actual	(Over)/Under	Benchmark		Actual		Reservation							Lo	wer Tolerance
Month	Commodity Costs	Commodity Costs	Benchmark	Dollars		Dollars		Costs	Tra	ansportation Costs	Uppe	r Tolerance 2%	Low	er Tolerance 1%		5%
Apr-15	\$ 53,985,896	\$ 53,250,865	\$ 735,032	\$ 69,691,643	\$	68,956,611	\$	14,998,762	\$	706,984	\$	1,079,718	\$	539,859	\$	2,699,295
May-15	\$ 28,178,439	\$ 24,045,786	\$ 4,132,653	\$ 43,525,891	\$	39,393,237	\$	14,629,076	\$	718,376	\$	563,569	\$	281,784	\$	1,408,922
Jun-15	\$ 61,554,441	\$ 60,140,637	\$ 1,413,804	\$ 76,879,760	\$	75,465,956	\$	14,619,954	\$	705,365	\$	1,231,089	\$	615,544	\$	3,077,722
Jul-15	\$ 90,550,519	\$ 89,294,970	\$ 1,255,549	\$ 106,550,862	\$	105,295,314	\$	15,283,691	\$	716,652	\$	1,811,010	\$	905,505	\$	4,527,526
Aug-15	\$ 94,873,762	\$ 93,815,237	\$ 1,058,525	\$ 112,052,427	\$	110,993,902	\$	16,442,003	\$	736,662	\$	1,897,475	\$	948,738	\$	4,743,688
Sep-15	\$ 73,016,344	\$ 72,060,458	\$ 955,886	\$ 89,549,907	\$	88,594,022	\$	15,824,279	\$	709,284	\$	1,460,327	\$	730,163	\$	3,650,817
Oct-15	\$ 63,310,532	\$ 62,205,145	\$ 1,105,386	\$ 79,648,895	\$	78,543,509	\$	15,617,994	\$	720,370	\$	1,266,211	\$	633,105	\$	3,165,527
Nov-15	\$ 35,494,938	\$ 32,873,366	\$ 2,621,572	\$ 52,553,521	\$	49,931,949	\$	16,376,671	\$	681,912	\$	709,899	\$	354,949	\$	1,774,747
Dec-15	\$ 89,206,182	\$ 89,420,757	\$ (214,575)	\$ 106,191,134	\$	106,405,709	\$	16,348,198	\$	636,754	\$	1,784,124	\$	892,062	\$	4,460,309
Jan-16	\$ 97,866,348	\$ 92,626,995	\$ 5,239,353	\$ 114,366,295	\$	109,126,941	\$	15,928,810	\$	571,137	\$	1,957,327	\$	978,663	\$	4,893,317
Feb-16	\$ 79,625,646	\$ 76,920,122	\$ 2,705,524	\$ 96,085,468	\$	93,379,944	\$	15,771,906	\$	687,917	\$	1,592,513	\$	796,256	\$	3,981,282
Mar-16	\$ 32,673,423	\$ 25,519,620	\$ 7,153,803	\$ 49,191,229	\$	42,037,426	\$	15,835,638	\$	682,168	\$	653,468	\$	326,734	\$	1,633,671
Total	\$800,336,469	\$772,173,957	\$ 28,162,512	\$ 996,287,032		\$968,124,520		\$187,676,980		\$8,273,583		\$16,006,729		\$8,003,365		\$40,016,823