PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



December 22, 2016

Advice Letter 1023

Justin Lee Brown Vice President, Regulation & Public Affairs Southwest Gas Corporation P. O. Box 98510 Las Vegas, NV 89193-8510

SUBJECT: Annual Regulatory Gas Account Balance Update for Rates Effective January 1, 2017

Dear Mr. Brown:

Southwest Gas Corporation Advice Letter 1023 is approved as of the date of this letter for rates effective January 1, 2017. Pursuant to recommendations by the California State Auditor, Energy Division staff continues to conduct in-depth reviews of Southwest Gas Corporation gas balancing accounts. Balances in all accounts authorized for recovery are subject to audit, verification and adjustment.

Advice Letter 1023 includes the greenhouse gas compliance costs and allowance proceeds as informational forecasts and does not request to recover them in rates. These costs and proceeds are not approved and should not be incorporated into rates at this time.

Sincerely,

Edward Randolph

Director, Energy Division

Edward Randoft

cc: Valerie J. Ontiveroz, Regulatory Manager, valerie.ontiveroz@swgas.com



December 22, 2016

ATTN:

Tariff Unit, Energy Division

California Public Utilities Commission 505 Van Ness Avenue, Room 4005

San Francisco, CA 94102

Subject:

Southwest Gas Corporation (U 905 G)

Advice Letter No. 1023

Enclosed are an original and one (1) copy of a replacement sheet to correct a ministerial error in Southwest Gas Corporation's (Southwest Gas) Advice Letter No. (AL) 1023, filed on November 30, 2016. AL 1023 is Southwest Gas' annual update to balancing account surcharges and rates related to its Fixed Cost Adjustment Mechanism (FCAM), Interstate Transportation Cost Adjustment Mechanism (ITCAM), and transportation and storage, effective January 1, 2017. AL 1023 also included tables related to Greenhouse Gas (GHG) costs and allowance proceeds pursuant to Decision 15-10-032.

The purpose of this transmittal is to correct Footnotes 2, 3, and 4 on Schedule II, Sheet 1 of 2 in Attachment 1 to AL 1023. The word "forecasted" was misspelled and has been corrected in the attached. This correction does not affect any rate adjustments requested in AL 1023.

In accordance with General Order 96-B, General Rule 7.5.1, Southwest Gas is serving copies of this substitute sheet filing to the utilities and interested parties shown on the attached list.

Sincerely.

Valerie J. Ontiveroz

Regulatory Manager/California

VJO:dm Enclosures

Distribution List

Advice Letter No. 1023

In conformance with GO 96-B, General Rule 4.3

The following individual has been served by regular, first-class mail:

Elizabeth Echols, Director Office of Ratepayer Advocates California Public Utilities Commission 505 Van Ness Avenue, 4th Floor San Francisco, CA 94105

The following individuals or entities have been served by electronic mail:

Pacific Gas & Electric Company PGETariffs@pge.com

Southern California Gas Company SNewsom@semprautilities.com

San Diego Gas & Electric Company SDG&ETariffs@SempraUtilities.com

Robert M. Pocta
Office of Ratepayer Advocates
California Public Utilities Commission
rmp@cpuc.ca.gov

Nathaniel Skinner
Office of Ratepayer Advocates
California Public Utilities Commission
nws@cpuc.ca.gov

Pearlie Sabino
Office of Ratepayer Advocates
California Public Utilities Commission
pzs@cpuc.ca.gov

SOUTHWEST GAS CORPORATION SOUTHERN CALIFORNIA **UPSTREAM PIPELINE CHARGES AND STORAGE COSTS**

Line No.	Description	Annual Volumes		Rate	Annual Amount		Rate Therm	Line No.
110.	(a)	(b)	_	(c)	(d)=(b)*(c)	pei	(e)	140.
	1-7	(-7		(-/	(-) (-) (-)		(-)	
1	Franchise & Uncollectible Rate [1]			1.62990%				1
	Upstream Interstate Reservation Charges		_					_
2	Kem River Transmission Company (Kem) (Dth/Day)	9,490,000		0.27000	\$ 2,562,300			2
3	G-BTS1 Southern California Gas Company (SoCal)	9,490,000	\$	0.18629	\$ 1,767,892			3
	Backbone Transportation Service (Dth/Day)	0.405.000						
4	G-BTS2 Southern California Gas Company (SoCal)	9,125,000	\$	0.14903	\$ 1,359,899			4
-	Backbone Transportation Service (Dth/Day)	4.5	_					_
5	GT-SWGX SoCal Pisgah Meter Station (Months)	12	\$	27,505	\$ 330,060	_		5
6	Total Annual Reservation Charges				\$ 6,020,151	-		6
7	Total Core Sales Volumes (Therms) [2]	84,839,677						7
•	Total Colo Calca Totalica (Therma) [2]	07,000,071						,
8	Reservation Rate (Ln.6/Ln.7)*(1+Ln.1)					S	0.07212	8
						· · · · · · · · · · · · · · · · · · ·		
	Upstream Intrastate Storage Charges							
9	G-TBS SoCal Transaction Based Storage Service -	613.937.300	5	0.00170	\$ 1.043.693			9
	Inventory Storage Reservation Charge (Dth/Day)		_		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			_
10	Total Annual Storage Charges				\$ 1,043,693	-		10
						-		
11	Total Core Throughput (Therms) [3]	84,839,677						11
		,,						- •
12	Storage Rate (Ln.10/Ln.11)*(1+Ln.1)					\$	0.01250	12
							_	
	Upstream Intrastate Variable Charges							
13	GT-TLS (GT-9CA) SoCal Intrastate Transportation Service	96,609,174	S	0.01485	\$ 1,434,646			13
	(Therms)		-					
14	GT-SWGX SoCal Exchange Wholesale Natural Gas	24,152,294	\$	0.11273	\$ 2,722,688			14
	Service (Therms)	, ,,,,,	•		• -,,			
15	Kern Transmission Service (Therms)	98,446,371	S	0.00044	\$ 43,316			15
16	Total Annual Variable Charges				\$ 4,200,651			16
	· ·					-		
17	Total Throughput (Therms) [4]	95,872,627						17
18	Variable Rate (Ln.16/Ln.17)*(1+Ln.1)					\$	0.04453	18

^[1] Authorized by Commission in Order D.14-06-028.
[2] Forecasted core sales volumes, twelve-months ended December 31, 2016.
[3] Forecasted total core throughput, twelve-months ended December 31, 2016.
[4] Forecasted total throughput, less exempt volumes, twelve-months ended December 31, 2016.



December 13, 2016

ATTN:

Tariff Unit, Energy Division

California Public Utilities Commission 505 Van Ness Avenue, Room 4005

San Francisco, CA 94102

Subject:

Southwest Gas Corporation (U 905 G)

Advice Letter No. 1023

Enclosed are an original and one (1) copy of replacement sheets correcting ministerial errors in Southwest Gas Corporation's (Southwest Gas) Advice Letter No. (AL) 1023, filed on November 30, 2016. AL 1023 is Southwest Gas' annual update to balancing account surcharges and rates related to its Fixed Cost Adjustment Mechanism (FCAM), Interstate Transportation Cost Adjustment Mechanism (ITCAM), and transportation and storage, effective January 1, 2017. AL 1023 also included tables related to Greenhouse Gas (GHG) costs and allowance proceeds pursuant to Decision 15-10-032.

The purpose of this transmittal is to correct the following ministerial errors with respect to the GHG sections in AL 1023:

- 1) Page 3 of AL 1023, Table A Forecasted Revenue Requirement The last paragraph in this section denotes "Line 21-Covered Entity Rate Impact" on Table A as confidential. However, per Energy Division Staff guidance received on October 4, 2016, the Covered Entity and Non-Covered Entity rate impacts (Line Nos. 21 and 22, respectively) were not required in this filing pending a decision in Rulemaking 14-03-003.1
- 2) Attachment 2, Table A Forecast Revenue Requirement The redaction of Line 21 Covered Entity Rate Impact (\$/therm) has been removed. Additionally, the reference to AL 994 in the table heading has been updated to correctly refer to AL 1023.

The corrections noted above do not affect any rate adjustments requested in AL 1023.

In accordance with General Order 96-B, General Rule 7.5.1, Southwest Gas is serving copies of this substitute sheet filing to the utilities and interested parties shown on the attached list.

Sincerely.

Valerie J. Ontiveroz

Regulatory Manager/California

VJO:dm Enclosures

¹ For ease of reference, Southwest Gas has included both a clean and redlined version of Page 3. 5241 Spring Mountain Road / Las Vegas, Nevada 89150-0002 P.O. Box 98510 / Las Vegas, Nevada 89193-8510 / (702) 876-7011

Distribution List

Advice Letter No. 1023

In conformance with GO 96-B, General Rule 4.3

The following individual has been served by regular, first-class mail:

Elizabeth Echols, Director Office of Ratepayer Advocates California Public Utilities Commission 505 Van Ness Avenue, 4th Floor San Francisco, CA 94105

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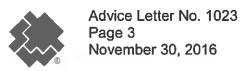
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nws@cpuc.ca.gov

Pearlie Sabino
Office of Ratepayer Advocates
California Public Utilities Commission
pzs@cpuc.ca.gov



from Energy Division Staff on October 4, 2016. A brief description of each table is set forth below.

Table A - Forecasted Revenue Requirement

Table A demonstrates the Company's calculation of the forecasted revenue requirement associated with its recorded GHG compliance costs for 2015 and forecasted GHG compliance costs for 2016 and 2017.⁵ As noted above, Southwest Gas is not requesting authorization to include the forecasted revenue requirement for GHG compliance costs in customer rates at this time, therefore rate impacts have not been provided (Lines 21 and 22). Instead, the Company has included, for illustrative purposes only, the following two scenarios which calculate rate impacts for both covered and non-covered entities (both scenarios provide that no compliance costs are included in rates in either 2015 or 2016):

<u>Scenario 1</u> – 50% of the total deferred revenue requirement for 2015 and 2016 GHG compliance costs are included in 2017 customer rates and the remaining 50% in 2018 customer rates.

Scenario 2 – 50% of the total deferred revenue requirement for 2015 GHG compliance costs are included in customer rates in both 2017 and 2018, while 50% of the total deferred revenue requirement for 2016 GHG compliance costs are included in customer rates in both 2019 and 2020.

Southwest Gas considers certain information contained in Table A confidential, including Gross Throughput (Line 1) and Throughput to Covered Entities (Line 2), and is providing it to the Energy Division confidentially under separate cover pursuant to General Order (GO) 66-C, PU Code § 583 and D.15-10-032.

Table B - Recorded GHG Costs

Southwest Gas has included recorded costs in Table B utilizing the weighted average cost methodology. Because Table B contains confidential information, it is being provided to the Energy Division confidentially under separate cover pursuant to GO 66-C, PU Code § 583 and D.15-10-032.

Table C - GHG Allowance Proceeds

Under the Cap-and-Trade Program, the California Air Resources Board (CARB) annually allocates GHG allowances to natural gas utilities for the benefit of their ratepayers, and CARB requires the utilities to consign a minimum percentage of the allowances for sale in CARB's allowance auctions, with consignment requirements beginning at 25 percent in

⁵ Southwest Gas will include its 2016 GHG compliance costs in its November 2017 annual update filing.

Advice Letter No. 1023 Page 3 November 30, 2016

from Energy Division Staff on October 4, 2016. A brief description of each table is set forth below.

Table A - Forecasted Revenue Requirement

Table A demonstrates the Company's calculation of the forecasted revenue requirement associated with its recorded GHG compliance costs for 2015 and forecasted GHG compliance costs for 2016 and 2017.⁵ As noted above, Southwest Gas is not requesting authorization to include the forecasted revenue requirement for GHG compliance costs in customer rates at this time, therefore rate impacts have not been provided (Lines 21 and 22). Instead, the Company has included, for illustrative purposes only, the following two scenarios which calculate rate impacts for both covered and non-covered entities (both scenarios provide that no compliance costs are included in rates in either 2015 or 2016):

Scenario 1-50% of the total deferred revenue requirement for 2015 and 2016 GHG compliance costs are included in 2017 customer rates and the remaining 50% in 2018 customer rates.

Scenario 2 – 50% of the total deferred revenue requirement for 2015 GHG compliance costs are included in customer rates in both 2017 and 2018, while 50% of the total deferred revenue requirement for 2016 GHG compliance costs are included in customer rates in both 2019 and 2020.

Southwest Gas considers certain information contained in Table A confidential, including Gross Throughput (Line 1) and —Throughput to Covered Entities (Line 2) and Covered Entity Rate Impact (Line 21), and is providing it to the Energy Division confidentially under separate cover pursuant to General Order (GO) 66-C, PU Code § 583 and D.15-10-032.

Table B - Recorded GHG Costs

Southwest Gas has included recorded costs in Table B utilizing the weighted average cost methodology. Because Table B contains confidential information, it is being provided to the Energy Division confidentially under separate cover pursuant to GO 66-C, PU Code § 583 and D.15-10-032.

Table C - GHG Allowance Proceeds

Under the Cap-and-Trade Program, the California Air Resources Board (CARB) annually allocates GHG allowances to natural gas utilities for the benefit of their ratepayers, and CARB requires the utilities to consign a minimum percentage of the allowances for sale in CARB's allowance auctions, with consignment requirements beginning at 25 percent in

⁵ Southwest Gas will include its 2016 GHG compliance costs in its November 2017 annual update filing.

Table A: Forecast Revenue Requirement SOUTHWEST GAS CORPORATION D.15-10-032 - Appendix A Advice Letter No. 1023

;			2015	2		2016		2017	
Line	Description		Forecast	Reco	Recorded	Forecast	Recorded	Forecast	Recorded
- 2	Gross Throughput (MMcf) Throughput to Covered Entities (MM-C)								
e	Net Throughput to End Users (NMAC) (Line 1 + Line 2)		13,683	12	12,245	13,785		13,781	
4	Lost and Unaccounted for Gas' (MMcf)		0			88		88	
40	Total Supplied Gas (MMcf) (Line 3 + Line 4)		13,683			13,883		13,881	
9	Emissions Conversion Factor (MTCO ₂ e/NMcf)		54.64437	54.5	54.55802	54.64437		54.64437	
! ~	Compliance Obligation for End Users and LUAF (MTCO ₂ e) (Line 5 * Line 6)		747,710			758,624		758,499	
80	Compliance Obligation for Company Facilities (MTCO ₂ e)		0			0		0	
ග	Gross Compliance Obligation (MTCO ₂ e) (Line 7 + Line 8)		747,710			758,624		758,499	
# :	Directly Allocated Allowances ² Percentane Consistent Aurition		(728,600)			(713,936)		(700,043)	
12	Consigned Allowances (Line 10 * Line 11)		182.150			214 180		346.036	
13	Net Compilance Obligation (MTCO ₂ e) (Line 9 + Line 10+ Line 12)		201,260	121,	121,627	258,868		303,471	
4	Proxy GHG Allowance Price 345	s	12.96		w	13.33	v	13.23	
15	Complance Instrument Cost ² Interest	•	2,608,330	\$ 1.813,190	13,190 \$	3,450,705	vı	4,014,916	
17	Franchise Fees & Uncollectibles ⁶	s	42,516	\$ 29	29,555 \$	56.248	es.	65.443	
18	Revenue Requirement (Line 15 + Line 16 + Line 17)	50	2,650,846	\$ 1,845,807	8 208	3,506,951	*	4,080,359	
20	Previous Year's Cost Balancing Subaccount Balance Revenue Requirement to be included in Rates (Line 18 + Line 19)	•	2,650,846	\$ 1,845,807	807 \$	3,506,951	w	4,080,359	
22	Covered Entity Rate Impact (\$therm) Non-Covered Entity Rate Impact (\$therm)	w	0.00052	\$ 0.00060	\$ 090	0.00054	47	0.00053	

					i	
Illustrative Rate Impacts: for Informational Purposes Only		2015		2016		2017
2017 Rev Req + 50% of 2015 and 2016 Rev Reqs	\$	•	s		49	6.756.738
2017 Rev Req + 50% of 2015 Rev Req	s		s		v	5.003.262
2017 Rev Req	s	•	ø		w	4,080,359
Non-Covered Entity Rate Impacts (\$7therm)						
2017 Rev Reg + 50% of 2015 and 2016 Rev Regs	us	٠	v		un	0.04769
2017 Rev Req + 50% of 2015 Rev Req	47		•		¢7	0.03532
2017 Rev Req	v		sn.		ø	0.02880
Covered Entity Rate Impacts (\$Mherm)						
2017 Rev Req + 50% of 2015 and 2016 Rev Reqs	s	,	67		•	0.00083
2017 Rev Req + 50% of 2015 Rev Req	••	•	S		s	0.00067
2017 Rev Req	\$		so.		νı	0.00053

Lost and unaccounted for gas percentages were authorized in Southwest Gas' last General Rate Case (GRC) Decision 14-06-028.

2 2017 Vintage Allowances Allocated by CARB on October 24, 2016.

3 The forecasted porty price is the January 16, 2015, fubrus settlement price for vintage year 2015 allowances for delivery in December. The future settlements price was obstanced from the intercontental Exchange dated January 16, 2015, Futures Daily Market Report for Physical Environmental. "CAN-California Canton. Allowance Future-Vintage 2015 - California Carbon Allowance Vintage 2015." This methodology is consistent with Southwest Gas' methodology for forecasting gas supply prices.

4 The forecasted proxy price is the November 23, 2015, futures settlement price for vinlage year 2016 allowances for delivery in December. The future settlements price was obtained from the Intercontinental Exchange dated November 23, 2015, Futures Daly Martet Report for Physical Environmental, "CAO-California Carbon Allowance Future-Vinlage 2016 and Allowance Vinlage 2016. "This methodology is consistent with Southwest Gas' methodology for forecasting gas supply prices.

5 The forecasted proxy price is the November 4, 2016, futures settlement price for vintage year 2017 allowances for delivery in December. The future settlements price was obtained from the Intercontinental Exchange dated November 4 2016, Futures Daily Marhet Report for Physical Environmental, "CAP-California Carbon Allowance Future-Vintage 2017 - California Carbon Allowance Vintage 2017." This methodology is consistent with Southwest Gas' methodology for forecasting gas supply prices.

6 The F&U Rate was authorized in Southwest Gas' last General Rate Case (GRC) Decision 14-08-028. 7 2016 Recorded Cost through October 31, 2016.



November 30, 2016

ATTN: Tariff Unit, Energy Division

California Public Utilities Commission 505 Van Ness Avenue, Room 4005

San Francisco, CA 94102

Subject: Southwest Gas Corporation (U 905 G)

Advice Letter No. 1023

Enclosed herewith is one (1) copy of Southwest Gas Corporation's Advice Letter No. 1023, together with California Gas Tariff Sheet Nos. 65-71.

Sincerely,

Valerie J. Ontiveroz

Regulatory Manager/California

VJO:jjp Enclosures



SOUTHWEST GAS CORPORATION

Advice Letter No. 1023

November 30, 2016

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Southwest Gas Corporation (Southwest Gas or Company) (U 905 G) tenders herewith for filing the following tariff sheets:

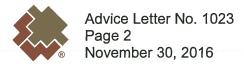
Cal. P.U.C. Sheet No.	California Gas Tariff Title of Sheet	Canceling Cal. P.U.C. Sheet No.
80th Revised Sheet No. 65	Statement of Rates - Rates Applicable to Southern California Service Area	79th Revised Sheet No. 65
81st Revised Sheet No. 66	Statement of Rates - Rates Applicable to Southern California Service Area	80th Revised Sheet No. 66
51st Revised	Statement of Rates - Rates Applicable to Southern	49th/50th
Sheet No. 67	California Service Area	Revised Sheet No. 67
79th Revised Sheet No. 68	Statement of Rates - Rates Applicable to Northern California Service Area	78th Revised Sheet No. 68
81st Revised Sheet No. 69	Statement of Rates - Rates Applicable to Northern California Service Area	79th/80th Revised Sheet No. 69
46th Revised Sheet No. 70	Statement of Rates - Rates Applicable to South Lake Tahoe Service Area	45th Revised Sheet No. 70
81st Revised Sheet No. 71	Statement of Rates - Rates Applicable to South Lake Tahoe Service Area	79th/80th Revised Sheet No. 71

Purpose

The purpose of this filing is to update balancing account surcharges related to the Fixed Cost Adjustment Mechanism (FCAM) and the Interstate Transportation Cost Adjustment Mechanism (ITCAM), and to update transportation and storage rates applicable to Southwest Gas' Southern California, Northern California and South Lake Tahoe Divisions. This filing also includes tables related to Greenhouse Gas (GHG) costs and allowance proceeds pursuant to Decision (D.) 15-10-032.

1) Annual Adjustments

The calculation of Southwest Gas' 2017 FCAM and ITCAM balancing account surcharges and upstream transportation and storage rates are contained in Schedules I and II (Attachment 1).



The combined effect of these changes will result in annual revenue decrease of approximately \$17.6 million or 12.7 percent in the Southern California Division, an increase of \$0.2 million or 0.5 percent in the Northern California Division, and an increase of \$0.2 million or 0.7 percent in the South Lake Tahoe District.

2) GHG Costs and Allowance Proceeds

Background

On October 22, 2015, the Commission issued D.15-10-032 resolving Phase 2 issues in Rulemaking (R.) 14-03-003,¹ including,

...methodologies for natural gas utilities to use when calculating forecast and recorded GHG allowance proceeds and GHG costs associated with complying with Cap-and-Trade, and it approves an advice letter process for the utilities to use when forecasting and reconciling reasonable GHG costs and allowance proceeds. Today's decision approves the 2015 forecasts presented in the utilities' preliminary statements and requires the utilities to include GHG costs in customers' rates on an equal-cents-per-therm basis. The decision also adopts a natural gas California Climate Credit for residential customer of those utilities.²

The Commission directed the natural gas utilities to utilize the tables provided in Appendix A to D.15-10-032 to annually forecast its GHG compliance costs and allowance proceeds and also include a "...narrative summary describing activities completed in the current year, including any deviations from what was forecasted for the current year, and projecting activities in the forecast year..." On April 7, 2016, the Commission approved D.16-04-013, which granted limited rehearing of D.15-10-032 regarding the return of GHG allowance proceeds to residential customers. D.16-04-013 vacated certain OPs, which effectively suspended the introduction of GHG costs into customer rates as well as the return of any GHG allowance proceeds.⁴

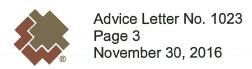
Although Southwest Gas is not requesting authorization through this filing to place GHG compliance costs into customer rates or to return GHG allowance proceeds to customers at this time, the Company has included as Attachment 2 its completed Appendix A tables pursuant to D.15-10-032. Tables A and C in Attachment 2 include various rate impact scenarios for illustrative purposes only, pursuant to the informal interim guidance received

¹ R.14-03-003, "Order Instituting Rulemaking to Address Natural Gas Distribution Utility Cost and Revenue Issues Associated with Greenhouse Gas Emissions," adopted by the Commission on March 12, 2014

² D.15-10-032, pgs. 2-3.

³ D.15-10-032, pg. 19.

⁴ D.16-04-013, OP 4 at pg. 6.



from Energy Division Staff on October 4, 2016. A brief description of each table is set forth below.

Table A - Forecasted Revenue Requirement

Table A demonstrates the Company's calculation of the forecasted revenue requirement associated with its recorded GHG compliance costs for 2015 and forecasted GHG compliance costs for 2016 and 2017.⁵ As noted above, Southwest Gas is not requesting authorization to include the forecasted revenue requirement for GHG compliance costs in customer rates at this time, therefore rate impacts have not been provided (Lines 21 and 22). Instead, the Company has included, for illustrative purposes only, the following two scenarios which calculate rate impacts for both covered and non-covered entities (both scenarios provide that no compliance costs are included in rates in either 2015 or 2016):

<u>Scenario 1</u> – 50% of the total deferred revenue requirement for 2015 and 2016 GHG compliance costs are included in 2017 customer rates and the remaining 50% in 2018 customer rates.

<u>Scenario 2</u> - 50% of the total deferred revenue requirement for 2015 GHG compliance costs are included in customer rates in both 2017 and 2018, while 50% of the total deferred revenue requirement for 2016 GHG compliance costs are included in customer rates in both 2019 and 2020.

Southwest Gas considers certain information contained in Table A confidential, including Gross Throughput (Line 1), Throughput to Covered Entities (Line 2) and Covered Entity Rate Impact (Line 21), and is providing it to the Energy Division confidentially under separate cover pursuant to General Order (GO) 66-C, PU Code § 583 and D.15-10-032.

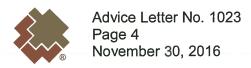
Table B - Recorded GHG Costs

Southwest Gas has included recorded costs in Table B utilizing the weighted average cost methodology. Because Table B contains confidential information, it is being provided to the Energy Division confidentially under separate cover pursuant to GO 66-C, PU Code § 583 and D.15-10-032.

Table C - GHG Allowance Proceeds

Under the Cap-and-Trade Program, the California Air Resources Board (CARB) annually allocates GHG allowances to natural gas utilities for the benefit of their ratepayers, and CARB requires the utilities to consign a minimum percentage of the allowances for sale in CARB's allowance auctions, with consignment requirements beginning at 25 percent in

⁵ Southwest Gas will include its 2016 GHG compliance costs in its November 2017 annual update filing.



2015 and increasing 5 percent annually through 2020.⁶ Southwest Gas forecasts approximately \$3.2 million net GHG allowance proceeds available for return to customers in 2017. However, Table C does not include a proposed California Climate Credit (Line 12). Instead, the Company has included, for illustrative purposes only, the following four scenarios of how the total proceeds received in 2017 could be distributed to customers (all scenarios provide that no allowance proceeds have been returned to customers in either 2015 or 2016):

<u>Scenario 1</u> – 50% of the total deferred 2015 and 2016 net GHG allowance proceeds are returned to residential customers in 2017 and the remaining 50% are returned to residential customers in 2018.

<u>Scenario 2</u> – 50% of the total deferred 2015 net GHG allowance proceeds are returned to residential customers in both 2017 and 2018, while 50% of the total deferred 2016 net GHG allowance proceeds are returned to residential customers in both 2019 and 2020.

<u>Scenario 3</u> – Same as Scenario 1, however, instead of a California Climate Credit that is calculated to be returned to residential customers only, an annual credit for all non-covered entities has been calculated.

<u>Scenario 4</u> – Same as Scenario 2, however, instead of a California Climate Credit that is calculated to be returned to residential customers only, an annual credit for all non-covered entities has been calculated.

In each of the above scenarios, the California Climate Credit was calculated by taking the forecasted GHG allowance proceeds remaining after subtracting the forecasted 2017 outreach and administrative expenses from the total allowance proceeds and dividing the result by the number of residential households. Southwest Gas' 2017 forecasted outreach and administrative expenses are discussed further below.

Table D – Outreach and Administrative Expenses

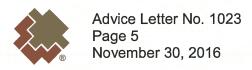
Southwest Gas' Outreach and Education Plan (Plan) was approved with a total forecasted cost of \$65,500.8 However, the overall Plan was not effectuated due to the suspension of the California Climate Credit and GHG compliance costs recovery, which also included a suspension of related outreach and education. As such, Southwest Gas experienced minimal costs related to its Plan in 2016.9 For 2017, the Company has forecasted the

⁶ D.15-10-032, pg. 5.

⁷ D.15-10-032, pg. 37.

⁸ Advice Letter No. 994, approved on December 30, 2015.

⁹ Letter from the Energy Division to Pacific Gas & Electric Company, San Diego Gas & Electric Company, Southern California Gas Company and Southwest Gas Corporation [sic], "Suspend April 2016 natural Gas Climate Credit and Introduction of GHG Costs in Rates," dated March 7, 2016.



same amount for outreach and education pending a final decision by the Commission in R.14-03-003. Although it is unknown at this time what additional programming and testing will be needed to implement any future directives by the Commission to return the GHG allowance proceeds to customers, Southwest Gas does not foresee the costs to be incremental and has therefore not forecasted administrative expenses for 2017. Yet, any expenses that may be incurred (i.e., overtime labor) will be appropriately recorded in the Company's GHG Memorandum Account.

Table E - Compliance Obligation Over Time

Southwest Gas has included its 2015 verified emissions in Table E.

Compliance Instrument Procurement Limit

The Commission adopted a GHG compliance instrument procurement limit formula for the natural gas utilities in D.14-12-040. Pursuant to D.15-10-032, procurement limits shall be provided to the Energy Division confidentially. As such, Southwest Gas will provide its annual GHG procurement limit to the Energy Division under separate cover.

Effective Date

Southwest Gas believes this Advice Letter is subject to Energy Division disposition and should be classified as Tier 2 (effective after Energy Division approval) pursuant to GO 96-B. Southwest Gas respectfully requests the adjustments to balancing account surcharges applicable to FCAM, ITCAM as well as updates to the upstream pipeline transportation and storage rates proposed herein be approved December 30, 2016, which is thirty (30) calendar days from the date of filing, with rates effective January 1, 2017.

Protest

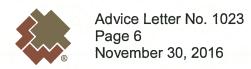
Anyone may protest this Advice Letter to the Commission. The protest must state the grounds upon which it is based with specificity. The protest must be sent no later than 20 days after the date of this Advice Letter filing and shall be sent by letter via U.S. Mail, facsimile, or electronically mailed. The address for mailing or delivering a protest to the Commission is:

ATTN: Tariff Unit
Energy Division
California Public Utilities Commission
505 Van Ness Avenue, 4th Floor
San Francisco, CA 94102

E-mail: edtariffunit@cpuc.ca.gov

Facsimile: 415-703-2200

Copies should also be mailed to the attention of the Director, Energy Division, Room 4004, at the same address as above and mailed or faxed to:



Protest (Continued)

Mr. Justin Lee Brown
Vice President/Regulation & Public Affairs
Southwest Gas Corporation
P.O. Box 98510
Las Vegas, NV 89193-8510

Facsimile: 702-364-3452

Notice

Pursuant to Energy Industry Rule 3.1(1), Southwest Gas is exempt from the notice requirements set forth in General Rule 4.2 in GO 96-B since the adjustments proposed herein are being filed pursuant to Southwest Gas' approved California gas tariff.

Service

In accordance with GO 96-B, General Rule 7.2, Southwest Gas is serving copies of this Advice Letter and related tariff sheets to the utilities and interested parties shown on the attached list.

Communications regarding this filing should be directed to:

Valerie J. Ontiveroz Regulatory Manager/California Southwest Gas Corporation P.O. Box 98510 Las Vegas, NV 89193-8510

Telephone: 702-876-7323

E-mail: valerie.ontiveroz@swgas.com

Justin Lee Brown

Respectfully submitted,

SOUTHWEST GAS CORPORATION

Attachments

By:

Distribution List

Advice Letter No. 1023

In conformance with GO 96-B, General Rule 4.3

The following individual has been served by regular, first-class mail:

Elizabeth Echols, Director
Office of Ratepayer Advocates
California Public Utilities Commission
505 Van Ness Avenue, 4th Floor
San Francisco, CA 94105

The following individuals or entities have been served by electronic mail:

Pacific Gas & Electric Company PGETariffs@pge.com

Southern California Gas Company SNewsom@semprautilities.com

San Diego Gas & Electric Company SDG&ETariffs@SempraUtilities.com

Robert M. Pocta
Office of Ratepayer Advocates
California Public Utilities Commission
rmp@cpuc.ca.gov

Nathaniel Skinner
Office of Ratepayer Advocates
California Public Utilities Commission
nws@cpuc.ca.gov

Pearlie Sabino
Office of Ratepayer Advocates
California Public Utilities Commission
pzs@cpuc.ca.gov

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

	MUS	T BE COMPLE	TED BY UTILITY (At	tach additional pages as needed)				
Company n	ame/CPUC L	Jtility No. Soutl	west Gas Corporat	ion (U 905 G)				
Utility type:			Contact Person: Va	lerie J. Ontiveroz				
□ ELC	■ GAS		Phone #: (702) 876-	7323				
☐ PLC	☐ HEAT	☐ WATER	E-mail: valerie.onti	veroz@swgas.com				
		ION OF UTILIT	Y TYPE	(Date Filed/ Received Stamp by CPUC)				
ELC = Elec PLC = Pipe		= Gas = Heat	WATER = Water					
· ·	er (AL) #: <u>102</u>							
Subject of A		alancing acco	unt surcharges, adju	ust transportation and storage rates effective				
Keywords (choose from	CPUC listing): I	Balancing Account	Surcharges/Transportation & Storage Rates				
AL filing typ	AL filing type: □ Monthly □ Quarterly ■Annual □ One-Time □ Other							
If AL filed in	compliance	with a Commis	sion order, indicate re	elevant Decision/Resolution #:				
Does AL re	place a withd	rawn or rejecte	d AL? If so, identify th	ne prior AL Not applicable				
Summarize	differences b	etween the AL	and the prior withdra	wn or rejected AL¹: Not applicable				
Resolution	Required? □	Yes ■ No		*				
Requested	effective date	e: January 1, 2	017	No. of tariff sheets: 7				
Estimated s	system annua	ıl revenue effec	t: (%): <u>(12.70%)</u> SCA	A, 0.51% NCA and 0.67% SLT				
Estimated s	system averag	ge rate effect (%	%): <u>(12.70%) SCA, 0</u>	.51% NCA and 0.67% SLT				
		•	attachment in AL sho , agricultural, lighting)	wing average rate effects on customer classes				
		: Not applica						
			9: See 'Subject of AL					
			me tariff sheets: Nor					
			egarding this AL are on the second second in the second in	due no later than 20 days after the date of this filing, e sent to:				
Attention: 505 Van Ne San Franci		102		Utility Info (including e-mail) Mr. Justin Lee Brown, Vice President/Regulation & Public Affairs Southwest Gas Corporation P. O. Box 98510 Las Vegas, NV 89193-8510 E-mail: justin.brown@swgas.com				

⁹ Discuss in AL if more space is needed.

Las Vegas, Nevada 89193-8510 California Gas Tariff

80th Revised	Cal.	P.U.C.	Sheet No.	
79th Revised	Cal	PIIC	Shoot No	

65

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STATEMENT OF RATES RATES APPLICABLE TO SOUTHERN CALIFORNIA SERVICE AREA [1]

Canceling

		Charges [2]				ĺ
Calcadata Na and Taxa of Class		and	Subtotal Gas	Other Surcharges		Effective
Schedule No. and Type of Charge	Margin	Adjustments	Usage Rate	CPUC PPP	Gas Cost	Sales Rate
GS-10-Residential Gas Service						
Basic Service Charge	\$5.00					\$5.00
Cost per Therm	¢ 00005	Ф 400E7	A 70400	0.00000 0.45044	A 00.400	
Baseline Quantities Tier II	\$.66835 \$.83962	\$.12657	\$.79492	\$.00093 \$.15841	\$.32428	
	Ф .03902	.12657	.96619	.00093 .15841	.32428	1.44981
GS-11-Residential Air-Conditioning Gas Service	· .					
Basic Service Charge	\$5.00					\$5.00
Cost per Therm						1.
Tier I	\$.66835	\$.12657	\$.79492	\$.00093 \$.15841	\$.32428	
Tier II Air-Conditioning	.83962 \$.33417	.12657	.96619	.00093 .15841	.32428	1.44981
	\$.33417	.12657	.46074	.00093 .15841	.32428	.94436
GS-12-CARE Residential Gas Service						
Basic Service Charge	\$4.00					\$4.00
Cost per Therm						
Baseline Quantities	\$.44451	\$.12657	\$.57108	\$.00093 \$.03984	\$.32428	\$.93613
Tier II	.58153	.12657	.70810	.00093 .03984	.32428	\$1.07315
GS-15-Secondary Residential Gas Service						1
Basic Service Charge	\$6.00					\$6.00
Cost per Therm	\$1.02862	\$.12657	\$1.15519	\$.00093 \$.15841	\$.32428	\$1.63881
GS-20-Multi-Family Master-Metered Gas Service						
Basic Service Charge	\$25.00					\$25.00
Cost per Therm						
Baseline Quantities	\$.66835	\$.12657	\$.79492	\$.00093 \$.15841	\$.32428	\$1.27854
Tier II	.83962	.12657	.96619	.00093 .15841	.32428	1.44981
GS-25 -Multi-Family Master-Metered Gas						- 1
Service-Submetered						- 1
Basic Service Charge	\$25.00					\$25.00
Cost per Therm						
Baseline Quantities	\$.66835	\$.12657	\$.79492	\$.00093 \$.15841	\$.32428	\$1.27854
Tier II	.83962	.12657	.96619	.00093 .15841	.32428	1.44981
Submetered Discount per Occupied Space	(\$7.69)					(\$7.69)
GS-35-Agriculture Employee Housing & Nonprofit Group Living Facility Gas Service						
Basic Service Charge	\$8.80					\$8.80
Cost per Therm	Ψ0.00					\$ 0.00
First 100	\$.39169	\$.12657	.51826	\$.00093 \$.03984	\$.32428	\$.88331
Next 500	.26500	.12657	.39157	.00093 .03984	.32428	.75662
Next 2,400	.16365	.12657	.29022	.00093 .03984	.32428	.65527
Over 3,000	.03779	.12657	.16436	.00093 .03984	.32428	.52941
GS-40-Core General Gas Service						
Basic Service Charge	\$11.00					\$11.00
Transportation Service Charge	\$780.00					\$780.00
Cost per Therm						7. 55.00
First 100	\$.60232	\$.12657	\$.72889	\$.00093 \$.15841	\$.32428	\$1.21251 F
Next 500	\$.44396	.12657	.57053	.00093 .15841	.32428	1.05415 F
Next 2,400	\$.31727	.12657	.44384	.00093 .15841	.32428	.92746 F
Over 3,000	\$.15995	.12657	.28652	.00093 .15841	.32428	.77014 F
						1

		Issued by	Date Filed November 30, 2016
Advice Letter No	1023	Justin Lee Brown	Effective
Decision No		Vice President	Resolution No.

Las Vegas, Nevada 89193-8510 California Gas Tariff

81st Revised	Cal. P.U.C. Sheet No.	6
80th Revised	Cal P.U.C. Sheet No.	6

STATEMENT OF RATES RATES APPLICABLE TO SOUTHERN CALIFORNIA SERVICE AREA [1]

Canceling __

Schedule No. and Type of Charge	Margin		harges [2] and ljustments		ibtotal Gas sage Rate		Other Surcharges CPUC PPP		Gas Cost	Effective Sales Rate	
00.50.0 Net and 0 0 to (M. /											
GS-50-Core Natural Gas Service for Motor Vehicles											
Basic Service Charge	\$25.00									\$25.00	
Cost per Therm	\$.11822	\$.12657	\$.24479	\$.00093 \$.15841	\$.32428	\$.72841	R
GS-60-Core Internal Combustion Engine Gas Service											
Basic Service Charge	\$25.00									\$25.00	
Cost per Therm	\$.17563	\$.12657	\$.30220	\$.00093 \$.15841	\$.32428	\$.78582	R
GS-LUZ-Solar Electric Generation Gas Service											
Basic Service Charge	\$50.00									\$50.00	
Cost per Therm	\$.05064	\$.00133	\$.05197	\$.00093			\$.05290	
GS-66-Core Small Electric Power Generation Gas Service											
Basic Service Charge	\$25.00									\$25.00	
Cost per Therm	\$.25015	\$.12657	\$.37672	\$.00093	\$.32428	\$.70193	R
GS-70-Noncore General Gas Transportation Service	_										
Basic Service Charge	\$100.00									\$100.00	
Transportation Service Charge	\$780.00	•	00004		4040#					\$780.00	_
Cost per Therm	\$.12834	\$.03661	\$.16495	\$.00093 \$.15841			\$.32429	R
GS-VIC City of Victorville Gas Service											
Basic Service Charge	\$11.00									\$ 11.00	
Transportation Service Charge	\$780.00	Φ.	40057	Φ.	40040	•	00000	•	00400	\$780.00	_
Cost per Therm	\$.35956	Ф	.12657	ф	.48613	\$.00093	\$.32428	\$.81134	R
TFF-Transportation Franchise Fee Surcharge Provision											
TFF Surcharge per Therm										\$.00364	
TDS – Transportation Distribution System Shrinkage Charge											
TDS Charge per Therm	_									\$.00246	
MHPS-Master-Metered Mobile Home Park Safety Inspection Provision										•	
MHPS Surcharge per Space per Month	-									\$.21000	
											ĺ

		Issued by	Date Filed November 30, 2016
Advice Letter No	1023	Justin Lee Brown	Effective
Decision No		Vice President	Resolution No.

SOUTHWEST GAS CORPORATION

P.O. Box 98510

Las Vegas, Nevada 89193-8510

Canceling	

51st_Revised_ Cal. P.U.C. Sheet No. ___ 49th/50th Revised Cal. P.U.C. Sheet No.

California Gas Tariff

STATEMENT OF RATES	
EFFECTIVE RATES APPLICABLE TO SOUTHERN CALIFORNIA DIVISION SCHEI	DULES [1]

			Charges [2] and	Subtotal Gas	Other Su	rcharges		Effective Sale
Schedule No. and Type of Change	Margin	Adjustments	Usage Rate	CPUC	PPP	Gas Cost	Rate	
of the Effe multiplying Account A volume ch	ners taking only transportation service of active Sales Rate, plus a Transportation g the currently effective Gas Cost rate particularly applicable to customers arge for customer-secured natural gas	n Service Cha per therm by t converting fr transportation	rge of \$780 pe he Lost and Ui om sales serv n will also be so	r month and a naccounted Forice to transport ubject to the T	in amount fo or Gas perce ortation serv FF Surcharg	r distributio ntage of 0. ice for a p e.	n shrinkage 76%. The P	calculated b
2] The Ch	narges and Adjustments applicable to e	ach tariff rate	schedule inclu	des the follow	ing compone	ents:		
		GS-10, GS-11,						
		GS-12	GS-40,					
		GS-15, GS-20.						
		GS-25		GS-70	GS-VIC	GS-LUZ		
Upstrea	m Intrastate Charges							
Storag	ge	\$.01250		\$.01250			
Variab	ole		.04453	\$.04453	.04453			
Upstrea	m Interstate Reservation Charges		.07212		.07212			
	Surcharge		.00000	.00000				
Balancir	ng Account Adjustments							
FCAM	! *		.00667	.00133	.00667	\$.00133		
ITCAN	Л	(.00925)	(.00925)	(.00925)			
GHGE	3A**							
No	n-Covered Entities							
Co	vered Entities							
Total Ra	ate Adjustment	\$.12657	\$.03661	\$.12657	\$.00133		

Date Filed November 30, 2016 Issued by Advice Letter No.____ 1023 Justin Lee Brown Effective Decision No. Vice President Resolution No. __

^{*} The FCAM surcharge includes an amount of \$.00133 per therm related to the difference between Southwest Gas' authorized margin R and recorded revenues intended to recover these costs.

^{**} Pursuant to D.15-10-032, Company costs incurred to comply with the California Air Resources Board (ARB) natural gas supplier Capand-Trade Program are to be included in transportation rates and recovered from Non-Covered Entities. Covered Entities, who are directly regulated by the ARB, are only responsible for paying for emission costs related to lost and unaccounted for gas (LUAF).

	79th Revised	Cal. P.U.C. Sheet No.	68
Canceling	78th Revised	Cal. P.U.C. Sheet No.	68

STATEMENT OF RATES RATES APPLICABLE TO NORTHERN CALIFORNIA SERVICE AREA [1] [2]

		Charges [3] and	Subtotal Gas	Other Su	rcharges		Effective	
Schedule No. and Type of Charge	Margin	Adjustments	Usage Rate	CPUC	PPP	Gas Cost	Sales Rate	_
GN-10-Residential Gas Service								
Basic Service Charge	\$5.00						\$5.00	1
Cost per Therm	6 74000	0 40004	A 04000					
Baseline Quantities Tier II	\$.71036	\$.19984	\$.91020	\$.00093		\$.31805	\$1.28280	R
l ler ii	.82117	.19984	1.02101	.00093	.05362	.31805	1.39361	R
GN-12-CARE Residential Gas Service								
Basic Service Charge	\$4.00						\$4.00	1
Cost per Therm								1
Baseline Quantities	\$.46471	\$.19984	\$.66455	\$.00093	\$.03984		\$1.02337	R
Tier II	.55336	.19984	.75320	.00093	.03984	.31805	1.11202	R
GN-15-Secondary Residential Gas Service								1
Basic Service Charge	\$6.00						\$6.00	
Cost per Therm	\$.85533	\$.19984	\$1.05517	\$.00093	\$.05362	\$.31805	\$1.42777	R
CN 20 Multi Family Master Metered Co.								
GN-20-Multi-Family Master-Metered Gas Service								
Basic Service Charge	\$25.00						\$25.00	
Cost per Therm	Ψ20.00						φ23.00	1
Baseline Quantities	\$.71036	\$.19984	\$.91020	\$.00093	\$.05362	\$.31805	\$1.28280	R
Tier II	.82117	.19984	1.02101	.00093	.05362	.31805	1.39361	R
GN 25 Multi Family Master Metered Con								1
GN-25-Multi-Family Master-Metered Gas Service-Submetered								l
Basic Service Charge	\$25.00						\$25.00	
Cost per Therm	Ψ20.00						Ψ23.00	
Baseline Quantities	\$.71036	\$.19984	\$.91020	\$.00093	\$.05362	\$.31805	\$1.28280	R
Tier II	.82117	.19984	1.02101	.00093	.05362	.31805	1.39361	R
Submetered Discount per Occupied Space	(\$11.01)						(\$11.01)	
GN-35-Agriculture Employee Housing &								
Nonprofit Group Living Facility Gas Service								
Basic Service Charge	\$ 8.80						\$ 8.80	
Cost per Therm	*						\$ 0.00	
First 100	\$.36940	\$.19984	\$.56924	\$.00093	\$.03984	\$.31805	\$.92806	R
Next 500	.27396	.19984	.47380	.00093	.03984	.31805	.83262	R
Next 2,400	.18105	.19984	.38089	.00093	.03984	.31805	.73971	R
Over 3,000	.03482	.19984	.23466	.00093	.03984	.31805	.59348	R
GN-40-Core General Gas Service								
Basic Service Charge	\$11.00						\$11.00	
Transportation Service Charge	\$780.00						\$780.00	
Cost per Therm								_
First 100 Next 500	\$.59122	\$.19984		\$.00093	\$.05362	\$.31805	\$1.16366	R
Next 2,400	.47192 .35579	.19984 .19984	.67176 .55563	.00093 .00093	.05362 .05362	.31805 .31805	1.04436 .92823	R R
Over 3,000	.17300	.19984	.37284	.00093	.05362	.31805	.74544	R
			.0.20.	.00000	.00002	.01000		l'`
GN-50-Core Natural Gas Service for Motor								
Vehicles Pagin Sonting Charge							005.00	
Basic Service Charge Cost per Therm	\$25.00	¢ 10004	¢ 20026 4	\$.00093	¢ 05000	₾ 2400 €	\$25.00	
Coot por Therm	\$.09852	\$.19984	\$.29836	.00093	φ .υουο2	\$.31805	\$.67096	R
								I

	d by Date Filed ₋	November 30, 2016
Advice Letter No. 1023 Justin Lee	e Brown Effective	
Decision No Vice Pre	esident Resolution	No

Las Vegas, Nevada 89193-8510 California Gas Tariff

Canceling _

81st Revised 79th/80th Revised

Cal. P.U.C. Sheet No. _ Cal. P.U.C. Sheet No. _

69 69

STATEMENT OF RATES

	SIAIL		FRAIES				
RATES APPLICABLE TO	O NORT	HERN C	ALIFORNI	IA SERVICE AF	REA [1] [2	2]	
						-	
		Charges [3]					
		and	Subtotal Gas	- 111-01		Effective	
Schedule No. and Type of Charge	Margin	Adjustments	Usage Rate	CPUC PPP	Gas Cost	Sales Rate	-
GN-60-Core Internal Combustion Engine Gas Service							
Basic Service Charge	\$ 25.00					\$ 25.00	
Cost per Therm	\$.27273	\$.19984	\$.47257	\$.00093 \$.05362	\$.31805	\$.84517	R
GN-66-Core Small Electric Power Generation							
Gas Service Basic Service Charge	\$ 25.00					Ф OF OO	
Cost per Therm		\$.19984	\$.47257	\$.00093	\$.31805	\$ 25.00 \$.79155	R
GN 70 Napora Conoral Con Transportation						,	
GN-70-Noncore General Gas Transportation Service							
Basic Service Charge	\$ 100.00					\$ 100.00	
Transportation Service Charge Cost per Therm	\$ 780.00 \$ 16437	(\$.02764)	\$.13673	\$.00093 \$.05362		\$ 780.00 \$.19128	R
Cost per mem	Ψ .10437	(ψ.02704)	ψ .13073	φ.00093 φ.00302		φ .18120	`
TFF-Transportation Franchise Fee Surcharge							
Provision TFF Surcharge per Therm	-					\$.00413	
TDS – Transportation Distribution System						ψ .00+10	
Shrinkage Charge	_						
TDS Charge per Therm						\$.00178	
MHPS-Master-Metered Mobile Home Park Safety Inspection Provision							
MHPS Surcharge per Space per Month	-					\$.21000	
[1] Customers taking only transportation con	م النب من	u the Effectiv	Calaa Data	lass the Interntets I			-
[1] Customers taking only transportation ser components of the Effective Sales Rate, plus a	Transportat	tion Service Ch	harge of \$780 r	er month and an amou	unt for distribu	nd Gas Cost tion shrinkage	
calculated by multiplying the currently effective	Gas Cost r	ate per therm I	by the Lost and	d Unaccounted For Ga	s percentage	of 0.56%. The	1
PGA Balancing Account Adjustment is applica months. The volume charge for customer-secur	bie to custo red natural d	mers convertir pas transportat	ng from sales s tion will also be	service to transportation subject to the TFF Suite	n service for a rcharge.	a period of 12	
[2] A Franchise Fee differential of 2.5% will be a of the Town of Truckee.	-			•	_	ithin the limits	
[3] The Charges and Adjustments applicable to	each tariff r	ate schedule i	ncludes the foll	lowing components:			
[o] The charges and Adjustments applicable to	GN-	10, GN-35,	riciades the foil	owing components.			
	GN-						
	GN- GN-						
Charges and Adjustments Description	GN-	25, GN-66	GN-70				
Upstream Interstate Charges Storage	\$.02249					R
Reservation	•	.22103]î
IRRAM Surcharge Balancing Account Adjustments		.00000	\$.00000				
FCAM*		(.04368)	(.02764)				R
GHGBA**			, ,				
Non-Covered Entities Covered Entities							
Total Rate Adjustment	\$.19984	(\$.02764)				R
* The FCAM surcharge includes an amount		per therm rela	ated to the diffe	erence between Southv	vest Gas' auth	orized margin	R
and recorded revenues intended to recover t							
** Pursuant to D.15-10-032, Company costs and-Trade Program are to be included in to	incurred to	comply with th	e California Air	Resources Board (AR Non-Covered Entities	B) natural gas	supplier Cap-	
directly regulated by the ARB, are only respondent	onsible for p	aying for emiss	sion costs relat	ted to lost and unaccou	nted for gas (I	_UAF).	

directly regulated by the ARB, are only responsible for paying for emission costs related to lost and unaccounted for gas (LUAF).

Las Vegas, Nevada 89193-8510 California Gas Tariff

Canceling _

46th Revised Cal. P.U.C. Sheet No. __ 45th Revised Cal. P.U.C. Sheet No.

STATEMENT OF RATES RATES APPLICABLE TO SOUTH LAKE TAHOE SERVICE AREA [1]

			harges [2] and		ubtotal Ga		Other Su	<u>urch</u>				Effective	
Schedule No. and Type of Charge	Margin	_ <u>A</u>	djustments	<u>U</u>	sage Rate		CPUC		PPP	<u>G</u>	as Cost	Sales Rate	-
SLT-10-Residential Gas Service	- 05.00												
Basic Service Charge Cost per Therm	\$5.00											\$5.00	1
Baseline Quantities	\$.31102	Ф	.26560	¢	.57662	\$.00093	æ	.05362	\$.31805	¢ 04000	L
Tier II	.39856	Ψ	.26560	φ	.66416	Ψ	.00093	φ	.05362	Φ	.31805	\$.94922 1.03676	R R
SLT-12-CARE Residential Gas Service	.00000		.20000		.00110		.00000		.00002		.5 1005	1.03070	'`
Basic Service Charge	- \$4.00											£ 4.00	
Cost per Therm	Ψ4.00											\$4.00	
Baseline Quantities	\$.13209	\$.26560	\$.39769	\$.00093	\$.03984	\$.31805	\$.75651	R
Tier II	.20212	•	.26560	۳	.46772	Ψ	.00093	Ψ	.03984	Ψ	.31805	.82654	R
SLT-15-Secondary Residential Gas Service												.0200 .	'`
Basic Service Charge	- \$6.00											\$6.00	
Cost per Therm	\$.43159	\$.26560	\$.69719	\$.00093	\$	05362	\$	31805	\$ 1.06979	R
SLT-20-Multi-Family Master-Metered Gas	4	Ψ	.20000	Ψ	.00710	Ψ	.00000	Ψ	.00002	Ψ	.01000	ψ 1.00575	'`
Service Service													1
Basic Service Charge	\$11.00											\$11.00	
Cost per Therm												* · · · · · ·	
Baseline Quantities	\$.31102	\$.26560	\$.57662	\$.00093	\$.05362	\$.31805	\$.94922	R
Tier II	.39856		.26560		.66416		.00093		.05362		.31805	1.03676	R
SLT-25-Multi-Family Master-Metered Gas Service-Submetered	_												
Basic Service Charge	\$11.00											\$11.00	
Cost per Therm													
Baseline Quantities	\$.31102	\$.26560	\$.57662	\$		\$.05362	\$.31805	\$.94922	R
Tier II	.39856		.26560		.66416		.00093		.05362		.31805	1.03676	R
Submetered Discount per Occupied Space	(\$7.69)											(\$ 7.69)	
SLT-35-Agriculture Employee Housing &													
Nonprofit Group Living Facility Gas Service Basic Service Charge	\$ 8.80											# 0.00	
Cost per Therm	φ 0.00											\$ 8.80	
First 100	\$.22111	\$.26560	\$.48671	\$.00093	\$.03984	\$.31805	\$.84553	R
Next 500	.17044	Ψ	.26560	Ψ	.43604	Ψ	.00093	Ψ	.03984	Ψ	.31805	.79486	R
Next 2,400	.11976		.26560		.38536		.00093		.03984		.31805	.74418	R
Over 3,000	.02631		.26560		.29191		.00093		.03984		.31805	.65073	R
SLT-40-Core General Gas Service													
Basic Service Charge	\$11.00											\$11.00	
Transportation Service Charge	\$780.00											\$780.00	
Cost per Therm												V . 00.00	
First 100	\$.42230	\$.26560	\$.68790	\$.00093	\$.05362	\$.31805	\$1.06050	R
Next 500	.35896		.26560		.62456		.00093		.05362		.31805	.99716	R
Next 2,400	.29561		.26560		.56121		.00093		.05362		.31805	.93381	R
Over 3,000	.17880		.26560		.44440		.00093		.05362		.31805	.81700	R
SLT-50-Core Natural Gas Service for Motor Vehicles	_												
Basic Service Charge	\$11.00											\$11.00	
Cost per Therm	\$.20358	\$.26560	\$.46918	\$.00093	\$.05362	\$.31805	\$.84178	R

	Issued by	Date FiledNOVE	mber 30, 2016
Advice Letter No1023	Justin Lee Brown	Effective	· · · · · · · · · · · · · · · · · · ·
Decision No	Vice President	Resolution No.	

SOUTHWEST GAS CORPORATION

P.O. Box 98510

Las Vegas, Nevada 89193-8510 California Gas Tariff

	81st Revised	Cal. P.U.C. Sheet No.	71
Canceling	79th/80th Revised	Cal. P.U.C. Sheet No.	71

STATEMENT OF RATES RATES APPLICABLE TO SOUTH LAKE TAHOE SERVICE AREA [1]

			_	-		
Schedule No. and Type of Charge	Margin	Charges [2] and Adjustments	Subtotal Gas Usage Rate	Other Surcharges	S Gas Cost	Effective Sales Rate
SLT-60-Core Internal Combustion Engine						
Gas Service						
Basic Service Charge	\$ 11.00					\$ 11.00
Cost per Therm	\$.23175	\$.26560	\$.49735	\$.00093 \$.0530	32 \$.31805	\$.86995
SLT-66-Core Small Electric Power Generation Gas Service						
Basic Service Charge	\$ 11.00					\$ 11.00
Cost per Therm	\$.23175	\$.26560	\$.49735	\$.00093	\$.31805	\$.81633
SLT-70-Noncore General Gas Transportation Service						
Basic Service Charge	\$ 100.00					\$ 100.00
Transportation Service Charge	\$ 780.00					\$ 780.00
Cost per Therm	\$.16707	\$.03812	\$.20519	\$.00093 \$.0536	62	\$.25974
TFF-Transportation Franchise Fee Surcharge Provision						
TFF Surcharge per Therm						\$.00413
TDC Transportation Distribution Contains						*
TDS-Transportation Distribution System Shrinkage Charge						
TDS Charge per Therm						\$.00178
150 charge per monn						φ .00176
MHPS-Master-Metered Mobile Home Park						
Safety Inspection Provision						
MHPS Surcharge per Space per Month						\$.21000

^[1] Customers taking only transportation service will pay the Effective Sales Rate less the Interstate Reservation and Gas Cost components of the Effective Sales Rate, plus a Transportation Service Charge of \$780 per month and an amount for distribution shrinkage calculated by multiplying the currently effective Gas Cost rate per therm by the Lost and Unaccounted For Gas percentage of 0.56%. The PGA Balancing Account Adjustment is applicable to customers converting from sales service to transportation service for a period of 12 months. The volume charge for customer-secured natural gas transportation service will also be subject to the TFF Surcharge.

[2] The Charges and Adjustments applicable to each tariff rate schedule includes the following components:

	SL SL	T-10, T-12, T-15,	SLT-35, SLT-40, SLT-50,		
		T-20,	SLT-60,		
Charges and Adjustments Description	SL	T-25,	SLT-66		SLT-70
Upstream Interstate Charges					
Storage	\$.022	49		
Reservation		.221	03		
IRRAM Surcharge		.000	00	\$.00000
Balancing Account Adjustment				•	
FCAM *		.022	08		.03812
GHGBA					
Non-Covered Entities					
Covered Entities					
Total Rate Adjustment	\$.265	60	\$.03812
-				_	

^{*} The FCAM surcharge includes an amount of \$.03812 per therm related to the difference between Southwest Gas' authorized margin and recorded revenues intended to recover these costs.

	Issued by	Date Filed November 30, 2016	
Advice Letter No1023	Justin Lee Brown	Effective	
Decision No.	Vice President	Resolution No.	

^{**} Pursuant to D.15-10-032, Company costs incurred to comply with the California Air Resources Board (ARB) natural gas supplier Capand-Trade Program are to be included in transportation rates and recovered from Non-Covered Entities. Covered Entities, who are directly regulated by the ARB, are only responsible for paying for emission costs related to lost and unaccounted for gas (LUAF).

Advice Letter No. 1023 Attachment 1

Schedules

SOUTHWEST GAS CORPORATION SOUTHERN CALIFORNIA DIVISION BALANCING ACCOUNT SURCHARGE RATES TWELVE-MONTHS ENDING OCTOBER 31, 2016

Line No.	Description	,	Amount	Rate per Therm	Line No.
	(a)		(b)	(c)	
1	Franchises & Uncollectibles Rate [1]		1.630%		1
	Fixed Cost Adjustment Mechanism (FCAM)				
2	Upstream Fixed Charges Balance [2]	\$	445,625		2
3	Total Core Volumes (Therms) [3]	84	4,839,677		3
4	Upstream Fixed Charges Included in Rates (Ln. 2/Ln.3)*(1+Ln.1)			\$ 0.00534	4
5	Margin Balance [2]	\$	120,423		5
6	Total Throughput Less Special Contract Volumes (Therms) [3]	9	1,892,867		6
7	Margin Balance Amount Included in Rates (Ln. 5/Ln.6)*(1+Ln.1)			\$ 0.00133	7
8	Total FCAM Surcharge Rate (Ln. 4 + Ln. 7)			\$ 0.00667	8
	Intrastate Transportation Account Mechanism (ITCAM)				
9	Upstream Variable Charges [2]	\$(836,609)		9
10	ITCAM Surcharge Rate (Ln. 9/Ln. 6)*(1+Ln.1)			<u>\$(0.00925)</u>	10

^[1] Authorized by Commission in D.14-06-028.

^[2] Ending account balances at October 31, 2016.

^[3] Forecasted volumes twelve-months ended December 31, 2017.

SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA DIVISION BALANCING ACCOUNT SURCHARGE RATES TWELVE-MONTHS ENDING OCTOBER 31, 2016

Line No.	Description	Amount	Rate per Therm	Line No.
	(a)	(b)	(c)	
1	Franchises & Uncollectibles Rate [1]	1.459%		1
	Fixed Cost Account Mechanism (FCAM)			
2	Upstream Fixed Charges Balance [2]	\$ (707,811)		2
3	Total Core Volumes (Therms) [3]	44,783,176		3
4	Upstream Fixed Charges Included in Rates (Ln. 2/Ln.3)*(1+Ln.1)		\$ (0.01604)	4
5	Margin Balance [2]	\$ (688,071)		5
6	Total Throughput (Therms) [4]	25,253,101		6
7	Margin Balance Amount Included in Rates (Ln. 5/Ln.6)*(1+Ln.1)		\$ (0.02764)	7
8	Total FCAM Surcharge Rate (Ln. 4 + Ln. 7)		\$ (0.04368)	8

^[1] Authorized by Commission in D.14-06-028.

^[2] Ending account balances at October 31, 2016.

^[3] Northern California & South Lake Tahoe Jurisdictions combined forecasted volumes, twelve-months ended December 31, 2017.

^[4] Northern California forecasted volumes twelve-months ended December 31, 2017.

SOUTHWEST GAS CORPORATION SOUTH LAKE TAHOE DIVISION BALANCING ACCOUNT SURCHARGE RATES TWELVE-MONTHS ENDING OCTOBER 31, 2016

Line No.	Description (a)	Amount (b)	Rate per Therm (c)	Line No.
1	Franchises & Uncollectibles Rate [1]	1.459%		1
	Fixed Cost Adjustment Mechanism (FCAM)			
2	Upstream Fixed Charges Balance [2]	\$(707,811)		2
3	Total Core Volumes (Therms) [3]	44,783,176		3
4	Upstream Fixed Charges Included in Rates (Ln. 2/Ln.3)*(1+Ln.1)		\$ (0.01604)	4
5	Margin Balance [2]	\$ 793,134		5
6	Total Throughput (Therms) [4]	21,107,330		6
7	Margin Balance Amount Included in Rates (Ln. 5/Ln.6)*(1+Ln.1)		\$ 0.03812	7
8	Total FCAM Surcharge Rate (Ln. 4 + Ln. 7)		\$ 0.02208	8

^[1] Authorized by Commission in D.14-06-028.

^[2] Ending account balances at October 31, 2016.

^[3] Northern California & South Lake Tahoe Jurisdictions combined forecasted volumes, twelve-months ended December 31, 2017.

^[4] South Lake Tahoe forecasted volumes, twelve-months ended December 31, 2017.

SOUTHWEST GAS CORPORATION SOUTHERN CALIFORNIA UPSTREAM PIPELINE CHARGES AND STORAGE COSTS

Line	_	Annual		Annual	Rate	Line
No.	Description	Volumes	Rate	Amount	per Therm	No.
	(a)	(b)	(c)	(d)=(b)*(c)	(e)	
1	Franchise & Uncollectible Rate [1]		1.62990%			1
	Upstream Interstate Reservation Charges					
2	Kern River Transmission Company (Kern) (Dth/Day)	9,490,000	\$ 0.27000	\$ 2,562,300		2
3	G-BTS1 Southern California Gas Company (SoCal)	9,490,000	\$ 0.18629	\$ 1,767,892		3
	Backbone Transportation Service (Dth/Day)	, ,				
4	G-BTS2 Southern California Gas Company (SoCal)	9,125,000	\$ 0.14903	\$ 1.359.899		4
	Backbone Transportation Service (Dth/Day)	5,125,500	+ • • • • • • • • • • • • • • • • • • •	4 1,000,000		•
5	GT-SWGX SoCal Pisgah Meter Station (Months)	12	\$ 27,505	\$ 330,060		5
6	Total Annual Reservation Charges		Ψ 21,000	\$ 6,020,151	-	6
•	rotal rimaa rioodration onaligoo			Ψ 0,020,101	•	U
7	Total Core Sales Volumes (Therms) [2]	84,839,677				7
8	Reservation Rate (Ln.6/Ln.7)*(1+Ln.1)				\$ 0.07212	8
	Upstream Intrastate Storage Charges					
9	G-TBS SoCal Transaction Based Storage Service -	613,937,300	\$ 0.00170	£ 4.042.602		0
9	Inventory Storage Reservation Charge (Dth/Day)	013,937,300	\$ 0.00170	\$ 1,043,693		9
10				£ 4.042.002	•	40
10	Total Annual Storage Charges			\$ 1,043,693		10
11	Total Core Throughput (Therms) [3]	84,839,677				11
	, , , , , , , , , , , , , , , , , , ,	0.,000,01.				
12	Storage Rate (Ln.10/Ln.11)*(1+Ln.1)				\$ 0.01250	12
	Upstream Intrastate Variable Charges					
13	GT-TLS (GT-9CA) SoCal Intrastate Transportation	96,609,174	\$ 0.01485	\$ 1,434,646		13
	Service (Therms)					
14	GT-SWGX SoCal Exchange Wholesale Natural Gas	24,152,294	\$ 0.11273	\$ 2,722,688		14
	Service (Therms)					
15	Kern Transmission Service (Therms)	98,446,371	\$ 0.00044	\$ 43,316		15
16	Total Annual Variable Charges	. ,		\$ 4,200,651	•	16
	ŭ				•	
17	Total Throughput (Therms) [4]	95,872,627				17
18	Variable Rate (Ln.16/Ln.17)*(1+Ln.1)				\$ 0.04453	18

^[1] Authorized by Commission in Order D.14-06-028.

^[2] Forecated core sales volumes, twelve-months ended December 31, 2016.

^[3] Forecated total core throughput, twelve-months ended December 31, 2016.

^[4] Forecated total throughput, less exempt volumes, twelve-months ended December 31, 2016.

SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA RATE JURISDICTION AND SOUTH LAKE TAHOE RATE JURISDICTION UPSTREAM PIPELINE AND STORAGE COSTS

Line		Annual		Annual	Rate	Line
No.	Description	Volumes	Rate	Amount	per Therm	No.
	(a)	(b)	(c)	(d)=(b)*(c)	(e)	
1	Franchise & Uncollectible Rate [1]		1.45890%			1
2	Total Core Throughput (Therms) [2]	44,783,176				2
	Upstream Interstate Reservation Charges (DTH)					
3	Northwest Pipeline	2,284,920	\$ 1.24368	\$ 2,841,702		3
4	Paiute Pipeline FT-1 (F47, F50, F51)	4,629,180	\$ 1.02286	4,735,003		4
5	Paiute Pipeline 2010 Incremental Expansion (F45)	198,840	\$ 1.74114	346,208		5
6	Tuscarora Pipeline	365,412	\$ 0.83615	1,833,235		6
7	Total Reservation Charge	333, =	4 0.00010	\$ 9,756,148		7
				+ 0,100,110		,
8	Reservation Rate (Ln.7/Ln.2)*(1+Ln.1)				\$ 0.22103	8
	(, (,				0.22100	Ü
	Upstream Interstate Storage Charges					
	Paiute Pipeline Company					
	LGS-1 Liquefied Gas Storage Service					
9	Storage Charge	1 504 860	f 0.00740	r 400 040		0
10		1,504,860	\$ 0.02748	\$ 496,243		9
	Delivery Charge	114,000	\$ 0.36275	496,242		10
11	Total Storage Charges			\$ 992,485		11
12	Total Storage Boto // p. 11// p. 2*/1 l. p. 1\				r 0.00040	40
12	Total Storage Rate (Ln.11/Ln.2)*(1+Ln.1)				\$ 0.02249	12

^[1] Authorized by Commission in Order D.14-06-028.

^[2] Combined forecasted volumes for Northern California & South Lake Tahoe Jurisdictions, twelve-months ended December 31, 2016.

Advice Letter No. 1023 Attachment 2

D.15-10-032 Appendix A Tables

D.15-10-032 - Appendix A Table A: Forecast Revenue Requirement SOUTHWEST GAS CORPORATION Advice Letter No. 994

13 13 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15				2015		2016		2017	
Troughput to Envered Furth! Troughput to Envered Furth! Troughput to Envered Furth! Troughput to Envered Furth! Environment of Coas* (MMcf) (Line 1 + Line 2) 13,683 12,245 13,785 13,781 13,8	Line	Description		Forecast	Recorded	Forecast	Recorded	Forecast	Recorded
Net Throughput to End Users (MMcr) (Line 1 + Line 2) 13,683 12,245 13,785 13 Lost and Unaccounted for Gas¹ (MMcr) (Line 3 + Line 4) 13,683 13,883 13 Total Supplied Gas (MMcr) (Line 3 + Line 4) 13,683 13,883 13 Emissions Conversion Factor (MTCO₂e/MMcr) 54,64437 54,64437 54,64437 54,64437 Compliance Obligation for End Users and LUAF (MTCO₂e) (Line 7 + Line 8) 747,710 758,624 758 Compliance Obligation for Company Facilities (MTCO₂e) (Line 7 + Line 8) 747,710 758,624 758 Directly Allocated Allowances² Percentage Consigned to Autowances (Line 11)² 12,747,710 758,624 758 Percentage Consigned Allowances (Line 11)² 12,746 25,68,624 758 Consigned Allowances (Line 11)² 12,126 21,260 24,180 Net Compliance Obligation (MTCO₂e) (Line 9 + Line 10 + Line 12) \$ 2,600,300 \$ 1,465,77 258,868 30,96 Provide Fees & Uncollectibles³ \$ 1,645,807 \$ 3,450,705 \$ 4,014 Revenue Requirement (Line 15 + Line 16 + Line 17) \$ 2,650,846 \$ 1,445,807 \$ 3,506,951 \$ 4,004	1 2	Gross Throughput (MMAcf) Throughput to Covered Entitles (MMcf)							
Total Supplied Gas (MMcf) (Line 3 + Line 4) 13,683 13,883 13,883 13,883 13,883 13,883 14,883	ဗ	Net Throughput to End Users (MMcf) (Line 1 + Line 2)		13,683	12,245	13,785		13,781	
Total Supplied Gas (MMcf) (Line 3 + Line 4) 13,883	4	Lost and Unaccounted for Gas ¹ (MMcf)		0		86		66	
Emissions Conversion Factor (MTCO ₂ e)/MMcf) Compilance Obligation for End Users and LUAF (MTCO ₂ e) (Line 5 * Line 6) Compilance Obligation for End Users and LUAF (MTCO ₂ e) (Line 7 + Line 8) Gross Compilance Obligation (MTCO ₂ e) (Line 7 + Line 8) Directly Allocated Allowances 2 Porectaged Consigned Allowance School (Line 9 + Line 10 + Line 12) Compilance Obligation (MTCO ₂ e) (Line 9 + Line 10 + Line 12) Compilance Obligation (MTCO ₂ e) (Line 9 + Line 10 + Line 12) Compilance Obligation (MTCO ₂ e) (Line 9 + Line 10 + Line 12) Compilance Obligation (MTCO ₂ e) (Line 9 + Line 10 + Line 12) Compilance Obligation (MTCO ₂ e) (Line 9 + Line 10 + Line 12) Compilance Instrument Cost	S.	Total Supplied Gas (MMcf) (Line 3 + Line 4)		13,683		13,883		13,881	
Compliance Obligation for End Users and LUAF (MTCO ₂ e) (Line 5 * Line 6) 747,710 758,624 758,624 758 Compliance Obligation for Company Facilities (MTCO ₂ e) (Line 7 + Line 8) 747,710 758,624 758,624 758 Directly Allocated Allowances Compliance Obligation (MTCO ₂ e) (Line 7 + Line 8) (728,600) (7728,600) 275,600 245 Percentage Consigned Allowances (Line 10 * Line 11)* 182,150 214,180 214,180 245 Net Compliance Obligation (MTCO ₂ e) (Line 9 + Line 11)* \$ 12,96 \$ 1,813,190 \$ 13,33 \$ 1 Net Compliance Instrument Cost* \$ 1,813,190 \$ 1,813,190 \$ 3,450,705 \$ 4,014 Interest Franchise Fees & Uncollectibles* \$ 2,650,846 \$ 1,845,807 \$ 3,506,951 \$ 4,080 Previous Year's Cost Balancing Subaccount Balance \$ 2,650,846 \$ 1,845,807 \$ 3,506,951 \$ 4,080 Covered Entity Rate Impact (\$/therm) Non-Covered Entity Rate Impact (\$/therm) \$ 2,650,951 \$ 3,506,951 \$ 4,080	9	Emissions Conversion Factor (MTCO ₂ el/MMcf)		54.64437	54.55802	54.64437		54.64437	
Gross Compliance Obligation (MTCO₂e) (Line 7 + Line 8) 747,710 758,624 758,624 758,624 Directly Allocated Allowances² Percentage Consigned to Auction (773,936) (773,936) (770,936) (773,936) (770,936) (773,936) (770,936) (773,936) (770,936) (770,936) (770,936) (770,936) (770,936) (770,936) (770,936) (770,946) <	7 8	Compliance Obligation for End Users and LUAF (MTCO $_2$ e) (Line 5 * Line 6) Compliance Obligation for Company Facilities (MTCO $_2$ e)		747,710 0		758,624		758,499	
Directly Allocated Allowances	6	Gross Compliance Obligation (MTCO ₂ e) (Line 7 + Line 8)		747,710		758,624		758,499	
Consigned Allowances (Line 11)* 182,150 214,180 214,180 Net Compliance Obligation (MTCO ₂ e) (Line 9 + Line 10 + Line 12) \$ 201,260 121,627 258,888 Proxy GHG Allowance Price ^{3,4,5} \$ 12.96 \$ 1,813,190 \$ 1,333 \$ 4,1 Compliance instrument Cost* \$ 2,608,330 \$ 1,813,190 \$ 3,450,705 \$ 4,1 Interest Franchise Fees & Uncollectibles* \$ 2,650,846 \$ 1,845,807 \$ 3,506,951 \$ 4,0 Previous Year's Cost Balancing Subaccount Balance Revenue Requirement to be Included in Rates (Line 19 + Line 19) \$ 2,650,846 \$ 1,845,807 \$ 3,506,951 \$ 4,0 Covered Entity Rate Impact (\$/therm) \$ 2,650,846 \$ 1,845,807 \$ 3,506,951 \$ 4,0	11	Directly Allocated Allowances ² Percentage Consigned to Auction		(728,600) 25%		(713,936) 30%		(700,043) 35%	
Proxy GHG Allowance Price ^{3,4,5} \$ 12.96 \$ 13.33 \$ 4,0 Compliance instrument Cost? \$ 2,608,330 \$ 1,813,190 \$ 3,450,705 \$ 4,0 Interest \$ 3,062 \$ 56,246 \$ 4,0 Franchise Fees & Uncollectibles* \$ 2,650,846 \$ 1,845,807 \$ 3,506,951 \$ 4,0 Revenue Requirement (Line 15 + Line 17) \$ 2,650,846 \$ 1,845,807 \$ 3,506,951 \$ 4,0 Revenue Requirement to be included in Rates (Line 18 + Line 19) \$ 2,650,846 \$ 1,845,807 \$ 3,506,951 \$ 4,0 Covered Entity Rate Impact (8/therm) Non-Covered Entity Rate Impact (8/therm) \$ 4,0 \$ 4,0	13 2	Consigned Allowances (Line 10 * Line 11) ² Net Compliance Obligation (MTCO ₂ e) (Line 9 + Line 10+ Line 12)		182,150 201,260	121,627	214,180 258,868		245,015 303,471	
Compliance instrument Cost? \$ 2,608,330 \$ 1,813,190 \$ 3,450,705 \$ 4,6 Interest \$ 3,062 \$ 5,246 \$ 4,6 Franchise Fees & Uncollectibles* \$ 2,650,846 \$ 1,845,807 \$ 3,506,951 \$ 4,6 Revenue Requirement (Line 15 + Line 17) \$ 2,650,846 \$ 1,845,807 \$ 3,506,951 \$ 4,6 Revenue Requirement to be included in Rates (Line 18 + Line 19) \$ 2,650,846 \$ 1,845,807 \$ 3,506,951 \$ 4,6 Covered Entity Rate Impact (8/therm) Non-Covered Entity Rate Impact (8/therm)	4	Proxy GHG Allowance Price 346	69	12.96	€9	13.33	s	13.23	
Franchise Fees & Uncollectibles	15	Compliance Instrument Cost ⁷ Interest	69			3,450,705	69	4,014,916	
Previous Year's Cost Balancing Subaccount Balance Revenue Requirement to be included in Rates (Line 18 + Line 19) \$ 2,650,846 \$ 1,845,807 \$ 3,506,951 \$ \$ Covered Entity Rate Impact (\$/therm) Non-Covered Entity Rate Impact (\$/therm)	118	Franchise Fees & Uncollectibles ^a Revenue Requirement (Line 15 + Line 16 + Line 17)	69 69		29,555 \$ 1,845,807 \$	56,246 3,506,951	69 69	65,443 4,080,359	
	19 20	Previous Year's Cost Balancing Subaccount Balance Revenue Requirement to be Included in Rates (Line 18 + Line 19)	w	2,650,846 \$	1,845,807 \$	3,506,951	w	4,080,359	
	21	Covered Entity Rate Impact (\$/therm) Non-Covered Entity Rate Impact (\$/therm)							

2017	6,756,738	5,003,262	4,080,359		0.04769	0.03532	0.02880		0.00083	0.00067	0.00053
	မာ	69	69		69	69	69		s	€9	s
2016			ı								
	69	69	69		69	49	69		s	s	s
2015										•	
	69	69	69		s	€	69		69	υ	G
Illustrative Rate Impacts: for Informational Purposes Only	2017 Rev Req + 50% of 2015 and 2016 Rev Reqs	2017 Rev Req + 50% of 2015 Rev Req	2017 Rev Req	Non-Covered Entity Rate Impacts (\$/therm)	2017 Rev Req + 50% of 2015 and 2016 Rev Reqs	2017 Rev Req + 50% of 2015 Rev Req	2017 Rev Req	Covered Entity Rate Impacts (\$/therm)	2017 Rev Req + 50% of 2015 and 2016 Rev Reqs	2017 Rev Req + 50% of 2015 Rev Req	2017 Rev Req

Foolnotes
1 Lost and unaccounted for gas percentages were authorized in Southwest Gas' last General Rate Case (GRC) Decision 14-06-028.
2 2017 Vintage Allowances Allowances Marcade by CARS on October 24, 2015, futures settlement price for wintage year 2015 allowances for delivery in December. The future settlements price was 3The forestated proxy price is the January 16, 2015, futures Settlement price for wintage year 2015 allowances for delivery in December. The future settlements price was obtained from the intercontrinental Exchange dated January 16, 2015, Futures Daily Market Report for Physical Environmental, "CAN-California Carbon Allowance Future-Vintage 2015 - This methodology is consistent with Southwest Gas' methodology for forecasting gas supply prices.

⁴ The forecasted proxy price is the November 23, 2015, futures settlement price for vintage year 2016 allowances for delivery in December. The future settlements price was obtained from the intercontinental Exchange dated November 23, 2015, Futures Daliy Market Report for Physical Environmental, "CAO-Caiffornia Carbon Allowance Future-Vintage 2016 - California Carbon Allowance Vintage 2016 - "This methodology is consistent with Southwest Gas' methodology for forecasting gas supply prices.

⁵ The forecasted proxy price is the November 4, 2016, futures settlement price for vintage year 2017 allowances for delivery in December. The future settlements price was obtained from the Intercontinental Exchange dated November 4 2016, Futures Daily Market Report for Physical Environmental, "CAP-California Carbon Allowance Future-Vintage 2017 - California Carbon Allowance Vintage 2017." This methodology is consistent with Southwest Gas' methodology for forecasting gas supply prices.

⁶ The F&U Rate was authorized in Southwest Gas' last General Rate Case (GRC) Decision 14-06-028. 7 2016 Recorded Cost through October 31, 2016.

SOUTHWEST GAS CORPORATION Advice Letter No. 1023 D.15-10-032 - Appendix A Table C: GHG Allowance Proceeds

			2015		2016	9	2017	
Line	Line Description		Forecast	Recorded	Forecast	Recorded	Forecast	Recorded
-	Proxy GHG Allowance Price (\$/MT) ^{1,2,3}	69	12.96	€7	13.33	€9	13.23	
0 m 4	Directly Allocated Allowances³ Percentage Consigned to Auction Consigned Allowances³		728,600 25% 182,150		713,936 30% 214,180		700,043 35% 245,015	
ro o	Allowance Proceeds	⊕	(2,360,664)	\$ (2,360,664) \$ (2,247,731) \$ (2,855,019)	(2,855,019)	<i>₩</i>	\$ (3,241,549)	
9 / 8	Previous Years Kevenue Balancing Subaccount Balance Interest Subtotal Allowance Proceeds (\$) (Line 5 + Line 6 + Line 7)	\$	(2,360,664)	\$ (4,019) (2,360,664) \$ (2,251,750) \$	(2,855,019)) \$	\$ (3,241,549)	•
6	Outreach and Admin Expenses (\$) (from Table D)	69	٠	65 \$	66,810	\$ 99	66,810	ı
10	Net GHG Proceeds Available for Customer Returns (\$) (Line 8 + Line 9) \$ (2,360,664) \$ (2,251,685) \$	49	(2,360,664)	\$ (2,251,685) \$	(2,788,209)) \$ 99	\$ (3,174,739)	,
12	Number of Residential Households Per Household California Climate Credit (\$) (Line 10 / Line 11)		179,352		186,789		188,662	

2017	\$ 5,694,686	\$ 4,300,582	\$ 3,174,739		\$ 30.18	\$ 22.80	\$ 16.83		\$ 29.43	\$ 22.22	\$ 16.41
2016			1		•	•			•	•	
	8	↔	69		69	↔	€9		↔	↔	€9
2015						,			,	1	
1	₩	↔	€9		s S	↔	₩		⇔	€9	69
Illustrative Climate Credits for Informational Purposes Only	2017 Net GHG Proceeds + 50% of 2015 and 2016 Net GHG Proceeds	2017 Net GHG Proceeds + 50% of 2015 Net GHG Proceeds	2017 Net GHG Proceeds	California Climate Credit to Residential Households	2017 Net GHG Proceeds +50% of 2015 and 2016 Net GHG Proceeds	2017 Net GHG Proceeds +50% of 2015 Net GHG Proceeds	2017 Net GHG Proceeds	California Climate Credit to All Non-Covered Entities	2017 Net GHG Proceeds + 50% of 2015 and 2016 Net GHG Proceeds	2017 Net GHG Proceeds +50% of 2015 Net GHG Proceeds	2017 Net GHG Proceeds

Footnote

'CAN-California Carbon Allowance Future-Vintage 2015 - California Carbon Allowance Vintage 2015 ." This methodology is consistent with Southwest 1 The forecasted proxy price is the January 16, 2015, futures settlement price for vintage year 2015 allowances for delivery in December. The future settlements price was obtained from the Intercontinental Exchange dated January 16, 2015, Futures Daily Market Report for Physical Environmental, Gas' methodology for forecasting gas supply prices.

2 The forecasted proxy price is the November 23, 2015, futures settlement price for vintage year 2016 allowances for delivery in December. The future settlements price was obtained from the Intercontinental Exchange dated November 23, 2015, Futures Daily Market Report for Physical Environmental, "CAO-California Carbon Allowance Future-Vintage 2016 - California Carbon Allowance Vintage 2016." This methodology is consistent with Southwest Gas' methodology for forecasting gas supply prices.

settlements price was obtained from the Intercontinental Exchange dated November 4 2016, Futures Daily Market Report for Physical Environmental, "CAP-California Carbon Allowance Future-Vintage 2017 - California Carbon Allowance Vintage 2017 - California Carbon Allowance Vintage 2017 - California Carbon Allowance Future-Vintage 2017 - California Carbon Allowance Vintage 2017 - California Carbon Allowance Future Vintage 2017 - California Carbon Allowance Vintage 2017 - California Carbon Vintage 2017 - Californ 3 The forecasted proxy price is the November 4, 2016, futures settlement price for vintage year 2017 allowances for delivery in December. The future Gas' methodology for forecasting gas supply prices.

3 2016 Vintage Allowances Allocated by CARB on October 26, 2015.

SOUTHWEST GAS CORPORATION Advice Letter No. 1023

D.15-10-032 - Appendix A Table D: GHG Outreach and Administrative Expenses

				2015			2016			2017	17
Line	Description	요	reca	st ?ec	orded	Forecast Recorded Forecast Recorded	ast 36	scorde	ь Б	recast	Record
_	Outreach Expenses										
2	Detail of Outreach Activity (\$)										
3	Website Page					\$ 2,000	00		↔	2,000	
4	E-Blasts					\$ 5,000		\$ 65	8	5,000	
2	Bill Insert					\$ 2,500	00		69	2,500	
9	On-Bill Message					ج					
7	On-Hold Phone Message					\$ 1,000	8		↔	1,000	
œ	Post Phone Survey					\$ 55,000	00		€9	\$ 55,000	
6	Subtotal Outreach (\$)	↔	•	↔	1	\$ 65,500		\$ 65		\$ 65,500	• •
10	Administrative Expenses										
Ξ	Detail of Administrative Activity (\$)	_									
12	Programming					€					
13	Testing					€9					
14	Subtotal Administrative (\$)	↔	1	₩		⇔	97	1	↔		•
15	Subtotal Outreach and Administrative (\$)	\$	•	↔	1	\$ 65,500	00	9 65		\$ 65,500	€
16	Interest (\$)	↔	1	↔		\$ 1,310	10		↔	1,310	۰ ج
17	Total (\$)	₩	•	49		\$ 66,810	-	99 \$		\$ 66.810	49

SOUTHWEST GAS CORPORATION

Advice Letter No. 1023 D.15-10-032 - Appendix A Table E: Compliance Obligation Over Time

	2015	2016	2017	2018	2019	2020
Natural Gas Fuel Supplier Compliance Obligation (MTCO ₂ e)	668,077					Ī
Company Facility Compliance Obligation (MTCO ₂ e)	0					