

Brokerage Fee Summary

Current Brokerage Fee	0.148 cents per therm	TCAP Gas Purchases	SoCalGas 2013-15 Core (MTherms) 3,646,701
Proposed Brokerage Fee (SoCalGas+SDG&E)	0.157 cents per therm		SDG&E 2013-15 Core (MTherms) 502,042
		Total SCG & SDG&E	4,148,743

Total Cost Estimate

	Labor	NonLabor	Overheads	Direct Cost	Rent	Total
Gas Acquisition	\$2,657,744	\$481,115	\$1,702,851	\$4,841,710	\$495,004	\$5,336,715
Demand Forecastir	\$67,283	\$8,989	\$64,115	\$140,387	\$8,353	\$148,740
Case Management	\$14,426	\$1,567	\$26,041	\$42,034	\$1,856	\$43,890
Regulatory Tariff	\$8,246	\$171	\$17,082	\$25,499	\$1,547	\$27,045
Human Resources	\$25,056	\$1,028	\$33,195	\$59,279	\$6,188	\$65,467
C&I Sales	\$9,116	\$1,216	\$38,378	\$48,710	\$1,083	\$49,793
IT	\$509,017	\$46,142	\$226,851	\$782,011	\$46,407	\$828,417
Law	\$14,126	\$1,319	\$9,050	\$24,495	\$524	\$25,019
	\$3,305,013	\$541,546	\$2,117,565	\$5,964,125	\$560,962	\$6,525,087

(Costs in \$000)	2010	2006
Gas Procurement	\$6,165	\$6,095
Sales & Supply Forecasti	\$149	\$131
C&I Services	\$50	\$33
Reg Affairs+Law+HR	\$161	\$160
	\$6,525	\$6,419

Rent Estimate

	% Labor	Sq. Ft.
Gas Acquisition	#N/A	8,250
Demand Forecastir	54.00%	139
Case Management	12.00%	31
Regulatory Tariff	10.00%	26
Human Resources	40.00%	103
C&I Sales	7.00%	18
IT	300.00%	773
Law	3.39%	9
		9,349

32 persons

258 Avg. Chargeable Sq. Ft. per person

\$60 Rent All-Inconclusive Rate (\$ per SqFt)

Labor to NonLabor and Overheads Ratio

	Labor	NonLabor Ratio	Overheads Ratio
Except Gas Acq an	\$633,144	\$59,113	\$405,663
Law		9.34%	64.07%

Chargeable Square Feet

	CSF	Persons	CSF/Person
2200-0832	6,797	32	212
2200-2055	3,584	5	717
2100-3427	690	10	69
2100-3429	1,753	3	584
2200-0330	1,098	4	275
	13,922	54	258

Source: M.L.

Updated May 2011 for TCAP

Directly Related to Core Procurement Activities (2010 Recorded Costs)

Exclude HUB

Includes three new headcounts at entry level indicated in A.06-08-026

Source: M.L. and Z.G.

Labor	\$2,657,744
Non-Labor	\$481,115
Vacation & Sick	\$401,096

Excludes HUB Services.

- 1 Person 1
- 2 Person 2
- 3 Person 3
- 4 Person 4
- 5 Person 5
- 6 Person 6
- 7 Person 7
- 8 Person 8
- 9 Person 9
- 10 Person 10
- 11 Person 11
- 12 Person 12
- 13 Person 13
- 14 Person 14
- 15 Person 15
- 16 Person 16
- 17 Person 17
- 18 Person 18
- 19 Person 19
- 20 Person 20
- 21 Person 21
- 22 Person 22
- 23 Person 23
- 24 Person 24
- 25 Person 25
- 26 Person 26
- 27 Person 27
- 28 Person 28
- 29 Person 29
- 30 Person 30
- 31 Person 31
- 32 Person 32

**Core Brokerage Fee Survey
2009 BCAP**

Name of person who supports core gas procurement function:	Person A
Group Name:	Demand Forecasting
Number of Employees in group:	5
Cost Center:	2200-2308
Cost Center:	
Cost Center:	

Budget Associated with the Cost Center(s) above	Direct	Indirect	Per Person
Labor:	\$533,995.00	\$255,246.09	\$106,799.00
Non-Labor:	\$71,339.00	\$27,114.12	\$14,267.80
Overhead	\$508,850.30	\$242,995.88	\$101,770.06
Labor	\$506,489.06	\$242,098.43	
Non-Labor	\$2,361.25	\$897.45	

Describe Your Activities/Responsibilities Related to Procurement	Percent of Time	Labor (\$)			NonLabor (\$)		Overhead (\$)		Total (\$)	
1 El Paso rate case	1.00%	\$21,359.80			\$2,853.56		\$20,354.01			\$44,567.37
2 Misc: DLFM, monthly market trends meeting	10.00%									
3										
4										
5										
Total	11.00%	\$21,359.80			\$2,853.56		\$20,354.01			\$44,567.37

Please complete the survey by entering your information in the shaded light blue cells.

**Core Brokerage Fee Survey
2009 BCAP**

Name of person who supports core gas procurement function:	Person B
Group Name:	Demand Forecasting
Number of Employees in group:	5
Cost Center:	2200-2055
Cost Center:	
Cost Center:	

Budget Associated with the Cost Center(s) above	Direct	Indirect	Per Person
Labor:	\$533,995.00	\$255,246.09	\$106,799.00
Non-Labor:	\$71,339.00	\$27,114.12	\$14,267.80
Overhead	\$508,850.30	\$242,995.88	\$101,770.06
Labor	\$506,489.06	\$242,098.43	
Non-Labor	\$2,361.25	\$897.45	

Describe Your Activities/Responsibilities Related to Procurement	Percent of				
	Time	Labor (\$)	NonLabor (\$)	Overhead (\$)	Total (\$)
1 Provision & Analysis of Weather Data	4.00%	\$4,271.96	\$570.71	\$4,070.80	\$8,913.47
2 DLFM Support for Gas Proc. Per Omnibus Settlement	2.00%	\$2,135.98	\$285.36	\$2,035.40	\$4,456.74
3 Analysis of Core Mkt. Behavior/Trends for Gas Proc. Planning	5.00%	\$5,339.95	\$713.39	\$5,088.50	\$11,141.84
4					
5					
Total	11.00%	\$11,747.89	\$1,569.46	\$11,194.71	\$24,512.05

Please complete the survey by entering your information in the shaded light blue cells.

**Core Brokerage Fee Survey
2009 BCAP**

Name of person who supports core gas procurement function:	Person C
Group Name:	Demand Forecasting
Number of Employees in group:	5
Cost Center:	2200-2055
Cost Center:	
Cost Center:	

Budget Associated with the Cost Center(s) above	Direct	Indirect	Per Person
Labor:	\$533,995.00	\$255,246.09	\$106,799.00
Non-Labor:	\$71,339.00	\$27,114.12	\$14,267.80
Overhead	\$508,850.30	\$242,995.88	\$101,770.06
Labor	\$506,489.06	\$242,098.43	
Non-Labor	\$2,361.25	\$897.45	

	Describe Your Activities/Responsibilities Related to Procurement	Percent of				Total (\$)
		Time	Labor (\$)	NonLabor (\$)	Overhead (\$)	
1	Daily Load Forecasting Model as part of the Omnibus settlement.	30.00%	\$32,039.70	\$4,280.34	\$30,531.02	\$66,851.06
2						
3						
4						
5						
	Total	30.00%	\$32,039.70	\$4,280.34	\$30,531.02	\$66,851.06

Please complete the survey by entering your information in the shaded light blue cells.

**Core Brokerage Fee Survey
2009 BCAP**

Name of person who supports core gas procurement function:	Person D
Group Name:	Demand Forecasting
Number of Employees in group:	5
Cost Center:	2200-2055
Cost Center:	
Cost Center:	

Budget Associated with the Cost Center(s) above	Direct	Indirect	Per Person
Labor:	\$533,995.00	\$255,246.09	\$106,799.00
Non-Labor:	\$71,339.00	\$27,114.12	\$14,267.80
Overhead	\$508,850.30	\$242,995.88	\$101,770.06
Labor	\$506,489.06	\$242,098.43	
Non-Labor	\$2,361.25	\$897.45	

	Describe Your Activities/Responsibilities Related to Procurement	Percent of				Total (\$)
		Time	Labor (\$)	NonLabor (\$)	Overhead (\$)	
1	Daily Load Forecasting Model as part of the Omnibus settlement.	2.00%	\$2,135.98	\$285.36	\$2,035.40	\$4,456.74
2						
3						
4						
5						
	Total	2.00%	\$2,135.98	\$285.36	\$2,035.40	\$4,456.74

Please complete the survey by entering your information in the shaded light blue cells.

**Core Brokerage Fee Survey
2009 BCAP**

Name of person who supports core gas procurement function:	Person E
Group Name:	Gas Case Management
Number of Employees in group:	10
Cost Center:	2100-3427
Cost Center:	
Cost Center:	

Budget Associated with the Cost Center(s) above	Direct	Indirect	Per Person
Labor:	\$1,120,978.00	\$389,910.45	\$120,213.00
Non-Labor:	\$130,542.00	\$39,143.80	\$13,054.20
Overhead	\$2,170,121.61	\$754,520.18	\$217,012.16
Labor	\$2,163,561.69	\$752,552.96	
Non-Labor	\$6,559.92	\$1,967.03	

	Describe Your Activities/Responsibilities Related to Procurement	Percent of				Total (\$)
		Time	Labor (\$)	NonLabor (\$)	Overhead (\$)	
1	Application, data requests, brief preparations for GCIM, Winter Hedging filings	8.00%	\$9,617.04	\$1,044.34	\$17,360.97	\$28,022.35
2	Two monthly meetings with DRA, Energy Division on all activities related to procurement	2.00%	\$2,404.26	\$261.08	\$4,340.24	\$7,005.59
3	Various monitoring and reporting of other cases related to procurement group	2.00%	\$2,404.26	\$261.08	\$4,340.24	\$7,005.59
4						
5	Total	12.00%	\$14,425.56	\$1,566.50	\$26,041.46	\$42,033.52

**Core Brokerage Fee Survey
2009 BCAP**

Name of person who supports core gas procurement fu	Person f
Group Name:	SoCalGas Law
Number of Employees in group:	
Cost Center:	
Cost Center:	
Cost Center:	

Budget Associated with the Cost Center(s) above	Direct	Indirect	Per Person
Labor:			
Non-Labor:			9%
Overhead			64%
Labor			
Non-Labor			

billable hours grow at rate of inflation
206 212.18 218.55

Describe Your Activities/Responsibilities Related to Procurement	Hours	Labor (\$)	NonLabor	Overhead	Total (\$)
			(\$)	(\$)	
1 Annual GCIM applications	52.5	\$11,497.50	\$1,073.45	\$7,366.60	\$19,937.55
2 GA Committee meetings, legal advice,	18	\$2,628.00	\$245.36	\$1,683.79	\$4,557.15
Total	70.5	\$14,125.50	\$1,318.81	\$9,050.39	\$24,494.70

Please complete the survey by entering your information in the shaded light blue cells.

I am a lawyer in the SoCalGas law department.

A substantial amount of my work relates in some way, shape, or form to the Gas Acquisition group.

Sometimes this involves defending SoCalGas in CPUC investigations or civil lawsuits stemming from alleged actions by GA, but my client is the company, not GA, so I don't know if that counts for your survey.

Sometimes my work involves applications or other CPUC presentations for something SoCalGas and GA want to do (such as winter hedging), but again I don't know if this counts for your survey.

Some of my time (perhaps 5%) relates to our annual GCIM applications that you have referenced.

I also attend GA Committee meetings, provide GA with day-to-day legal advice, etc., but these activities aren't confined to GCIM issues, so I'm not sure how best to answer this.

**Core Brokerage Fee Survey
2009 BCAP**

Name of person who supports core gas procurement function:	Person G
Group name:	Capacity Products
Number of employees in group:	4
Cost Center:	2200-0330
Cost Center:	
Cost Center:	

Budget Associated with the Cost Center(s) above	Direct	Indirect	Per Person
Labor:	\$520,913.00	\$104,283.38	\$130,228.25
Non-Labor:	\$69,491.00	\$3,472.17	\$17,372.75
Overhead	\$2,193,048.04	\$437,452.96	\$548,262.01
Labor	\$2,182,524.46	\$436,927.14	
Non-Labor	\$10,523.58	\$525.82	

Description of Activities/Responsibilities Related to Procurement	Percent of				
	Time	Labor (\$)	NonLabor (\$)	Overhead (\$)	Total (\$)
1 Daily Tracking of Core Storage Position	0.00%	\$0.00	\$0.00	\$0.00	\$0.00
2 Official Monthly Reconciliation of Final Storage Position	5.00%	\$6,511.41	\$868.64	\$27,413.10	\$34,793.15
3 GCIM Master Data request	2.00%	\$2,604.57	\$347.46	\$10,965.24	\$13,917.26
4					
5					
Total	7.00%	\$9,115.98	\$1,216.09	\$38,378.34	\$48,710.41

Please complete the shaded cells. Values in green are from SAP Business Warehouse and values in black are calculated.

**Core Brokerage Fee Survey
2009 BCAP**

Name of person who supports core gas procurement function:	Person H1, H2 and H3
Group Name:	SEU IT Produce & Procure Energy
Number of Employees in group:	9
Cost Center:	2100-3094
Cost Center:	
Cost Center:	

Budget Associated with the Cost Center(s) above	Direct	Indirect	Per Person	
Labor:	\$1,527,051.00	\$818,230.13	\$169,672.33	0.998369877
Non-Labor:	\$138,427.00	\$51,414.88	\$15,380.78	0.001630123
Overhead:	\$680,553.86	\$364,393.97	\$75,617.10	363799.9631
Labor	\$678,954.58	\$363,799.96		
Non-Labor	\$1,599.28	\$594.01		

Describe Your Activities/Responsibilities Related to Procurement	Percent of				
	Time	Labor (\$)	NonLabor (\$)	Overhead (\$)	Total (\$)
1 David Waldher - Support full-time for Pinacle	100.00%	\$169,672.33	\$15,380.78	\$75,617.10	\$260,670.21
2 Amy Liu - Support full-time for Pinacle	100.00%	\$169,672.33	\$15,380.78	\$75,617.10	\$260,670.21
3 Greg Guevara - Support full-time for Pinacle	100.00%	\$169,672.33	\$15,380.78	\$75,617.10	\$260,670.21
4					
5					
Total	300.00%	\$509,017.00	\$46,142.33	\$226,851.29	\$782,010.62

Please complete the survey by entering your information in the shaded light blue cells.

**Core Brokerage Fee Survey
2009 BCAP**

Name of person who supports core gas procurement function:	Person I
Group Name:	Regulatory Tariff
Number of Employees in group:	3
Cost Center:	2100-3429
Cost Center:	
Cost Center:	

Budget Associated with the Cost Center(s) above	Direct	Indirect	Per Person
Labor:	\$200,110.00	\$95,651.26	\$82,456.00
Non-Labor:	\$5,120.00	\$1,946.02	\$1,706.67
Overhead	\$512,468.21	\$244,723.59	\$170,822.74
Labor	\$510,090.22	\$243,819.76	
Non-Labor	\$2,377.99	\$903.83	

	Describe Your Activities/Responsibilities Related to Procurement	Percent of				Total (\$)
		Time	Labor (\$)	NonLabor (\$)	Overhead (\$)	
1	Core procurement charge update advice letter filing and standby procurement charge advice letter filing.	10.00%	\$8,245.60	\$170.67	\$17,082.27	\$25,498.54
2						
3						
4						
5						
	Total	10.00%	\$8,245.60	\$170.67	\$17,082.27	\$25,498.54

**Core Brokerage Fee Survey
2009 BCAP**

Name of person who supports core gas procurement function:	Person J
Group Name:	Human Resouces
Number of Employees in group:	9
Cost Center:	2200-0838
Cost Center:	
Cost Center:	

Budget Associated with the Cost Center(s) above	Direct	Indirect	Per Person
Labor:	\$751,685.00	\$361,142.60	\$83,520.56
Non-Labor:	\$30,851.00	\$11,978.52	\$3,427.89
Overhead	\$995,845.26	\$478,080.46	\$110,649.47
Labor	\$991,858.29	\$476,532.44	
Non-Labor	\$3,986.97	\$1,548.02	

Describe Your Activities/Responsibilities Related to Procurement	Percent of				
	Time	Labor (\$)	NonLabor (\$)	Overhead (\$)	Total (\$)
1 HR Advistor to Gas Acquisition	10.00%	\$8,352.06	\$342.79	\$11,064.95	\$19,759.79
2 Recruiting	10.00%	\$8,352.06	\$342.79	\$11,064.95	\$19,759.79
3 Worker's Comp	10.00%	\$8,352.06	\$342.79	\$11,064.95	\$19,759.79
4 Org Development	10.00%				
5 Total	40.00%	\$25,056.17	\$1,028.37	\$33,194.84	\$59,279.38

2012 CGR Gas Price Forecasts Current \$/MMBtu

SoCal Border	Current \$/MMBtu												Average	Index GDP Deflator	
	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov			Dec
2012	3.40	3.00	2.92	2.96	3.04	3.10	3.16	3.19	3.19	3.24	3.39	3.67	3.19	NYMEX Clear Port	1.000
2013	3.80	3.80	3.77	3.73	3.75	3.78	3.82	3.84	3.84	3.88	3.97	4.18	3.85	NYMEX Clear Port	1.014
2014	4.29	4.27	4.22	4.11	4.13	4.15	4.19	4.21	4.21	4.24	4.32	4.52	4.24	NYMEX HH	1.031
2015	4.70	4.64	4.55	4.38	4.39	4.42	4.45	4.47	4.47	4.51	4.59	4.79	4.53	NYMEX HH	1.050
2016	4.62	4.45	4.39	4.34	4.39	4.43	4.49	4.52	4.52	4.57	4.69	4.97	4.53	NYMEX HH	1.069
2017	4.88	4.70	4.64	4.59	4.64	4.69	4.75	4.77	4.78	4.83	4.96	5.25	4.79	NYMEX HH	1.088
2018	5.17	4.98	4.91	4.86	4.91	4.97	5.03	5.06	5.06	5.11	5.26	5.57	5.07	NYMEX HH	1.107
2019	5.47	5.27	5.20	5.14	5.20	5.25	5.32	5.35	5.36	5.41	5.56	5.89	5.37	NYMEX HH	1.125
2020	5.76	5.55	5.47	5.42	5.47	5.53	5.61	5.64	5.64	5.70	5.86	6.20	5.66	NYMEX HH	1.143
2021	6.06	5.84	5.76	5.70	5.76	5.82	5.90	5.93	5.94	6.00	6.16	6.53	5.95	NYMEX HH	1.162
2022	6.36	6.13	6.04	5.98	6.04	6.11	6.18	6.22	6.23	6.29	6.46	6.84	6.24	NYMEX HH	1.182
2023	6.65	6.41	6.32	6.25	6.32	6.39	6.47	6.50	6.51	6.58	6.76	7.16	6.52	NYMEX HH	1.202
2024	6.93	6.68	6.59	6.52	6.59	6.66	6.74	6.78	6.79	6.86	7.05	7.46	6.80	NYMEX HH	1.222
2025	7.22	6.95	6.86	6.78	6.86	6.93	7.02	7.06	7.07	7.14	7.34	7.77	7.08	Composite 7	1.244
2026	7.43	7.16	7.06	6.99	7.06	7.14	7.23	7.27	7.28	7.35	7.56	8.00	7.30	Composite 7	1.266
2027	7.66	7.38	7.28	7.20	7.27	7.36	7.45	7.49	7.50	7.57	7.78	8.24	7.52	Composite 7	1.289
2028	7.89	7.60	7.49	7.41	7.49	7.58	7.67	7.72	7.72	7.80	8.02	8.49	7.74	Composite 7	1.312
2029	8.12	7.83	7.72	7.64	7.72	7.80	7.90	7.95	7.96	8.04	8.26	8.75	7.97	Composite 7	1.335
2030	8.37	8.06	7.95	7.87	7.95	8.04	8.14	8.19	8.19	8.28	8.51	9.01	8.21	Composite 7	1.359

Diff HH	3.8288056	3.689002	3.63745	3.5988722	3.63705	3.67735	3.7241833	3.74545	3.7491722	3.7871389	3.8918889	4.122	3.7573636
	3.6627778	3.5533152	3.5140889	3.4954556	3.5336333	3.5739333	3.6207667	3.6420333	3.6457556	3.6837222	3.7983333	4.0284444	3.6460216
	0.1660278	0.1356869	0.1233611	0.1034167	0.1034167	0.1034167	0.1034167	0.1034167	0.1034167	0.1034167	0.0935556	0.0935556	0.111342
	1.0190139	0.981806	0.9680857	0.9578185	0.9679793	0.9787049	0.9911693	0.9968293	0.9978199	1.0079245	1.0358031	1.09704581	1

SoCal Citygate	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
2012	3.51	3.11	3.03	3.07	3.15	3.21	3.27	3.30	3.30	3.35	3.50	3.78	3.30	SoCalGas +11
2013	3.91	3.91	3.88	3.84	3.86	3.89	3.93	3.95	3.95	3.99	4.08	4.29	3.96	SoCalGas +11
2014	4.40	4.38	4.33	4.22	4.24	4.26	4.30	4.32	4.32	4.35	4.43	4.63	4.35	SoCalGas +11
2015	4.81	4.75	4.66	4.49	4.50	4.53	4.56	4.58	4.58	4.62	4.70	4.90	4.64	SoCalGas +11
2016	4.73	4.56	4.50	4.45	4.50	4.54	4.60	4.63	4.63	4.68	4.80	5.08	4.64	SoCalGas +11
2017	4.99	4.81	4.75	4.70	4.75	4.80	4.86	4.88	4.89	4.94	5.07	5.36	4.90	SoCalGas +11
2018	5.28	5.09	5.02	4.97	5.02	5.08	5.14	5.17	5.17	5.22	5.37	5.68	5.18	SoCalGas +11
2019	5.58	5.38	5.31	5.25	5.31	5.36	5.43	5.46	5.47	5.52	5.67	6.00	5.48	SoCalGas +11
2020	5.87	5.66	5.58	5.53	5.58	5.64	5.72	5.75	5.75	5.81	5.97	6.31	5.77	SoCalGas +11
2021	6.17	5.95	5.87	5.81	5.87	5.93	6.01	6.04	6.05	6.11	6.27	6.64	6.06	SoCalGas +11
2022	6.47	6.24	6.15	6.09	6.15	6.22	6.29	6.33	6.34	6.40	6.57	6.95	6.35	SoCalGas +11
2023	6.76	6.52	6.43	6.36	6.43	6.50	6.58	6.61	6.62	6.69	6.87	7.27	6.63	SoCalGas +11
2024	7.04	6.79	6.70	6.63	6.70	6.77	6.85	6.89	6.90	6.97	7.16	7.57	6.91	SoCalGas +11
2025	7.33	7.06	6.97	6.89	6.97	7.04	7.13	7.17	7.18	7.25	7.45	7.88	7.19	SoCalGas +11
2026	7.54	7.27	7.17	7.10	7.17	7.25	7.34	7.38	7.39	7.46	7.67	8.11	7.41	SoCalGas +11
2027	7.77	7.49	7.39	7.31	7.38	7.47	7.56	7.60	7.61	7.68	7.89	8.35	7.63	SoCalGas +11
2028	8.00	7.71	7.60	7.52	7.60	7.69	7.78	7.83	7.83	7.91	8.13	8.60	7.85	SoCalGas +11
2029	8.23	7.94	7.83	7.75	7.83	7.91	8.01	8.06	8.07	8.15	8.37	8.86	8.08	SoCalGas +11
2030	8.48	8.17	8.06	7.98	8.06	8.15	8.25	8.30	8.30	8.39	8.62	9.12	8.32	SoCalGas +11

3-Year
Average

SCG CityGate
\$3.96

\$4.35

\$4.64

\$4.32

Malin

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
2012	3.18	2.79	2.83	2.87	2.98	3.00	3.00	2.92	2.95	3.13	3.32	3.40	3.03
2013	3.58	3.59	3.68	3.64	3.69	3.68	3.67	3.57	3.60	3.78	3.90	3.91	3.69
2014	4.07	4.06	4.13	4.02	4.07	4.05	4.03	3.94	3.96	4.14	4.26	4.25	4.08
2015	4.48	4.43	4.46	4.29	4.33	4.32	4.29	4.20	4.23	4.40	4.52	4.52	4.37
2016	4.40	4.24	4.30	4.25	4.33	4.34	4.33	4.25	4.27	4.46	4.63	4.70	4.37
2017	4.66	4.49	4.55	4.50	4.58	4.59	4.59	4.51	4.53	4.72	4.90	4.99	4.63
2018	4.95	4.77	4.82	4.77	4.85	4.87	4.87	4.79	4.82	5.01	5.19	5.30	4.92
2019	5.25	5.06	5.11	5.05	5.14	5.16	5.16	5.08	5.11	5.31	5.50	5.62	5.21
2020	5.54	5.34	5.38	5.33	5.41	5.44	5.45	5.37	5.40	5.59	5.79	5.94	5.50
2021	5.84	5.63	5.67	5.61	5.70	5.72	5.74	5.66	5.69	5.89	6.10	6.26	5.79
2022	6.14	5.92	5.95	5.89	5.98	6.01	6.03	5.95	5.98	6.18	6.40	6.58	6.08
2023	6.43	6.20	6.23	6.16	6.26	6.29	6.31	6.24	6.26	6.47	6.69	6.89	6.37
2024	6.71	6.47	6.50	6.43	6.53	6.56	6.59	6.51	6.54	6.75	6.98	7.20	6.65
2025	7.00	6.74	6.77	6.70	6.80	6.83	6.86	6.79	6.82	7.03	7.27	7.50	6.93
2026	7.21	6.95	6.97	6.90	7.00	7.04	7.07	7.01	7.03	7.25	7.49	7.74	7.14
2027	7.44	7.17	7.19	7.11	7.21	7.26	7.29	7.22	7.25	7.47	7.72	7.98	7.36
2028	7.67	7.39	7.40	7.32	7.43	7.48	7.48	7.45	7.48	7.70	7.95	8.22	7.58
2029	7.90	7.62	7.63	7.55	7.66	7.70	7.74	7.68	7.71	7.93	8.19	8.48	7.82
2030	8.15	7.85	7.86	7.78	7.89	7.94	7.98	7.92	7.95	8.17	8.44	8.74	8.06
	-0.22	-0.21	-0.09	-0.09	-0.06	-0.10	-0.16	-0.27	-0.25	-0.11	-0.06	-0.27	

PG&E Citygate

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
2012	3.35	2.94	3.08	3.11	3.25	3.32	3.33	3.30	3.32	3.43	3.71	3.61	3.31
2013	3.74	3.75	3.93	3.88	3.96	4.00	4.00	3.96	3.97	4.07	4.29	4.12	3.97
2014	4.23	4.22	4.38	4.27	4.34	4.38	4.36	4.32	4.34	4.43	4.64	4.47	4.36
2015	4.64	4.59	4.71	4.54	4.60	4.64	4.62	4.58	4.60	4.70	4.91	4.74	4.66
2016	4.56	4.40	4.54	4.49	4.60	4.66	4.66	4.63	4.65	4.76	5.01	4.92	4.66
2017	4.82	4.65	4.79	4.74	4.85	4.91	4.92	4.89	4.91	5.02	5.28	5.20	4.91
2018	5.11	4.93	5.07	5.02	5.12	5.19	5.20	5.17	5.19	5.31	5.58	5.51	5.20
2019	5.41	5.22	5.36	5.30	5.41	5.48	5.49	5.46	5.48	5.60	5.88	5.83	5.49
2020	5.71	5.50	5.63	5.57	5.69	5.76	5.78	5.75	5.77	5.89	6.18	6.15	5.78
2021	6.00	5.79	5.92	5.85	5.97	6.05	6.07	6.04	6.06	6.19	6.48	6.47	6.07
2022	6.30	6.07	6.20	6.13	6.25	6.33	6.35	6.33	6.35	6.48	6.78	6.79	6.36
2023	6.59	6.35	6.48	6.40	6.53	6.61	6.64	6.62	6.64	6.77	7.08	7.10	6.65
2024	6.88	6.63	6.75	6.67	6.80	6.88	6.91	6.90	6.92	7.05	7.37	7.41	6.93
2025	7.16	6.90	7.02	6.94	7.07	7.16	7.19	7.17	7.20	7.33	7.66	7.72	7.21
2026	7.38	7.11	7.22	7.14	7.27	7.36	7.40	7.39	7.41	7.55	7.88	7.95	7.42
2027	7.60	7.33	7.43	7.35	7.49	7.58	7.62	7.60	7.63	7.77	8.10	8.19	7.64
2028	7.83	7.55	7.65	7.57	7.70	7.80	7.84	7.83	7.85	7.99	8.34	8.44	7.87
2029	8.07	7.78	7.88	7.79	7.93	8.03	8.07	8.06	8.08	8.23	8.58	8.69	8.10
2030	8.31	8.01	8.11	8.02	8.16	8.26	8.31	8.30	8.32	8.47	8.83	8.95	8.34
	0.16	0.16	0.25	0.24	0.27	0.32	0.33	0.38	0.37	0.30	0.38	0.21	

San Juan Basin

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
2012	3.103	2.7274773	2.6463667	2.7009667	2.7788667	2.8427667	2.9031667	2.9316	2.9381667	2.9801667	3.1379667	3.42053333	2.93 NYMEX
2013	3.5494333	3.5508333	3.5247	3.4463667	3.4687667	3.4996667	3.5428667	3.5606333	3.5626333	3.6007667	3.7096167	3.91988333	3.58 NYMEX
2014	4.02865	4.0138167	3.8291167	3.84335	3.86945	3.90635	3.92395	3.92655	3.9603167	4.15	4.24	4.43	4.01 NYMEX
2015	4.29	4.29	4.21	4.01	4.07	4.12	4.12	4.24	4.18	4.16	4.27	4.48	4.20
2016	4.56	4.55	4.48	4.26	4.32	4.37	4.37	4.49	4.43	4.42	4.54	4.76	4.46
2017	4.84	4.84	4.76	4.54	4.59	4.65	4.64	4.78	4.72	4.71	4.84	5.06	4.75
2018	5.15	5.15	5.07	4.82	4.87	4.93	4.92	5.06	5.01	5.00	5.15	5.37	5.04
2019	5.47	5.46	5.38	5.09	5.15	5.20	5.20	5.34	5.28	5.28	5.43	5.65	5.33
2020	5.76	5.75	5.68	5.38	5.44	5.49	5.48	5.63	5.58	5.59	5.74	5.96	5.62
2021	6.07	6.06	5.98	5.66	5.71	5.77	5.77	5.91	5.86	5.87	6.03	6.26	5.91
2022	6.37	6.36	6.28	5.94	5.98	6.04	6.04	6.20	6.15	6.16	6.31	6.54	6.20
2023	6.65	6.64	6.57	6.21	6.24	6.31	6.32	6.48	6.42	6.44	6.60	6.83	6.48
2024	6.94	6.93	6.85	6.49	6.52	6.59	6.60	6.75	6.70	6.72	6.87	7.11	6.76
2025	7.33	7.28	7.19	6.87	6.94	7.01	7.03	7.18	7.13	7.15	7.34	7.65	7.17
2026	7.55	7.50	7.40	7.08	7.14	7.22	7.24	7.39	7.34	7.36	7.55	7.88	7.39
2027	7.71	7.66	7.56	7.24	7.30	7.38	7.40	7.55	7.50	7.52	7.72	8.05	7.55
2028	7.91	7.86	7.76	7.42	7.49	7.57	7.59	7.74	7.69	7.72	7.92	8.26	7.74
2029	8.12	8.07	7.96	7.62	7.68	7.76	7.79	7.95	7.89	7.92	8.13	8.48	7.95
2030	8.25	8.20	8.09	7.74	7.81	7.89	7.91	8.07	8.02	8.05	8.26	8.61	8.07
	-0.24	-0.22	-0.22	-0.27	-0.22	-0.19	-0.23	-0.12	-0.19	-0.24	-0.22	-0.22	

AECO

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
2012	3.19	2.64	2.66	2.48	2.70	2.78	2.69	2.79	2.79	2.85	2.87	3.01	2.79
2013	3.51	3.51	3.74	3.27	3.43	3.47	3.37	3.46	3.45	3.51	3.26	3.33	3.44
2014	3.81	3.79	4.00	3.57	3.72	3.76	3.65	3.74	3.73	3.79	3.95	3.81	3.78
2015	4.13	4.13	4.32	4.02	4.16	4.04	3.90	4.01	4.03	4.25	4.22	4.08	4.11
2016	4.05	3.94	4.15	3.98	4.15	4.06	3.94	4.05	4.07	4.31	4.32	4.26	4.11
2017	4.31	4.19	4.40	4.23	4.40	4.31	4.20	4.31	4.33	4.57	4.59	4.54	4.37
2018	4.61	4.47	4.67	4.50	4.68	4.59	4.48	4.59	4.62	4.85	4.89	4.86	4.65
2019	4.91	4.76	4.96	4.78	4.97	4.88	4.77	4.89	4.91	5.15	5.19	5.18	4.95
2020	5.20	5.04	5.24	5.06	5.24	5.16	5.06	5.17	5.20	5.44	5.49	5.49	5.23
2021	5.50	5.33	5.52	5.34	5.53	5.45	5.35	5.47	5.49	5.74	5.79	5.82	5.53
2022	5.79	5.62	5.80	5.62	5.81	5.73	5.64	5.75	5.78	6.03	6.09	6.13	5.82
2023	6.08	5.90	6.08	5.89	6.09	6.01	5.92	6.04	6.06	6.32	6.39	6.45	6.10
2024	6.37	6.17	6.35	6.16	6.36	6.28	6.20	6.32	6.34	6.60	6.68	6.75	6.38
2025	6.65	6.45	6.62	6.43	6.63	6.56	6.47	6.60	6.62	6.88	6.97	7.06	6.66
2026	6.87	6.66	6.83	6.63	6.83	6.77	6.68	6.81	6.83	7.09	7.19	7.29	6.87
2027	7.09	6.87	7.04	6.84	7.04	6.98	6.90	7.03	7.05	7.31	7.41	7.53	7.09
2028	7.32	7.09	7.26	7.06	7.26	7.20	7.12	7.25	7.28	7.54	7.65	7.78	7.32
2029	7.56	7.32	7.48	7.28	7.49	7.43	7.35	7.48	7.51	7.78	7.89	8.04	7.55
2030	7.80	7.55	7.71	7.51	7.72	7.66	7.59	7.72	7.75	8.02	8.14	8.30	7.79
	-0.28	-0.29	-0.03	-0.14	0.00	0.01	-0.13	-0.06	-0.07	-0.05	-0.51	-0.66	

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
2012	3.4755	2.9287273	2.6865862	2.62205	2.69995	2.76385	2.82425	2.8526833	2.85925	2.90125	3.3864667	3.66903333	2.97 NYMEX
2013	3.7979333	3.7993333	3.7732	3.4077833	3.4301833	3.4610833	3.5042833	3.52205	3.52405	3.5621833	3.7745333	3.9848	3.63 NYMEX
2014	4.0935667	4.0787333	4.0297	3.7058667	3.7201	3.7462	3.7831	3.8007	3.8033	3.8370667	4.47	4.47	3.96 NYMEX
2015	4.42	4.43	4.35	4.16	4.16	4.03	4.04	4.07	4.10	4.30	4.73	4.74	4.29
2016	4.34	4.23	4.18	4.12	4.15	4.05	4.07	4.11	4.15	4.36	4.83	4.92	4.29
2017	4.60	4.49	4.43	4.37	4.40	4.30	4.33	4.37	4.40	4.62	5.10	5.20	4.55
2018	4.89	4.77	4.70	4.64	4.68	4.58	4.61	4.65	4.69	4.90	5.40	5.51	4.84
2019	5.19	5.06	4.99	4.92	4.96	4.87	4.90	4.95	4.98	5.20	5.70	5.84	5.13
2020	5.48	5.34	5.27	5.20	5.24	5.15	5.19	5.23	5.27	5.49	6.00	6.15	5.42
2021	5.78	5.63	5.55	5.48	5.52	5.44	5.48	5.53	5.56	5.79	6.30	6.47	5.71
2022	6.08	5.91	5.83	5.76	5.81	5.72	5.77	5.81	5.85	6.08	6.60	6.79	6.00
2023	6.37	6.19	6.11	6.03	6.08	6.00	6.05	6.10	6.14	6.37	6.90	7.10	6.29
2024	6.65	6.47	6.38	6.30	6.35	6.27	6.33	6.38	6.42	6.65	7.19	7.41	6.57
2025	6.94	6.74	6.65	6.56	6.62	6.55	6.60	6.66	6.69	6.93	7.48	7.72	6.85
2026	7.15	6.95	6.86	6.77	6.83	6.75	6.81	6.87	6.91	7.14	7.70	7.95	7.06
2027	7.38	7.16	7.07	6.98	7.04	6.97	7.03	7.09	7.13	7.36	7.93	8.19	7.28
2028	7.61	7.39	7.29	7.19	7.26	7.19	7.25	7.31	7.35	7.59	8.16	8.44	7.50
2029	7.84	7.61	7.51	7.42	7.48	7.42	7.49	7.54	7.58	7.83	8.40	8.69	7.73
2030	8.09	7.85	7.74	7.65	7.72	7.65	7.72	7.78	7.82	8.07	8.65	8.95	7.97
	-0.061	-0.0036842	-0.1178261	-0.131	-0.1738095	-0.2881318	-0.2585	-0.1369565	-0.127381	-0.105	0.20575	0.21261905	

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
2012	3.03	2.68	2.60	2.62	2.69	2.76	2.82	2.85	2.85	2.89	3.11	3.39	2.86 NYMEX
2013	3.52	3.52	3.49	3.38	3.40	3.43	3.47	3.49	3.49	3.53	3.69	3.90	3.53 NYMEX
2014	4.01	4.00	3.95	3.77	3.79	3.81	3.85	3.87	3.87	3.90	4.07	4.26	3.93 NYMEX
2015	4.36	4.34	4.26	3.84	3.85	3.87	3.91	3.92	3.93	3.96	4.18	4.38	4.07 NYMEX
2016	4.48	4.45	4.38	4.17	4.18	4.20	4.24	4.26	4.26	4.30	4.44	4.65	4.33 NYMEX
2017	4.76	4.53	4.50	4.27	4.40	4.40	4.41	4.46	4.41	4.66	4.79	5.08	4.56
2018	5.05	4.81	4.77	4.54	4.68	4.68	4.69	4.75	4.69	4.95	5.09	5.40	4.84
2019	5.35	5.10	5.06	4.83	4.96	4.97	4.98	5.04	4.99	5.25	5.39	5.72	5.14
2020	5.64	5.38	5.33	5.10	5.24	5.25	5.26	5.33	5.27	5.54	5.69	6.03	5.42
2021	5.94	5.67	5.62	5.38	5.53	5.54	5.56	5.62	5.56	5.83	5.99	6.36	5.72
2022	6.24	5.95	5.90	5.66	5.81	5.82	5.84	5.91	5.85	6.13	6.29	6.67	6.01
2023	6.53	6.23	6.18	5.93	6.08	6.10	6.13	6.19	6.14	6.41	6.59	6.99	6.29
2024	6.81	6.51	6.45	6.20	6.35	6.37	6.40	6.47	6.42	6.70	6.88	7.29	6.57
2025	7.10	6.78	6.72	6.47	6.62	6.65	6.68	6.75	6.70	6.98	7.17	7.60	6.85
2026	7.32	6.99	6.92	6.67	6.83	6.85	6.89	6.96	6.91	7.19	7.39	7.83	7.06
2027	7.54	7.21	7.14	6.88	7.04	7.07	7.11	7.18	7.13	7.41	7.61	8.07	7.28
2028	7.77	7.43	7.35	7.10	7.26	7.29	7.33	7.41	7.35	7.64	7.85	8.32	7.51
2029	8.00	7.66	7.58	7.32	7.49	7.52	7.56	7.64	7.58	7.87	8.09	8.58	7.74
2030	8.25	7.89	7.81	7.55	7.72	7.75	7.80	7.88	7.82	8.11	8.34	8.84	7.98
	-0.12	-0.17	-0.14	-0.32	-0.23	-0.29	-0.34	-0.31	-0.37	-0.16	-0.17	-0.17	

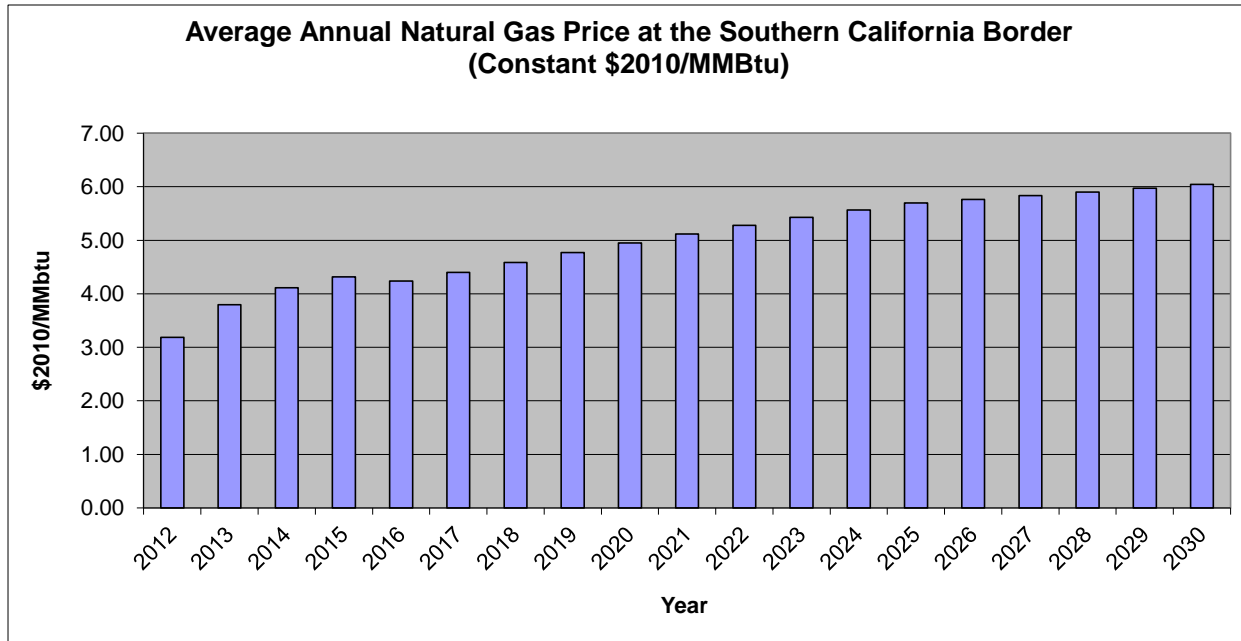
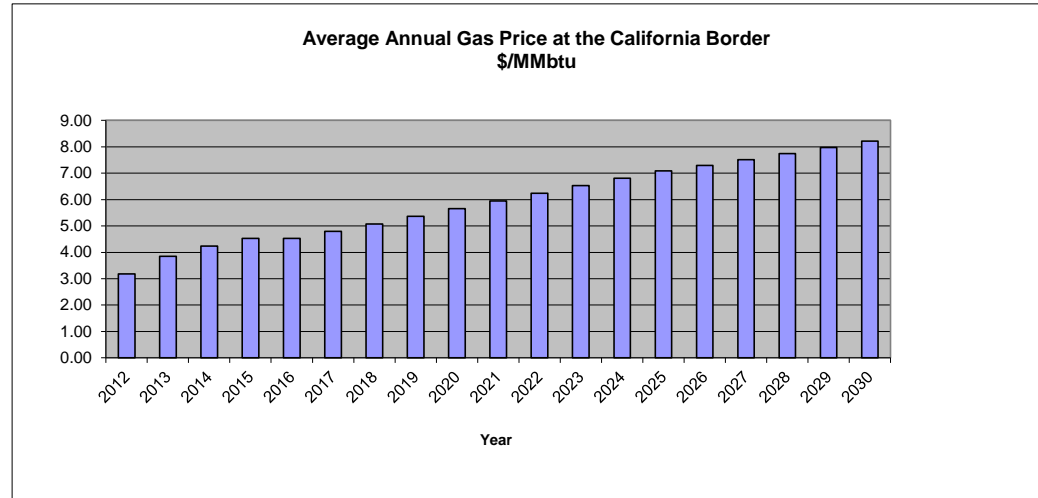
Henry Hub

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
2012	3.10	2.78	2.74	2.85	2.92	2.99	3.05	3.08	3.08	3.13	3.28	3.56	3.05 NYMEX
2013	3.69	3.69	3.67	3.62	3.64	3.68	3.72	3.74	3.74	3.78	3.88	4.09	3.74 NYMEX
2014	4.20	4.18	4.13	4.02	4.03	4.06	4.10	4.11	4.12	4.15	4.24	4.43	4.15 NYMEX
2015	4.53	4.51	4.43	4.28	4.29	4.31	4.35	4.37	4.37	4.40	4.49	4.70	4.42 NYMEX
2016	4.80	4.77	4.69	4.53	4.54	4.56	4.60	4.62	4.62	4.66	4.76	4.98	4.68 NYMEX
2017	5.08	5.06	4.98	4.81	4.82	4.84	4.88	4.91	4.91	4.95	5.06	5.28	4.96 NYMEX
2018	5.39	5.37	5.29	5.09	5.10	5.12	5.16	5.19	5.20	5.24	5.37	5.59	5.26 NYMEX
2019	5.71	5.68	5.60	5.36	5.37	5.39	5.43	5.47	5.48	5.52	5.65	5.87	5.54 NYMEX
2020	6.00	5.97	5.89	5.65	5.66	5.68	5.72	5.76	5.77	5.83	5.96	6.18	5.84 NYMEX
2021	6.31	6.28	6.20	5.93	5.93	5.96	6.00	6.04	6.05	6.11	6.25	6.48	6.13 NYMEX
2022	6.61	6.58	6.50	6.21	6.20	6.23	6.28	6.32	6.34	6.40	6.53	6.76	6.41 NYMEX
2023	6.89	6.86	6.78	6.48	6.47	6.51	6.56	6.60	6.62	6.68	6.82	7.05	6.69 NYMEX
2024	7.18	7.15	7.07	6.76	6.74	6.78	6.83	6.88	6.89	6.96	7.09	7.33	6.97 NYMEX
2025	7.57	7.50	7.40	7.14	7.16	7.20	7.26	7.31	7.32	7.39	7.56	7.87	7.39 Composite 7
2026	7.79	7.72	7.62	7.35	7.36	7.41	7.47	7.52	7.53	7.60	7.77	8.10	7.60 Composite 7
2027	7.95	7.88	7.78	7.51	7.52	7.57	7.63	7.68	7.69	7.76	7.94	8.27	7.77 Composite 7
2028	8.15	8.08	7.97	7.69	7.71	7.76	7.82	7.87	7.88	7.95	8.14	8.48	7.96 Composite 7
2029	8.36	8.29	8.18	7.89	7.91	7.96	8.02	8.07	8.08	8.16	8.35	8.70	8.16 Composite 7
2030	8.49	8.42	8.31	8.01	8.03	8.08	8.15	8.19	8.21	8.28	8.48	8.83	8.29 Composite 7
	5.3452231	5.2982214	5.2285128	5.0439256	5.0543128	5.0860487	5.1278436	5.1591974	5.1685667	5.2156564	5.3362077	5.56036667	5.22
	1.0242494	1.0152429	1.0018854	0.9665149	0.9685053	0.9745865	0.9825952	0.9886032	0.9903985	0.9994219	1.0225218	1.06547508	1

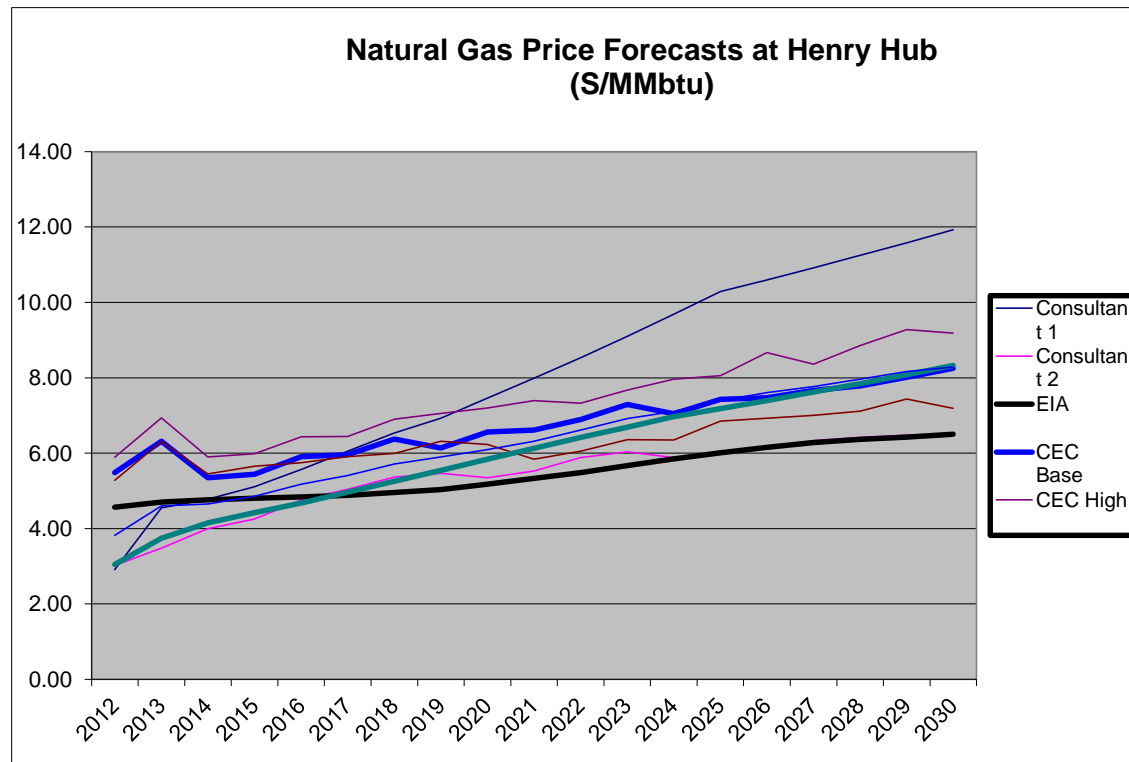
Permian Basin

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
2012	3.07675	2.7426905	2.6583667	2.71605	2.7586167	2.8360167	2.9470833	2.9876833	2.9609167	2.9435	3.13755	3.42011667	4.03 NYMEX
2013	3.5490167	3.5504167	3.5242833	3.4621167	3.4845167	3.5154167	3.5586167	3.5763833	3.5783833	3.6165167	3.71195	3.92221667	4.31 NYMEX
2014	4.0309833	4.01615	3.9671167	3.91	3.95	3.97	4.01	4.01	4.00	4.02	4.12	4.31	4.57
2015	4.39	4.39	4.31	4.17	4.20	4.23	4.26	4.27	4.26	4.27	4.37	4.58	4.31
2016	4.65	4.65	4.57	4.42	4.45	4.48	4.51	4.52	4.51	4.53	4.64	4.86	4.57
2017	4.94	4.94	4.85	4.70	4.73	4.76	4.79	4.81	4.80	4.82	4.94	5.16	4.85
2018	5.25	5.25	5.16	4.98	5.01	5.04	5.07	5.09	5.08	5.11	5.25	5.47	5.15
2019	5.56	5.56	5.48	5.26	5.29	5.31	5.34	5.37	5.36	5.39	5.53	5.75	5.43
2020	5.85	5.85	5.77	5.54	5.57	5.59	5.63	5.66	5.66	5.70	5.84	6.06	5.73
2021	6.16	6.16	6.08	5.83	5.85	5.87	5.91	5.94	5.94	5.98	6.13	6.36	6.02
2022	6.46	6.46	6.38	6.11	6.12	6.15	6.19	6.22	6.22	6.27	6.41	6.64	6.30
2023	6.75	6.74	6.66	6.38	6.38	6.42	6.47	6.50	6.50	6.55	6.70	6.93	6.58
2024	7.03	7.03	6.95	6.66	6.66	6.70	6.75	6.78	6.78	6.83	6.97	7.21	6.86
2025	7.43	7.38	7.28	7.04	7.07	7.12	7.17	7.21	7.21	7.26	7.44	7.75	7.28
2026	7.64	7.60	7.50	7.25	7.28	7.33	7.38	7.42	7.42	7.47	7.65	7.98	7.49
2027	7.81	7.76	7.66	7.40	7.44	7.48	7.54	7.58	7.58	7.63	7.82	8.15	7.65
2028	8.01	7.96	7.85	7.59	7.62	7.67	7.73	7.77	7.77	7.82	8.02	8.36	7.85
2029	8.22	8.17	8.06	7.79	7.82	7.87	7.93	7.97	7.97	8.03	8.23	8.58	8.05
2030	8.35	8.30	8.18	7.91	7.94	7.99	8.06	8.09	8.10	8.15	8.36	8.71	8.18
	-0.14	-0.12	-0.12	-0.10	-0.08	-0.08	-0.09	-0.10	-0.11	-0.13	-0.12	-0.12	

Year	Current \$		Year	Nominal \$		
	Average	Copnstant 2012 \$		Current \$	\$2.05	\$2.05
2012	3.19	3.19	2012	6.31	5.24	1.13
2013	3.85	3.79	2013	6.62	5.90	1.79
2014	4.24	4.11	2014	6.93	6.29	2.18
2015	4.53	4.32	2015	7.27	6.58	2.48
2016	4.53	4.24	2016	7.62	6.58	2.48
2017	4.79	4.40	2017	7.98	6.84	2.73
2018	5.07	4.58	2018	8.36	7.13	3.02
2019	5.37	4.77	2019	8.77	7.42	3.31
2020	5.66	4.95	2020	9.19	7.71	3.60
2021	5.95	5.12	2021	9.63	8.00	3.89
2022	6.24	5.28	2022	10.09	8.29	4.19
2023	6.52	5.43	2023	10.57	8.58	4.47
2024	6.80	5.57	2024	11.08	8.86	4.75
2025	7.08	5.70	2025	11.61	9.14	5.03
2026	7.30	5.76	2026	12.17	9.35	5.24
2027	7.52	5.83	2027	12.76	9.57	5.46
2028	7.74	5.90	2028	13.37	9.79	5.69
2029	7.97	5.97	2029	14.01	10.03	5.92
2030	8.21	6.04	2030	14.68	10.27	6.16



Henry Hub Forecast	Consultant	Consultant	EIA	CEC Base	CEC High	CEC Low	NYMEX	
Year	Consultant 1	Consultant 2	EIA	CEC Base	CEC High	CEC Low	NYMEX	Composite
2012	2.91	3.02	\$4.57	5.49	5.89	5.28	3.05	3.82
2013	4.55	3.48	\$4.70	6.32	6.94	6.31	3.74	4.60
2014	4.78	4.00	\$4.77	5.35	5.90	5.45	4.15	4.65
2015	5.11	4.25	\$4.81	5.44	5.98	5.65	4.42	4.86
2016	5.57	4.76	\$4.83	5.91	6.44	5.74	4.68	5.17
2017	6.05	5.04	\$4.88	5.96	6.44	5.91	4.96	5.41
2018	6.54	5.36	\$4.96	6.38	6.90	5.99	5.26	5.71
2019	6.93	5.47	\$5.04	6.14	7.06	6.32	5.54	5.90
2020	7.46	5.35	\$5.18	6.56	7.20	6.23	5.84	6.10
2021	7.99	5.53	\$5.33	6.61	7.39	5.84	6.13	6.32
2022	8.53	5.88	\$5.48	6.90	7.33	6.05	6.41	6.61
2023	9.10	6.04	\$5.67	7.29	7.68	6.36	6.69	6.92
2024	9.69	5.89	\$5.85	7.05	7.96	6.35	6.97	7.10
2025	10.29	6.02	\$6.01	7.42	8.05	6.85	7.18	7.39
2026	10.60	6.18	\$6.15	7.47	8.67	6.93	7.40	7.60
2027	10.92	6.34	\$6.28	7.67	8.36	7.00	7.62	7.77
2028	11.24	6.42	\$6.36	7.79	8.85	7.12	7.85	7.96
2029	11.58	6.48	\$6.43	8.01	9.28	7.44	8.08	8.16
2030	11.93	6.48	\$6.50	8.25	9.18	7.19	8.33	8.29



HH NYMEX	SoCal	
2012-01	3.10	3.40
2012-02	2.78	3.00
2012-03	2.74	2.92
2012-04	2.85	2.96
2012-05	2.92	3.04
2012-06	2.99	3.10
2012-07	3.05	3.16
2012-08	3.08	3.19
2012-09	3.08	3.19
2012-10	3.13	3.24
2012-11	3.28	3.39
2012-12	3.56	3.67
2013-01	3.69	3.80
2013-02	3.69	3.80
2013-03	3.67	3.77
2013-04	3.62	3.73
2013-05	3.64	3.75
2013-06	3.68	3.78
2013-07	3.72	3.82
2013-08	3.74	3.84
2013-09	3.74	3.84
2013-10	3.78	3.88
2013-11	3.88	3.97
2013-12	4.09	4.18
2014-01	4.20	4.29
2014-04	4.02	4.11
2014-05	4.03	4.13
2014-06	4.06	4.15
2014-07	4.10	4.19
2014-08	4.11	4.21
2014-09	4.12	4.21
2014-10	4.15	4.24
2014-11	4.24	4.32
2014-12	4.43	4.52
2015-01	4.53	4.36
2015-02	4.51	4.37
2015-03	4.43	4.40
2015-04	4.28	4.44
2015-05	4.29	4.45
2015-06	4.31	4.46
2015-07	4.35	4.49
2015-08	4.37	
2015-09	4.37	
2015-10	4.40	
2015-11	4.49	
2015-12	4.70	
2016-01	4.80	
2016-02	4.77	
2016-03	4.69	
2016-04	4.53	
2016-05	4.54	
2016-06	4.56	
2016-07	4.60	
2016-08	4.62	
2016-09	4.62	

2016-10	4.66
2016-11	4.76
2016-12	4.98
2017-01	5.08
2017-02	5.06
2017-03	4.98
2017-04	4.81
2017-05	4.82
2017-06	4.84
2017-07	4.88
2017-08	4.91
2017-09	4.91
2017-10	4.95
2017-11	5.06
2017-12	5.28
2018-01	5.39
2018-02	5.37
2018-03	5.29
2018-04	5.09
2018-05	5.10
2018-06	5.12
2018-07	5.16
2018-08	5.19
2018-09	5.20
2018-10	5.24
2018-11	5.37
2018-12	5.59
2019-01	5.71
2019-02	5.68
2019-03	5.60
2019-04	5.36
2019-05	5.37
2019-06	5.39
2019-07	5.43
2019-08	5.47
2019-09	5.48
2019-10	5.52
2019-11	5.65
2019-12	5.87
2020-01	6.00
2020-02	5.97
2020-03	5.89
2020-04	5.65
2020-05	5.66
2020-06	5.68
2020-07	5.72
2020-08	5.76
2020-09	5.77
2020-10	5.83
2020-11	5.96
2020-12	6.18
2021-01	6.31
2021-02	6.28
2021-03	6.20
2021-04	5.93
2021-05	5.93
2021-06	5.96

2021-07	6.00
2021-08	6.04
2021-09	6.05
2021-10	6.11
2021-11	6.25
2021-12	6.48
2022-01	6.61
2022-02	6.58
2022-03	6.50
2022-04	6.21
2022-05	6.20
2022-06	6.23
2022-07	6.28
2022-08	6.32
2022-09	6.34
2022-10	6.40
2022-11	6.53
2022-12	6.76
2023-01	6.89
2023-02	6.86
2023-03	6.78
2023-04	6.48
2023-05	6.47
2023-06	6.51
2023-07	6.56
2023-08	6.60
2023-09	6.62
2023-10	6.68
2023-11	6.82
2023-12	7.05
2024-01	7.18
2024-02	7.15
2024-03	7.07
2024-04	6.76
2024-05	6.74
2024-06	6.78
2024-07	6.83
2024-08	6.88
2024-09	6.89
2024-10	6.96
2024-11	7.09

WP-HSE-3-Core Storage

SCG and SDG&E Core Storage Allocations by Customer Class							Check		
SoCalGas	Residential	Nonresidential Core				Total SCG Core			
		G-10	G-AC	G-GE	G-NGV				
Inventory Allocation BCF	61.8	11.4	0.0	0.0	0.5	73.7	73.7	83.0	
Injection MMcf	289.1	53.1	0.0	0.0	2.1	344.3	344.3	388.0	
Withdrawal MMcf	1,287.7	680.0	0.0	0.0	22.3	1,990	1,990.0	2225.0	1990
SDG&E									
SDG&E	Residential	Nonresidential Core		Total SDG&E Core		SCG & SDG&E Core Totals			
		GN-3	G-NGV						
Inventory Allocation BCF	7.6	1.8	0.0	9.3		83	9.3	83.0	
Injection MMcf	35.3	8.3	0.0	43.6		388	43.6	388.0	
Withdrawal MMcf	154.1	79.1	1.8	235.0		2,225	235.0	2225.0	

SoCalGas	Residential	Nonresidential Core				Total SCG Core			
		G-10	G-AC	G-GE	G-NGV				
Inventory Allocation BCF	56.18	10.32	0.00	0.00	0.42	66.9	1.100851		
Injection MMcf	263	48	0	0	2	312.7	1.0534760		
Withdrawal MMcf	1,288	680	0	0	22	1,990.0	0.9998941		
	64.71%	34.17%			1.12%				
SDG&E									
SDG&E	Residential	Nonresidential Core		Total SDG&E Core		SCG & SDG&E Core Totals			
		GN-3	G-NGV						
Inventory Allocation BCF	6.9	1.6	0.0	8.5		75			
Injection MMcf	44.9	10.5	0.1	55.5		368			
Withdrawal MMcf	154.0	79.4	1.8	235.2		2,225			
	65.6%	33.7%	0.8%						

**Southern California Gas Company
UAF WACOG Comparison
April 2008 - Mar 2011**

	<u>Total Receipts</u>	<u>Total Deliveries</u>	<u>UAF (MMBtu)</u>	<u>UAF % of Receipts</u>
Apr-08	82,692,415	80,737,839	1,954,576	2.36%
May-08	78,088,483	78,611,097	(522,614)	-0.67%
Jun-08	76,412,248	76,418,330	(6,082)	-0.01%
Jul-08	74,298,646	73,325,954	972,692	1.31%
Aug-08	79,851,045	79,700,404	150,641	0.19%
Sep-08	85,864,351	86,391,542	(527,191)	-0.61%
Oct-08	80,924,699	80,615,853	308,846	0.38%
Nov-08	84,264,368	83,978,199	286,169	0.34%
Dec-08	82,636,919	82,508,626	128,293	0.16%
Jan-09	108,243,376	106,532,628	1,710,748	1.58%
Feb-09	93,044,444	90,889,058	2,155,386	2.32%
Mar-09	91,054,372	92,589,254	(1,534,882)	-1.69%
Apr-09	82,349,914	80,781,492	1,568,422	1.90%
May-09	76,440,894	74,926,775	1,514,119	1.98%
Jun-09	71,021,997	71,636,365	(614,368)	-0.87%
Jul-09	65,638,064	64,108,806	1,529,258	2.33%
Aug-09	79,834,102	80,125,947	(291,845)	-0.37%
Sep-09	78,993,362	78,179,122	814,240	1.03%
Oct-09	84,893,452	84,551,006	342,446	0.40%
Nov-09	73,378,387	72,851,281	527,106	0.72%
Dec-09	77,826,360	76,820,295	1,006,065	1.29%
Jan-10	104,952,793	104,902,864	49,929	0.05%
Feb-10	97,788,561	96,436,723	1,351,838	1.38%
Mar-10	85,821,633	85,197,064	624,569	0.73%
Apr-10	86,134,189	84,167,263	1,966,926	2.28%
May-10	78,365,035	77,478,767	886,268	1.13%
Jun-10	70,413,585	71,101,893	(688,308)	-0.98%
Jul-10	64,908,866	62,786,590	2,122,276	3.27%
Aug-10	72,751,040	72,533,377	217,663	0.30%
Sep-10	79,438,840	78,853,135	585,705	0.74%
Oct-10	75,178,673	75,465,030	(286,357)	-0.38%
Nov-10	82,201,773	81,276,435	925,338	1.13%
Dec-10	92,153,132	92,806,060	(652,928)	-0.71%
Jan-11	100,215,887	97,838,522	2,377,365	2.37%
Feb-11	99,407,722	96,424,319	2,983,403	3.00%
Mar-11	<u>95,066,523</u>	<u>96,498,951</u>	<u>(1,432,428)</u>	<u>-1.51%</u>
Totals	2,992,550,150	2,970,046,866	22,503,284	0.752%

Southern California Gas Company LUAF WACOG Comparison April 2008 - April 2011						
<u>Dates</u>	<u>Total Receipts</u>	<u>Total Deliveries</u>	<u>UAF (MMBtu)</u>	<u>UAF % of Receipts</u>	<u>Percent Core</u>	<u>Percent Non-Core</u>
<u>Apr 2008- Mar 2011</u>					37%	63%
36 Months' Total	2,992,550,150	2,970,046,866	22,503,284	0.752%	0.278%	0.474%

WP-HSE-4 SDG UAF

WP-HSE-4 UAF Gas

San Diego Gas and Electric
UAF WACOG Comparison
April 2001 - March 2011

	<u>Total Receipts</u>	<u>Total Deliveries</u>	<u>Billing Adjustments to UAF</u>	<u>UAF (MMBtu)</u>	<u>UAF % of Receipts</u>
May-08	9,078,134	8,168,907	(893,683)	15,544	0.17%
Jun-08	9,043,210	9,428,939	368,292	(17,437)	-0.19%
Jul-08	8,403,168	8,345,014	147,768	205,921	2.45%
Aug-08	8,274,355	8,386,112	100,537	(11,220)	-0.14%
Sep-08	8,988,770	8,541,780	(483,355)	(36,365)	-0.40%
Oct-08	9,956,624	8,886,232	(1,026,111)	44,282	0.44%
Nov-08	10,839,609	10,052,749	(712,852)	74,008	0.68%
Dec-08	10,348,551	11,153,593	949,021	143,979	1.39%
Jan-09	14,081,585	11,416,352	(2,586,232)	79,002	0.56%
Feb-09	12,129,190	13,861,867	2,285,534	552,857	4.56%
Mar-09	10,824,783	11,948,452	1,181,888	58,218	0.54%
Apr-09	9,485,167	10,339,557	887,169	32,779	0.35%
May-09	8,078,032	7,499,849	(730,714)	(152,531)	-1.89%
Jun-09	8,773,086	8,791,146	256,419	238,359	2.72%
Jul-09	7,221,011	8,409,561	1,371,664	183,114	2.54%
Aug-09	9,078,245	7,553,004	(1,561,890)	(36,649)	-0.40%
Sep-09	8,783,645	8,557,498	(138,383)	87,764	1.00%
Oct-09	10,240,501	8,965,230	(1,264,284)	10,987	0.11%
Nov-09	11,235,685	10,619,789	(444,476)	171,420	1.53%
Dec-09	10,802,893	11,004,916	399,346	197,322	1.83%
Jan-10	13,928,133	12,091,883	(1,770,837)	65,413	0.47%
Feb-10	12,687,385	13,761,716	1,437,760	363,429	2.86%
Mar-10	11,454,614	12,098,279	927,566	283,901	2.48%
Apr-10	11,663,994	10,729,441	(642,441)	292,112	2.50%
May-10	10,049,405	11,410,584	1,344,265	(16,914)	-0.17%
Jun-10	8,996,000	8,782,220	(4,729)	209,051	2.32%
Jul-10	7,109,430	8,545,144	1,611,917	176,203	2.48%
Aug-10	8,634,302	8,414,523	(154,363)	65,416	0.76%
Sep-10	8,992,296	8,821,500	(83,222)	87,574	0.97%
Oct-10	8,169,325	8,274,233	176,398	71,489	0.88%
Nov-10	8,852,565	8,299,067	(397,295)	156,203	1.76%
Dec-10	10,865,714	9,983,097	(921,016)	(38,399)	-0.35%
Jan-11	12,413,261	11,804,707	(340,580)	267,974	2.16%
Feb-11	11,335,144	11,839,014	813,760	309,890	2.73%
Mar-11	11,152,112	10,974,746	(164,225)	13,142	0.12%
Totals	351,969,919	347,760,700		4,147,836	1.178%

San Diego Gas and Electric UAF WACOG Comparison April 2008 - March 2011						
<u>Dates</u> Apr 2008- Mar 2011	<u>Total Receipts</u>	<u>Total Deliveries</u>	<u>UAF (MMBtu)</u>	<u>UAF % of Receipts</u>	<u>Percent Core</u> 27%	<u>Percent Non-Core</u> 73%
36 Months' Total	351,969,919	347,760,700	4,147,836	1.178%	0.318%	0.860%