

1 Application No: _____
2 Exhibit No.: _____
3 Witness: Yu Kai Chen

4 _____)
5 In the Matter of the Application of Southern)
6 California Gas Company (U 904 G), San Diego Gas)
7 & Electric Company (U 902 M) and Southern)
8 California Edison Company (U 338 E) for Approval)
of Changes to Natural Gas Operations and Service)
Offerings)

A.06-07-____
(Filed August 28, 2006)

11
12 **PREPARED DIRECT TESTIMONY**
13 **OF YU KAI CHEN**

14 **SAN DIEGO GAS & ELECTRIC COMPANY**
15 **AND**
16 **SOUTHERN CALIFORNIA GAS COMPANY**

26 **BEFORE THE PUBLIC UTILITIES COMMISSION**
27 **OF THE STATE OF CALIFORNIA**
28 August 28, 2006

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**PREPARED DIRECT TESTIMONY
OF YU KAI CHEN**

4 **A. QUALIFICATIONS AND PURPOSE**

5 My name is Yu Kai Chen. My business address is 555 West Fifth Street, Los Angeles,
6 California, 90013-1011. I am employed as a Principal Economic Advisor in the Regulatory Gas
7 Analysis group for both the Southern California Gas Company (SoCalGas) and the San Diego Gas
8 & Electric Company (SDG&E).

9 I began work at SoCalGas in 1997 and have held positions of increasing responsibilities in
10 the Revenue Cycle Services, Customer Services, and Regulatory Affairs departments. I have
11 served in my present role since October 1, 2004. My current responsibilities include providing
12 analytical support and direction to SoCalGas and SDG&E on gas rate design, cost allocation,
13 balancing accounts, revenue requirements, and other related issues.

14 I received my Bachelor of Arts degree with honors in Economics from the University of
15 California, Irvine. I also hold a Master of Business Administration degree with distinctions from
16 Yale University with concentrations in Strategy and Operations.

17 I have not previously testified before this Commission.

18 The purpose of my testimony is to discuss changes to the treatment of procurement related
19 costs for the core customers of SDG&E and SoCalGas under the core portfolio consolidation
20 proposal put forth in the accompanying testimony of Witness Paul Goldstein. My testimony is
21 arranged in six sections:

- 22 • Section A presents my qualifications and the purpose of testimony;
 - 23 • Section B discusses current and proposed treatment of storage costs;
 - 24 • Section C discusses current and proposed treatment of interstate pipeline demand charges;
 - 25 • Section D discusses current and proposed treatment of carrying costs of gas in inventory;
 - 26 • Section E discusses current and proposed treatment of brokerage fees; and
 - 27 • Section F presents current and proposed revenue requirements and rates.
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B. STORAGE COSTS

SoCalGas currently reserves a portion of its storage assets for use by core customers. These storage capacities were adopted in the last Biennial Cost Allocation Proceeding¹ (BCAP). The associated reservation and variable charges for these storage assets are recovered through transportation rates. The total core storage cost currently in SoCalGas rates is \$79.1 million.²

SDG&E currently has no on-system storage. Therefore, SDG&E purchases storage services from the SoCalGas unbundled storage program. Per the BCAP, most SDG&E storage capacity reservations costs are allocated to core customers while a small amount is allocated to noncore customers with procurement service. The difference between the storage revenue requirements and actual storage costs, including all variable and in-kind fuel costs, are trued-up through the Gas Storage Balancing Account (GSBA). The estimated storage cost for 2006 is \$14.6 million.³

As referenced in the testimony of Witness Goldstein, the new storage capacities for the combined portfolio will be 70 Bcf of inventory, 327 MMcf/d of injection, and 2,225 MMcf/d of withdrawal capacity⁴. As part of the combined portfolio proposal, the reservation charges and estimated variable costs for storage will remain in the transportation rate to allow different allocation of these costs among the various core classes. Inventory, injection, and withdrawal capacity costs will be allocated based on the weighted-average of the current SDG&E/SoCalGas storage requirements. These allocated storage costs will then be divided by the combined class throughput. For example, under the core portfolio consolidation, the combined inventory costs will be \$25.6 million⁵. The current total storage requirement⁶ for SDG&E and SoCalGas Residential customers is 65,817 MMcf, which is 83.4% of the 78,911 MMcf⁷ current total storage

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¹ SDG&E and SoCalGas BCAP decision, D.00-04-060.

² \$79.1 million is the scaled marginal cost of storage.

³ \$14.6 million reflects the estimated storage cost for 2006 calendar year based on two contracts. SDG&E Advice Letter Nos. 1499-G and 1595-G.

⁴ As discussed in the testimony of Witness Goldstein, the SDG&E withdrawal contract capacity of 297 MMBtu per day would be added to the current allocation to SoCalGas core withdrawal capacity of 1,935 MMcf per day for a total of 2,225 MMcf per day if the effective implementation of the combined portfolio is April 1, 2007.

⁵ Combined inventory (MMcf) x Per Unit LRMC Cost x SoCalGas EPMC Scaling Factor =
70,000 MMcf x 0.19721561 M\$/MMcf x 1.86 = \$25.6 million

⁶ Refers to the sum of the current SDG&E and SoCalGas storage requirement in the absence of a combined portfolio.

⁷ 70,000 MMcf for SoCalGas and 8,911 MMcf for SDG&E under 2007 Storage Contract.

1 requirement for all SDG&E and SoCalGas core customers. Therefore, SDG&E and SoCalGas
2 Residential customers are allocated \$21.4 million⁸ in inventory costs. Since the current total
3 Residential throughput is 287,306 Mdth⁹, SDG&E and SoCalGas Residential customers would be
4 charged 0.74¢ per therm¹⁰ for inventory cost. The same method of calculation for storage would
5 be used for injection and withdrawal costs as well as for other customer classes. Consequently,
6 customers of the same class between SDG&E and SoCalGas will pay the same unit rate. That is,
7 SDG&E Residential customers will pay the same storage costs on a cents per therm basis as
8 SoCalGas Residential customers; SDG&E Core Commercial & Industrial (C&I) customers will
9 pay the same storage costs on a cents per therm basis as SoCalGas Core C&I customers; and
10 SDG&E Natural Gas Vehicle (NGV) customers will pay the same storage costs on a cents per
11 therm basis as SoCalGas NGV customers. As a result of the core portfolio consolidation, SDG&E
12 core customers will pay \$9.7 million in storage costs while SoCalGas core customers will pay
13 \$72.8 million in storage costs.

14 Under the combined portfolio, SDG&E will discontinue offering noncore procurement
15 service as further described in the accompanying testimony of Witness Rodger Schwecke.
16 Consequently, SDG&E's storage costs will no longer be allocated to its noncore customers.

17 18 **C. INTERSTATE PIPELINE DEMAND CHARGES**

19 SDG&E currently recovers approximately \$16.5 million¹¹, excluding franchise fees and
20 uncollectibles (FF&U), in interstate pipeline demand charges (IPDC) through the procurement
21 charge. SoCalGas currently recovers approximately \$108.1 million, excluding FF&U, in IPDC
22 through the procurement charge.¹²

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24 _____
25 ⁸ \$25.6 million x 83.4% = \$21.4 million

26 ⁹ SDG&E average year Residential throughput is 32,621 Mdth. SoCalGas average year Residential throughput is
27 254,685 Mdth.

28 ¹⁰ \$21.4 million / 287,306 Mdth = 0.74¢ per therm

¹¹ Based on the last twelve month average IPDC rate ending August 2006 of 3.7¢ per therm and average year sales.

¹² At the time of filing, SoCalGas still recovers approximately \$83.9 million IPDC for the original El Paso capacity
through transportation rates. However, with the expiration of the original El Paso contracts at the end of August
2006, these costs will be removed from transportation rates per SoCalGas Advice Letter No. 3644. Going
forward, the IPDC for all new capacity commitments will be reflected in the procurement rate with the exception
of capacity used to transport company use and unaccounted-for gas.

1 Under the combined portfolio, the IPDC will be recovered through the procurement charge
2 on an equal cent per therm (ECPT) basis from all core procurement customers of SDG&E and
3 SoCalGas. As a result of the proposal, SDG&E will recover approximately \$15.0 million in IPDC
4 while SoCalGas will recover approximately \$109.6 million in IPDC¹³, both excluding FF&U.

5 **D. CARRYING COSTS OF GAS IN STORAGE INVENTORY**

6 SoCalGas currently recovers its seasonal storage component of carrying costs of gas in
7 storage inventory (CCSI), totaling \$1.636 million, excluding FF&U, through transportation rates.¹⁴
8 SDGE currently recovers its CCSI, totaling \$0.356 million¹⁵, excluding FF&U, through
9 procurement charge.¹⁶

10 Under the new combined portfolio, the combined CCSI will be recovered through the
11 procurement charge on an ECPT basis from all core procurement customers of SDG&E and
12 SoCalGas. As a result of the proposal, SoCalGas will recover approximately \$1.753 million in
13 CCSI while SDG&E will recover approximately \$0.239 million in CCSI, both excluding FF&U.

14 **E. BROKERAGE FEES**

15 Per Commission decision in the BCAP¹⁷, brokerage fees for both utilities are recovered
16 through the procurement charge. The authorized brokerage fees excluding FF&U are 0.0922¢ per
17 therm for SDG&E core customers and 0.1971¢ per therm for SoCalGas core customers.¹⁸

18 Under the core portfolio consolidation, core brokerage fees will be recovered through the
19 procurement charge on an ECPT basis from all core procurement customers of SDG&E and
20 SoCalGas. As a result of the proposal, the proposed core brokerage fee, excluding FF&U, will be
21 0.1845¢ per therm.

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26 ¹³ Assuming average year sales.

27 ¹⁴ SoCalGas CCSI allocation methodology was adopted in D.93-02-013.

28 ¹⁵ SDG&E CCSI is currently charged on a per unit rate of 0.08¢ per therm. \$0.356 million is based on SDG&E average year sales.

¹⁶ SDG&E CCSI allocation methodology was adopted in D.00-04-060.

¹⁷ D.00-04-060.

¹⁸ SDGE Tariff Schedule GPC and SoCalGas Tariff Schedule No. G-CP. Tariffs include FF&U.

F. TOTAL REVENUE REQUIREMENTS AND RATES

The summary table below illustrates the overall core average rate impact of the utilities' combined portfolio proposal:

	<u>Cent Per Therm (w/o FF&U)¹⁹</u>		
	Current	Proposed	% Change
<u>SDG&E</u>			
Transportation Rate	48.6¢	47.5¢	-2.2%
Procurement Charge	80.3¢	80.1¢	-0.3%
TOTAL	128.9¢	127.6¢	-1.0%
<u>SoCalGas</u>			
Transportation Rate	38.0¢	37.7¢	-0.6%
Procurement Charge	80.0¢	80.1¢	0.1%
TOTAL	117.9¢	117.8¢	-0.1%

For further details, the current procurement-related and transportation revenue requirements for SDG&E and SoCalGas are presented in Appendix Da. These costs are presented without FF&U. Appendix Db translates these costs into class average rate components.

Additionally, Appendix Ea and Eb present the procurement-related and transportation revenue requirements as well as class average rates for SDG&E and SoCalGas customers under core portfolio consolidation. Again, the costs in these tables are without FF&U. The final bundled rates for each utility will reflect the unique FF&U factor for its own service territory.

This concludes my testimony.

¹⁹ Totals and percent changes may not tally due to rounding.

Appendix 1a: Current Revenue Requirements excluding FF&U (M\$)

		CORE Customers						
		Residential	Core C&I	NGV	Gas A/C	Gas Eng	TOTAL	
		A	B	C	D	E	F	
SDG&E								
<i>Transportation Revenues</i>								
1	Other Transportation Revenues	\$171,064	\$37,557	\$342	N/A	N/A	\$208,963	1
2	Seasonal Storage	\$10,625	\$3,825	\$132	N/A	N/A	\$14,581	2
3	Total Transportation Revenues	\$181,688	\$41,382	\$474	N/A	N/A	\$223,544	3
4	Average Year Throughput (Mdth)	32,621	12,979	403	N/A	N/A	46,003	4
<i>Procurement-related Revenues</i>								
5	WACOG (Illustrative Only)*	\$247,977	\$89,263	\$3,081	N/A	N/A	\$340,321	5
6	IPDC**	\$11,995	\$4,318	\$149	N/A	N/A	\$16,462	6
7	CCSI	\$259	\$93	\$3	N/A	N/A	\$356	7
8	Brokerage Fees	\$299	\$108	\$4	N/A	N/A	\$410	8
9	Total Procurement Revenues	\$260,531	\$93,782	\$3,237	N/A	N/A	\$357,550	9
10	Average Year Sales (Mdth)	32,434	11,675	403	N/A	N/A	44,512	10
11	Total Trans & Proc Revenues	\$442,219	\$135,164	\$3,712	N/A	N/A	\$581,094	11
SoCalGas								
<i>Transportation Revenues</i>								
12	Other Transportation Revenues	\$1,006,554	\$208,766	\$1,504	\$130	\$2,228	\$1,219,181	12
13	Seasonal Storage	\$66,446	\$12,498	\$130	\$4	\$18	\$79,096	13
14	CCSI: Procurement-related	\$1,264	\$351	\$12	\$1	\$8	\$1,636	14
15	Total Transportation Revenues	\$1,074,264	\$221,615	\$1,646	\$135	\$2,253	\$1,299,913	15
16	Average Year Throughput (Mdth)	254,685	83,463	2,435	120	1,604	342,308	16
<i>Procurement-related Revenues</i>								
17	WACOG (Illustrative Only)*	\$1,927,762	\$535,282	\$18,617	\$810	\$11,652	\$2,494,123	17
18	IPDC***	\$83,530	\$23,194	\$807	\$35	\$505	\$108,071	18
19	Brokerage Fees	\$4,969	\$1,380	\$48	\$2	\$30	\$6,428	19
20	Total Procurement Revenues	\$2,016,260	\$559,855	\$19,472	\$848	\$12,187	\$2,608,622	20
21	Average Year Sales (Mdth)	252,138	70,011	2,435	106	1,524	326,215	21
22	Total Trans & Proc Revenues	\$3,090,525	\$781,471	\$21,118	\$982	\$14,440	\$3,908,536	22

* Based on April 2007 Natural Gas Futures Price at SoCal Border traded during July 2006.

** Based on last twelve month average IPDC rate ending August 2006.

*** Includes El Paso IPDC that are currently reflected in transportation revenues.

1 **Appendix 1b: Current Rates excluding FF&U (¢ per therm)**

		CORE Customers					TOTAL	
		Residential	Core C&I	NGV	Gas A/C	Gas Eng		
		A	B	C	D	E	F	
SDG&E								
23	<i>Transportation Rate</i>							23
24	Other Transportation Rates	52.44 ¢	28.94 ¢	8.49 ¢	N/A	N/A	45.42 ¢	24
25	Seasonal Storage	3.26 ¢	2.95 ¢	3.28 ¢	N/A	N/A	3.17 ¢	25
26	Total Transportation Rates	55.70 ¢	31.88 ¢	11.77 ¢	N/A	N/A	48.59 ¢	26
<i>Procurement-related Rate</i>								
27	WACOG (Illustrative Only)*	76.46 ¢	76.46 ¢	76.46 ¢	N/A	N/A	76.46 ¢	27
28	IPDC**	3.70 ¢	3.70 ¢	3.70 ¢	N/A	N/A	3.70 ¢	28
29	CCSI	0.08 ¢	0.08 ¢	0.08 ¢	N/A	N/A	0.08 ¢	29
30	Brokerage Fees	0.09 ¢	0.09 ¢	0.09 ¢	N/A	N/A	0.09 ¢	30
31	Total Procurement Rates	80.33 ¢	80.33 ¢	80.33 ¢	N/A	N/A	80.33 ¢	31
32	Total Trans & Proc Rate	136.02 ¢	112.21 ¢	92.10 ¢	N/A	N/A	128.92 ¢	32
SoCalGas								
<i>Transportation Rate</i>								
33	Other Transportation Rates	39.52 ¢	25.01 ¢	6.17 ¢	10.86 ¢	13.89 ¢	35.62 ¢	33
34	Seasonal Storage	2.61 ¢	1.50 ¢	0.53 ¢	0.33 ¢	0.11 ¢	2.31 ¢	34
35	CCSI: Procurement-related	0.05 ¢	0.05 ¢	0.05 ¢	0.05 ¢	0.05 ¢	0.05 ¢	35
36	Total Transportation Rates	42.18 ¢	26.56 ¢	6.76 ¢	11.24 ¢	14.05 ¢	37.98 ¢	36
<i>Procurement-related Rate</i>								
37	WACOG (Illustrative Only)*	76.46 ¢	76.46 ¢	76.46 ¢	76.46 ¢	76.46 ¢	76.46 ¢	37
38	IPDC***	3.31 ¢	3.31 ¢	3.31 ¢	3.31 ¢	3.31 ¢	3.31 ¢	38
39	Brokerage Fees	0.20 ¢	0.20 ¢	0.20 ¢	0.20 ¢	0.20 ¢	0.20 ¢	39
40	Total Procurement Rates	79.97 ¢	79.97 ¢	79.97 ¢	79.97 ¢	79.97 ¢	79.97 ¢	40
41	Total Trans & Proc Rate	122.15 ¢	106.53 ¢	86.73 ¢	91.21 ¢	94.02 ¢	117.94 ¢	41

17 * Based on April 2007 Natural Gas Futures Price at SoCal Border traded during July 2006.

18 ** Based on last twelve month average IPDC rate ending August 2006.

19 *** Includes El Paso IPDC that are currently reflected in transportation revenues.

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Appendix 2a: Proposed Revenue Requirements excluding FF&U (M\$)

		CORE Customers						
		Residential	Core C&I	NGV	Gas A/C	Gas Eng	TOTAL	
		A	B	C	D	E	F	
3	SDG&E							
	<i>Transportation Revenues</i>							
1	Other Transportation Revenues	\$171,064	\$37,557	\$342	N/A	N/A	\$208,963	1
2	Seasonal Storage	\$7,731	\$1,896	\$30	N/A	N/A	\$9,657	2
3	Total Transportation Revenues	\$178,795	\$39,453	\$373	N/A	N/A	\$218,620	3
4	Average Year Throughput (Mdth)	32,621	12,979	403	N/A	N/A	46,003	4
	<i>Procurement-related Revenues</i>							
5	Consolidated WACOG (Illustrative Only)	\$247,977	\$89,263	\$3,081	N/A	N/A	\$340,321	5
6	IPDC	\$10,895	\$3,922	\$135	N/A	N/A	\$14,952	6
7	CCSI	\$174	\$63	\$2	N/A	N/A	\$239	7
8	Brokerage Fees	\$598	\$215	\$7	N/A	N/A	\$821	8
9	Total Procurement Revenues	\$259,644	\$93,463	\$3,226	N/A	N/A	\$356,333	9
10	Average Year Sales (Mdth)	32,434	11,675	403	N/A	N/A	44,512	10
11	Total Trans & Proc Revenues	\$438,439	\$132,916	\$3,599	N/A	N/A	\$574,954	11
	SoCalGas							
	<i>Transportation Revenues</i>							
12	Other Transportation Revenues	\$1,006,554	\$208,766	\$1,504	\$130	\$2,228	\$1,219,181	12
13	Seasonal Storage	\$60,361	\$12,190	\$184	\$4	\$24	\$72,763	13
14	Total Transportation Revenues	\$1,066,915	\$220,956	\$1,687	\$134	\$2,251	\$1,291,944	14
15	Average Year Throughput (Mdth)	254,685	83,463	2,435	120	1,604	342,308	15
	<i>Procurement-related Revenues</i>							
16	Consolidated WACOG (Illustrative Only)	\$1,927,762	\$535,282	\$18,617	\$810	\$11,652	\$2,494,123	16
17	IPDC	\$84,698	\$23,518	\$818	\$36	\$512	\$109,581	17
18	CCSI: Procurement-related	\$1,355	\$376	\$13	\$1	\$8	\$1,753	18
19	Brokerage Fees	\$4,651	\$1,291	\$45	\$2	\$28	\$6,018	19
20	Total Procurement Revenues	\$2,018,465	\$560,468	\$19,493	\$849	\$12,200	\$2,611,474	20
21	Average Year Sales (Mdth)	252,138	70,011	2,435	106	1,524	326,215	21
22	Total Trans & Proc Revenues	\$3,085,380	\$781,424	\$21,180	\$983	\$14,452	\$3,903,418	22

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Appendix 2b: Proposed Rates excluding FF&U (¢ per therm)

		CORE Customers					
		Residential	Core C&I	NGV	Gas A/C	Gas Eng	TOTAL
		A	B	C	D	E	F
1							
2							
3	SDG&E						
	<i>Transportation Rate</i>						
23	Other Transportation Rates	52.44 ¢	28.94 ¢	8.49 ¢	N/A	N/A	45.42 ¢ 23
24	Seasonal Storage	2.37 ¢	1.46 ¢	0.75 ¢	N/A	N/A	2.10 ¢ 24
25	Total Transportation Rates	54.81 ¢	30.40 ¢	9.25 ¢	N/A	N/A	47.52 ¢ 25
	<i>Procurement-related Rate</i>						
26	Consolidated WACOG (Illustrative Only)	76.46 ¢	76.46 ¢	76.46 ¢	N/A	N/A	76.46 ¢ 26
27	IPDC	3.36 ¢	3.36 ¢	3.36 ¢	N/A	N/A	3.36 ¢ 27
28	CCSI	0.05 ¢	0.05 ¢	0.05 ¢	N/A	N/A	0.05 ¢ 28
29	Brokerage Fees	0.18 ¢	0.18 ¢	0.18 ¢	N/A	N/A	0.18 ¢ 29
30	Total Procurement Rates	80.05 ¢	80.05 ¢	80.05 ¢	N/A	N/A	80.05 ¢ 30
31	Total Trans & Proc Rate	134.86 ¢	110.45 ¢	89.30 ¢	N/A	N/A	127.58 ¢ 31
10	SoCalGas						
	<i>Transportation Rate</i>						
32	Other Transportation Rates	39.52 ¢	25.01 ¢	6.17 ¢	10.86 ¢	13.89 ¢	35.62 ¢ 32
33	Seasonal Storage	2.37 ¢	1.46 ¢	0.75 ¢	0.33 ¢	0.15 ¢	2.13 ¢ 33
34	Total Transportation Rates	41.89 ¢	26.47 ¢	6.93 ¢	11.19 ¢	14.04 ¢	37.74 ¢ 34
	<i>Procurement-related Rate</i>						
35	Consolidated WACOG (Illustrative Only)	76.46 ¢	76.46 ¢	76.46 ¢	76.46 ¢	76.46 ¢	76.46 ¢ 35
36	IPDC	3.36 ¢	3.36 ¢	3.36 ¢	3.36 ¢	3.36 ¢	3.36 ¢ 36
37	CCSI: Procurement-related	0.05 ¢	0.05 ¢	0.05 ¢	0.05 ¢	0.05 ¢	0.05 ¢ 37
38	Brokerage Fees	0.18 ¢	0.18 ¢	0.18 ¢	0.18 ¢	0.18 ¢	0.18 ¢ 38
39	Total Procurement Rates	80.05 ¢	80.05 ¢	80.05 ¢	80.05 ¢	80.05 ¢	80.05 ¢ 39
40	Total Trans & Proc Rate	121.95 ¢	106.53 ¢	86.98 ¢	91.24 ¢	94.09 ¢	117.80 ¢ 40
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