

Application of )  
SAN DIEGO GAS & ELECTRIC COMPANY )  
For Authority to Update )  
Cost Allocation And Electric Rate Design )  
(U 902-E) )

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Application No. 08-11-014  
Exhibit No.: (SDGE-03) \_\_\_\_\_

**PREPARED REVISED DIRECT TESTIMONY  
OF JAMES S. PARSONS  
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY**

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

**JANUARY 27, 2009**

**TABLE OF CONTENTS**

<b>I.</b>	<b>OVERVIEW AND PURPOSE.....</b>	<b>1</b>
<b>II.</b>	<b>MARGINAL COSTS.....</b>	<b>2</b>
	A. General Approach.....	2
	B. Distribution.....	3
	C. Commodity.....	3
<b>III.</b>	<b>REVENUE ALLOCATION.....</b>	<b>3</b>
	A. Distribution.....	3
	B. Commodity.....	4
<b>IV.</b>	<b>QUALIFICATIONS OF JAMES S. PARSONS .....</b>	<b>5</b>

1 **PREPARED REVISED DIRECT TESTIMONY**

2 **OF**

3 **JAMES S. PARSONS**

4 **CHAPTER 3**

5 **I. OVERVIEW AND PURPOSE**

6 The purpose of my testimony is to present: (1) San Diego Gas & Electric's (SDG&E)  
7 proposed System Revenue Allocation for this Rate Design Window (RDW) application; (2)  
8 SDG&E's proposed RDW Distribution Revenue Allocation based on Test Year (TY) 2009 rate  
9 class sales and distribution allocation determinants; (3) SDG&E's proposed RDW Commodity  
10 Revenue Allocation and rate schedule commodity rates based on TY 2009 class sales and  
11 commodity allocation determinants; and (4) the results of a Large & Medium Commercial  
12 Industrial rate class split into Medium Commercial Industrial and Large Commercial Industrial  
13 rate classes based on hourly load research data from years 2004 through 2006.

14 The current system revenue allocation, distribution rates, and commodity rates are based  
15 on a settlement of distribution and commodity class revenue allocations adopted by the  
16 Commission in Decision (D.) 08-02-034, SDG&E's General Rate Case (GRC) Phase 2 decision  
17 (GRC Phase 2 Settlement). In D.08-02-034, no specific marginal costs for revenue allocation  
18 were adopted by the Commission, but rather only class revenue requirements.

19 SDG&E normally submits comprehensive new or revised marginal distribution and  
20 commodity cost studies either every three years in RDW applications, or as Phase 2 of a GRC  
21 application. These marginal cost studies then form the basis of subsequent distribution and  
22 commodity revenue allocation proposals. In the RDW Applications where SDG&E does not  
23 propose new marginal costs, the existing distribution and commodity revenue allocations are  
24 updated using the RDW Application TY sales and allocation determinants. Marginal costs are  
25 not updated or revised. Since SDG&E's last adopted revenue allocation was in year 2008,  
26 SDG&E does not propose revised marginal costs for this TY 2009 RDW application.

27 The GRC Phase 2 Settlement required an analysis of splitting the commercial and  
28 industrial customer classes into three levels based on their kW demands ("Class Split Study").  
29 This Class Split Study was duly filed on August 1, 2008, and a conference call, open to all  
30 parties on the SDG&E GRC Phase 2 (A.07-01-047) service list, was held to discuss the results.  
31 As required by the Settlement Agreement, the Class Split Study is presented in this Application

1 on an informational basis. SDG&E is not proposing revenue allocation or rates based on the  
2 Class Split Study.

3 The GRC Phase 2 Settlement Agreement also required SDG&E to propose in this  
4 Application at least one additional split of the current Commercial & Industrial customer class  
5 (C&I). In compliance with this requirement, this testimony proposes the required additional  
6 intra-class revenue allocations for distribution and commodity requirements in splitting this C&I  
7 class.

8 Witness Hansen, in his direct testimony, discusses further the requirements and the  
9 rationale of the proposed revenue allocation and rates split of the current Large & Medium C&I  
10 class into a Medium C&I class and a Large C&I class at the 500kW demand level. SDG&E does  
11 not believe that this class split is necessary to provide cost-based pricing. The current  
12 distribution and commodity rates, based on the GRC Phase 2 Settlement, already incorporate  
13 suitable rate structures to provide meaningful price signals for the customers in the C&I class.  
14 The splitting of the C&I class into two classes may not provide meaningful price signals.

15 Table JSP-1 provides the proposed system revenue allocation of all the revenue  
16 components, including Distribution and Commodity revenue requirements that incorporate both  
17 TY 2009 sales and allocation determinants, and a rate class split for the C&I class in to Medium  
18 and Large classes.

## 19 **II. MARGINAL COSTS**

### 20 **A. General Approach**

21 Because no marginal costs were explicitly adopted in the GRC Phase 2 Settlement, a  
22 proxy for rate class marginal costs was devised in order to incorporate TY 2009 sales and  
23 allocation determinants into a revenue allocation. These proxy class marginal costs were then  
24 applied to the TY 2009 sales and allocation determinants to derive class Marginal Cost Revenue  
25 Responsibilities (MCRR). The class MCRR values were then used for an Equal Percent  
26 Marginal Cost (EPMC) revenue allocation of the revenue requirement for system Distribution  
27 and Commodity revenue requirements.

28 The C&I class split into Medium and Large classes also required the derivation of  
29 marginal cost proxies to calculate MCRR for these two classes. These MCRRs were then used  
30 to split the total Commercial Industrial class allocated distribution and commodity revenue  
31 requirements in an intra-class type approach.

1           **B. Distribution**

2           Proxy marginal distribution rates were derived from the adopted class revenue  
3 requirements by using the adopted TY 2008 class' sales that were consistent with the GRC Phase  
4 2 Settlement. These customer class proxy marginal costs were then applied to the TY 2009 class  
5 sales to derive class MCRR for distribution revenue allocation.

6           The C&I class split required deriving marginal costs for Large and Medium customers.  
7 The same distribution marginal cost methodology (and models) as proposed by SDG&E in the  
8 GRC Phase 2 proceeding was used to derive unit marginal costs. This was necessary since  
9 implicit in the distribution rates currently in effect are the SDG&E GRC Phase 2 distribution  
10 marginal costs. The Large and Medium unit marginal costs were then applied to TY 2009  
11 distribution allocation determinants. The resulting MCRR values for the Large and Medium  
12 classes were then used to split the Commercial Industrial distribution revenue allocation into two  
13 distribution revenue requirements.

14           **C. Commodity**

15           Proxy marginal commodity rates were derived from the adopted class revenue  
16 requirements using the same general methodology as for distribution. The C&I class split  
17 required deriving marginal costs for Large and Medium customers. The same commodity  
18 marginal cost methodologies (and models) as proposed by SDG&E in the GRC Phase 2  
19 proceeding for both commodity capacity and commodity energy components were used to derive  
20 unit marginal costs. This required analyzing 8760 hourly interval data for Large and Medium  
21 customers for the three years of 2004 through 2006. This analysis required constructing typical  
22 weekday and weekend day hourly profiles for each month using the three years of data for the  
23 calculating of commodity energy MCRRs for the Large and Medium classes. The capacity  
24 MCRRs for the Large and Medium classes were derived by using the Top 300 hour methodology  
25 (100 hours from each of the years 2004 through 2006) from the hourly data.

26 **III. REVENUE ALLOCATION**

27           **A. Distribution**

28           The MCRR values by customer class, before the C&I class split, were used in the EPMC  
29 methodology to allocate the marginal distribution revenue requirement. The large and Medium  
30 class MCRRs were then used in a second calculation to split the distribution revenue allocation  
31 of the C&I class into two parts. These revenue allocations are only for that part of the

1 distribution revenue requirement attributable to marginal costs. Other distribution revenue  
2 components are either directly assigned, or use other than EPMC allocation methods, and are  
3 calculated in the Rates model sponsored by witness Hansen. The results of the distribution  
4 revenue allocation are shown in column (B) of Table JSP-1. The details of the distribution  
5 allocation are shown in Table JSP-2.

6 **B. Commodity**

7 The MCRR values by customer class, before the C&I class split, were used in the EPMC  
8 methodology to allocate the marginal commodity revenue requirement. The large and Medium  
9 class MCRRs, for both capacity and energy, were then used in a second calculation to split the  
10 commodity revenue allocation of the C&I class into two parts. The results of the commodity  
11 revenue allocation are shown in column (K) of Table JSP-1. The details of the Large and  
12 Medium class split are shown on JSP-3.

13 Table JSP-3 shows a decrease to the proposed RDW Medium C&I class commodity  
14 revenue allocation from present commodity revenue allocation, and a corresponding increase to  
15 the Large C&I class proposed revenue allocation from the present revenue allocation, in order to  
16 maintain the same proposed C&I class revenue allocation in the case of no rate class split at the  
17 500 kW demand level. These somewhat anomalous results are a result of trying to incorporate  
18 an intra-class revenue allocation split based on settled revenue requirements of all classes, and  
19 without a new marginal cost study and revised revenue allocation to all classes.

20 This concludes my prepared direct testimony.  
21

1 **IV. QUALIFICATIONS OF JAMES S. PARSONS**

2 My name is James S Parsons. My business address is 8315 Century Park Court, San  
3 Diego, California, 92123. I am a Principal Regulatory Economics Advisor in the Electric Rates  
4 Section of the Rates and Revenues Group at San Diego Gas & Electric Company ("SDG&E").  
5 My primary responsibilities include the development of electric cost-of-service studies, revenue  
6 allocation studies, and derivation of rate designs.

7 I received a Bachelor of Science degree in Engineering from The Pennsylvania State  
8 University 1966. I received a Master of Science degree in Business Administration from the San  
9 Diego State University 1972 I am a Registered Professional Engineer, Mechanical Branch, in  
10 the State of California. I have been employed by SDG&E since 1972 in various engineering,  
11 regulatory analysis, and rate design capacities.

12 I have testified before this Commission since 1980 in numerous costs of service, revenue  
13 allocation, and rate design proceedings.

# **TABLE JSP - 1**



Table JSP-1

SAN DIEGO GAS & ELECTRIC COMPANY - ELECTRIC DEPARTMENT  
Rate Design Window Application (A.) 08-11-014

Effective 9/1/2008													
Class Sales & Average Revenue Summary													
Line No.	(A) Determinants (2009 Forecast) (KWhr)	(B) Distribution Revenues (\$)	(C) Transmission Revenues (\$)	(D) Public Goods Revenues (\$)	(E) Nuc Decom Revenues (\$)	(F) On-Going CTC Revenues (\$)	(G) RS Revenues (\$)	(H) TRAC Revenues (\$)	(I) DWR-BC Revenues (\$)	(J) Total JDC Revenues (\$)	(K) Commodity Revenues (\$)	(L) Total Revenues (\$)	Line No.
1	Residential	7,829,000,000	576,751,946	100,454,514	26,130,691	3,598,838	16,332,066	3,990,016	32,950,602	737,708,673	736,155,899	1,473,864,572	1
2	Small Comm.	2,103,589,000	120,968,016	34,351,608	8,771,358	967,651	5,981,620	1,072,830	10,267,874	182,390,958	211,531,479	393,912,437	2
3	Medium Comm.	6,117,863,255	235,444,114	73,025,300	23,431,416	2,814,217	17,092,236	3,054,098	27,357,070	382,218,452	493,992,176	876,210,628	3
4	Large C&I	4,634,513,745	107,311,734	44,579,157	17,750,188	2,131,876	10,992,209	2,284,486	19,539,207	204,588,856	258,242,485	462,831,341	4
5	Agriculture	94,034,000	5,200,100	1,535,575	405,287	43,256	237,906	47,957	463,742	7,993,822	8,521,421	16,465,243	5
6	Lighting	111,000,000	8,546,563	903,327	(14,459)	49,954	0	54,390	545,068	10,084,843	7,740,045	17,824,888	6
7	System Total	20,890,000,000	1,054,222,473	254,849,481	76,474,481	9,605,792	50,636,037	10,503,777	91,123,562	1,524,915,603	1,716,183,505	3,241,099,108	7
<b>Proposed RDW</b>													
8	Residential	7,829,000,000	567,377,943	100,454,514	26,130,691	3,598,838	16,332,066	3,990,016	32,950,602	728,334,669	718,299,269	1,446,633,938	8
9	Small Comm.	2,103,589,000	118,836,563	34,351,608	8,771,358	967,651	5,981,620	1,072,830	10,267,874	180,249,504	206,488,780	386,738,284	9
10	Medium Comm.	6,117,863,255	226,978,024	73,025,300	23,431,416	2,814,217	17,092,236	3,054,098	27,357,070	373,752,362	498,189,458	871,941,820	10
11	Large C&I	4,634,513,745	107,584,949	44,579,157	17,750,188	2,131,876	10,992,209	2,284,486	19,539,207	204,862,072	253,109,511	457,971,583	11
12	Agriculture	94,034,000	5,164,049	1,535,575	405,287	43,256	237,906	47,957	463,742	7,897,772	8,426,108	16,323,880	12
13	Lighting	111,000,000	8,420,837	903,327	(14,459)	49,954	0	54,390	545,068	9,959,117	7,555,464	17,514,581	13
14	System Total	20,890,000,000	1,034,362,365	254,849,481	76,474,481	9,605,792	50,636,037	10,503,777	91,123,562	1,505,055,495	1,692,068,590	3,197,124,085	14
<b>Revenue Change Summary</b>													
15	Residential	7,829,000,000	(9,374,004)	0	0	0	0	0	0	(9,374,004)	(17,856,630)	(27,230,634)	15
16	Small Comm.	2,103,589,000	(2,131,453)	0	0	0	0	0	0	(2,131,453)	(5,042,699)	(7,174,152)	16
17	Medium Comm.	6,117,863,255	(8,466,090)	0	0	0	0	0	0	(8,466,090)	4,197,282	(4,268,808)	17
18	Large C&I	4,634,513,745	273,216	0	0	0	0	0	0	273,216	(5,132,974)	(4,859,758)	18
19	Agriculture	94,034,000	(36,051)	0	0	0	0	0	0	(36,051)	(95,313)	(131,364)	19
20	Lighting	111,000,000	(125,726)	0	0	0	0	0	0	(125,726)	(184,581)	(310,307)	20
21	System Total	20,890,000,000	(19,860,108)	0	0	0	0	0	0	(19,860,108)	(24,114,915)	(43,975,023)	21
<b>Average % Change Summary</b>													
22	Residential	7,829,000,000	-1.63%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.27%	-2.43%	-1.85%	22
23	Small Comm.	2,103,589,000	-1.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.17%	-2.38%	-1.82%	23
24	Medium Comm.	6,117,863,255	-3.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-2.21%	0.85%	-0.49%	24
25	Large C&I	4,634,513,745	0.25%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.13%	-1.99%	-1.05%	25
26	Agriculture	94,034,000	-0.69%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.45%	-1.12%	-0.80%	26
27	Lighting	111,000,000	-1.47%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.25%	-2.38%	-1.74%	27
28	System Total	20,890,000,000	-1.88%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.30%	-1.41%	-1.36%	28

## **TABLE JSP - 2**

**Table JSP-2**

Distribution Revenue Allocation Summary								
Line No	(A) Present Rates GRC Sales (\$ x 1000)	(B) GRC Phase 2 Sales (gWhr)	(C) GRC Phase 2 Rate (\$/kWhr)	(D) TY 2009 RDW Sales (gWhr)	(E) Unscaled Revenue Allocation (\$ x 1000)	(F) Proposed Revenue Allocation (\$ x 1000)	(G) EPMC Factor (Percentage)	Line No
1	Residential	471,943.18	7,673.00	0.0615070	7,829.00	481,538.27	553,599.321	55.7794%
2	Small Commercial	99,960.35	2,100.92	0.0475794	2,103.59	100,087.53	115,065.391	11.5937%
3	Medium Commercial				6,107.30		217,589.360	21.9238%
4	Large C&I				3,952.38		97,112.642	9.7849%
5	Medium & Large Subtotal	269,848.90	9,916.76	0.0272114	10,059.68	273,737.80	314,702.001	31.7087%
6	Agriculture	4,175.36	90.07	0.0463547	94.03	4,358.92	5,011.222	0.5049%
7	Lighting	3,519.52	109.50	0.0321418	111.00	3,567.74	4,101.639	0.4133%
8	System Total	849,447.31	19,890.25	0.0427067	20,197.30	863,290.25	992,479.574	100.0000%
<b>Proposed TY 2009 RDW Distribution Revenue for EPMC Allocation</b>							992,479,574	

## **TABLE JSP - 3**

Table JSP-3

Commodity Revenue Allocation Summary								
Lin No	Customer Class	(A) Commodity Revenue at Present Rates From Rates Model (\$)	(B) Commodity Revenue Settled Rates RDW 2009 Determinants (\$)	(C) Proposed Commodity Revenue RDW 2009 Determinants (\$)	(D) Proposed Change Col C - Col A (\$)	(E) Percentage Change (Percentage)	(F) EPMC Factor (Percentage)	Lin No
1	Residential	736,155,899.00	600,087,619.69	718,299,269.50	(17,856,629.50)	-2.43%	42.45%	1
2	Small Commercial	211,531,479.00	172,506,594.16	206,488,780.14	(5,042,698.86)	-2.38%	12.20%	2
3	Medium Commercial	493,992,176.00	419,584,042.82	498,189,457.86	4,197,281.86	0.85%	29.44%	3
4	Large C&I	258,242,485.00	208,072,463.79	253,109,511.49	(5,132,973.51)	-1.99%	14.96%	4
5	Med & Lg Comm/Ind Subtot	752,234,661.00	627,656,506.61	751,298,969.35	(935,691.65)	-0.12%	44.40%	5
6	Agriculture	8,521,421.00	7,039,409.79	8,426,107.69	(95,313.31)	-1.12%	0.50%	6
7	Lighting	7,740,045.00	6,312,049.57	7,555,464.31	(184,580.69)	-2.38%	0.45%	7
8	System Total	1,716,183,505.00	1,413,602,179.82	1,692,068,591.00	(24,114,914.00)	-1.41%	100.00%	8
Proposed TY 2009 Commodity Revenue for EPMC Allocation				1,692,068,591.00				
Medium & Large Commercial Industrial Class Split Summary								
Lin No	Customer Class	(A) Class Split MCRRS From 2004-2006 Study (\$ x 1000)	(B) Percentage Breakdown (Percentage)	(C) Revenue from Settled Rates & RDW 2009 Determinants (\$)	(D) Percentage Breakdown (Percentage)	(E) Proposed Class Split Revenue Allocation (\$)	Lin No	
1	Medium Commercial							
1	Energy	360,144.93	56.61%	353,238,875.01	56.28%	425,273,150.46	1	
2	Capacity	61,749.58	9.71%	66,345,167.81	10.57%	72,916,307.40	2	
3	Subtotal	421,894.51	66.31%	419,584,042.82	66.85%	498,189,457.86	3	
4	Large C&I							
4	Energy	180,998.64	28.45%	178,921,346.84	28.51%	213,730,238.72	4	
5	Capacity	33,348.56	5.24%	29,151,116.95	4.64%	39,379,272.77	5	
6	Subtotal	214,347.20	33.69%	208,072,463.79	33.15%	253,109,511.49	6	
7	Total	636241.7059	100.00%	627,656,506.61	100.00%	751,298,969.35	7	