

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

---

)  
)  
)  
)  
)

Application No. 07-01-\_\_\_\_\_  
Exhibit No.: (SDGE-05) \_\_\_\_\_

**PREPARED 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 31, 2007**

**TABLE OF CONTENTS**

**I. OVERVIEW AND PURPOSE..... 1**

**II. SDG&E REVENUE ALLOCATION REGULATORY HISTORY ..... 2**

**III. OVERVIEW OF REVENUE ALLOCATION ..... 3**

**IV. DISTRIBUTION REVENUE ALLOCATION ..... 3**

**V. COMMODITY REVENUE ALLOCATION..... 4**

**VI. TOTAL PROPOSED REVENUE ALLOCATION..... 5**

**VII. QUALIFICATIONS OF JAMES S. PARSONS ..... 7**

1 **PREPARED DIRECT TESTIMONY**

2 **OF**

3 **JAMES S. PARSONS**

4 **CHAPTER 5**

5 **I. OVERVIEW AND PURPOSE**

6 The purpose of my direct testimony is to present San Diego Gas & Electric  
7 Company's (SDG&E) proposals for revenue allocation to customer classes using  
8 distribution marginal customer costs, marginal distribution demand costs, marginal  
9 generating capacity costs, and marginal energy costs. The marginal customer and  
10 marginal distribution demand costs comprise marginal distribution costs. The marginal  
11 generation and energy costs comprise the marginal commodity costs. The unit marginal  
12 cost prices for the commodity function are disaggregated between capacity and energy  
13 components. I sponsor the unit marginal distribution costs, the unit marginal generating  
14 capacity costs, and the unit marginal energy costs, and explain their derivation in the  
15 following sections of this chapter. I am also sponsoring the determinants used in  
16 conjunction with the unit marginal generating costs to derive marginal customer cost  
17 revenue responsibilities, or marginal cost revenue by customer class.

18 The marginal distribution costs are used in conjunction with the marginal  
19 commodity costs to allocate SDG&E's proposed authorized revenues for those two  
20 functions to customer classes by using the Equal Percent of Marginal Cost (EPMC)  
21 methodology. The purpose of this EPMC methodology is to reconcile the distribution  
22 and commodity marginal cost revenue responsibilities to the authorized revenue

1 requirements of these two functions adopted in Phase 1 of SDG&E's Test Year 2008  
2 (TY 2008) General Rate Case (GRC) proceeding.

3 I also present the revenue allocation of the other components that make up the  
4 total SDG&E revenue requirement as collected in rates. These are shown in the  
5 proposed revenue allocation in order to present the complete unbundled proposed rate  
6 components. Witness Robert W. Hansen explains revenue allocation principles in  
7 Chapter 2 of this application. Chapter 5 will describe mechanics of the revenue  
8 allocation and the resulting allocation to customer classes.

9 The proposals for revenue allocation and marginal costs will be used by the rate  
10 design witnesses in their rate design proposals contained in Chapters 6, 7, 8, and 10 of  
11 this application. SDG&E proposes these marginal costs and determinants strictly for  
12 revenue allocation and rate design purposes. These marginal costs are not proposed for  
13 any other purposes at this time. SDG&E proposes these rates be implemented January 1,  
14 2008.

## 15 16 **II. SDG&E REVENUE ALLOCATION REGULATORY HISTORY**

17 The California Public Utilities Commission (Commission) has adopted a  
18 settlement on revenue allocation in every SDG&E Rate Design Window (RDW)  
19 proceeding since 1996. With the exception of the settlement in the 2004 RDW  
20 proceeding, as adopted by Decision (D.) 04-04-042, these settlements have been all-party  
21 settlements.

22 In these prior proceedings, SDG&E proposed marginal costs and an EPMC  
23 revenue allocation to customer classes based on those marginal costs, capping the

1 revenue changes to classes when necessary. The other parties then proposed their  
2 versions of marginal costs and the resulting revenue allocations. A comprise revenue  
3 allocation was then settled upon, which resulted in a reasonable allocation acceptable to  
4 all the parties, and which was then used in the rate design.

### 6 **III. OVERVIEW OF REVENUE ALLOCATION**

7 Revenue allocation is the assignment of the proposed or authorized revenue  
8 requirement among the various rate classes using the marginal costs of those classes. The  
9 various marginal costs by customer classes are multiplied by the applicable determinant  
10 to calculate the revenue that would be collected were unit marginal costs used as rates.  
11 These values are the customer class marginal cost revenue responsibilities, or marginal  
12 cost revenue. A separate marginal cost revenue is calculated for the distribution function  
13 (customer costs, feeders and local distribution costs, and substation costs) and the  
14 commodity function. This is necessary since the authorized revenue requirements are  
15 disaggregated into distribution revenue requirements and commodity revenue  
16 requirements. The marginal cost revenues by customer class are then reconciled to the  
17 authorized revenue requirement to derive proposed customer class revenue requirements.  
18 The proposed customer class revenue allocation for both the distribution and commodity  
19 functions are then used in rate design for the various customer classes.

### 21 **IV. DISTRIBUTION REVENUE ALLOCATION**

22 SDG&E proposes to continue using the Commission adopted EPMC revenue  
23 allocation method for allocating the distribution revenue requirement to customer classes.

1 The EPMC methodology simply scales the customer class distribution revenue  
2 responsibilities, or marginal cost revenues, up or down by a single factor such that the  
3 sum equals the authorized distribution revenue requirement.

4 The proposed distribution revenue requirement is the revenue requirement  
5 proposed in the Test Year 2008 GRC Phase 1. The revenue at current rates is the rates in  
6 effect on January 1, 2007 applied to the forecast TY 2008 sales. The proposed  
7 distribution revenue allocation allocates this GRC Phase 1 distribution revenue  
8 requirement among the customer classes based on the proposed marginal costs revenue  
9 responsibilities by customer class. The customer class revenue responsibilities for  
10 distribution demand and customer are summed for use for in the allocation. No capping  
11 is proposed for the Distribution revenue allocation.

12 The resulting proposed distribution revenue allocation is provided in JSP-5-3.  
13

#### 14 **V. COMMODITY REVENUE ALLOCATION**

15 SDG&E proposes to also use the EPMC revenue allocation methodology to  
16 allocate the commodity component revenue requirement. This revenue requirement is  
17 composed of revenue requirements from the Department of Water Resources (DWR) and  
18 Utility Retained Generation (URG). The marginal generation capacity revenue  
19 responsibilities and the marginal energy revenue responsibilities are combined by  
20 customer class to use as the allocation factor for the DWR and URG revenue  
21 requirements. The EPMC methodology is then used to scale the customer class  
22 allocations to sum to the DWR and URG revenue requirements. No capping is proposed

1 for the generation and energy revenue allocation. The proposed allocation is provided in  
2 JSP-5-2.

3

#### 4 **VI. TOTAL PROPOSED REVENUE ALLOCATION**

5 The total revenue allocation based on all the revenue requirement components is  
6 provided in JSP-5-1. This allocation table provides the class revenue allocations for both  
7 current and proposed revenues and the changes between current and proposed both in  
8 dollars and percentages for each of the ten components of the total utility Electric revenue  
9 requirements.

10 I am sponsoring the revenue allocation for two of the revenue requirement  
11 components: (1) the Distribution revenue allocation and (2) the Commodity revenue  
12 allocation. The other revenue requirement allocations are determined in other regulatory  
13 proceedings.

14 There are three changes to revenue requirements and/or revenue allocation that  
15 are determined in other regulatory proceedings. The first change involves the  
16 Competition Transition Charge (CTC) revenue requirement and allocation. The CTC  
17 revenue requirement for commercial industrial rate schedules was previously collected as  
18 a demand charge. Effective January 1, 2007, the collection of the CTC revenue  
19 requirement switched from a demand charge basis to an energy charge basis. With the  
20 increased sales forecast for Test Year 2008, the revenue requirement was thereby  
21 reduced, and the revenue allocation changed.

22 The second change involves the Total Rate Adjustment Component (TRAC)  
23 revenue requirement. The TRAC revenue requirement reflects the Rate Design

1 Settlement (RDS) impacting the residential class for which there was an over-collection  
2 at year-end 2006. This over-collection is shown as a residential class revenue  
3 requirement reduction in both the current and proposed revenue allocations.

4 The third change involves the removal of the DWR Bond Charge (DWR-BC) out  
5 of the Commodity revenue requirements and revenue allocation. This rate is applied to  
6 sales and does not change between current and proposed revenue allocations.

7 This concludes my prepared direct testimony.



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

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

8 I received a Bachelor of Science degree in Engineering from The Pennsylvania  
9 State University 1966. I received a Master of Science degree in Business Administration  
10 from the San Diego State University 1972 I am a Registered Professional Engineer,  
11 Mechanical Branch, in the State of California. I have been employed by SDG&E since  
12 1972 in various engineering, regulatory analysis, and rate design capacities.

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

# **ATTACHMENT**

**JSP-5-1**

**ATTACHMENT JSP-5-1  
SAN DIEGO GAS ELECTRIC COMPANY - ELECTRIC DEPARTMENT  
2008 GRC PHASE II  
PROPOSED REVENUE ALLOCATION**

Revenue at Current Rates (01/01/07)														
Line No.	Customer Class	(A) Distribution Revenues (\$)	(B) Transmission Revenues (\$)	(C) Public Goods Revenues (\$)	(D) Nuc Decom Revenues (\$)	(E) FTA Bond Revenues (\$)	(F) On-Going CTC Revenues (\$)	(G) RS Revenues (\$)	(H) TRAC Revenues (\$)	(I) DWR-BC Revenues (\$)	(J) Total UDC Revenues (\$)	(K) Commodity Revenues (\$)	(L) Total Revenues (\$)	Line No.
1	Residential	474,469,044	66,631,702	47,155,923	3,527,110	39,334,941	10,721,709	46,159,131	(7,186,813)	31,194,752	712,007,499	555,429,198	1,267,436,698	1
2	Small Comm.	97,614,061	21,807,508	16,629,788	966,421	10,999,369	3,782,862	13,592,927	0	9,739,953	175,132,888	178,881,266	354,014,155	2
3	Med. & Lg. C&I	276,226,118	75,304,460	63,857,490	4,912,115	0	16,671,371	60,451,878	0	34,664,001	532,087,433	620,325,863	1,152,413,296	3
4	Agriculture	4,169,956	934,968	699,875	41,434	0	136,012	582,779	0	387,661	6,952,685	6,750,597	13,703,282	4
5	Lighting	7,829,884	602,780	478,557	49,954	0	0	583,589	0	512,814	10,057,578	6,748,588	16,806,167	5
6	<b>System Total</b>	<b>860,309,063</b>	<b>165,281,418</b>	<b>128,821,633</b>	<b>9,497,034</b>	<b>50,334,310</b>	<b>31,311,954</b>	<b>121,370,304</b>	<b>(7,186,813)</b>	<b>76,499,181</b>	<b>1,436,238,085</b>	<b>1,368,135,514</b>	<b>2,804,373,598</b>	<b>6</b>
Proposed Revenue Allocation														
7	Residential	564,962,651	66,631,702	47,155,923	3,527,110	0	10,274,624	46,159,131	(7,186,813)	31,194,752	762,719,080	605,872,601	1,368,591,681	7
8	Small Comm.	128,127,269	21,807,508	16,629,788	966,421	0	3,760,640	13,592,927	0	9,739,953	194,624,506	172,317,866	366,942,372	8
9	Med. & Lg. C&I	290,152,342	75,304,460	63,857,490	4,912,115	0	16,124,550	60,451,878	0	34,664,001	545,466,836	589,154,055	1,134,620,891	9
10	Agriculture	5,070,573	934,968	699,875	41,434	0	133,310	582,779	0	387,661	7,850,600	6,485,784	14,336,384	10
11	Lighting	10,797,292	602,780	478,557	49,954	0	0	583,589	0	512,814	13,024,986	6,096,579	19,121,565	11
12	<b>System Total</b>	<b>999,110,127</b>	<b>165,281,418</b>	<b>128,821,633</b>	<b>9,497,034</b>	<b>0</b>	<b>30,293,124</b>	<b>121,370,304</b>	<b>(7,186,813)</b>	<b>76,499,181</b>	<b>1,523,686,008</b>	<b>1,379,926,885</b>	<b>2,903,612,893</b>	<b>12</b>
Proposed Revenue Change														
13	Residential	90,493,607	0	0	0	(39,334,941)	(447,085)	0	0	0	50,711,580	50,443,403	101,154,983	13
14	Small Comm.	30,513,208	0	0	0	(10,999,369)	(22,222)	0	0	0	19,491,617	(6,563,400)	12,928,217	14
15	Med. & Lg. C&I	13,926,224	0	0	0	0	(546,821)	0	0	0	13,379,403	(31,171,808)	(17,792,405)	15
16	Agriculture	900,617	0	0	0	0	(2,702)	0	0	0	897,915	(264,813)	633,102	16
17	Lighting	2,967,408	0	0	0	0	0	0	0	0	2,967,408	(652,009)	2,315,399	17
18	<b>System Total</b>	<b>138,801,064</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(50,334,310)</b>	<b>(1,018,830)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>87,447,924</b>	<b>11,791,371</b>	<b>99,239,295</b>	<b>18</b>
Proposed Revenue Change Percentages														
19	Residential	19.07%	0.00%	0.00%	0.00%	-100.00%	-4.17%	0.00%	0.00%	0.00%	7.12%	9.08%	7.98%	19
20	Small Comm.	31.26%	0.00%	0.00%	0.00%	-100.00%	-0.59%	0.00%	0.00%	0.00%	11.13%	-3.67%	3.65%	20
21	Med. & Lg. C&I	5.04%	0.00%	0.00%	0.00%	0.00%	-3.28%	0.00%	0.00%	0.00%	2.51%	-5.03%	-1.54%	21
22	Agriculture	21.60%	0.00%	0.00%	0.00%	0.00%	-1.99%	0.00%	0.00%	0.00%	12.91%	-3.92%	4.62%	22
23	Lighting	37.90%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	29.50%	-9.66%	13.78%	23
24	<b>System Total</b>	<b>16.13%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>-100.00%</b>	<b>-3.25%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>6.09%</b>	<b>0.86%</b>	<b>3.54%</b>	<b>24</b>

# **ATTACHMENT**

**JSP-5-2**

**ATTACHMENT JSP-5-2  
SAN DIEGO GAS ELECTRIC COMPANY - ELECTRIC DEPARTMENT  
2008 GRC PHASE II  
COMMODITY REVENUE ALLOCATION**

**Commodity Revenue Allocation by Customer Classes**

<b>Line No</b>	<b>Customer Class</b>	<b>Commodity EPMC Factors (A)</b>	<b>Proposed Allocatrion (Dollars) (B)</b>	<b>Current Allocation (Dollars) (C)</b>	<b>Revenue Change (Dollars) (D)</b>	<b>Percentage Change (E)</b>	<b>Line No</b>
1	Residential	43.86%	605,275,645	555,429,026	49,846,619	8.97%	1
2	Small Comm.	12.52%	172,717,648	178,881,249	(6,163,601)	-3.45%	2
3	Med. & Lg. C&I	42.72%	589,460,974	620,327,071	(30,866,097)	-4.98%	3
4	Agriculture	0.47%	6,488,557	6,750,597	(262,040)	-3.88%	4
5	Lighting	0.43%	5,984,061	6,748,588	(764,527)	-11.33%	5
6	System Total	100.00%	1,379,926,886	1,368,136,532	11,790,354	0.86%	6

**ATTACHMENT JSP-5-2  
SAN DIEGO GAS ELECTRIC - ELECTRIC DEPARTMENT  
2008 GRC PHASE II  
COMMODITY REVENUE ALLOCATION**

**Commodity Revenue Allocation EPMC Factors by Customer Classes**

<b>Line No</b>	<b>Customer Class</b>	<b>Marginal Capacity Revenue (\$) (A)</b>	<b>Percentage Allocator (B)</b>	<b>Marginal Energy Revenue (\$) (C)</b>	<b>Percentage Allocator (D)</b>	<b>Marginal Commodity Revenue (\$) (E)</b>	<b>Commodity EPMC Allocator</b>	<b>Line No</b>
1	Residential	116,013,720	41.59%	546,145,499	44.38%	662,159,219	43.86%	1
2	Small Comm.	39,154,229	14.04%	149,795,358	12.17%	188,949,586	12.52%	2
3	Med. & Lg. C&I	122,407,537	43.88%	522,450,754	42.45%	644,858,291	42.72%	3
4	Agriculture	1,340,990	0.48%	5,757,360	0.47%	7,098,349	0.47%	4
5	Lighting	15,732	0.01%	6,530,710	0.53%	6,546,441	0.43%	5
6	System Total	278,932,206	100.00%	1,230,679,681	100.00%	1,509,611,887	100.00%	6

ATTACHMENT JSP-5-2  
 SAN DIEGO GAS ELECTRIC COMPANY - ELECTRIC DEPARTMENT  
 2008 GRC PHASE II  
 COMMODITY REVENUE ALLOCATION

**Proposed Commodity Rates for Rate Design**

Line No	Rate Description (Rates Model Input Categories)	Marginal Cost Energy (¢/kWhr) (A)	Marginal Cost Capacity (¢/kWhr or \$/kW) (B)	Marginal Cost Total (¢/kWhr or \$/kW) (C)	Proposed Commodity Rate (¢/kWhr or \$/kW) (D)	Adjusted For Rate Desgn (¢/kWhr or \$/kW) (E)	Line No
<b>Residential Class (Schedules DR/DM/DS/DT)</b>							
1	Summer Season - ¢/kWhr	7.18741	3.01946	10.20687	9.33004	9.33004	1
2	Winter Season - ¢/kWhr	7.09444	0.00000	7.09444	6.48498	6.48498	2
3	Annual - ¢/kWhr	7.14102	1.51265	8.65367	7.91026	7.91026	3
<b>Schedule DR-TOU</b>							
4	Summer On-Peak - ¢/kWhr	9.21458	13.00423	22.21881	20.31008	20.31008	4
5	Summer Off-Peak - ¢/kWhr	6.54857	0.91111	7.45969	6.81885	6.81885	5
6	Winter On-Peak - ¢/kWhr	7.88998	0.00000	7.88998	7.21218	7.21218	6
7	Winter Off-Peak - ¢/kWhr	6.84219	0.00000	6.84219	6.25441	6.25441	7
8	Annual - ¢/kWhr	7.01035	1.50938	8.51973	7.78784	7.78784	8
<b>Schedule DR-SES</b>							
9	Summer On-Peak - ¢/kWhr	9.14980	10.81100	19.96080	18.24604	18.24604	9
10	Summer Semi-Peak - ¢/kWhr	7.66541	0.89543	8.56084	7.82541	7.82541	10
11	Summer Off-Peak - ¢/kWhr	5.97428	0.75531	6.72959	6.15148	6.15148	11
12	Winter Semi-Peak - ¢/kWhr	7.72040	0.00000	7.72040	7.05717	7.05717	12
13	Winter Off-Peak - ¢/kWhr	6.76320	0.00000	6.76320	6.18220	6.18220	13
14	Annual - ¢/kWhr	7.14114	1.51759	8.65873	8.52836	8.52836	14
<b>Schedule EV-TOU</b>							
15	Summer On-Peak - ¢/kWhr	8.72135	11.25980	19.98115	18.26465	18.26465	15
16	Summer Off-Peak - ¢/kWhr	6.68795	0.26068	6.94863	6.35170	6.35170	16
17	Summer Super Off-Peak - ¢/kWhr	4.24894	0.00000	4.24894	3.88393	3.88393	17
18	Summer On-Peak - ¢/kWhr	7.87674	0.00000	7.87674	7.20008	7.20008	18
19	Summer Off-Peak - ¢/kWhr	7.15044	0.00000	7.15044	6.53617	6.53617	19
20	Winter Super Off-Peak - ¢/kWhr	4.47313	0.00000	4.47313	4.08886	4.08886	20
21	Annual - ¢/kWhr	6.72414	1.45824	8.18238	7.47947	7.47947	21

ATTACHMENT JSP-5-2  
SAN DIEGO GAS ELECTRIC COMPANY - ELECTRIC DEPARTMENT  
2008 GRC PHASE II  
COMMODITY REVENUE ALLOCATION

Proposed Commodity Rates for Rate Design

Line No	Rate Description (Rates Model Input Categories)	Marginal Cost Energy (¢/kWhr) (A)	Marginal Cost Capacity (¢/kWhr or \$/kW) (B)	Marginal Cost Total (¢/kWhr or \$/kW) (C)	Proposed Commodity Rate (¢/kWhr or \$/kW) (D)	Adjusted For Rate Desgn (¢/kWhr or \$/kW) (E)	Line No
<b>Schedule A</b>							
<b>Summer</b>							
22	Secondary - ¢/kWhr	7.09757	4.17628	11.27385	10.30536	10.30536	22
23	Primary - ¢/kWhr	6.97525	4.10430	11.07955	10.12775	10.12775	23
<b>Winter</b>							
24	Secondary - ¢/kWhr	7.31651	0.12182	7.43833	6.79933	6.79933	24
25	Primary - ¢/kWhr	7.18934	0.11970	7.30904	6.68115	6.68115	25
26	Annual - ¢/kWhr	7.22041	0.00000	7.22041	6.60013	6.60013	26
<b>Schedule ATC</b>							
27	Summer Season - ¢/kWhr	6.94536	3.29488	10.24024	9.36054	9.36054	27
28	Winter Season - ¢/kWhr	7.26210	0.06655	7.32865	6.69908	6.69908	28
29	Annual - ¢/kWhr	7.12316	1.54941	8.67256	7.92754	7.92754	29
<b>Schedule A-TOU</b>							
<b>Summer</b>							
30	On-Peak - ¢/kWhr	8.98810	13.26158	22.24969	20.33830	20.33830	30
31	Semi-Peak - ¢/kWhr	7.33171	0.91354	8.24525	7.53693	7.53693	31
32	Off-Peak - ¢/kWhr	5.49246	0.58356	6.07602	5.55405	5.55405	32
<b>Winter</b>							
33	On-Peak - ¢/kWhr	8.78953	0.15592	8.94545	8.17698	8.17698	33
34	Semi-Peak - ¢/kWhr	8.10149	0.23752	8.33901	7.62264	7.62264	34
35	Off-Peak - ¢/kWhr	6.03990	0.00000	6.03990	5.52104	5.52104	35
36	Annual - ¢/kWhr	7.07119	1.79456	8.86575	8.10413	8.10413	36
<b>Schedule AD</b>							
<b>Maximum Demand: Summer</b>							
37	Secondary - \$/kW/month		10.11	10.11	9.24	9.24	37
38	Primary - \$/kW/month		9.97	9.97	9.11	9.11	38
<b>Maximum Demand: Winter</b>							
39	Secondary - \$/kW/month		0.30	0.30	0.28	0.28	39
40	Primary - \$/kW/month		0.30	0.30	0.27	0.27	40
<b>Summer Energy</b>							
41	Secondary - ¢/kWhr	7.24171		7.24171	6.61960	6.61960	41
42	Primary - ¢/kWhr	7.11691		7.11691	6.50552	6.50552	42
<b>Winter Energy</b>							
43	Secondary - ¢/kWhr	7.46179		7.46179	6.82078	6.82078	43
44	Primary - ¢/kWhr	7.33210		7.33210	6.70223	6.70223	44
45	Annual - ¢/kWhr	7.36619		7.36619	6.73339	6.73339	45



ATTACHMENT JSP-5-2  
SAN DIEGO GAS ELECTRIC COMPANY - ELECTRIC DEPARTMENT  
2008 GRC PHASE II  
COMMODITY REVENUE ALLOCATION

**Proposed Commodity Rates for Rate Design**

Line No	Rate Description (Rates Model Input Categories)	Marginal Cost Energy (¢/kWhr) (A)	Marginal Cost Capacity (¢/kWhr or \$/kW) (B)	Marginal Cost Total (¢/kWhr or \$/kW) (C)	Proposed Commodity Rate (¢/kWhr or \$/kW) (D)	Adjusted For Rate Desgn (¢/kWhr or \$/kW) (E)	Line No
<b>Schedule A6-TOU Capacity</b>							
Maximum On-Peak Demand: Summer							
47	Primary - \$/kW/month		17.08	17.08	15.61	15.61	47
48	Primary Substation - \$/kW/month		17.08	17.08	15.61	15.61	48
49	Transmission - \$/kW/month		16.66	16.66	15.23	15.23	49
Maximum On-Peak Demand: Winter							
50	Primary - \$/kW/month		0.11	0.11	0.10	0.10	50
51	Primary Substation - \$/kW/month		0.11	0.11	0.10	0.10	51
52	Transmission - \$/kW/month		0.11	0.11	0.10	0.10	52
<b>Schedule PA-T-1 Capacity</b>							
Demand: Summer							
Option C							
53	Secondary - \$/kW/month		13.78	13.78	12.60	12.60	53
54	Primary - \$/kW/month		13.59	13.59	12.42	12.42	54
55	Transmission - \$/kW/month		13.26	13.26	12.12	12.12	55
Option D							
56	Secondary - \$/kW/month		14.37	14.37	13.14	13.14	56
57	Primary - \$/kW/month		14.18	14.18	12.96	12.96	57
58	Transmission - \$/kW/month		13.83	13.83	12.64	12.64	58
Option E							
59	Secondary - \$/kW/month		14.08	14.08	12.87	12.87	59
60	Primary - \$/kW/month		13.88	13.88	12.69	12.69	60
61	Transmission - \$/kW/month		13.54	13.54	12.38	12.38	61
Option F							
62	Secondary - \$/kW/month		13.47	13.47	12.31	12.31	62
63	Primary - \$/kW/month		13.29	13.29	12.14	12.14	63
64	Transmission - \$/kW/month		12.96	12.96	11.85	11.85	64
Demand: Winter							
Option C							
65	Secondary - \$/kW/month		0.43	0.43	0.39	0.39	65
66	Primary - \$/kW/month		0.43	0.43	0.39	0.39	66
67	Transmission - \$/kW/month		0.42	0.42	0.38	0.38	67
Option D							
68	Secondary - \$/kW/month		0.46	0.46	0.42	0.42	68
69	Primary - \$/kW/month		0.45	0.45	0.42	0.42	69
70	Transmission - \$/kW/month		0.44	0.44	0.40	0.40	70
Option E							
71	Secondary - \$/kW/month		0.45	0.45	0.41	0.41	71
72	Primary - \$/kW/month		0.44	0.44	0.41	0.41	72
73	Transmission - \$/kW/month		0.43	0.43	0.40	0.40	73
Option F							
74	Secondary - \$/kW/month		0.46	0.46	0.42	0.42	74
75	Primary - \$/kW/month		0.45	0.45	0.42	0.42	75
76	Transmission - \$/kW/month		0.44	0.44	0.40	0.40	76

ATTACHMENT JSP-5-2  
 SAN DIEGO GAS ELECTRIC COMPANY - ELECTRIC DEPARTMENT  
 2008 GRC PHASE II  
 COMMODITY REVENUE ALLOCATION

**Proposed Commodity Rates for Rate Design**

Line No	Rate Description (Rates Model Input Categories)	Marginal Cost Energy (¢/kWhr) (A)	Marginal Cost Capacity (¢/kWhr or \$/kW) (B)	Marginal Cost Total (¢/kWhr or \$/kW) (C)	Proposed Commodity Rate (¢/kWhr or \$/kW) (D)	Adjusted For Rate Design (¢/kWhr or \$/kW) (E)	Line No
<b>Schedules AL-TOU / AY-TOU Capacity</b>							
<b>Demand: Summer</b>							
77	Secondary - \$/kW/month		13.47	13.47	12.31	12.31	77
78	Primary - \$/kW/month		13.29	13.29	12.14	12.14	78
79	Secondary Substation - \$/kW/month		13.47	13.47	12.31	12.31	79
80	Primary Substation - \$/kW/month		13.29	13.29	12.14	12.14	80
81	Transmission - \$/kW/month		12.96	12.96	11.85	11.85	81
<b>Demand: Winter</b>							
82	Secondary - \$/kW/month		0.43	0.43	0.39	0.39	82
83	Primary - \$/kW/month		0.43	0.43	0.39	0.39	83
84	Secondary Substation - \$/kW/month		0.43	0.43	0.39	0.39	84
85	Primary Substation - \$/kW/month		0.43	0.43	0.39	0.39	85
86	Transmission - \$/kW/month		0.42	0.42	0.38	0.38	86

ATTACHMENT JSP-5-2  
SAN DIEGO GAS ELECTRIC COMPANY - ELECTRIC DEPARTMENT  
2008 GRC PHASE II  
COMMODITY REVENUE ALLOCATION

Proposed Commodity Rates for Rate Design

Line No	Rate Description (Rates Model Input Categories)	Marginal Cost Energy (¢/kWhr) (A)	Marginal Cost Capacity (¢/kWhr or \$/kW) (B)	Marginal Cost Total (¢/kWhr or \$/kW) (C)	Proposed Commodity Rate (¢/kWhr or \$/kW) (D)	Adjusted For Rate Desgn (¢/kWhr or \$/kW) (E)	Line No
<b>Commercial/Industrial TOU Energy (Schedules AL-TOU, AY-TOU, A6-TOU, PA-T-1)</b>							
<b>Summer On-Peak</b>							
87	Secondary - ¢/kWhr	8.94390		8.94390	8.17556	8.17556	87
88	Primary - ¢/kWhr	8.80663		8.80663	8.05009	8.05009	88
89	Secondary Substation - ¢/kWhr	8.94390		8.94390	8.17556	8.17556	89
90	Primary Substation - ¢/kWhr	8.80663		8.80663	8.05009	8.05009	90
91	Transmission - ¢/kWhr	8.65528		8.65528	7.91174	7.91174	91
<b>Summer Semi-Peak</b>							
92	Secondary - ¢/kWhr	7.24708		7.24708	6.62451	6.62451	92
93	Primary - ¢/kWhr	7.13237		7.13237	6.51965	6.51965	93
94	Secondary Substation - ¢/kWhr	7.24708		7.24708	6.62451	6.62451	94
95	Primary Substation - ¢/kWhr	7.13237		7.13237	6.51965	6.51965	95
96	Transmission - ¢/kWhr	7.01697		7.01697	6.41417	6.41417	96
<b>Summer Off-Peak</b>							
97	Secondary - ¢/kWhr	5.45538		5.45538	4.98673	4.98673	97
98	Primary - ¢/kWhr	5.35364		5.35364	4.89373	4.89373	98
99	Secondary Substation - ¢/kWhr	5.45538		5.45538	4.98673	4.98673	99
100	Primary Substation - ¢/kWhr	5.35364		5.35364	4.89373	4.89373	100
101	Transmission - ¢/kWhr	5.28297		5.28297	4.82913	4.82913	101
<b>Winter On-Peak</b>							
102	Secondary - ¢/kWhr	8.78751		8.78751	8.03261	8.03261	102
103	Primary - ¢/kWhr	8.65534		8.65534	7.91179	7.91179	103
104	Secondary Substation - ¢/kWhr	8.78751		8.78751	8.03261	8.03261	104
105	Primary Substation - ¢/kWhr	8.65534		8.65534	7.91179	7.91179	105
106	Transmission - ¢/kWhr	8.50104		8.50104	7.77075	7.77075	106
<b>Winter Semi-Peak</b>							
107	Secondary - ¢/kWhr	8.07900		8.07900	7.38497	7.38497	107
108	Primary - ¢/kWhr	7.95003		7.95003	7.26707	7.26707	108
109	Secondary Substation - ¢/kWhr	8.07900		8.07900	7.38497	7.38497	109
110	Primary Substation - ¢/kWhr	7.95003		7.95003	7.26707	7.26707	110
111	Transmission - ¢/kWhr	7.82351		7.82351	7.15142	7.15142	111
<b>Winter Off-Peak</b>							
112	Secondary - ¢/kWhr	6.02015		6.02015	5.50298	5.50298	112
113	Primary - ¢/kWhr	5.90724		5.90724	5.39977	5.39977	113
114	Secondary Substation - ¢/kWhr	6.02015		6.02015	5.50298	5.50298	114
115	Primary Substation - ¢/kWhr	5.90724		5.90724	5.39977	5.39977	115
116	Transmission - ¢/kWhr	5.82966		5.82966	5.32886	5.32886	116
117	Annual - ¢/kWhr	7.06622		7.06622	6.45919	6.45919	117

ATTACHMENT JSP-5-2  
 SAN DIEGO GAS ELECTRIC COMPANY - ELECTRIC DEPARTMENT  
 2008 GRC PHASE II  
 COMMODITY REVENUE ALLOCATION

**Proposed Commodity Rates for Rate Design**

Line No	Rate Description (Rates Model Input Categories)	Marginal Cost Energy (¢/kWhr) (A)	Marginal Cost Capacity (¢/kWhr or \$/kW) (B)	Marginal Cost Total (¢/kWhr or \$/kW) (C)	Proposed Commodity Rate (¢/kWhr or \$/kW) (D)	Adjusted For Rate Desgn (¢/kWhr or \$/kW) (E)	Line No
<b>Agriculture</b>							
118	Summer Season - ¢/kWhr	6.77688	3.01111	9.78799	8.94714	8.94714	118
119	Winter Season - ¢/kWhr	7.16931	0.11964	7.28895	6.66278	6.66278	119
120	Annual - ¢/kWhr	6.96536	1.62235	8.58772	7.84998	7.84998	120
<b>Lighting</b>							
121	Annual - ¢/kWhr	5.97274	0.01439	5.98712	5.47279	5.47279	121

# **ATTACHMENT**

**JSP-5-3**

**ATTACHMENT JSP-5-3  
SAN DIEGO GAS ELECTRIC COMPANY - ELECTRIC DEPARTMENT  
2008GRC PHASE II  
DISTRIBUTION REVENUE ALLOCATION**

**Proposed Allocation of Distribution Revenue Requirement**

Line No	Customer Class	Distribution EPMC Factors (%) (A)	Non Marginal Revenue (\$ x 1000) (B)	Allocation Marginal Revenue (\$ x 1000) (C)	Proposed Allocation (\$ x 1000) (D)	TY 2008 Sales (GWhrs) (E)	Proposed Avg Rate (¢/kWhr) (F)	Current Revenue (\$ x 1000) (G)	Current Avg Rate (¢/kWhr) (H)	Percentage Change (%) (I)	Line No
1	Residential	57.0%		564,963	564,962.651	7,673.0	7.363	479,922	6.255	17.7%	1
2	Small Commercial	12.9%		128,127	128,127.269	2,100.9	6.099	99,402	4.731	28.9%	2
3	Commercial Industrial	28.8%	4,576	285,577	290,152.342	9,944.9	2.918	269,048	2.705	7.8%	3
4	Agricultural	0.5%		5,071	5,070.573	90.1	5.629	4,248	4.717	19.4%	4
5	Lighting	0.7%	4,115	6,682	10,797.292	109.5	9.861	7,899	7.213	36.7%	5
6	System	100.0%	8,691	990,419	999,110.127	19,918.4	5.016	860,519	4.320	16.1%	6
<b>Distribution Revenue Requirement:</b>			<b>1,000,558</b>								
<b>Non Marginal Rev Req Components:</b>											
Lighting Facilities Charges:			4,115								
Standby Revenue:			2,301								
Distance Adjustment Fees:			2,275								

**ATTACHMENT JSP-5-3  
SAN DIEGO GAS ELECTRIC COMPANY - ELECTRIC DEPARTMENT  
2008 GRC PHASE II  
DISTRIBUTION REVENUE ALLOCATION**

**Distribution EPMC Factors**

<b>Line No</b>	<b>Customer Class</b>	<b>Customer LRMC Rev (\$ x 1000) (A)</b>	<b>Percentage Allocator (%) (B)</b>	<b>Local Distribution LRMC Rev (\$ x 1000) (C)</b>	<b>Substation LRMC Rev (\$ x 1000) (D)</b>	<b>Local and Substation Subtotal (\$ x 1000) (E)</b>	<b>Percentage Allocator (%) (F)</b>	<b>Total Distribution LRMC Rev (\$ x 1000) (G)</b>	<b>Distribution EPMC Factor (%) (H)</b>	<b>Line No</b>
1	Residential	151,495	67.1%	171,391	31,036	202,427	51.3%	353,921	57.0%	1
2	Small Commercial	38,712	17.1%	31,685	9,869	41,553	10.5%	80,265	12.9%	2
3	Commercial Industrial	31,161	13.8%	113,605	34,133	147,738	37.4%	178,900	28.8%	3
4	Agricultural	1,171	0.5%	1,605	401	2,006	0.5%	3,176	0.5%	4
5	Lighting	3,360	1.5%	725	101	826	0.2%	4,186	0.7%	5
6	System	225,899	100.0%	319,011	75,539	394,550	100.0%	620,449	100.0%	6

**ATTACHMENT JSP-5-3  
SAN DIEGO GAS ELECTRIC COMPANY - ELECTRIC DEPARTMENT  
2008 GRC PHASE II  
DISTRIBUTION REVENUE ALLOCATION**

**Distribution Marginal Cost Revenue**

Line No	Customer Class	Secondary (A)	Primary (B)	Secondary Substation (C)	Primary Substation (D)	Total (F)	Line No
<b>Customer LRM (\$ x 1000):</b>							
1	Residential	151,495				151,495	1
2	Small Commercial	38,712				38,712	2
3	Commercial Industrial	30,780	338	8	36	31,161	3
4	Agricultural	1,171				1,171	4
5	Lighting	3,360				3,360	5
6	System	225,517	338	8	36	225,899	6
<b>Feeders &amp; Local Distribution Demand LRM (\$ x 1000):</b>							
7	Residential	171,391				171,391	7
8	Small Commercial	31,685				31,685	8
9	Commercial Industrial	89,680	13,220	1,860	8,846	113,605	9
10	Agricultural	1,605				1,605	10
11	Lighting	725				725	11
12	System	295,085	13,220	1,860	8,846	319,011	12
<b>Substation Demand LRM (\$ x 1000):</b>							
13	Residential	31,036				31,036	13
14	Small Commercial	9,869				9,869	14
15	Commercial Industrial	26,944	3,972	559	2,658	34,133	15
16	Agricultural	401				401	16
17	Lighting	101				101	17
18	System	68,351	3,972	559	2,658	75,539	18



**ATTACHMENT JSP-5-3  
SAN DIEGO GAS ELECTRIC COMPANY - ELECTRIC DEPARTMENT  
2008 GRC PHASE II  
DISTRIBUTION REVENUE ALLOCATION**

**Distribution Marginal Cost Determinants**

Line No	Customer Class	Secondary (A)	Primary (B)	Secondary Substation (C)	Primary Substation (D)	Total (F)	Line No
<b>Customer LRMC (Average Customers per month):</b>							
1	Residential	1,233,646				1,233,646	1
2	Small Commercial	120,401	121			120,521	2
3	Commercial Industrial	21,967	324	7	29	22,327	3
4	Agricultural	3,465				3,465	4
5	Lighting	6,458				6,458	5
6	System	1,385,937	445	7	29	1,386,417	6
<b>Feeders &amp; Local Distribution Demand LRMC (MW):</b>							
7	Residential	3,891				3,891	7
8	Small Commercial	719				719	8
9	Commercial Industrial	2,036	300	42	201	2,579	9
10	Agricultural	36				36	10
11	Lighting	16				16	11
<b>Substation Demand LRMC (MW):</b>							
12	Residential	1,679				1,679	12
13	Small Commercial	534				534	13
14	Commercial Industrial	1,458	215	30	144	1,847	14
15	Agricultural	22				22	15
16	Lighting	5				5	16

**ATTACHMENT JSP-5-3  
SAN DIEGO GAS ELECTRIC COMPANY - ELECTRIC DEPARTMENT  
2008 GRC PHASE II  
DISTRIBUTION REVENUE ALLOCATION**

**Distribution Marginal Cost Summary**

<b>Line No</b>	<b>Customer Class</b>	<b>Secondary (A)</b>	<b>Primary (B)</b>	<b>Secondary Substation (C)</b>	<b>Primary Substation (D)</b>	<b>Total (F)</b>	<b>Line No</b>
<b>Customer LRMC (\$/Customer/Yr) :</b>							
1	Residential	122.80				122.80	1
2	Small Commercial	321.53				321.20	2
3	Commercial Industrial	1,401.16	1,041.13	1,222.17	1,233.56	1,395.65	3
4	Agricultural	337.87				337.87	4
5	Lighting	520.28				520.28	5
6	System	157.01	1,041.13	1,222.17	1,233.56	157.32	6
<b>Feeders &amp; Local Distribution Demand LRMC (\$/kW/Yr) :</b>							
7	All Classes	44.05	44.05	44.05	44.05	44.05	7
<b>Substation Demand LRMC (\$/kW/Yr) :</b>							
8	All Classes	18.48	18.48	18.48	18.48	18.48	8