Application of San Diego Gas & Electric Company (U-902-M) for Approval of Electric and Natural Gas Energy Efficiency Programs and Budgets for Years 2006 through 2008.

Application 05-06-\_\_\_

## **CHAPTER IV**

## PREPARED DIRECT TESTIMONY

OF

### LISA DAVIDSON

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

**JUNE 1, 2005** 

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**JUNE 1, 2005** 

## 1 PREPARED DIRECT TESTIMONY OF LISA DAVIDSON 2 3 SAN DIEGO GAS & ELECTRIC COMPANY 4 **PURPOSE** 5 6 The purpose of my testimony is to 1) propose a new cost allocation methodology for San 7 Diego Gas and Electric (SDG&E) to recover the electric Energy Efficiency (EE) program costs described in the testimony of SDG&E Witness Athena Besa; and 2) to propose an updated electric rate design for the Procurement Energy Efficiency Surcharge Rate. 10 My testimony is arranged as follows: 11 Section II presents the SDG&E electric EE program cost allocation proposal. 12 Section III presents the SDG&E electric rate design proposal for the Procurement Energy 13 Efficiency Surcharge Rate. II. COST ALLOCATION PROPOSAL FOR SDG&E ELECTRIC 14 15 SDG&E proposes a change in the allocation of electric EE program costs to its customer classes, in order to better align cost recovery with the beneficiaries of program funding. 16 17 Specifically, SDG&E proposes to allocate costs to its customer classes based on the total energy efficiency program dollars projected to be spent in years 2006-2008 on each customer class. 18 19 This proposal is consistent with the EE cost allocation proposal for SDG&E gas, as described in

## A. Current Allocation Methodology

the testimony of SDG&E Witness Yu Kai Chen (Chapter V).

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SDG&E currently recovers its electric EE program costs through a portion of the Nonlow Income component of the PPP surcharge, as well as through the Procurement Energy Efficiency Surcharge rate authorized by the Commission in D.03-12-062. Pursuant to Public Utilities Code Section 399.8, the Non-low Income component of the PPP rate may not exceed the level of the rate components effective on January 1, 2000. As described in the testimony of SDG&E witness Athena Besa, SDG&E proposes to recover future EE revenue requirement increases above the authorized amount included in the PPP Non-low Income component through the Procurement EE Surcharge rate mechanism.

The Non-low Income component of the PPP rate is allocated to customers based on System Average Percent Change (SAPC) methodology using 1996 revenues as adopted by the Commission in D.99-06-058. The Procurement Energy Efficiency Surcharge Rate is allocated equal cents/kWh based on usage, and is separately identified in tariffs and recovered through the PPP component of the customer bill. SDG&E believes that the current method of allocating costs based on a combination of 1996 revenues and equal cents/kWh is outdated, and is an inferior approach compared to aligning allocation with energy efficiency program spending and benefits for its customers. SDG&E therefore proposes that the Commission adopt SDG&E's cost allocation methodology presented in Section B below, effective January 1, 2006.

#### B. Proposed Allocation Methodology

SDG&E proposes to allocate electric EE program costs identified in Table 4 in the testimony of SDG&E Witness Athena Besa based on forecasted 2006-2008 EE program spending for each customer class. The use of this method better aligns those customer classes who are beneficiaries of program funding and their share of the program costs, limiting cross-subsidies among customer classes.

Furthermore, the method of allocating EE program costs based on customer class benefits is consistent with Commission precedents for similar programs at other utilities, as described in

the testimony of SDG&E Witness Yu Kai Chen. Thus, adopting this proposal for SDG&E electric achieves greater statewide consistency.

As described above, pursuant to Public Utilities Code Section 399.8, the Non-low Income component of the PPP rate may not exceed the level of the rate components effective on January 1, 2000. Furthermore, the Non-low Income component of the PPP rate recovers Renewables and RD&D costs not addressed in this proceeding, in addition to EE costs. Therefore, SDG&E does not propose to alter the allocation or rate design for the PPP Non-low Income rate at this time. Instead, SDG&E proposes to achieve the results of its proposed cost allocation through adjustments to the Procurement Energy Efficiency Surcharge revenues allocated to each customer class. Thus, the Procurement EE Surcharge revenue allocation would be a residual calculation, designed to achieve the total proposed EE cost allocation by class while holding EE revenues associated with the Non-low Income component of PPP rates by class constant. The basis for the cost allocation, and resulting allocation factor percentages by customer class are summarized in Table 1 of Appendix A to this Testimony. The proposed allocation of energy efficiency program costs for years 2006-2008 is presented in Table 2 of Appendix A.

#### III. RATE DESIGN PROPOSAL FOR SDG&E ELECTRIC

As described in Section II above, SDG&E does not plan to alter the cost allocation or rate design of the Non-low Income component of the PPP rate at this time. Therefore, this section focuses on the proposed rate design to recover the Procurement Energy Efficiency Surcharge revenues allocated to each class (See Table 2 of Appendix A).

Currently, the Procurement Energy Efficiency Surcharge rate is a uniform cents/kWh charge assessed to all usage, including residential usage up to 130% of baseline allowances. The Procurement EE surcharge was established pursuant to D.03-12-062, and approved by the

Commission in AL-1552-E. In D.04-02-057, the Commission adopted an interpretation of AB 1X that required SDG&E to freeze total residential customer rates at their February 1, 2001 levels for usage up to 130% of baseline allowances. As a result of this interpretation, SDG&E has been ordered to offset certain previous non-commodity rate increases, including the Procurement EE Surcharge rate increase, by lowering the commodity rates for 130% of baseline usage.

In order to avoid further revenue shortfalls associated with the rate caps to residential usage up to 130% of baseline, and to prevent exacerbation of this issue as EE costs increase, SDG&E proposes to collect the amount of Procurement EE Surcharge revenues allocated to the residential class from residential usage above 130% of baseline. This proposal is consistent with the method adopted by the Commission in D.04-04-042, which approved a settlement authorizing SDG&E to recover electric distribution revenue increases allocated to the residential class from the upper rate tiers above 130% of baseline usage.

In conclusion, SDG&E proposes to recover Procurement EE Surcharge revenues allocated to the residential class through a uniform cents/kWh energy charge applicable to the upper tiers (above 130% of baseline). For all other customer classes, allocated Procurement EE Surcharge revenues would be recovered through a uniform cents/kWh energy charge applicable to all usage within that class. The Procurement EE Surcharge rate impacts of this proposal for years 2006-2008 are illustrated in Table 1 of Appendix B to this Testimony. For comparison purposes, the rate level of the residential Procurement EE Surcharge rate shown in Table 1 of Appendix B is approximately three times what it would otherwise be if AB1X were eliminated, or if AB1X rate caps were interpreted by the Commission to only apply to commodity rates. Since the amount of non-exempt residential usage is only approximately 30% of the class' usage,

customer bill impacts applicable to SDG&E's large-use electric residential customers are
exacerbated. Total class average rate impacts for years 2006-2008 resulting from SDG&E's
proposal are presented in Table 2 of Appendix B. Residential bill impacts for year 2006
resulting from SDG&E's proposal are presented in Appendix C to this Testimony.

This concludes my prepared direct testimony.

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#### **QUALIFICATIONS**

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3	My name is Lisa Davidson.	My business address is 8330	Century	y Park Court, San Diego
ı	California, 92123-1530.			

5	I am employed as a Principal Regulatory Economic Advisor in the Regulatory Affairs
5	department for San Diego Gas & Electric. One of my responsibilities is to analyze and develop
7	proposals for SDG&E in proceedings before the California Public Utilities Commission
3	("CPUC" or "Commission").

I received a Bachelor of Arts degree in Economics from Northwestern University in 1997. From 1998 to April 2001, I worked for Accenture as an Analyst/Consultant with various responsibilities including working with senior management in the development of strategic planning initiatives, "gap" analyses, project cost and time estimates, and implementation and training requirements. In 2001 I assumed my current position with SEU. During the past three years I have performed analysis for the purpose of preparing advice letters, applications and testimony on proceedings before this Commission as well as Federal Energy Regulatory Commission ("FERC") matters.

## Appendix A - Table 1

#### San Diego Gas & Electric Electric Energy Efficiency Proposed Cost Allocation Factors

Customer Class	Total Current Allocation * (\$)	Total Current Allocation %	Forecasted Program Spending by Customer Class **  (\$)	Proposed Allocation
Residential	23,428,620	37.2%	89,287,775	34.5%
Small Commercial	7,114,886	11.3%	39,135,501	15.1%
Medium and Large C&I	31,817,914	50.5%	127,482,820	49.3%
Agricultural	292,828	0.5%	1,559,608	0.6%
Lighting	373,667	0.6%	1,208,038	0.5%
System Total	63,027,913	100.0%	258,673,743	100.0%

<sup>\*</sup> Reflects Allocation of EE Costs Included in PPP and Procurement Energy Efficiency Surcharge Rates

<sup>\*\*</sup> Based on 3-year Forecast of Program Expenses by Class

## Appendix A - Table 2

# San Diego Gas & Electric Electric Energy Efficiency Proposed Cost Allocation of Procurement EE Surcharge for 2006-2008

		2006					
Customer Class		Existing PGC Allocation		Procurement EE Surcharge Allocation		Total Cost-Based Allocation	
Residential	\$	12,982,732	\$	7,173,087	\$	20,155,819	
Small Commercial	\$	4,034,335	\$	4,800,112	\$	8,834,446	
Medium and Large C&I	\$	16,185,603	\$	12,592,363	\$	28,777,966	
Agricultural	\$	170,261	\$	181,805	\$	352,066	
Lighting	\$	227,069	\$	45,634	. \$	272,703	
System Total	\$	33,600,000	\$	24,793,000	\$	58,393,000	
		2007					
Customer Class	Existing PGC EE		Marin de ann annual State		al Cost-Based Allocation		
Residential	S	13,255,370	\$	14,895,863	\$	28,151,232	
Small Commercial	\$	4,119,056	s	8,219,840	\$	12,338,896	
Medium and Large C&I	\$	16,525,501	S	23,668,114	\$	40,193,615	
Agricultural	\$	173,836	S	317,887	\$	491,723	
Lighting	, <b>\$</b>	231,837	\$	149,041	\$	380,878	
System Total	\$	34,305,600	\$	47,250,746	\$	81,556,346	
		2008					
Customer Class		kisting PGC Allocation	Procurement EE Surcharge Allocation		Total Cost-Base Allocation		
Residential	\$	13,533,732	\$	20,352,154	\$	33,885,887	
Small Commercial	\$	4,205,556	S	10,646,882	\$	14,852,438	
Medium and Large C&I	\$	16,872,537	\$	31,508,873	\$	48,381,409	
Agricultural	\$	177,487	\$	414,405	\$	591,892	
Lighting	\$	236,706	\$	221,761	S	458,466	
System Total	\$	35,026,018	\$	63,144,075	\$	98,170,092	

#### Appendix B - Table 1

#### San Diego Gas & Electric Electric Energy Efficiency Proposed Class Average Procurement EE Surcharge Rates for 2006-2008

Customer Class	Present Procurement EE Surcharge Rate (¢/KWhr)	2006 Proposed Procurement EE Surcharge Rate (¢/KWhr)	Change (é/KWhr)	Change %
Residential ** Up to 130% of Baseline Over 130% of Baseline	0.158 0.158	0.000 0.353	(0.158) 0.195	-100.0% 123.1%
Small Commercial	0.158	0.240	0.082	51.7%
Specification of the second of		***************************************	2000	******
Medium and Large C&I	0.158	0.125	(0.033)	-21.1%
Agricultural	0.158	0.228	0.070	44.2%
Lighting	0.158	0.048	(0.110)	-69.8%
System Total	0.158	0.130	(0.028)	-17.7%
		2907		
Customer Class	Present Procurement EE Surcharge Rate (d/KWhr)	Proposed Procurement EE Surcharge Rate (d/KWhr)	Change (&/KWhr)	Change %
Residential **		•		
Up to 130% of Baseline Over 130% of Baseline	0.158 0.158	0.000 0.732	(0.158) 0.574	-100.0% 363.3%
Small Commercial	0.158	0.410	0.252	159.7%
Medium and Large C&I	0.158	0.234	0.076	48.2%
Agricultural	0.158	0.398	0.240	152.1%
Lighting	0.158	0.156	(0.002)	-1.5%
System Total	0.158	0.248	0.090	56.8%
		2008		
Customer Class	Present Procurement EE Surcharge Rate (¢/KWhr)	Proposed Procurement EE Surcharge Rate (d/KWhr)	Change (é/KWhr)	Change 4
Residential **				1
Up to 130% of Baseline Over 130% of Baseline	0.158 0.158	0.000	(0.158) 0.842	-100.0% 533.1%
Small Commercial	0.158	0.532	0.374	236.4%
Medium and Large C&I	0.158	0.312	0.154	97.3%
Agricultural	0.158	0.519	0.361	228.6%
Lighting	0.158	0.232	0.074	46.5%
System Total	0.158	0.331	0.173	109.6%

<sup>\*\*</sup> Residential Procurement EE Surcharge revenues are proposed to be recovered from the upper liers of usage in order to allow for full cost recovery.

#### Appendix B - Table 2

#### San Diego Gas & Electric Electric Energy Efficiency Proposed Class Average Total Rates

#### 2006

Customer Class	6/1/05 Total Rate (¢/KWhr)	Proposed Total Rate (¢/KWhr)	Change (¢/KWhr)	Change %
Residential	14.956	15.015	0.058	0.4%
Small Commercial	16.929	17.010	0.082	0.5%
Medium and Large C&I	11.657	11.624	(0.033)	-0.3%
Agricultural	15.273	15.343	0.070	0.5%
Lighting	16.169	16.059	(0.110)	-0.7%
System Total	13.575	13.595	0.020	0.1%
		2007		
Customer Class	6/1/05 Total Rate (¢/KWhr)	Proposed Total Rate (¢/KWhr)	Change (¢/KWhr)	Change %
Residential	14.956	15.129	0.172	1.2%
Small Commercial	16.929	17.181	0.252	1.5%
Medium and Large C&I	11.657	11.733	0.076	0.7%
Agricultural	15.273	15.514	0.240	1.6%
Lighting	16.169	16.167	(0.002)	0.0%
System Total	13,575	13.712	0.137	1.0%
	*	2008		
Customer Class	6/1/05 Total Rate (¢/KWhr)	Proposed Total Rate (¢/KWhr)	Change (¢/KWhr)	Change
Rosidential	14.956	15.209	0.253	1.7%
Small Commercial	16.929	17.302	0.374	2.2%
Medium and Large C&I	11.657	11.811	0.154	1.3%
<b>Agricultural</b>	15.273	15.635	0.361	2.4%
Jighting	16.169	16.243	0.074	0.5%
System Total	13.575	13.796	0.221	1.6%

#### APPENDIX C SAN DIEGO GAS AND ELECTRIC COMPANY - ELECTRIC ENERGY EFFICIENCY

## TYPICAL MONTHLY RESIDENTIAL ENERGY CHARGES AT PRESENT AND PROPOSED (INLAND CUSTOMERS) Schedule DR (Summer Billing Period)

		PRESENT	PROPOSED			
	ENERGY	BILL	BILL	CHANGÉ	CHANGE	
LINE	(KWH)	(\$)	(5)	(\$)	(%)	LINE
NO.	(A)	(8)	(C)	<u> </u>	(E)	NO.
-		***************************************				
1	25	\$5.10	\$5,10	\$0.00	0.0%	1
2	50	6,44	8,44	0.00	0.0%	2
3	75	9,67	9.67	0.00	0.0%	3
4	100	12.89	12.89	0.00	0.0%	4
5	150	19.33	19,33	0.00	0.0%	5
6	200	25.78	25.78	0.00	0.0%	6
7	250	32.22	32.22	0.00	0.0%	7
8	300	38.67	38.67	0.00	0.0%	8
9	350	45.11	45.11	0.00	0.0%	9
-10	400	52.38	52.38	0,00	0.0%	10
11	450	59.84	59,84	0.00	0.0%	11
12	500	68.78	68,86	0,08	0.1%	12
13	600	88.21	88.49	0.27	0.3%	13
14	700	107.64	108.11	0.47	0.4%	14
15	800	127.82	128.48	0.66	0.5%	15
16	900	148.16	149.02	0.86	0.6%	16
17	1000	168.49	169.55	1.05	0.6%	17
18	1500	276.88	278.91	2.03	0.7%	18
19	2000	386.49	389.49	3.00	0.8%	19
20	3000	605.70	610.65	4,95	0.8%	20
21	****	And the second of the second			1	21
22						22
23		Schad	ule DR (Winter Billing	Period)		23
24						24
25						25
26		PRESENT	PROPOSED			26
27	ENERGY	BILL	BILL	CHANGE	CHANGE	27
28	(KWH)	(\$)	(\$)	(\$)	(%)	28
29	(A)	(6)			£l	29 30
30 31	25	5,10	5.10	0.00	0.0%	30 31
32	50	6.44	6.44	0.00	0.0%	32
33	75	9.67	9.67	0.00	0.0%	33
34	100	12.89	12.89	0.00	0.0%	34
35	150	19.33	19.33	0.00	0.0%	35
36	200	25.78	25.78	0.00	0.0%	36
37	250	32.22	32.22	0.00	0.0%	37
38	300	38.67	38.67	0.00	0.0%	38
39	350	45.13	30.07 45.13	0.00	0.0%	39
<i>39</i> 40	400	45, 13 52,58	45.13 52.58	0.00	0.0% #0.0	
41	450 450	52,58 60,04	52.56 60.04			40
42	500	69.07		0.00	0.0%	41
43		and the second s	\$4.17	Barrayan	<b>0.1%</b>	42
44	600 700	87.40 405.74	87.69	0.30	0.3%	43
45		105.74	106.23	0.49	0.5%	44
45 45	800	124.96	125.64	0.69	0.5%	45
40 47	900	144,17	145.05	0.88	0.6%	46
	1000	163,38	164.45	1.08	0.7%	47
48	1500	267.63	269,68	2.05	0.6%	48
49	2000	372.73	375.76	3.03	0.8%	49
50	3000	582.93	587.91	4.98	0.9%	50

## APPENDIX C SAN DIEGO GAS AND ELECTRIC COMPANY - ELECTRIC ENERGY EFFICIENCY

# TYPICAL MONTHLY RESIDENTIAL ENERGY CHARGES AT PRESENT AND PROPOSED (COASTAL CUSTOMERS) Schedule DR (Summer Billing Period)

		PRESENT	PROPOSED			
	ENERGY	BILL	BILL	CHANGE	CHANGE	
LINE	(KWH)	(5)	(5)	(5)		* ***
NO.	(A)	(8)	(C)		~	LINE
***************************************		· · · · · · · · · · · · · · · · · · ·	man Marian		(E)	WO.
. 1	25	\$5.10	\$5,10	\$0.00	0.0%	1
2	50	6.44	6.44	0.00	0.0%	2
3	75	9.67	9.67	0.00	0.0%	3
4	100	12.89	12.89	0.00	0.0%	4
5	150	19.33	19.33	0.00	0.0%	5
6	200	25.78	25.78	0.00	0.0%	6
7	250	32.22	32.22	0.00	0.0%	7
8	300	38.67	38.67	0.00	0.0%	8
9 10	350	45.94	45,94	0.00	0.0%	9
	400	53,39	53,39	0.00	0.0%	10
11	450	63.03	63.12	0.09	0.1%	11
12 13	500	72.76		0.19		12
14	600	92.18	92.56	0.39		13
15	700	112.35	112.93	0.58	0,5%	14
16	800	132,69	133.47	0.78	0.8%	15
17	900	153.03	154.00	0.97		16
18	1000	174.52	175.69	1.17		17
19	1500 2000	284.13	288.27	2.14	0.8%	18
20	3000	393.73	396.85	3.12		19
21	2000	612.94	618.01	5.07		20
22						21
23		e <sub>n</sub> t.	edule DR (Winter Billing P			22
24		Viii	and or familia billing b	eriodj		23
25						24 25
26		PRESENT	PROPOSED			25 26
27	ENERGY	BILL	BILL	CHANGE		27 27
28	(KWH)	(\$)	<b>(S)</b>	(\$)		28
29	<u>(A)</u>	(B)	(C)	(O)		29
30						30
31	25	5.10	5.10	0.00		31
32 33	50	6.44	6.44	0.00		32
33 34	75	9.67	9.67	0.00		33
35	100 150	12.89	12.89	0.00	0.0%	34
36	200	19.33	19,33	0.00		35
37	250	25.78	25,78	0.00	0.0% 3	36
38	300	32.22	32.22	0.00		37
39	350	38.67	38.67	0.00		18
40	400	45.54 52.99	45.54	0.00		39
41	450	61.20	52.99	0.00	· ·	10
42	500	70.37	61.25	0.04		11
43	600	88.70	70.51	0.14		12
44	700	107.40	89.04 107.93	0.34		13
45	800	126,61	127.34	0.53		4
46	900	145,82	146.75	0.73		5
47	1000	165.27	166.39	0.92 1.12		6
48	1500	270.37	272.46	2.09		7
49	2000	375.47	378.54	3.07		8
50	3000	585.67	590.69	5.02	0.8% 4	
		******	444.43	3.VZ	0.9% 5	U