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 V

PREPARED DIRECT TESTIMONY

OF

YU KAI CHEN

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

JUNE 1, 2005

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SAN DIEGO GAS & ELECTRIC COMPANY

I. PURPOSE

The purpose of my testimony is to propose a new Energy Efficiency (EE) program cost allocation methodology for the gas business of San Diego Gas & Electric (SDG&E).

My testimony is arranged as follows:

- Section II discusses the latest EE goals.
- Section III presents the SDG&E EE program cost allocation proposal.

II. BACKGROUND

On September 23, 2004, the Commission issued D.04-09-060, which implemented the mandate from the Energy Action Plan (EAP) into a quantitative goal to reduce energy use per capita. The adopted natural gas savings goals are designed to achieve approximately 40% of the maximum demand reduction potential. In this application, SDG&E has submitted a budget for the 2006-08 period that results in an 18% increase to the current EE program funding levels[1].

The substantial increase in EE program funding to meet the Commission's savings targets underscores the need to examine the current cost allocation methodologies to recover on-going and new EE program costs. EE programs are now a part of the series of public purpose programs (PPP) and customer groups should pay a proportionate share of the costs relative to the

[1] See the testimony of SDG&E Witness Athena Besa.

benefits they receive for these programs. Allocation methods that fail to achieve a benefit-charge balance will result in a cross subsidy of costs in customer rates.

III. COST ALLOCATION PROPOSAL FOR SDG&E

SDG&E's proposed cost allocation for its gas related EE program costs will better align cost recovery with the beneficiaries of program funding and correct a current under collection problem with PPP surcharge fees.

SDG&E currently allocates its gas EE program costs based on an Equal Percentage of Marginal Cost (EPMC) basis. EPMC is a cost allocation methodology that assigns revenue requirements to customer classes in proportion to each class' share of total system marginal cost revenue[2]. Energy efficiency program costs were included in SDG&E's gas base margin revenue requirements as part of "Customer Service and Information" expenses[3], which are allocated by EPMC. Since July 1, 2001, gas related EE program costs have been removed from SDG&E's gas base margin rates and have been recovered through the gas PPP surcharge (see SDG&E Advice Letter 1252-G-B). The allocation of EE program costs under the gas PPP surcharge fee continues to be done on an EPMC basis. Table 1 below shows the current allocation:

[2] Marginal cost revenue is the level of revenue from each customer class assuming that each class pays its marginal cost for the next unit of service. This is calculated by multiplying the unit marginal costs by the level of the cost causation factor, i.e., cost allocation determinant for the customer class.
[3] EE program costs were part of Customer Services expenses approved by the Commission in D.98-12-038.

Table 1: Current Customer Class Allocation

Customer Class	Dollars	Percent
	($000)	%
Core		
Residential	$ 4,258	77.4%
Core "C&I"	$ 601	10.9%
Natural Gas Vehicle	$ 18	0.3%
Subtotal Core	$ 4,877	88.7%
Non-core		
Non-core C&I	$ 147	2.7%
Electric Generation	$ 477	8.7%
Subtotal Non-core	$ 623	11.3%
TOTAL	$ 5,500	100.0%

The gas EPMC allocation methodology is often used to recover the cost of on-going utility operations (i.e., base margin). However, the gas EE programs are now part of the gas public purpose program, are not related to the utility's base margin cost structure, and are recovered through a separate surcharge. Therefore, it is no longer appropriate to allocate gas EE program costs based on gas EPMC factors. Furthermore, a comparison of how the EE costs are recovered, as shown in Table 1 above, to how the proposed program funds will be distributed, as discussed in the testimony of SDG&E Witness Athena Besa, illustrates that certain customer groups would tend to get a disproportionate share of the benefits relative to the costs paid by those classes.

SDG&E proposes to assign the costs of current EE programs to more accurately match funding awarded to the customer classes who participate in these programs. The proposed

allocation of costs by class is based on the 2006-08 three-year total of the proposed program budget, which is provided in the testimony of Ms. Besa as shown in Table 2 below:

Table 2: EE 3-Year Budget and Total Percent

Customer Class	2006	2007	2008	3-Yr Total
	($000)	($000)	($000)	%
Residential Budget	$ 1,735	$ 1,819	$ 1,711	27.0%
Small Commercial	$ 501	$ 685	$ 1,068	11.6%
Medium Commercial	$ 1,225	$ 1,560	$ 2,281	26.0%
Large Commercial	$ 2,220	$ 2,336	$ 2,329	35.4%
Total	$ 5,680	$ 6,401	$ 7,389	100.0%

As reflected in the proposed EE program budget, SDG&E has different programs for Small[4], Medium[5], and Large Commercial[6] customers. These programs will be offered to both Core and Non-core Commercial customers. For cost allocation purposes, I have further segmented the proposed program budgets by Core and Non-core based on the number of customers that meet the size criteria for these programs. Small Commercial and Medium Commercial program costs are assigned to the Core Commercial and Industrial (C&I) class. Sixty percent of the program costs of the Large Commercial programs are allocated to Core C&I, with the remaining forty percent allocated to Non-core C&I[7]. Natural Gas Vehicle (NGV) customers are not allocated

[4] Small Commercial customers are nonresidential customers consuming less than 20,800 therms per year.
[5] Medium Commercial customers consume between 20,800 and 240,000 therms per year.
[6] Large Commercial customers consume more than 240,000 therms per year.
[7] Historically, EE program participation has been higher by Core customers than by Non-core customers. Between 2002 and 2003, Core Commercial customers received 29% of total EE funding while Non-core Commercial customers received 5%. However, with more emphasis on funding for C&I customers, the participation by Non-core customers is likely to increase.

any costs because no programs are targeted to the NGV class in the 2006-08 EE program years. The resulting proposed allocation factors are then multiplied to the annual budgets to get the cost allocation as shown in Table 3 below:

Table 3: Proposed Cost Allocation Factors

Customer Class	Current Allocation	Proposed Allocation	2006	2007	2008
	%	%	($000)	($000)	($000)
Annual Budget			$ 5,680	$ 6,401	$ 7,389
Core					
Residential	77.4%	27.0%	$ 1,536	$ 1,731	$ 1,998
Core C&I	10.9%	58.8%	$ 3,341	$ 3,764	$ 4,346
Natural Gas Vehicle	0.3%	0.0%	$ -	$ -	$ -
Subtotal Core	88.7%	85.9%	$ 4,877	$ 5,495	$ 6,344
Non-core					
Non-core C&I	2.7%	14.1%	$ 803	$ 905	$ 1,045
Electric Generation	8.7%	0.0%	$ -	$ -	$ -
Subtotal Non-core	11.3%	14.1%	$ 803	$ 905	$ 1,045
TOTAL	100.0%	100.0%	$ 5,680	$ 6,401	$ 7,389

The resulting PPP surcharge rates for 2006-08 and the rate impact relative to current rates are shown in the Tables 4 through 6 below:

Table 4: 2006 PPP Surcharge Rate Impact

	Non-CARE Customers			CARE Customers		
Customer Class	Current	**2006**	**% change**	**Current**	**2006**	**% change**
	¢/th	**¢/th**		**¢/th**	**¢/th**	
Core						
Residential	4.35	3.52	-19%	3.03	2.20	-27%
Core C&I	2.17	3.82	76%	0.85	2.51	195%
Natural Gas Vehicle	1.92	1.66	-13%	n/a	n/a	n/a
Non-core						
Non-core C&I	2.33	4.28	83%	n/a	n/a	n/a
Electric Generation	n/a	n/a	n/a	n/a	n/a	n/a

Table 5: 2007 PPP Surcharge Rate Impact

	Non-CARE Customers			CARE Customers		
Customer Class	**Current**	**2007**	**% change**	**Current**	**2007**	**% change**
	¢/th	¢/th		¢/th	¢/th	
Core						
Residential	4.35	3.58	-18%	3.03	2.26	-25%
Core C&I	2.17	4.08	88%	0.85	2.76	225%
Natural Gas Vehicle	1.92	1.66	-13%	n/a	n/a	n/a
Non-core						
Non-core C&I	2.33	4.58	96%	n/a	n/a	n/a
Electric Generation	n/a	n/a	n/a	n/a	n/a	n/a

Table 6: 2008 PPP Surcharge Rate Impact

	Non-CARE Customers			CARE Customers		
Customer Class	**Current**	**2008**	**% change**	**Current**	**2008**	**% change**
	¢/th	¢/th		¢/th	¢/th	
Core						
Residential	4.35	3.66	-16%	3.03	2.34	-23%
Core C&I	2.17	4.43	104%	0.85	3.11	266%
Natural Gas Vehicle	1.92	1.66	-13%	n/a	n/a	n/a
Non-core						
Non-core C&I	2.33	5.00	114%	n/a	n/a	n/a
Electric Generation	n/a	n/a	n/a	n/a	n/a	n/a

If we utilize SDG&E's current gas EPMC allocation methodology to assign gas related EE program costs, then most of these costs would be allocated to Residential customers even though Core C&I customers receive a higher share of the funding levels shown in Table 3. This outcome results in Residential customer's rates subsidizing the costs of EE program funding earmarked for Core C&I and Non-core C&I customers. SDG&E's proposed cost allocation proposal would better align the recovery of program funding with the beneficiaries of program funding and eliminate the cost cross subsidies as described above.

SDG&E's proposed cost allocation for its gas related EE program costs would also resolve a potential under collection problem associated with SDG&E's current PPP surcharge allocation. The current EPMC structure allocates approximately 9% of total EE program costs to the electric generation (EG) customer class, based on the EPMC factors adopted in SDG&E's last BCAP decision, D.00-04-060. Subsequently, the state legislature adopted AB 1002, which exempts EG customers from paying the PPP surcharge. The current cost allocation method results in a potential under collection for SDG&E, which would be recorded in the gas related

EE balancing account[8]. For example, $477,000 was allocated to EG customers in the development of 2005 PPP surcharge fees. However, SDG&E cannot collect this amount from EG customers, who are exempt from paying PPP surcharges pursuant to AB 1002. Therefore, the dollars allocated to the EG class will not be recovered in current rates and the resulting under collection would be recovered in future PPP surcharge fees, adding to the upward pressure on future PPP surcharge rates. This problem will be magnified in 2006 through 2008 as EE program budgets are substantially increased. Allocating the projected 2006-08 EE program budgets based on cost-causation will correct this problem[9].

Lastly, SDG&E's cost allocation proposal is consistent with Commission precedents for similar programs at the other California utilities. SoCalGas and PG&E both allocate EE funding using a cost-causation approach[10]. If SDG&E also uses this same approach, there would be a movement towards statewide consistency in EE program cost allocation. SDG&E therefore respectfully requests that the Commission adopt its proposed cost causation EE cost allocation method and EE cost allocation factors shown in Table 3 effective with the next annual Gas PPP Surcharge update effective January 1, 2006.

This concludes my prepared direct testimony.

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[8] An undercollection in the EE balancing account will depend on the actual revenues recovered through rates and program spending commitments.

[9] In D04-08-010, the Commission deferred the allocation to either SDG&E's next BCAP or other appropriate ratemaking proceeding. However, deferring the allocation to the BCAP will miss most, if not all of the 2006-08 program cycle, resulting in cross-subsidies by SDG&E's Residential customers and a large under collection in the EE balancing account.

[10] The Commission adopted a benefits allocation for SoCalGas and PG&E in Decisions D.93-12-043 and D.95-12-053, respectively.

QUALIFICATIONS

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

I began work at SoCalGas in 1997 and have held positions of increasing responsibilities in the Revenue Cycle Services, Mass Markets, and Regulatory Affairs departments. I have served in my current role as Economic Advisor since October 1, 2004. My current responsibilities include providing analytical support and direction to SoCalGas and SDG&E on gas rate design, cost allocation, balancing accounts, revenue requirements, rate adjustment mechanisms, industry restructuring, stranded cost recovery and other related issues.

I received a Bachelor of Arts degree in Economics in 1998 from the University of California, Irvine with honors. In 2003, I graduated from Yale University with a Master of Business Administration degree in Strategy and Operations.