

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

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Application No. 07-01-____
Exhibit No.: (SDGE-01) _____

**PREPARED DIRECT TESTIMONY
OF JEFFREY K. HARTMAN
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY**

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

JANUARY 31, 2007

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1 **II. GRC PHASE 2 APPLICATION OVERVIEW**

2 This application includes the traditional elements of GRC Phase 2 cost allocation and rate
3 design, as well as proposals for dynamic pricing to align SDG&E’s rates with the State’s policy
4 goals. The traditional elements include:

- 5 • Chapter 2 (Mr. Hansen) describes how SDG&E’s revenue allocation and rate
6 design principles balance the support for cost causation and rate impacts, and the
7 proposed methodology for implementing a reform of residential rates by reducing
8 the subsidies in Tiers 1 and 2;
- 9 • Chapter 3 (Mr. Katsapis) presents the sales forecast;
- 10 • Chapter 4 (Mr. Parsons) describes the marginal cost methodology and results;
- 11 • Chapter 5 (Mr. Parsons) applies the marginal cost to derive revenue allocations;
- 12 • Chapter 6 (Ms. Claffey) describes the residential, small commercial and
13 agriculture rate designs;
- 14 • Chapter 7 (Mr. Borden) describes the rate designs for medium and large
15 commercial customers; and,
- 16 • Chapter 8 (Ms. Fang) describes the rate design for Street Lighting customers.

17 In addition, the remaining portions of this application address SDG&E’s dynamic pricing policy,
18 design and implementation. This includes:

- 19 • Chapter 9 (Mr. Fong) describes the dynamic policies and linkage with SDG&E’s
20 AMI deployment plan;
- 21 • Chapter 10 (Mr. Magill) presents dynamic pricing rate designs;
- 22 • Chapter 11 (Mr. Velasquez) describes the implementation of the dynamic pricing
23 rates with customers;

- Chapter 12 (Mr. Jack) describes the Critical Peak Pricing (CPP) event triggers; and,
- Chapter 13 (Ms. Willoughby) presents the plan to conduct Measurement and Evaluation activities of these dynamic pricing tariffs.

III. THE ENERGY ACTION PLAN (EAP) REAFFIRMED THE STATE’S COMMITMENT TO COST BASED RATES, ENERGY EFFICIENCY AND DEMAND RESPONSE

The EAP noted that Californians pay higher utility rates than most other states in the nation. As a result, it encourages the State to reform its rate structures while providing consumers the tools to manage their energy usage. Specifically, the EAP seeks to “...create more transparency in consumer electricity rates, [and] adopt rates based on clear cost-causation principles...”¹ Concurrently, the EAP highlights the need for significant capital investments to augment the current electric infrastructure, and places prominence on a number of demand and supply elements, including energy efficiency and demand response.²

To meet these goals, SDG&E previously proposed additional energy efficiency and demand response programs, dynamic pricing tariffs, and AMI to provide customers with the tools to utilize these new programs and tariffs. This application further supports the goals of the EAP by proposing:

- revenue allocations based on cost causation;

¹ EAP II, page 9.

² EAP II, page 7.

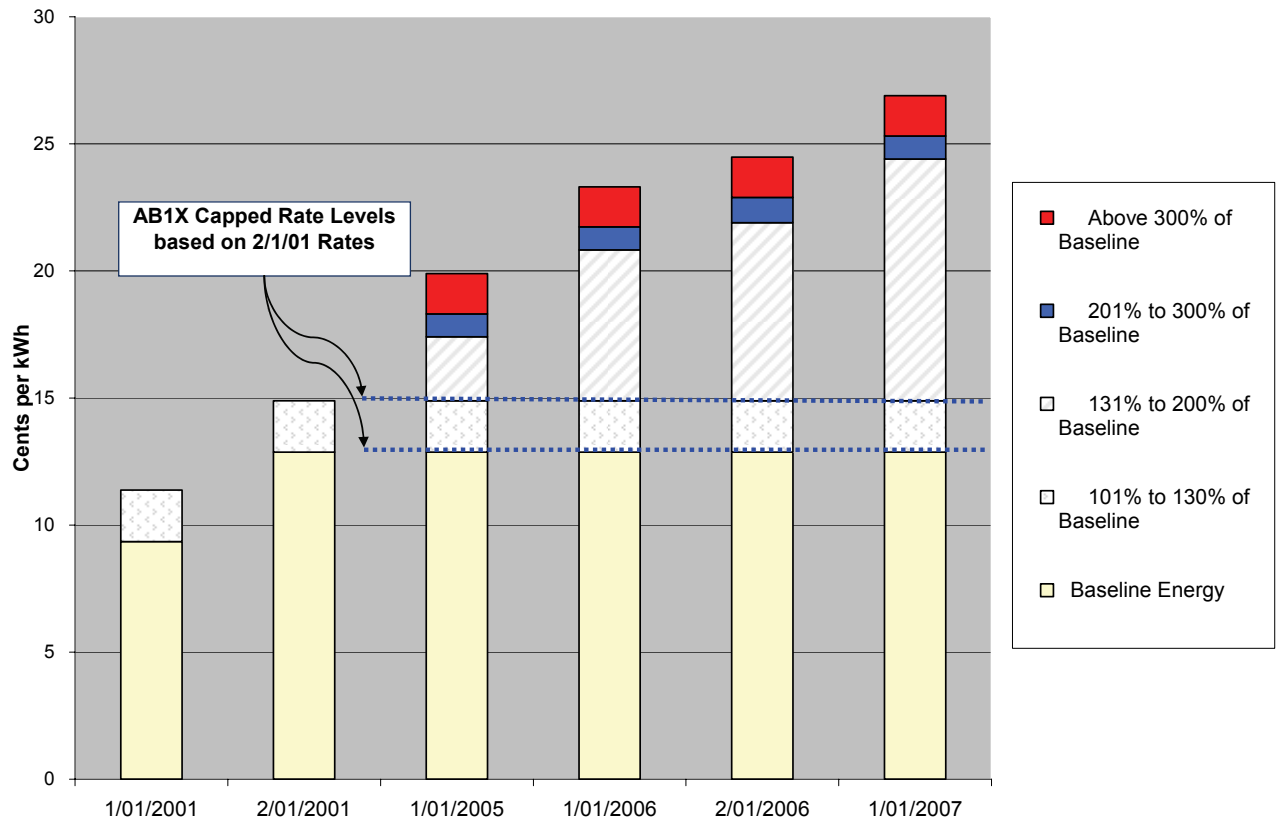
- rate mechanisms for customers that more clearly link their usage to the costs incurred through tariffs that introduce greater degrees of dynamic pricing -- in particular, CPP, Peak Time Rebates and Time Of Use (TOU) rates; and,
- a mechanism to reform the impact of the AB1X rate cap gradually to move residential rates toward a structure that reflects cost causation principles and supports energy efficiency and demand response objectives.

IV. THE CURRENT RESIDENTIAL RATE STRUCTURE UNDERMINES THE GOALS OF THE ENERGY ACTION PLAN (EAP)

One key element of current ratemaking significantly undermines the State's ability to meet the goals of the EAP—the AB1X provision that caps residential electric rates for usage up to #130 percent of baseline at February 1, 2001 rate levels. The AB1X rate cap was initially intended to protect residential customers against the cost consequences of the contracts entered into by the Department of Water Resources (DWR) during the energy crisis. Thus, residential customers are billed based on an aggregate of their monthly usage that does not correspond to the costs of providing that usage at the specific time of use. By capping the rates for the first two residential tiers, the AB1X rate cap has caused all increases in revenue requirements to be allocated to the upper tiers (Tiers 3-5), as shown in Table 1 below.

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Table 1: SDG&E Summer Season Rates By Usage Tier, 2001 - 2007



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3 Today, the rate cap's main effect is to shelter the majority of residential electric customers from
 4 such costs as the effects of inflation and costs for new infrastructure, renewables, and public
 5 purpose programs – none of which were the focus of AB1X.

6

7 **V. CONTINUING THE CURRENT CAPPING OF RESIDENTIAL RATES FOR**
 8 **USAGE UP TO 130 PERCENT OF BASELINE IS NOT IN THE PUBLIC**
 9 **INTEREST**

10 The level of subsidy provided by upper tier residential usage to usage protected under the
 11 AB1X rate cap (residential usage up to 130 percent of baseline) is enormous, undermining the
 12 implementation of the following key State policies:

- 1 • minimizing cross-subsidies that mask price signals;
- 2 • encouraging energy conservation and demand response;
- 3 • meeting new environmental goals; and
- 4 • promoting equitable rates.

5

6 a. Cross Subsidies

7 Residential consumers with usage in the lower tiers get the price signal that incremental
8 usage is priced well below cost. Conversely, consumers with higher tier usage get an artificially
9 inflated price signal that they should invest in non-cost-effective measures to reduce bills, based
10 on a rate that includes a cross-subsidy until the phase-out of the AB1X rate cap is implemented.
11 Both outcomes raise costs to the State consumers.

12

13 b. Energy Conservation and Demand Response

14 The AB1X rate cap subsidy reduces customers' incentives to participate in dynamic
15 pricing structures, such as CPP or TOU rates. This may frustrate demand reduction efforts,
16 potentially impacting service reliability to other customers, or cause the State to unnecessarily
17 increase investments in peaking generation to avoid any disruption that could have been avoided
18 by proper price signals.

19 Likewise, the AB1X rate cap is not a hidden conservation program. While the creation of
20 high upper tier rates may have a collateral, conservation-like effect, the major impact of the rate
21 cap is to cause customers to make economically counter-productive decisions. For example, the
22 rate cap gives low usage customers the false signal that additional energy use, including during
23 peak periods, is relatively inexpensive, while giving higher use customers incentive to pay
24 excessively to reduce metered load that could occur anytime, including off-peak.

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c. Environmental Goals

Meeting the State’s commitment to green house gas (GHG) reductions will be heavily dependent on the ability to promote energy conservation and efficiency enhancements, in particular, reduction of peak energy demand. Since GHG emissions from peaking generation are higher than baseload generation, lack of progress in managing peak demand will undermine efforts to meet these aggressive reduction targets.

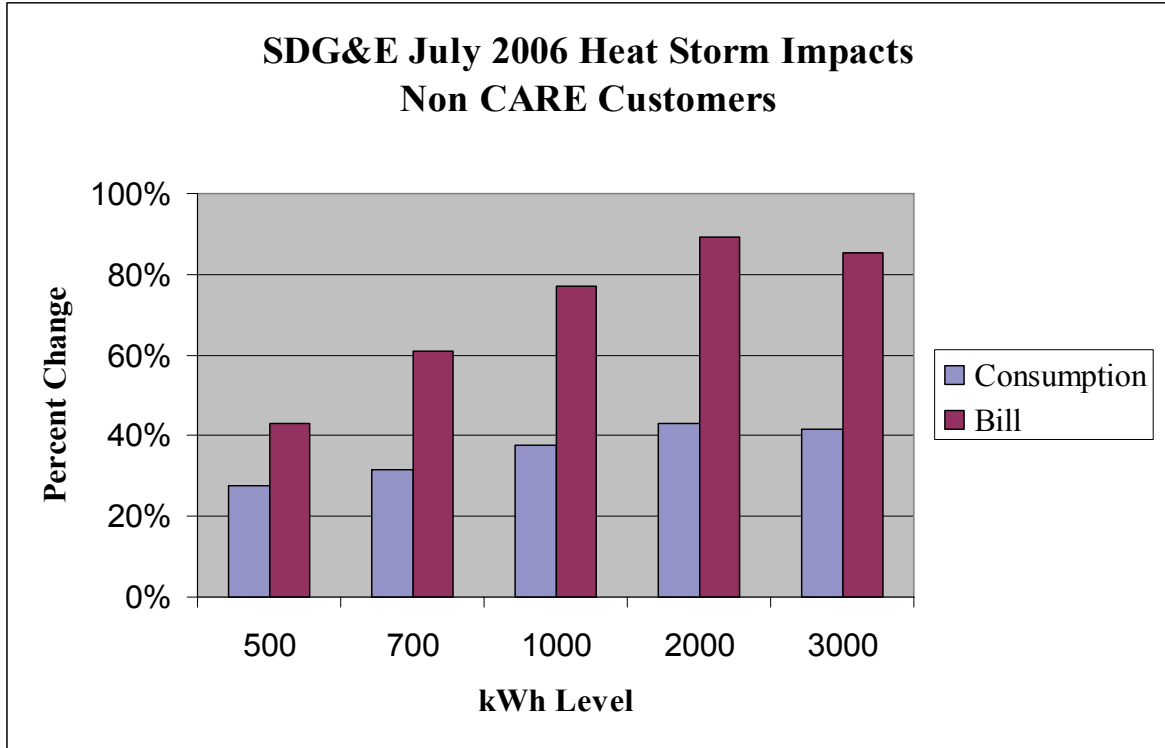
d. Rate Equity

Depending on the assigned baseline allowances, the AB1X rate structure is generally inequitable. These distorted rates adversely impact customers depending on the climate zone in which they reside. Residents in warmer inland areas bear a disproportionate burden. As Table 2 shows, when faced with events that increase usage suddenly, such as the weather conditions during July 2006, customers with their incremental usage billed above Tier 2 saw a tremendous increase in their bills that was significantly disproportionate to their usage.

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Table 2: Comparison of Change in Usage and Resulting Bill Impact



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Moreover, the rate cap also unfairly places the burden of meeting energy efficiency and demand response goals upon non-residential customers. The residential rate structure limits the effectiveness of utility demand response and energy efficiency programs, placing a greater burden upon non-residential customers to meet these goals. In effect, the “playing field is not level” nor conducive to non-residential customer support for dynamic pricing proposals.

In essence, the rate cap is no longer accomplishing the AB1X legislative objectives, but instead is causing other, unforeseen problems. If the Commission does not address this structural problem, the challenge will increase over time. Table 3 illustrates how the disparity between rates for Tier 1 and 2 usage and rates for usage above 130 percent of baseline can increase absent Commission action.

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1 Table 3: The Effects Of Time And Small Increases In Residential Revenue
 2 Requirements On Residential Tier Rates

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	2008 Rates Absent Reform Of Rate Caps ³ [¢/kwh]	Rates in 2016 after 3% Annual Inflation [¢/kwh]	Percent Change Compared To 2008 Rates Absent Reform of Rate Caps
Tier 1	12.9	12.9	0%
Tier 2	14.9	14.9	0%
Tier 3	28.7	61.5	114%
Tier 4	29.6	63.4	114%
Tier 5	29.6	63.4	114%

4
 5 While Table 3 is not intended as a forecast of residential rates in 2016, it clearly shows
 6 that if the revenue allocation to residential customers increases three percent annually, absent
 7 reform of current residential rates, the entire amount would be allocated to usage above 130
 8 percent of baseline, i.e., Tiers 3, 4 and 5. This would exacerbate the disparity between “capped”
 9 and “uncapped” rates.

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 11 **VI. THE COMMISSION SHOULD INITIATE RESIDENTIAL RATE REFORM**

12 As a matter of policy, the Commission must take action now to reduce these unintended
 13 outcomes and the direct conflict with State policy objectives. The Commission should begin the
 14 process of reducing the level of the AB1X rate cap subsidy of Tier 1 and 2 usage by the upper

³ Based on implementation of the GRC Phase 1 rates in 2008.

1 tiers. As described in the testimony of Mr. Hansen, this can be accomplished by reducing the
2 subsidy provided to Tier 1 and 2 usage by the upper tiers in proportion to the decrease in the
3 DWR contract purchase commitments.⁴ This proposed reduction in the AB1X rate cap subsidy
4 would gradually reverse the cross-subsidy within the residential class, avoid subsequent rate
5 shock, and would reverse a rate structure that undermines important State policy goals and
6 initiatives. Absent initiating reform of the residential rate caps in this proceeding, the
7 Commission will be subsequently faced with implementing significant reallocation of the
8 embedded subsidies to usage below 130 percent of baseline. This could lead to significant rate
9 shock to some customers that would have been avoided by the gradual reform of residential
10 rates, or, in the absence of any reform, continuing a rate structure that undermines the State's
11 energy policy goals.

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13 **VII. SUMMARY AND RECOMMENDATIONS**

14 SDG&E's application seeks Commission approval to continue to implement cost based
15 rates. The Commission needs to consider the interdependence of implementing dynamic pricing
16 policies with achieving critical State energy policy goals. Since the AB1X residential rate cap
17 undermine implementation of cost based ratemaking principles, and important State objectives,
18 SDG&E seeks approval to initiate a reform of residential rates in this proceeding.

19 This concludes my prepared testimony.

⁴ As noted in Mr. Hansen's testimony, this roll-off can be based on the Commission's allocation of the CDWR contracts to SDG&E, or the Commission may choose to adopt a policy approach that aggregates the contracts for SDG&E with those allocated to SCE and PG&E, and then implement a consistent, state-wide roll-off of the rate caps.

1 **VIII. QUALIFICATIONS OF JEFFREY K. HARTMAN**

2 My name is Jeffrey Hartman. I am employed by SDG&E and Southern California Gas
3 Company (SoCalGas) as Director, Regulatory Policy and Analysis in the Regulatory Affairs
4 Department. My business address is 555 West Fifth Street, Los Angeles, California, 90013-
5 1011.

6 I received a Master of Arts degree in International Affairs from George Washington
7 University in 1979 and a Bachelor of Arts degree in Political Science with a Specialization in
8 International Relations from the University of California, Los Angeles, in 1977. From 1979 to
9 1985 I held the position of International Economist in the U.S. Department of Energy. I joined
10 SoCalGas in 1985 as a Petroleum Analyst. I have held several positions of increasing
11 responsibility in the Regulatory Affairs and Customer Services departments related to
12 developing regulatory policies and to providing of utility services to various customers of
13 SoCalGas and SDG&E. I assumed my present position in November, 2005.

14 I have previously testified before the Commission.