

Proceeding No.: A.10-07-_____
Exhibit No.: _____
Witness: Robert W. Hansen

Application of San Diego Gas & Electric Company (U 902 E) for Approval of its Proposals for Dynamic Pricing and Recovery of Incremental Expenditures Required for Implementation.

**PREPARED DIRECT TESTIMONY OF
ROBERT W. HANSEN
CHAPTER 4
SAN DIEGO GAS & ELECTRIC COMPANY**

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA
July 06, 2010**



TABLE OF CONTENTS

I.	OVERVIEW AND PURPOSE.....	1
	A. Overview of Critical Peak Pricing – Default (CPP-D) Rate Design Methodology	4
	B. Capacity Reservation Charge	5
	C. Energy Rates.....	5
II.	PROPOSED DEFAULT DYNAMIC PRICING DESIGN FOR LESS THAN 20KW NON-RESIDENTIAL CUSTOMERS	7
	A. Rate design variations of PSW versus CPP-D.....	8
	B. Implementation of PSW	11
III.	Opt-Out TOD Commodity rates for nonresidential customers WITH DEMANDS LESS THAN 20 kW	12
IV.	OPTIONAL PEAKSHIFT AT HOME AND OPTIONAL TOD COMMODITY RATES FOR RESIDENTIAL CUSTOMERS (PSH AND EECC-DR-TOD-C)	14
V.	PROPOSAL FOR EXPANDED LOW-INCOME (SCHEDULE E-LI)	18
VI.	APPLICABILITY OF PROPOSALS BY RATE SCHEDULE	18
VII.	CUSTOMER BILL IMPACT ANALYSES	18
VIII.	CUSTOMER BILL AND AVERAGE RATE IMPACTS OF PROPOSED REVENUE REQUIREMENT INCREASE.....	19
IX.	SUMMARY AND RECOMENDATIONS	20
X.	STATEMENT OF QUALIFICATIONS	22

1 **PREPARED DIRECT TESTIMONY**
2 **OF**
3 **ROBERT W. HANSEN**
4 **CHAPTER 4**

5 **I. OVERVIEW AND PURPOSE**

6 The purpose of my testimony is to sponsor San Diego Gas & Electric Company's
7 (SDG&E) rate design methodology for each of the various rate proposals in this proceeding.
8 Overarching policies that were followed in developing the rate designs are described in the
9 testimonies of SDG&E witnesses Joseph S. Velasquez (Chapter 1), Glen C. Breed (Chapter 2)
10 and William G. Saxe (Chapter 3). My testimony presents rate design proposals related to the
11 following:

- 12 (1) PeakShift at Work (PSW) Rate Design for small non-residential customers
13 with demands less than 20kW, identified as SDG&E's proposed Schedule
14 PSW;
- 15 (2) TimeOfDay (TOD) commodity rates for nonresidential customers with
16 demands less than 20kW, identified as Schedules EECC-AS-TOD and EECC-
17 PA-TOD;
- 18 (3) Optional PeakShift at Home (PSH) rates for residential customers, identified
19 as SDG&E's proposed Schedule PSH;
- 20 (4) Optional TOD commodity rates for residential customers, identified as
21 Schedule EECC-DR-TOD-C;
- 22 (5) New TOD Utility Distribution Company (UDC) schedule that applies to
23 customers opting into PSH or EECC-DR-TOD-C commodity rates, identified
24 as Schedule DR-TOD-C.
- 25 (6) New UDC rate schedules for non-residential customers currently served under
26 Schedules A, AD, A-TOU, and PA identified as Schedules AS-TOD, AD-
27 TOD, A-TOD and PA-TOD.

1 (7) Propose that TOD commodity rates be applied to medium/large (M/L)
2 customers on Schedules AD, A-TOU and PA, that opt-out of SDG&E's
3 current Critical Peak Pricing – Default service (CPP-D);

4 (8) Typical bill and class-average rate impacts associated with the proposed
5 annual revenue requirement increases.

6 My testimony will describe the rate structure variations and map SDG&E's commodity
7 rate options, including proposed PSW and PSH rates, to the various rates schedules. I also
8 present an analysis of residential and small commercial customer bill impacts.

9 In this proceeding, SDG&E's primary rate design proposal is related to changes to the
10 category of commodity. To facilitate implementation of the optional residential commodity rate
11 options, SDG&E also proposes a different method of passing through Total Rate Adjustment
12 Component (TRAC) charges and credits that are associated with Assembly Bill (AB) 1X rate
13 caps. No changes are proposed for transmission or reliability service (RS) rates that are subject
14 to FERC jurisdiction. Also, no changes are proposed to the categories of Distribution, Public
15 Purpose Program (PPP), nuclear decommissioning (ND), or Competition Transition Charges
16 (CTC).

17 SDG&E proposes no rate structure changes that would require new metering prior to
18 Advanced Meter Infrastructure (AMI or Smart Meter) implementation. Furthermore, SDG&E
19 proposes no change to its existing allocation for distribution and commodity revenue
20 requirements, marginal costs or the 2009 test year sales forecast as approved by the Commission
21 in its adoption of the settlement agreement in SDG&E's Rate Design Window (RDW)
22 proceeding (Decision 09-09-036).

23 Pending changes in electric rates, such as those adopted in future rate-related proceedings
24 will cause variations in present bill amounts and therefore rate impacts and customer bill impacts
25 will differ somewhat from those presented in this proceeding. Unless otherwise described, rates
26 and tariff changes approved in this proceeding are proposed to be implemented in 2013. The

1 first-year rate change resulting from SDG&E’s proposed revenue requirement request should be
2 implemented concurrent with other rate changes that may occur in 2011.

3 The structure of my testimony is as follows:

- 4 • Section II: describes SDG&E’s rate proposal for PSW for nonresidential
5 customers with demands less than 20kW;
- 6 • Section III: describes SDG&E’s proposal for opt-out EECC-AS-TOD and EECC-
7 PA-TOD Commodity rates for nonresidential customers with demands less than
8 20kW;
- 9 • Section IV: describes SDG&E’s rate proposal for optional PSH and EECC-DR-
10 TOD-C commodity rates for residential customers, and SDG&E’s proposal for
11 modifying the way TRAC charges and credits are passed through to residential
12 customers opting for service under PSH and EECC-DR-TOD-C commodity rates;
- 13 • Section V: describes SDG&E’s proposal to not “default” non-residential CARE
14 customers to PSW but allow them to opt-in to the dynamic rate;
- 15 • Section VI: provides a summary of the applicability of SDG&E’s proposals by
16 rate schedule;
- 17 • Section VII: describes estimated customer bill impacts of the PSW and EECC-
18 AS-TOD rate proposals;
- 19 • Section VIII: describes estimated first-year customer bill impacts and annual
20 class-average rate impacts associated with the proposed revenue requirement
21 change;
- 22 • Section IX: provides a summary of recommendations.

1 **A. Overview of Critical Peak Pricing – Default (CPP-D) Rate Design**

2 **Methodology**

3 SDG&E's currently effective non-residential rate design methodology for CPP-D was
4 approved in SDG&E's GRC Phase 2 proceeding in Application 07-01-047. Rate design methods
5 and implementation details for CPP-D were established by an All-Party/All-Issue Settlement on
6 November 1, 2007, which was approved by the Commission in Decision 08-02-034. In this
7 proceeding, SDG&E proposes differing approaches to dynamic pricing for small non-residential
8 and residential customers compared to the CPP-D approach currently approved for medium and
9 large (M/L) non-residential customers.

10 SDG&E's design of CPP-D rates is intended to be revenue-neutral with non-CPP
11 commodity rates that are applied to the M/L non-residential customer class. Schedule CPP-D
12 rates are applicable to non-residential customers with demands equal to or greater than 20 kW.
13 In designing revenue-neutral commodity rates, SDG&E includes all customers served under
14 Schedules AL-TOU, AY-TOU, A6-TOU and PA-T-1 rate schedules, as well as customers that
15 would qualify for Schedule AL-TOU but are currently served on Schedules A-TOU, AD or PA.

16 The characteristics of the current CPP-D rate structure include: a Capacity Reservation
17 Charge (CRC), a CPP energy rate applicable to load in excess of the CRC demand level, and
18 TOD energy charges applicable to on-peak, semi-peak and off-peak periods. Each of these
19 components is discussed in more detail below.

20 In developing CPP-D rates, SDG&E uses an estimate of summer on-peak energy usage
21 (11 a.m. – 6 p.m.) for the nine (9) highest system demand days, scaled to the currently adopted
22 2009 test year sales forecast period. Summer on-peak energy billing determinants are reduced to
23 account for the CPP event period sales and CRC assumptions.

24 Load information for 2005 was used to estimate the average hourly demand level during
25 the top nine (9) summer days for the greater than or equal to 20 kW customer class. This

1 average peak demand level is then multiplied by a marginal generation capacity cost to
2 determine marginal cost revenue associated with generation capacity. This marginal cost
3 revenue is then divided by CPP-D forecast sales, and added to an estimate of summer on-peak
4 marginal energy cost, to determine a total CPP rate per kWh. The CPP-D energy rate is based on
5 a marginal generation capacity cost assumption of \$67 per kW per year consistent with
6 SDG&E's GRC Phase 2 Settlement on November 1, 2007 in D.08-02-034.

7 **B. Capacity Reservation Charge**

8 Consistent with SDG&E's GRC Phase 2 Settlement, an optional Capacity Reservation
9 Charge (CRC) is offered with CPP-D rates. The CRC component allows customers to manage
10 their bill fluctuation by paying for load that cannot be reduced during CPP events by means of a
11 predictable monthly demand charge throughout the year. When a CPP event is called, customers
12 pay the CPP-D Peak Period energy rate for only usage in excess of their reserved demand levels.
13 The otherwise applicable on-peak energy rate will apply to usage associated with the customer's
14 demand that is less than or equal to the CRC level. The CRC is also calculated based on a
15 marginal generation capacity cost of \$67 per kW per year, divided by 12 months per year. In
16 estimating the amount of revenue recovered by the CRC rate component the current
17 methodology SDG&E currently assumes a default value of fifty (50) percent of the customer's
18 applicable maximum demand.

19 **C. Energy Rates**

20 **1. CPP-D Energy Rate**

21 As previously described, the CPP-D Peak Period energy rate is calculated to
22 ensure recovery of the CPP marginal capacity cost revenues during CPP event hours, in
23 addition to on-peak marginal energy costs. The CPP energy rate equals the CPP
24 marginal capacity cost revenues, divided by forecasted billed CPP usage, plus the

1 summer on-peak marginal energy rate. The CPP-D Peak Period energy rate is reduced to
2 reflect the share of generation capacity revenues associated with the CRC.

3 **2. On-peak, semi-peak and off-peak rates**

4
5 The CPP-D on-peak, semi-peak and off-peak rates are based on the opt-out
6 commodity rates, adjusted by an equal-cent-per-kWh to maintain revenue neutrality.
7 This methodology, also determined by the Settlement in SDG&E's GRC Phase 2
8 proceeding, applies the same adjustment to each energy rate to maintain the TOD rate
9 differentials.

10 **3. Ratemaking treatment of CPP-D over/undercollections**

11 The rates for CPP-D are currently based on an assumption that nine (9) CPP
12 Event Days would be called during the year and the assumption that customers would
13 specify a Capacity Reservation level of fifty (50) percent of their maximum on-peak
14 summer demand. To the extent the actual number of events and CRC elections differ
15 from the rate design assumptions, these factors will contribute to higher than forecast or
16 lower than forecast commodity revenues from the CPP-D rate. This over- or under-
17 collection in commodity revenues is reflected in the Energy Resource Recovery Account
18 (ERRA). Pursuant to Decision 08-02-034, which adopted SDG&E's 2008 GRC Phase 2
19 Settlement, SDG&E calculates the revenue imbalance attributable to CPP-D annually,
20 and directly assigns this over- or under-collection to the M/L Commercial & Industrial
21 (C&I) customer class. The GRC Phase 2 Settlement Agreement (Section II, Critical Peak
22 Pricing) states:

23 "CPP imbalances shall be contained within the Commercial and Industrial
24 (C&I) Customer class. Resulting over or under collections shall be allocated to
25 only the following C&I rate components on an equal percentage basis:

- 1 a. For non-CPP C&I tariffs the allocation will be limited to
2 summer on-peak and semi-peak energy rates and summer and
3 winter on-peak demand charges.
- 4 b. For Default CPP tariffs the allocation will be limited to the CPP
5 period, summer on-peak and semi-peak energy rates and capacity
6 reservation charges.”

7 In 2009, only eight (8) CPP Event Days were called, and customers designated CRC
8 levels that were significantly lower than the rate design assumption of fifty (50) percent of
9 maximum summer on-peak demand. The combination of these two factors resulted in lower
10 than forecast commodity revenues from the CPP-D rate. Commodity rate adjustments for CPP-
11 D undercollections were filed by SDG&E in Advice Letter 2135-E on December 29, 2009, and
12 became effective January 1, 2010. The change in the amortization amounts in 2008 versus 2009
13 resulted in a net decrease of \$11.4 million to electric commodity rates for the C&I class of
14 customers. Future CPP-D over- or under-collections will be reflected in commodity rate changes
15 effective January 1 of each year.

16 **II. PROPOSED DEFAULT DYNAMIC PRICING DESIGN FOR LESS THAN 20KW**
17 **NON-RESIDENTIAL CUSTOMERS**

18 SDG&E proposes that dynamic pricing applicable to customers with demands less than
19 20kW be tempered by the assumption that this customer segment will have less ability to
20 respond to demand response price signals. The basis for the policy directives that have impacted
21 SDG&E’s PSW rate design proposals are more thoroughly discussed in the testimony of
22 Velasquez (Ch. 1) and Breed (Ch. 2). Illustrative PSW commodity rates applicable to customers
23 with demands less than 20kW are shown in Attachment RWH-1, Column F.

1 **A. Rate design variations of PSW versus CPP-D**

2 SDG&E’s proposed rate design for PSW is substantially different than the methodology
3 currently used for CPP-D. PSW rates are designed for non-residential customers with demands
4 less than 20kW. Since this customer segment is assumed to have a reduced ability to respond to
5 price signals, the PSW rate structure has been adjusted as follows:

6 First, SDG&E proposes that PSW PeakShift Period charges be applied as a rate “add”
7 to the otherwise applicable TOD energy rates. In other words, on an event day a PeakShift
8 Period adder would be applicable to all energy use occurring from 11 a.m. to 6 p.m. The charges
9 associated with the PeakShift Period adder would therefore be in addition to monthly charges
10 based on the applicable TOD energy rates. This methodology differs from CPP-D in which the
11 CPP-D rates substitute for the applicable on-peak, off-peak, or semi-peak TOD energy rates on
12 event days. SDG&E believes that the PeakShift Period adder approach will be easier for
13 customers to understand and remember. Once a customer is familiar with the underlying PSW,
14 opt-out EECC-AS-TOD or opt-out EECC-PA-TOD energy rate structure, a customer would
15 simply need to be cognizant that energy charges will be higher on a ReduceYourUse Day, from
16 11 a.m. to 6 p.m., by the PeakShift Period adder.

17 Second, SDG&E has designed the PeakShift Period adder to be analogous to the On-Peak
18 Demand Charge (which is termed “SeasonalDemand Charge” in this application and for
19 customer communication purposes) under the opt-out EECC-AS-TOD and EECC-PA-TOD
20 rates. In other words, using forecast sales determinants the annual revenue collection from the
21 SeasonalDemand Charge would be equal to the amount of revenue collected by the PeakShift
22 Period adder. Since the PeakShift Period adder is designed to be equivalent to the
23 SeasonalDemand Charge, the TOD energy rates can also be set exactly the same for PSW,
24 EECC-AS-TOD and EECC-PA-TOD. This rate comparability should also simplify customer
25 understanding and communication of the PSW, opt-out EECC-AS-TOD and opt-out EECC-PA-
26 TOD rate structures.

1 Third, since the existing Schedules A and PA commodity rates are flat rates without any
2 TOD differential, SDG&E proposes that TOD rates for PSW and the opt-out EECC-AS-TOD
3 and EECC-PA-TOD commodity rates for nonresidential customers also have a relatively flat
4 TOD rate structure. Reduced TOD price differentials will allow initial implementation of PSW
5 and the opt-out EECC-AS-TOD and EECC-PA-TOD rates with relatively minor customer bill
6 impacts. The opt-out EECC-AS-TOD and EECC-PA-TOD commodity rates are discussed in
7 greater detail below in Section III.

8 Fourth, the rate structure and underlying generation marginal costs are the same as for
9 Schedule CPP-D. However, for customers with demands of less than 20 kW, since SDG&E has
10 incorporated a reduced SeasonalDemand Charge in the opt-out EECC-AS-TOD and EECC-PA-
11 TOD rate structures, the resulting revenue shortfall is collected in TOD energy rates that are
12 scaled to be overall revenue-neutral. As previously described, the opt-out EECC-AS-TOD and
13 EECC-PA-TOD energy rates and PSW TOD rates (not including the PeakShift Period adder) are
14 equivalent.

15 Fifth, the development of the PeakShift Period adder differs from the method used to
16 develop Schedule CPP-D Period rates. Schedule PSW is designed to recover generation capacity
17 costs and marginal energy costs associated with Schedule A customers, which typically have a
18 different load profile than that of customers with demands greater than 20 kW. A cost-based
19 PeakShift Period adder would result in total PSW PeakShift Period rates that would be
20 substantially higher than that of CPP-D. In the proposed PSW rate design methodology the
21 SeasonalDemand Charge and PeakShift Period adder are set at approximately 15% of a cost-
22 based level. Setting the PeakShift Period adder at a reduced level is intended to mitigate
23 potential customer bill impacts and to maintain customer participation in the PSW program. As
24 described previously, to maintain consistency in the designs of PSW and the opt-out EECC-AS-
25 TOD and EECC-PA-TOD rates, the PeakShift Period adder is designed to recover an equivalent

1 amount of revenue as the opt-out SeasonalDemand Charge revenue, based on forecast
2 determinants.

3 Sixth, as further described in the testimony of Breed (Ch. 2) SDG&E proposes a 2-period
4 TOD structure in both the summer and winter periods, and SDG&E has incorporated October in
5 the summer rating period. The proposed simplified 2-period structure would apply to PSW and
6 opt-out TOD rates for commercial customers with demands less than 20 kW. Underlying costs
7 of providing service would continue to be estimated based on SDG&E's currently-adopted 3-
8 period TOD definition applicable to commercial & industrial customers. For rate simplicity
9 reasons a 2-period TOD rates structure would be applicable to small commercial tariffs and
10 customer bills. In the summer rating period, the semi-peak and off-peak costing periods
11 (including holidays) would be combined and designated as an off-peak rating period, with all
12 other summer hours designated as on-peak. In the winter rating period, the weekday on-peak
13 and semi-peak costing periods would be combined and designated as an on-peak rating period,
14 with all other hours (including weekends and holidays) designated as off-peak.¹

15 Seventh, SDG&E does not propose a CRC option for PSW.

16 Eighth, as previously described, total PSW rates during PeakShift Periods are not
17 proposed to be set at the full cost-based development. Consistent with SDG&E's intent of
18 mitigating customer bill impacts, the TOD price differentials are set at reduced levels compared
19 to cost-based estimates.

¹ In SDG&E's last GRC Phase 2 (D.08-02-034), SDG&E proposed to eliminate the winter on-peak period for nonresidential customers once their summer period is changed to include the month of October. In this application SDG&E has incorporated both the seasonal change and 2-period TOD definition in its proposal for PSW and opt-out TOD rates applicable to small commercial customers. SDG&E plans to assess its proposed and existing TOD periods applicable to other customer classes as part of the next GRC Phase 2 or future rate design proceeding.

1 Ninth, modifying the seasonal rating period also has a minor impact on seasonal UDC
2 rates. Therefore, in developing small commercial customer bill impact comparisons SDG&E has
3 redesigned the distribution rates of Schedule A to reflect updated seasonal billing determinants.

4 Finally, to preserve the proposed price relationships within PSW rates, SDG&E proposes
5 that subsequent commodity revenue requirement changes be applied by means of equal
6 percentage adjustments to all components, including the PeakShift Period adder.

7 **B. Implementation of PSW**

8 **1. Other Rate Design Elements of PSW**

9 SDG&E's basis for rate development of PSW is Schedules A and PA, which are
10 SDG&E's standard rate schedules applicable to customers in the Small Commercial and
11 Agricultural classes. To preserve the authorized class allocation for commodity
12 revenues, upon implementation, SDG&E proposes that PSW and the opt-out EECC-AS-
13 TOD and EECC-PA-TOD commodity rates maintain revenue neutrality with the current
14 design of Schedules A commodity rates.

15 PSW rates are proposed to be identical for all applicable rate schedules for
16 nonresidential customers with demands less than 20 kW. For example, the same PSW
17 rates apply to Schedules A, PA and to AL-TOU for customers with demands less than 20
18 kW.

19 Although current commodity allocation factors differ slightly among the major
20 customer classes to reflect variations in class-average load shapes, SDG&E does not
21 currently have the TOD and CPP billing determinants that would be necessary for class-
22 specific rate designs for customers with demands less than 20kW. SDG&E expects that
23 PSW and EECC-AS-TOD rate differentiation by major customer class will be possible
24 with SDG&E's AMI Smart Meter implementation and future sales forecasts, and
25 SDG&E may therefore propose PSW and EECC-AS-TOD rate differentiation by major
26 customer class in a future rate proceeding.

1 Variations in PSW revenue collection will occur due to sales variations,
2 differences in the number of event days, as well as from various rate design assumption
3 differences. SDG&E proposes that PSW over- and under-collections be calculated and
4 collected from the PSW eligible group of customers annually by means of a single factor
5 adjustment to commodity rates. SDG&E proposes that a simplified factor adjustment be
6 applied rather than the more-complex method applicable to CPP-D over- and under-
7 collections.

8 **2. Exclusion of Traffic Control Devices from PSW**

9 SDG&E proposes that customers served under Schedule A-TC (Traffic Control
10 Service) not be defaulted to PSW. Schedule A-TC customers would continue to be
11 subject to a non-TOD, seasonally differentiated, cent per kWh commodity rate structure.
12 For Schedule A-TC customers that may benefit under either the PSW or Opt-Out TOD
13 commodity rate structures (or CPP-D rate structure for that matter), customers would
14 need to switch from Schedule A-TC to Schedule AS-TOD (or Schedule AL-TOU).

15 **III. OPT-OUT TOD COMMODITY RATES FOR NONRESIDENTIAL CUSTOMERS**
16 **WITH DEMANDS LESS THAN 20 KW**

17 SDG&E's proposed rate design for opt-out EECC-AS-TOD and EECC-PA-TOD commodity
18 rates for nonresidential customers with demand less than 20 kW is substantially different than the
19 methodology for existing EECC rates applicable to Schedule AL-TOU. Small non-residential
20 opt-out commodity rates (EECC-AS-TOU for small commercial and EECC-PA-TOD for
21 agricultural) incorporate the following adjustments:

22 (1) The rate design addresses reduced ability of less than 20 kW nonresidential
23 customers to respond to price signals, as discussed in the testimony of SDG&E
24 Velasquez (Ch. 1) and Breed (Ch. 2):

25 a. TOD differentials are reduced from cost-based price differentials;

b. The SeasonalDemand Charge is also set at a level that is lower than the cost-based level, with the proposed rate being substantially lower than for customers with demands equal to or greater than 20 kW; and

(2) The SeasonalDemand Charge is designed to recover the same revenue as the PSW PeakShift Period adder:

a. The PeakShift Period adder is set at a fraction of the cost-based level, and the SeasonalDemand Charge will recover an equivalent amount of revenue using forecast billing determinants.

b. TOD energy charges are set to the same rates as PSW, such that revenue shortfalls resulting from setting the SeasonalDemand Charge at a reduced level are recovered through adjustments to summer energy charges.

c. As with PSW, remaining capacity costs would be recovered in summer on-peak energy charge calculations in a cost-based version, but TOD price differentials are reduced to mitigate customer bill impacts.

Consistent with the design of PSW rates, SDG&E’s proposed opt-out EECC-AS-TOD and EECC-PA-TOD commodity rates are initially designed to be revenue-neutral with SDG&E’s standard Small Commercial rate schedule, Schedule A which is the utility’s standard tariff for non-residential customers with demands less than 20 kW. The current commodity rate for Schedule A customers is a flat seasonal rate with the summer season defined as the five-month season of May through September. The proposed TOD periods and seasons are as follows:

Summer	May through October	
On-Peak	11 am – 6 pm	Weekdays Excluding Holidays
Off-Peak	All Other Hours	
Winter	October through April	
On-Peak	6 am – 10 pm	Weekdays Excluding Holidays
Off-Peak	All Other Hours	
PeakShift Period	11 am – 6 pm	Any Day of the Year, on ReduceYourUse Days

1 Illustrative opt-out EECC-AS-TOD and EECC-PA-TOD commodity rates applicable to
2 customers with demands less than 20 kW are shown in Attachment RWH-1, Column G.

3 Attachment RWH-2 illustrates unbundled rate components of: (1) currently effective
4 Schedule A with its currently effective seasonal commodity rates, (2) Schedule A rates when
5 combined with PSW commodity rates, and (3) Schedule A rates when combined with EECC-AS-
6 TOD commodity rates. Each of these rate options are designed to be revenue-neutral using
7 current Schedule A billing determinants and estimated Schedule A usage by TOD period.

8 Consistent with SDG&E's proposal for a new Schedule AS-TOD, SDG&E also proposes new
9 rate schedules be implemented for customers served under closed Schedules AD (with demands
10 20 kW up to 500 kW) and A-TOU (with demands less than 40 kW), and for agricultural
11 customers served under Schedule PA (with demands up to 500 kW). The proposed service
12 offerings would be named Schedules AD-TOD, A-TOD and PA-TOD, respectively. These new
13 UDC rate schedules would be structured to accommodate TOD pricing but would have no
14 impact on total UDC rate levels as compared to current Schedules AD, A-TOU and PA. The
15 new schedules would enable TOD UDC rate structures to be combined with TOD commodity
16 rates that would be identified as EECC-AD-TOD, EECC-A-TOD and EECC-PA-TOD.

17 **IV. OPTIONAL PEAKSHIFT AT HOME AND OPTIONAL TOD COMMODITY**
18 **RATES FOR RESIDENTIAL CUSTOMERS (PSH AND EECC-DR-TOD-C)**

19 The vast majority of SDG&E's residential customers are currently served under Schedule
20 DR which is comprised of a four-tier structure for Utility Distribution Company (UDC) charges,
21 and a flat, but seasonal, rate structure for commodity charges. As described in the testimony of
22 Saxe (Ch. 3), SDG&E proposes implementation of an optional PSH commodity rate and an
23 optional EECC-DR-TOD-C commodity rate.

24 To promote rate simplicity and to ease customer understanding of TOD and dynamic
25 pricing structures, SDG&E proposes that 4-tier UDC rates be changed to a non-tiered UDC
26 structure, with line-item credits for baseline usage and up to 130 percent of baseline usage. The

1 end result, when line-item credits are included, would be a 3-tier rate structure. To provide
2 customers with similar AB1X and SB 695 rate capping benefits, the line-item bill credits would
3 be designed to produce the exact same total UDC rates for baseline usage and for usage up to
4 130 percent of baseline allowances as their otherwise applicable tiered rate schedule.

5 Incorporating line-item credits instead of the current multi-tiered UDC rate structure will
6 allow UDC rates to be presented the same within each TOD period. The line-item credits would
7 substitute for the current negative Total Rate Adjustment Component (TRAC) rates for up to 130
8 percent of baseline usage that are currently included on customers' bills as part of the PPP line-
9 item.

10 Moving the AB1X related capping benefits to line-item credits will allow TRAC charges
11 (that recover the AB1X rate subsidies) to be flat across each TOD period. SDG&E proposes that
12 a non-seasonal TRAC charge per kWh, with no variation by TOD period, be incorporated in the
13 UDC rates for recovery of AB1X rate subsidies.

14 For residential customers opting for PSH or optional EECC-DR-TOD-C rates, total rate
15 levels will be allowed to differ due to TOD commodity pricing, but SDG&E's TRAC credit
16 methodology will ensure that the customers' benefit from AB1X rate capping up to 130 percent
17 of baseline usage is the same dollar amount as under current Schedule DR tiered rates. For
18 customers with total usage less than 130 percent of baseline allowances, SDG&E's proposed
19 TRAC and credit methodology will ensure no change to total UDC rate levels or UDC bill
20 amounts (versus Schedule DR or DR-LI) for customers with usage up to 130 percent of baseline
21 allowances. Total bill amounts for all levels of monthly usage will differ due to application of
22 TOD commodity rates.

23 For customers with monthly usage in excess of 130 percent of baseline allowances, total
24 bill amounts will also differ slightly due to SDG&E's proposal to consolidate Tier 3 and Tier 4
25 UDC rates. Upper tier total UDC rates levels will differ under SDG&E's proposed methodology
26 since SDG&E is proposing non-seasonal TRAC rates. In prior rate proceedings (in the 2008

1 GRC Phase 2, and in SDG&E's most recent RDW), tiered TRAC rates differed by season to
2 mitigate impacts of seasonal commodity rates. In this proceeding, SDG&E proposes that
3 seasonal commodity rate differences not be mitigated for PSH or EECC-DR-TOD-C with TRAC
4 rates by season. SDG&E therefore proposes to eliminate the seasonality of TRAC charges in
5 UDC rates. With non-seasonal TRAC charges the resulting total UDC rates will be slightly
6 higher in the summer season and slightly lower in the winter season (versus Schedule DR), for
7 usage in excess of 130 percent of baseline allowances.

8 For commodity rate design, SDG&E's approach for designing residential PSH and
9 EECC-DR-TOD-C rates is consistent with the approach for designing PSW and Opt-Out rates as
10 described in Section II, but with a few exceptions. Since the proposed residential commodity
11 rates would be optional rather than default like proposed PSW, the cost-basis of PSH and EECC-
12 DR-TOD-C rates are more closely maintained than for proposed PSW. PSH Period rate levels
13 and Optional TOD price differentials are set relatively close to their cost-based levels. Since the
14 new commodity rates are optional, SDG&E does not propose to temper the TOD price
15 differentials or PeakShift Period rate level to mitigate potential adverse customer bill impacts to
16 the same extent as proposed for default service under PSW.

17 The procedure for designing PSH and EECC-DR-TOD-C rates is as follows:

18 First, the EECC-DR-TOD-C rates are designed to be revenue-neutral with currently
19 effective non-TOD seasonal commodity rates applicable to Schedule DR. Schedule EECC-DR-
20 TOD-C prices are set based on marginal capacity costs and marginal energy costs by TOD
21 period, using results from SDG&E's most-recently filed marginal cost study submitted in its
22 2008 GRC Phase 2 proceeding. The marginal cost-based rates are scaled to collect an equivalent
23 amount of revenue as SDG&E's currently-effective non-TOD commodity rates for Schedule DR.
24 The residential TOD periods and seasons are designated as follows:²

² SDG&E plans to assess its proposed and existing TOD periods as part of the next GRC Phase 2 or future rate design proceeding.

1

Summer	May through October	
On-Peak	11 am – 6 pm	Weekdays Excluding Holidays
Semi-Peak	6 am – 11 am, and 6 pm – 10 pm	Weekdays Excluding Holidays
Off-Peak	All Other Hours	
Winter	November through April	
Semi-Peak	6 am – 10 pm	Weekdays Excluding Holidays
Off-Peak	All Other Hours	
	11 am – 6 pm	
PeakShift Period		Any Day of the Year, on ReduceYourUse Days

2

Second, marginal generation capacity costs, including the associated revenue scaling factor, are removed from the TOD rates. This produces the non-PeakShift Period TOD rate levels.

3

4

5

Third, a cost-based PeakShift Period adder is calculated by dividing the revenue shortfall resulting from removing the marginal generation capacity costs by a forecast of PeakShift Period kWh determinants. The resulting combination of cost-based TOD rates and the PeakShift Period adder is again set to be revenue-neutral with non-TOD commodity rates.

6

7

8

9

Attachment RWH-3 shows a comparison of currently-effective non-TOD commodity rates applicable to Schedule DR (in Column B), proposed PSH commodity rates (in Column C), and EECC-DR-TOD-C residential commodity rates (in Column D). Attachment RWH-4 presents the unbundled rate components for Schedule DR non-CARE customers when combined with: current seasonal commodity rates, proposed PSH commodity rates, and proposed EECC-DR-TOD-C commodity rates. Attachment RWH-4 also shows TRAC charges and Baseline Allowance Credits for customers on proposed PSH and EECC-DR-TOD-C rate structures which will provide residential customers with similar ABIX rate capping benefits and subsidy costs.

10

11

12

13

14

15

16

17

Unbundled rates applicable to residential CARE customers, are shown in Attachment RWH-5. The CARE rates shown for Schedule DR-LI, proposed PSH, and proposed EECC-DR-TOD-C are prior to applying the 20 percent CARE discount and exemption from the CARE surcharge which are provided by means of a line-item credit on CARE customers' bills.

18

19

20

1 An illustration of a non-CARE customer bill format under SDG&E's proposed PSH and
2 credit structure is included as Attachment RWH-6. As shown on Attachment RWH-6, during
3 months with PeakShift Period events, the customer's bill will include a line-item calculation
4 based on the PeakShift Period adder multiplied by the customer's PeakShift Period usage.

5 **V. PROPOSAL FOR EXPANDED LOW-INCOME (SCHEDULE E-LI)**

6 Currently, the discount for nonresidential CARE customers served under Schedule E-LI is
7 applied as a flat discounted commodity rate that is included in Schedule EECC, in addition to a
8 20 percent CARE discount. Since the proposed dynamic pricing options would entail either
9 TOD commodity rates or an energy/demand rate structure, the customer bill impact of switching
10 to a dynamic rate structure would be associated with a more severe bill impact than for other
11 nonresidential non-CARE customers. Therefore, instead of defaulting expanded CARE
12 customers to the dynamic pricing structures, SDG&E proposes that PSW and TOD commodity
13 rates be optional for this group of nonresidential low-income customers.

14 **VI. APPLICABILITY OF PROPOSALS BY RATE SCHEDULE**

15 SDG&E has prepared a table to more easily compare rate schedule applicability and rate
16 structure proposal differences. The summary table is provided as Attachment RWH-7. The table
17 maps SDG&E's proposed dynamic pricing and EECC rates to its applicable rate schedules, and
18 the table notes the rate design elements for each rate schedule. The table is categorized by Rate
19 Schedule and allows a comparison of SDG&E's Current Rate Structure for UDC and commodity
20 rates, as well as a comparison of proposed rate structures for dynamic pricing and opt-out
21 commodity rates. PSW and opt-out commodity rate options by rate schedule are shown in
22 Attachment RWH-8.

23 **VII. CUSTOMER BILL IMPACT ANALYSES**

24 Estimated annual bill impacts of SDG&E's PSW and opt-out commodity rate proposals
25 are summarized on Attachment RWH-9. As shown by the sum of annual small commercial
26 customer bill impacts, the CPP and EECC-AS-TOD rate designs are essentially revenue-neutral,

1 with some overall bill variations due to the use of forecast sales determinants in the rate design
2 process. Individual customer bill impacts will vary from 6.9 percent savings per year to 7.2
3 percent increases in charges per year.

4 A frequency distribution analysis of residential customers under the optional PSH and
5 EECC-DR-TOD-C rates is included as Attachment RWH-10. As shown by the sum of annual
6 customer bill impacts, the optional residential rates are essentially revenue-neutral, with some
7 overall bill variations due to: (1) the use of forecast sales determinants in the rate design process,
8 and (2) the proposed consolidation of Tier 3 and Tier 4 UDC rates, which will slightly benefit
9 residential customers with monthly usage in excess of 200 percent of baseline allowances.

10 Individual customer bill impacts will vary from 21.5 percent savings per year to 18.2 percent
11 increases charges per year.

12 **VIII. CUSTOMER BILL AND AVERAGE RATE IMPACTS OF PROPOSED** 13 **REVENUE REQUIREMENT INCREASE**

14 As described in the testimony SDG&E witness Frederick W. Myers (Chapter 6), the first-
15 year revenue requirement decrease (due to tax credits) associated with PSW and PSH
16 implementation is -\$7.1 million, including adjustments for Franchise Fees and Uncollectibles
17 (FF&U). Average rate and bill impacts associated with the proposed revenue requirement
18 changes have been prepared based on SDG&E's currently adopted distribution revenue
19 allocation methodology (adopted in D.08-02-034) and 2009 forecast sales.

20 SDG&E proposes to recover the costs of implementing the PSW and PSH through
21 distribution rates and therefore proposes cost recovery from both bundled service and Direct
22 Access customers. Cost recovery of the PSW and PSH revenue requirements are proposed to be
23 through distribution base margin consistent with SDG&E's currently adopted methodologies
24 used for recovery of AMI and CPP-D implementation costs.³ Attachment RWH-11 shows the

³ Specific cost recovery accounts and proposed mechanism is described in the direct testimony of SDG&E witness Yvonne M. Le Mieux (Chapter 7).

1 system-average and class-average rate impacts associated with SDG&E's proposed annual
2 distribution revenue requirement changes.

3 First-year customer bill impacts for residential customers corresponding to the proposed
4 2011 revenue requirement decrease are provided as Attachment RWH-12. For a typical
5 residential customer using 500 kWh per month in the Inland climate zone the summer season bill
6 impact will be -10 cents per month, and -20 cents per month for a customer in the Coastal
7 climate zone. On a percentage basis this equates to a decrease of -0.1 percent for a typical
8 residential customer in the Inland climate zone and -0.2 percent for a typical residential customer
9 in the Coastal climate zone. These residential typical customer bill impact estimates are
10 associated with the proposed first-year 2011 revenue requirement change only and therefore do
11 not incorporate impacts of proposed PSH or EECC-DR-TOD-C rates.

12 **IX. SUMMARY AND RECOMENDATIONS**

13 This testimony summarizes: SDG&E's PSW, EECC-AS-TOD and EECC-PA-TOD
14 commodity rate design proposals for non-residential customers with demands less than 20 kW,
15 SDG&E's optional PSH and EECC-DR-TOD-C commodity rate design proposals for residential
16 customers. This testimony also describes various new UDC rate schedules that should be
17 implemented to facilitate TOD pricing.

18 Recommendations are as follows:

- 19 1. Default PSW should be offered with rates set to mitigate customer bill impacts.
- 20 2. PSW should incorporate a PeakShift Period adder approach, in which the
21 underlying TOD rates are exactly the same as for optional EECC-AS-TOD and
22 EECC-PA-TOD.
- 23 3. The PeakShift Period adder for PSW should be set at a comparable cost-based
24 rate level as the proposed SeasonalDemand Charge.
- 25 4. Non-residential customers enrolled in SDG&E's expanded CARE program, with
26 commodity rate service under Schedule E-LI (within Schedule EECC), should be

1 allowed to opt-in to dynamic pricing options. Participation in dynamic pricing
2 rates should not be the default service option for these customers.

3 5. Residential PSH and EECC-DR-TOD-C rates should be more closely set at
4 marginal costs since both of the residential rates are optional.

5 6. PSH should also incorporate a PeakShift Period adder approach.

6 7. The PeakShift Period adder for PSH should be set to recover generation capacity
7 costs.

8 8. ABIX rate capping benefits should be passed through to residential customers
9 served under optional PSH and optional EECC-DR-TOD-C by means of credits
10 for usage up to 130 percent of baseline allowances.

11 9. New TOD rate schedules should be implemented for customers served under
12 closed Schedules AD and A-TOU, and for agricultural customers served under
13 Schedule PA. The proposed service offerings would be named Schedules AD-
14 TOD, A-TOD and PA-TOD, respectively. These new UDC rate schedules would
15 be structured to accommodate TOD pricing, but with no impact on total UDC rate
16 levels as compared to current Schedules AD, A-TOU and PA.

17 10. Proposed revenue requirement increases should be recovered through distribution
18 rate components, and allocated and reflected in rates consistently with currently
19 adopted methodologies used for demand response program costs.

20 This concludes my direct testimony.

1 **X. STATEMENT OF QUALIFICATIONS**

2 My name is Robert W. Hansen. My business address is 8330 Century Park Court, San
3 Diego, California, 92123. I am Gas/Electric Analysis Manager in the Rates and Revenues
4 Department for San Diego Gas & Electric Company (SDG&E). My primary responsibilities
5 include the development of cost-of-service studies, determination of revenue allocation and
6 electric rate design methods, analysis of ratemaking theories, and preparation of various
7 regulatory filings.

8 I received a Bachelor of Science degree in Mining Engineering from South Dakota
9 School of Mines & Technology in 1981. I received a Master of Science degree in Policy
10 Economics from the University of Illinois in 1987, where my areas of specialization were natural
11 resource and environmental economics. I am a Registered Professional Engineer in the State of
12 Indiana.

13 From 1991 to 1998, I was employed by SDG&E as a Pricing Design Analyst and Senior
14 Pricing Analyst. From 1998 to July 2000, I was employed by Sempra Energy as a Regulatory
15 Policy Analyst in the Regulatory Affairs Division. From July 2000 to December 2001, I was
16 employed by Enron Energy Services as Director – Utility Risk Management, and Director –
17 Product Management. I have been employed in my current position since April 2002.

18 I have testified before the FERC and the CPUC in other proceedings.

San Diego Gas & Electric Company
Application 10-__-__

Non-Residential PeakShift at Work and Opt-Out TOD Commodity Rate Summary

Line No.	(A)	Units	Schedule A Commodity Rate Adjusted for Season Change	Proposed Rates		Line No.
				PSW	EECC-AS-TOD EECC-PA-TOD	
		(B)	(C)	(D)	(E)	
1	SeasonalDemand Charge					1
2	Summer	\$/kW	--	--	1.08	2
3						3
4	PeakShift Period Adder	\$/kWh	--	0.20000	--	4
5						5
6	Summer	\$/kWh	0.09815			6
7	On-Peak	\$/kWh	--	0.12791	0.12791	7
8	Off-Peak	\$/kWh	--	0.07788	0.07788	8
9	Winter	\$/kWh	0.06959			9
10	On-Peak	\$/kWh	--	0.07623	0.07623	10
11	Off-Peak	\$/kWh	--	0.06131	0.06131	11

Summer (May 1 – Oct 31)	
On-Peak	11 a.m. to 6 p.m. Weekdays
Off-Peak	All Other Hours, Including Weekends and Holidays
Winter (Nov 1 - Apr 30)	
On-Peak	6 a.m. to 10 p.m. Weekdays
Off-Peak	All Other Hours, Including Weekends and Holidays
PeakShift Period	11 a.m. to 6 p.m.any day of the year, on ReduceYourUse Days

San Diego Gas & Electric Company
Application 10-__-__

SMALL COMMERCIAL (LESS THAN 20 kW) – UNBUNDLED UNIT CHARGES
BASED ON 05/01/2010 RATES

LINE NO.	DESCRIPTION (A)	UNITS (B)	TRANSMISSION RATE (C)	DISTRIBUTION RATE (D)	PPP RATE (E)	NUCLEAR DECOMMISSION RATE (F)	CTC RATE (H)	RS RATE (I)	TOTAL UDC RATE (K)	EECC RATE (M)	DWR BOND RATE (N)	TOTAL RATE (O)	LINE NO.	
1	CURRENT SCHEDULE A													1
2	Basic Service Fee	\$/Month	--	\$9.56	--	--	--	--	\$9.56	--	--	\$9.56	2	
3	Energy Charge												3	
4	Summer (May - September)	\$/kWh	0.01548	0.05990	0.00866	0.00046	0.00281	0.00083	0.08814	0.10072	0.00515	0.19401	4	
5	Winter (October - April)	\$/kWh	0.01548	0.05438	0.00866	0.00046	0.00273	0.00083	0.08254	0.07184	0.00515	0.15953	5	
6													6	
7													7	
8													8	
9	SCHEDULE AS-TOD - WITH PEAKSHIFT AT WORK COMMODITY													9
10													10	
11	Basic Service Fee	\$/Month	--	\$9.56	--	--	--	--	\$9.56	--	--	\$9.56	11	
12	Summer									PSW Rates			12	
13	ON	\$/kWh	0.01548	0.05899	0.00866	0.00046	0.00280	0.00083	0.08721	0.12791	0.00515	0.22028	13	
14	OFF	\$/kWh	0.01548	0.05899	0.00866	0.00046	0.00280	0.00083	0.08721	0.07788	0.00515	0.17025	14	
15	Winter												15	
16	ON	\$/kWh	0.01548	0.05438	0.00866	0.00046	0.00273	0.00083	0.08254	0.07623	0.00515	0.16392	16	
17	OFF	\$/kWh	0.01548	0.05438	0.00866	0.00046	0.00273	0.00083	0.08254	0.06131	0.00515	0.14900	17	
18													18	
19	PeakShift Period Adder, 11am-6pm	\$/kWh	--	--	--	--	--	--	--	0.20000	--	--	19	
20													20	
21													21	
22	SCHEDULE AS-TOD - WITH EECC-AS-TOD OPT-OUT COMMODITY													22
23													23	
24	Basic Service Fee	\$/Month	--	\$9.56	--	--	--	--	\$9.56	--	--	\$9.56	24	
25	Summer									EECC-AS-TOD Rates			25	
26	ON	\$/kWh	0.01548	0.05899	0.00866	0.00046	0.00280	0.00083	0.08721	0.12791	0.00515	0.22028	26	
27	OFF	\$/kWh	0.01548	0.05899	0.00866	0.00046	0.00280	0.00083	0.08721	0.07788	0.00515	0.17025	27	
28	Winter												28	
29	ON	\$/kWh	0.01548	0.05438	0.00866	0.00046	0.00273	0.00083	0.08254	0.07623	0.00515	0.16392	29	
30	OFF	\$/kWh	0.01548	0.05438	0.00866	0.00046	0.00273	0.00083	0.08254	0.06131	0.00515	0.14900	30	
31													31	
32													32	
33	SeasonalDemand Charge:												33	
34	Summer	\$/kW	--	--	--	--	--	--	--	1.08	--	1.08	34	
35	Winter	\$/kW	--	--	--	--	--	--	--	--	--	--	35	

Proposed Summer (May 1 – Oct 31)	
On-Peak	11 a.m. to 6 p.m. Weekdays
Off-Peak	All Other Hours, Including Weekends and Holidays
Proposed Winter (Nov 1 - Apr 30)	
On-Peak	6 a.m. to 10 p.m. Weekdays
Off-Peak	All Other Hours, Including Weekends and Holidays
PeakShift Period	11 a.m. to 6 p.m.any day of the year, on ReduceYourUse Days

San Diego Gas & Electric Company
Application 10-__-__

Residential Optional PeakShift at Home and TOD Commodity Rate Summary

\$ per kWh

Line No.	(A)	Current Schedule DR Commodity Rate (B)	Optional PSH (C)	Optional EECC-DR-TOD-C (D)	Line No.
1	PeakShift Period Adder	--	0.91000	--	1
2					2
3	Summer	0.08978	--	--	3
4	On-Peak	--	0.08500	0.16464	4
5	Semi-Peak	--	0.07146	0.07806	5
6	Off-Peak	--	0.05570	0.06126	6
7	Winter	0.06655			7
8	Semi-Peak	--	0.06899	0.07632	8
9	Off-Peak	--	0.06421	0.05718	9

Summer (May 1 – Oct 31)	
On-Peak	11 a.m. to 6 p.m. Weekdays
Semi-Peak	6 a.m. to 11 a.m. Weekdays 6 p.m. to 10 p.m. Weekdays
Off-Peak	10 p.m. to 6 a.m. Weekdays Plus Weekends & Holidays
Winter (Nov 1 - Apr 30)	
Semi-Peak	6 a.m. to 10 p.m. Weekdays
Off-Peak	10 p.m. to 6 a.m. Weekdays Plus Weekends & Holidays
PeakShift Period	11 a.m. to 6 p.m.any day of the year, on ReduceYourUse Days

San Diego Gas & Electric Company
Application 10- - -

RESIDENTIAL -- UNBUNDLED UNIT CHARGES - NON-CARE
BASED ON RATES EFFECTIVE 05/01/2010

LINE NO.	DESCRIPTION (A)	UNITS (B)	TRANSMISSION RATE (C)	DISTRIBUTION RATE (D)	PPP RATE (E)	NUCLEAR			TRAC RATE (J)	TOTAL UDC RATE (K)	EECC RATE (M)	DWR BOND RATE (N)	TOTAL RATE (O)	LINE NO.
						DECOMMISSION RATE (F)	CTC RATE (H)	RS RATE (I)						
1	SCHEDULE DR - CURRENT													1
2	Summer													2
3	Baseline Energy	\$/kWh	0.01318	0.07317	0.00644	0.00046	0.00203	0.00066	(0.05675)	0.03919	0.08978	0.00515	0.13412	3
4	101% to 130% of Baseline	\$/kWh	0.01318	0.08245	0.00644	0.00046	0.00203	0.00066	(0.04526)	0.05996	0.08978	0.00515	0.15489	4
5	131% to 200% of Baseline	\$/kWh	0.01318	0.08245	0.00644	0.00046	0.00203	0.00066	0.07178	0.17700	0.08978	0.00515	0.27193	5
6	Above 200% of Baseline	\$/kWh	0.01318	0.08245	0.00644	0.00046	0.00203	0.00066	0.09178	0.19700	0.08978	0.00515	0.29193	6
7	Winter													7
8	Baseline Energy	\$/kWh	0.01318	0.07317	0.00644	0.00046	0.00203	0.00066	(0.03352)	0.06242	0.06655	0.00515	0.13412	8
9	101% to 130% of Baseline	\$/kWh	0.01318	0.08245	0.00644	0.00046	0.00203	0.00066	(0.02203)	0.08319	0.06655	0.00515	0.15489	9
10	131% to 200% of Baseline	\$/kWh	0.01318	0.08245	0.00644	0.00046	0.00203	0.00066	0.07862	0.18384	0.06655	0.00515	0.25554	10
11	Above 200% of Baseline	\$/kWh	0.01318	0.08245	0.00644	0.00046	0.00203	0.00066	0.09862	0.20384	0.06655	0.00515	0.27554	11
12														12
13	SCHEDULE DR-TOD-C FOR RESIDENTIAL CUSTOMERS - WITH BL CREDIT STRUCTURE AND PEAKSHIFT AT HOME COMMODITY													13
14	Summer										PSH Rates			14
15	ON	\$/kWh	0.01318	0.07734	0.00644	0.00046	0.00203	0.00066	0.08645	0.18655	0.08500	0.00515	0.27670	15
16	SEMI	\$/kWh	0.01318	0.07734	0.00644	0.00046	0.00203	0.00066	0.08645	0.18655	0.07146	0.00515	0.26317	16
17	OFF	\$/kWh	0.01318	0.07734	0.00644	0.00046	0.00203	0.00066	0.08645	0.18655	0.05570	0.00515	0.24740	17
18														18
19	Winter													19
20	SEMI	\$/kWh	0.01318	0.07734	0.00644	0.00046	0.00203	0.00066	0.08645	0.18655	0.06899	0.00515	0.26070	20
21	OFF	\$/kWh	0.01318	0.07734	0.00644	0.00046	0.00203	0.00066	0.08645	0.18655	0.06421	0.00515	0.25591	21
22														22
23	PeakShift Period Adder, 11am-6pm	\$/kWh	--	--	--	--	--	--	--	--	0.91000	--	--	23
24	Summer Baseline Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.14736)	--	--	--	--	24
25	Summer 101% to 130% of BL Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.12659)	--	--	--	--	25
26	Winter Baseline Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.12413)	--	--	--	--	26
27	Winter 101% to 130% of BL Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.10336)	--	--	--	--	27
28														28
29	SCHEDULE DR-TOD-C FOR RESIDENTIAL CUSTOMERS - WITH BL CREDIT STRUCTURE AND EECC-DR-TOD-C COMMODITY													29
30	Summer										EECC-DR-TOD-C Rates			30
31	ON	\$/kWh	0.01318	0.07734	0.00644	0.00046	0.00203	0.00066	0.08645	0.18655	0.16464	0.00515	0.35634	31
32	SEMI	\$/kWh	0.01318	0.07734	0.00644	0.00046	0.00203	0.00066	0.08645	0.18655	0.07806	0.00515	0.26976	32
33	OFF	\$/kWh	0.01318	0.07734	0.00644	0.00046	0.00203	0.00066	0.08645	0.18655	0.06126	0.00515	0.25296	33
34														34
35	Winter													35
36	SEMI	\$/kWh	0.01318	0.07734	0.00644	0.00046	0.00203	0.00066	0.08645	0.18655	0.07632	0.00515	0.26803	36
37	OFF	\$/kWh	0.01318	0.07734	0.00644	0.00046	0.00203	0.00066	0.08645	0.18655	0.05718	0.00515	0.24888	37
38														38
39	Summer Baseline Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.14736)	--	--	--	--	39
40	Summer 101% to 130% of BL Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.12659)	--	--	--	--	40
41	Winter Baseline Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.12413)	--	--	--	--	41
42	Winter 101% to 130% of BL Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.10336)	--	--	--	--	42

San Diego Gas & Electric Company
Application 10- - -

RESIDENTIAL -- UNBUNDLED UNIT CHARGES - CARE (PRIOR TO 20% LINE-ITEM CREDIT)
BASED ON RATES EFFECTIVE 05/01/2010

LINE NO.	DESCRIPTION (A)	UNITS (B)	TRANSMISSION RATE (C)	DISTRIBUTION RATE (D)	PPP RATE (E)	NUCLEAR			TRAC RATE (J)	TOTAL UDC RATE (K)	EECC RATE (M)	DWR BOND RATE (N)	TOTAL RATE (O)	LINE NO.	
						DECOMMISSION RATE (F)	CTC RATE (H)	RS RATE (I)							
1	SCHEDULE DR-LI - CURRENT														1
2	Summer														2
3	Baseline Energy	\$/kWh	0.01318	0.07158	0.00644	0.00046	0.00203	0.00066	(0.05675)	0.03760	0.08978	0.00000	0.12738	3	
4	101% to 130% of Baseline	\$/kWh	0.01318	0.08086	0.00644	0.00046	0.00203	0.00066	(0.04526)	0.05837	0.08978	0.00000	0.14815	4	
5	131% to 200% of Baseline	\$/kWh	0.01318	0.08086	0.00644	0.00046	0.00203	0.00066	0.02895	0.13258	0.08978	0.00000	0.22236	5	
6	Above 200% of Baseline	\$/kWh	0.01318	0.08086	0.00644	0.00046	0.00203	0.00066	0.02895	0.13258	0.08978	0.00000	0.22236	6	
7	Winter														7
8	Baseline Energy	\$/kWh	0.01318	0.07158	0.00644	0.00046	0.00203	0.00066	(0.03352)	0.06083	0.06655	0.00000	0.12738	8	
9	101% to 130% of Baseline	\$/kWh	0.01318	0.08086	0.00644	0.00046	0.00203	0.00066	(0.02203)	0.08160	0.06655	0.00000	0.14815	9	
10	131% to 200% of Baseline	\$/kWh	0.01318	0.08086	0.00644	0.00046	0.00203	0.00066	0.03793	0.14156	0.06655	0.00000	0.20811	10	
11	Above 200% of Baseline	\$/kWh	0.01318	0.08086	0.00644	0.00046	0.00203	0.00066	0.03793	0.14156	0.06655	0.00000	0.20811	11	
12	SCHEDULE DR-TOD-C FOR CARE CUSTOMERS - WITH BL CREDIT STRUCTURE AND PEAKSHIFT AT HOME COMMODITY														12
13	Summer														13
14	PSH Rates														14
15	ON	\$/kWh	0.01318	0.07575	0.00644	0.00046	0.00203	0.00066	0.03326	0.13178	0.08500	0.00000	0.21678	15	
16	SEMI	\$/kWh	0.01318	0.07575	0.00644	0.00046	0.00203	0.00066	0.03326	0.13178	0.07146	0.00000	0.20325	16	
17	OFF	\$/kWh	0.01318	0.07575	0.00644	0.00046	0.00203	0.00066	0.03326	0.13178	0.05570	0.00000	0.18748	17	
18	Winter														18
19	SEMI	\$/kWh	0.01318	0.07575	0.00644	0.00046	0.00203	0.00066	0.03326	0.13178	0.06899	0.00000	0.20078	19	
20	OFF	\$/kWh	0.01318	0.07575	0.00644	0.00046	0.00203	0.00066	0.03326	0.13178	0.06421	0.00000	0.19599	20	
21	PeakShift Period Adder, 11am-6pm														21
22	PeakShift Period Adder, 11am-6pm	\$/kWh	--	--	--	--	--	--	--	--	0.91000	--	--	22	
23	Summer Baseline Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.09418)	--	--	--	--	23	
24	Summer 101% to 130% of BL Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.07341)	--	--	--	--	24	
25	Winter Baseline Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.07095)	--	--	--	--	25	
26	Winter 101% to 130% of BL Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.05018)	--	--	--	--	26	
27	SCHEDULE DR-TOD-C FOR CARE CUSTOMERS - WITH BL CREDIT STRUCTURE AND EECC-DR-TOD-C COMMODITY														27
28	Summer														28
29	EECC-DR-TOD-C Rates														29
30	ON	\$/kWh	0.01318	0.07575	0.00644	0.00046	0.00203	0.00066	0.03326	0.13178	0.16464	0.00000	0.29642	30	
31	SEMI	\$/kWh	0.01318	0.07575	0.00644	0.00046	0.00203	0.00066	0.03326	0.13178	0.07806	0.00000	0.20984	31	
32	OFF	\$/kWh	0.01318	0.07575	0.00644	0.00046	0.00203	0.00066	0.03326	0.13178	0.06126	0.00000	0.19304	32	
33	Winter														33
34	SEMI	\$/kWh	0.01318	0.07575	0.00644	0.00046	0.00203	0.00066	0.03326	0.13178	0.07632	0.00000	0.20810	34	
35	OFF	\$/kWh	0.01318	0.07575	0.00644	0.00046	0.00203	0.00066	0.03326	0.13178	0.05718	0.00000	0.18896	35	
36	Summer Baseline Allowance Credit														36
37	Summer Baseline Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.09418)	--	--	--	--	37	
38	Summer 101% to 130% of BL Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.07341)	--	--	--	--	38	
39	Winter Baseline Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.07095)	--	--	--	--	39	
40	Winter 101% to 130% of BL Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.05018)	--	--	--	--	40	
41	Summer Baseline Allowance Credit														41
42	Summer Baseline Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.09418)	--	--	--	--	42	
43	Summer 101% to 130% of BL Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.07341)	--	--	--	--	43	
44	Winter Baseline Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.07095)	--	--	--	--	44	
45	Winter 101% to 130% of BL Allowance Credit	\$/kWh	--	--	--	--	--	--	(0.05018)	--	--	--	--	45	

San Diego Gas & Electric Company
Application A.10- -
Illustration of Residential Bill Under Schedule DR-TOD-C and PeakShift at Home



Account Number **9999 999 999 9**
 Date Due
 Sep 23, 2012

Date Mailed Sep 3, 2012 Page 1 of ___
 1-800-411-SDGE (7343) English
 1-800-311-SDGE (7343) Espanol
 1-877-899-SDGE (7343) TTY
www.sdge.com

Electric Service

Detail of Current Charges

Rate: DR-TOD-C, PSH Residential Baseline Allowance: 336 kWh
 Billing Period: 8/2/12 - 9/1/12 Total Days: 30
 Meter Number: 99999999 Next scheduled read date Oct 2, 2012 Cycle: 2
 Meter Constant: 1.000 Meter Voltage Level: Secondary
 Circuit: 0295 Block: 051A **Rotating outage status is subject to change without notice.**

Metered Usage	Current Reading	Previous Reading	= Difference	x Meter Constant	= Total kWh
Summer					
Summer On-Peak	812	698	114	1.000	114
Summer Semi-Peak	3870	3723	147	1.000	147
Summer Off-Peak	5106	4867	239	1.000	239
PeakShift Day Use	715	702	13	1.000	13

Breakdown of Electric Charges

The total electric charges shown in the "Electric Service" section include the following components. Definitions for these terms are shown on page 5 of your bill.

Electricity Generation	45.34
DWR Bond Charge	2.58
Transmission	6.59
Distribution	38.67
Public Purpose Programs	(11.07)
Nuclear Decommissioning	0.23
Competition Transition Charge	1.02
Reliability Services	0.33
Total Electric Costs	\$83.67

ELECTRIC CHARGES

Amounts(\$)

Electricity Delivery (Details below)				500 kWh	
Summer Usage	On-Peak	Semi-Peak	Off-Peak		
kWh Used	114	147	239		
Rates/kWh	\$0.18655	\$0.18655	\$0.18655		
Charge	\$21.27	\$27.42	\$44.59	=	93.28

DWR Bond Charge 500 kWh x \$0.00515 = 2.58

Electricity Generation (Details below)					500 kWh	
Summer Usage	On-Peak	Semi-Peak	Off-Peak	PeakShift Period Adder		
kWh Used	114	147	239	13		
Rates/kWh	\$0.08500	\$0.07146	\$0.05570	\$0.91000		
Charge	\$9.69	\$10.51	\$13.31	\$11.83	=	45.34

Baseline Usage Credits (Details Below)
 Baseline 336 kWh x -\$0.14736 = (49.51)
 1-30% over Baseline 63 kWh x -\$0.12659 = (8.00)

Total Electric Charges \$83.67

TAXES & FEES ON ELECTRIC CHARGES

Amount (\$)

Franchise Fees on Electric Energy Supplied by Others	33.33	x 1.10%	0.37
State Surcharge Tax	500 kWh	\$0.00022	0.11
Franchise Fees on Electric Energy Supplied by Others	500 kWh	\$0.00024	0.12

Total Taxes & Fees on Electric Charges 0.60
Total Electric Service \$84.27

Time of Day - Electricity		
Summer	kWh	May 1 - Sep 30
On-Peak	114	11am-6pm weekdays
Semi-Peak	147	6am-11am, and 6pm-10pm
Off-Peak	239	10pm-6am, plus Sat/Sun/Holidays
Total	500	

PeakShift Period Use 13 11am-6pm on ReduceYourUse Days
 ReduceYourUse Days: Aug 7, Aug 18

San Diego Gas & Electric Company
Application 10-__-__
Dynamic Pricing Rate Proposal Summary - Applicability by Rate Schedule and Demand Level

Schedule for Utility Distribution Company (UDC) Charges	Demand Level - Applicable to UDC Schedule	Demand Level Applicable to Dynamic Pricing	Dynamic Pricing Schedule
Customer Class: Residential			
DR, DM, DS, DT, DT-RV (includes CARE)	N/A	all	Optional PSW
Customer Class: Small Commercial			
A	Less than 20 kW	all	PSW, Optional CPP-D
A-TC	Less than 20 kW	all	NA
A-TOU	Less than 40 kW	Less than 20 kW	PSW, Optional CPP-D
		Greater than or equal to 20 kW	CPP-D
Customer Class: M/L C&I			
AD	20 kW to 500 kW	all	CPP-D
AL-TOU	all	Less than 20 kW	PSW, Optional CPP-D
		Greater than or equal to 20 kW	CPP-D
DG-R	Less than or equal to 2 MW	all	Optional CPP-D
AY-TOU	Less than 500 kW	Less than 20 kW	PSW, Optional CPP-D
		Greater than or equal to 20 kW	CPP-D
A6-TOU	Greater than or equal to 500 kW	all	CPP-D
PA-T-1	Less than 500 kW	Less than 20 kW	PSW, Optional CPP-D
		Greater than or equal to 20 kW	CPP-D
Customer Class: Agriculture			
PA	Less than or equal to 500 kW	Less than 20 kW	PSW, Optional CPP-D
		Greater than or equal to 20 kW	CPP-D

San Diego Gas & Electric Company
Application 10-__-__
Dynamic Pricing and TOD Rate Options by Schedule

Current Schedule for Utility Distribution Company (UDC) Charges	Current UDC Rate Structure	Current Commodity Rate Structure	CPP Rates	TOU Rates
Customer Class: Residential				
DR, DM, DS, DT, DT-RV (includes CARE)	4-tier, seasonal energy charges	Seasonal energy charges	Optional PSH	Optional EECC-DR-TOD-C energy charges
Customer Class: Small Commercial				
A	Seasonal energy charges	Seasonal energy charges	PSW, or Optional CPP-D	Optional EECC-AS-TOD energy charges
A-TC	Seasonal energy charges	Seasonal energy charges	Optional CPP-D	Optional TOU energy charges and demand charges
A-TOU	TOU energy charges and demand charges	Seasonal TOU energy charges and demand charges	PSW or Optional CPP-D (for Less than 20 kW)	Optional EECC-AS-TOD energy and demand charges (for Less than 20 kW)
			CPP-D (for Greater than or equal to 20 kW)	Optional TOU energy and demand charges (for Greater than or equal to 20 kW)
Customer Class: Medium and Large C&I				
AD	TOU energy charges and demand charges	TOU energy charges and demand charges	CPP-D	Optional TOU energy and demand charges
AL-TOU	TOU energy charges and demand charges	Seasonal TOU energy charges and demand charges	PSW or Optional CPP-D (for Less than 20 kW)	Optional EECC-AS-TOD energy and demand charges (for Less than 20 kW)
			CPP-D (for Greater than or equal to 20 kW)	Optional TOU energy and demand charges (for Greater than or equal to 20 kW)
DG-R	TOU energy charges and demand charges	TOU energy charges	PSW or Optional CPP-D (for Less than 20 kW)	Optional EECC-AS-TOD energy and demand charges (for less than 20 kW)
			CPP-D (for greater than or equal to 20 kW)	Optional TOU energy and demand charges (for greater than or equal to 20 kW)
AY-TOU	TOU energy charges and demand charges	Seasonal TOU energy charges and demand charges	PSW or Optional CPP-D (for Less than 20 kW)	Optional EECC-AS-TOD energy and demand charges (for Less than 20 kW)
			CPP-D (for Greater than or equal to 20 kW)	Optional TOU energy and demand charges (for Greater than or equal to 20 kW)
A6-TOU	TOU energy charges and demand charges	Seasonal TOU energy charges and demand charges	CPP-D	Optional TOU energy and demand charges
PA-T-1	TOU energy charges and demand charges	Seasonal TOU energy charges and demand charges	PSW or Optional CPP-D (for Less than 20 kW)	Optional EECC-AS-TOD energy and demand charges (for Less than 20 kW)
			CPP-D (for Greater than or equal to 20 kW)	Optional TOU energy and demand charges (for Greater than or equal to 20 kW)
Customer Class: Agriculture				
PA	Seasonal energy charges	Seasonal energy charges	PSW or Optional CPP-D (for Less than 20 kW)	Optional EECC-AS-TOD energy and demand charges (for Less than 20 kW)
			CPP-D (for Greater than or equal to 20 kW)	Optional TOU energy and demand charges (for Greater than or equal to 20 kW)

San Diego Gas & Electric Company
Application A.10- ____
Small Commerical Customer Estimated Annual Bill Impacts

Line No.	% Change	Accounts	Annual kWh	Rate A *	PSW	Difference		Line No.
						\$/Year	%	
1	-7.0% to -6.0%	363	27,763,724	\$4,630,230	\$4,310,109	(\$320,120)	-6.9%	1
2	-6.0% to -5.0%	3,483	51,500,205	\$8,861,412	\$8,382,569	(\$478,843)	-5.4%	2
3	-5.0% to -4.0%	719	21,573,881	\$3,637,080	\$3,472,275	(\$164,805)	-4.5%	3
4	-4.0% to -3.0%	8,355	155,223,670	\$26,654,547	\$25,756,902	(\$897,645)	-3.4%	4
5	-3.0% to -2.0%	10,585	282,321,675	\$49,130,070	\$48,010,834	(\$1,119,235)	-2.3%	5
6	-2.0% to -1.0%	17,907	328,275,385	\$56,603,354	\$55,781,849	(\$821,505)	-1.5%	6
7	-1.0% to 0.0%	12,024	313,788,671	\$53,426,615	\$53,187,297	(\$239,318)	-0.4%	7
8	0.0% to 1.0%	17,907	295,450,464	\$51,514,888	\$51,726,092	\$211,204	0.4%	8
9	1.0% to 2.0%	13,640	224,748,159	\$38,974,147	\$39,554,480	\$580,333	1.5%	9
10	2.0% to 3.0%	10,207	140,873,569	\$24,749,919	\$25,374,320	\$624,401	2.5%	10
11	3.0% to 4.0%	9,067	95,492,640	\$17,079,957	\$17,704,345	\$624,389	3.7%	11
12	4.0% to 5.0%	2,821	54,075,644	\$9,376,542	\$9,794,166	\$417,623	4.5%	12
13	6.0% to 7.0%	1,382	10,407,998	\$1,890,213	\$2,013,367	\$123,154	6.5%	13
14	7.0% to 8.0%	719	12,677,695	\$2,356,809	\$2,525,637	\$168,828	7.2%	14
15	Total	109,177	2,014,173,380	\$348,885,781	\$347,594,241	(\$1,291,540)	-0.4%	15

* Note: Based on Schedule A rates effective 5/1/10, adjusted to reflect season definition change

San Diego Gas & Electric Company
Application A.10- -
Residential Customer Estimated Annual Bill Impacts

Line No.	% Change	Accounts	Annual kWh	Rate DR *	PSH	Difference		Line No.
						\$/Year	%	
1	Under -30.0%	0	0	\$0	\$0	\$0		1
2	-30.0% to -25.0%	0	0	\$0	\$0	\$0		2
3	-25.0% to -20.0%	0	0	\$0	\$0	\$0		3
4	-20.0% to -15.0%	0	0	\$0	\$0	\$0		4
5	-15.0% to -10.0%	3,519	7,330,264	\$995,915	\$893,754	(\$102,162)	-10.3%	5
6	-10.0% to -8.0%	11,137	34,291,858	\$4,811,415	\$4,387,908	(\$423,507)	-8.8%	6
7	-8.0% to -5.0%	82,573	612,962,563	\$130,469,077	\$122,687,220	(\$7,781,857)	-6.0%	7
8	-5.0% to -4.0%	80,727	621,984,699	\$127,701,156	\$121,879,840	(\$5,821,317)	-4.6%	8
9	-4.0% to -3.0%	153,514	1,028,196,933	\$194,270,563	\$187,521,397	(\$6,749,166)	-3.5%	9
10	-3.0% to -2.0%	173,813	1,116,573,115	\$204,683,604	\$199,494,632	(\$5,188,973)	-2.5%	10
11	-2.0% to -1.0%	174,015	1,131,379,336	\$212,493,390	\$209,227,034	(\$3,266,356)	-1.5%	11
12	-1.0% to 0.0%	103,644	782,546,965	\$153,480,041	\$152,610,467	(\$869,574)	-0.6%	12
13	SubTotal	782,942	5,335,265,733	\$1,028,905,163	\$998,702,252	(\$30,202,911)	-2.9%	13
14	0.0% to 1.0%	61,545	517,143,307	\$101,804,967	\$102,315,364	\$510,397	0.5%	14
15	1.0% to 2.0%	56,669	416,686,287	\$80,991,301	\$82,234,526	\$1,243,225	1.5%	15
16	2.0% to 3.0%	52,878	375,625,845	\$70,884,969	\$72,613,036	\$1,728,067	2.4%	16
17	3.0% to 4.0%	41,648	302,989,869	\$55,245,464	\$57,147,616	\$1,902,152	3.4%	17
18	4.0% to 5.0%	32,259	232,791,538	\$43,286,383	\$45,252,842	\$1,966,459	4.5%	18
19	5.0% to 8.0%	92,288	642,419,433	\$116,330,795	\$123,437,063	\$7,106,269	6.1%	19
20	8.0% to 10.0%	37,751	208,594,922	\$32,597,788	\$35,556,968	\$2,959,180	9.1%	20
21	10.0% to 15.0%	36,727	185,054,735	\$29,853,092	\$33,365,083	\$3,511,991	11.8%	21
22	15.0% to 20.0%	15,641	59,526,205	\$8,891,645	\$10,522,112	\$1,630,468	18.3%	22
23	20.0% to 25.0%	1,593	9,910,677	\$1,672,651	\$2,017,795	\$345,144	20.6%	23
24	25.0% to 30.0%	4,033	17,100,835	\$2,474,204	\$3,178,791	\$704,587	28.5%	24
25	Over 30.0%	2,016	3,932,229	\$527,391	\$723,093	\$195,703	37.1%	25
26	SubTotal	435,048	2,971,775,883	\$544,560,649	\$568,364,289	\$23,803,640	4.4%	26
27	Totals	1,217,990	8,307,041,616	\$1,573,465,811	\$1,567,066,541	(\$6,399,270)	-0.4%	27

* Note: Based on rates effective 5-1-10.

San Diego Gas & Electric Company
Application A.10- _____
System-Average and Class-Average Rate Impacts - 2011 through 2015

	Based on Rates Effective 5/1/10 (AL 2066-E)			Proposed 2011			Total Rate Change (¢/KWhr)	Total Rate Change (%)
	Current Total UDC Rate (¢/KWhr)	Current Avg. Commodity (¢/KWhr)	Current Total Rate (¢/KWhr)	Proposed Total UDC Rate (¢/KWhr)	Proposed Avg. Commodity (¢/KWhr)	Proposed Total Rate (¢/KWhr)		
Residential	9.861	7.828	17.689	9.811	7.828	17.639	(0.050)	-0.28%
Small Commercial	9.230	8.435	17.665	9.191	8.435	17.626	(0.039)	-0.22%
Med. & Large C&I	5.850	8.373	14.223	5.830	8.373	14.203	(0.020)	-0.14%
Agriculture	9.115	8.059	17.174	9.077	8.059	17.136	(0.038)	-0.22%
Lighting	9.730	5.799	15.529	9.704	5.799	15.503	(0.026)	-0.17%
System Total	7.729	8.123	15.852	7.696	8.123	15.819	(0.033)	-0.21%

	Based on Rates Effective 5/1/10 (AL 2066-E)			Proposed 2012			Total Rate Change (¢/KWhr)	Total Rate Change (%)
	Current Total UDC Rate (¢/KWhr)	Current Avg. Commodity (¢/KWhr)	Current Total Rate (¢/KWhr)	Proposed Total UDC Rate (¢/KWhr)	Proposed Avg. Commodity (¢/KWhr)	Proposed Total Rate (¢/KWhr)		
Residential	9.861	7.828	17.689	9.930	7.828	17.758	0.069	0.39%
Small Commercial	9.230	8.435	17.665	9.283	8.435	17.718	0.053	0.30%
Med. & Large C&I	5.850	8.373	14.223	5.879	8.373	14.252	0.029	0.20%
Agriculture	9.115	8.059	17.174	9.168	8.059	17.227	0.053	0.31%
Lighting	9.730	5.799	15.529	9.767	5.799	15.566	0.037	0.24%
System Total	7.729	8.123	15.852	7.776	8.123	15.899	0.047	0.30%

	Based on Rates Effective 5/1/10 (AL 2066-E)			Proposed 2013			Total Rate Change (¢/KWhr)	Total Rate Change (%)
	Current Total UDC Rate (¢/KWhr)	Current Avg. Commodity (¢/KWhr)	Current Total Rate (¢/KWhr)	Proposed Total UDC Rate (¢/KWhr)	Proposed Avg. Commodity (¢/KWhr)	Proposed Total Rate (¢/KWhr)		
Residential	9.861	7.828	17.689	10.109	7.828	17.937	0.248	1.40%
Small Commercial	9.230	8.435	17.665	9.420	8.435	17.855	0.190	1.08%
Med. & Large C&I	5.850	8.373	14.223	5.951	8.373	14.324	0.101	0.71%
Agriculture	9.115	8.059	17.174	9.304	8.059	17.363	0.189	1.10%
Lighting	9.730	5.799	15.529	9.860	5.799	15.659	0.130	0.84%
System Total	7.729	8.123	15.852	7.895	8.123	16.018	0.166	1.05%

	Based on Rates Effective 5/1/10 (AL 2066-E)			Proposed 2014			Total Rate Change (¢/KWhr)	Total Rate Change (%)
	Current Total UDC Rate (¢/KWhr)	Current Avg. Commodity (¢/KWhr)	Current Total Rate (¢/KWhr)	Proposed Total UDC Rate (¢/KWhr)	Proposed Avg. Commodity (¢/KWhr)	Proposed Total Rate (¢/KWhr)		
Residential	9.861	7.828	17.689	10.128	7.828	17.956	0.267	1.51%
Small Commercial	9.230	8.435	17.665	9.435	8.435	17.870	0.205	1.16%
Med. & Large C&I	5.850	8.373	14.223	5.960	8.373	14.333	0.110	0.77%
Agriculture	9.115	8.059	17.174	9.319	8.059	17.378	0.204	1.19%
Lighting	9.730	5.799	15.529	9.870	5.799	15.669	0.140	0.90%
System Total	7.729	8.123	15.852	7.909	8.123	16.032	0.180	1.14%

	Based on Rates Effective 5/1/10 (AL 2066-E)			Proposed 2015			Total Rate Change (¢/KWhr)	Total Rate Change (%)
	Current Total UDC Rate (¢/KWhr)	Current Avg. Commodity (¢/KWhr)	Current Total Rate (¢/KWhr)	Proposed Total UDC Rate (¢/KWhr)	Proposed Avg. Commodity (¢/KWhr)	Proposed Total Rate (¢/KWhr)		
Residential	9.861	7.828	17.689	10.097	7.828	17.925	0.236	1.33%
Small Commercial	9.230	8.435	17.665	9.411	8.435	17.846	0.181	1.02%
Med. & Large C&I	5.850	8.373	14.223	5.947	8.373	14.320	0.097	0.68%
Agriculture	9.115	8.059	17.174	9.295	8.059	17.354	0.180	1.05%
Lighting	9.730	5.799	15.529	9.854	5.799	15.653	0.124	0.80%
System Total	7.729	8.123	15.852	7.888	8.123	16.011	0.159	1.00%

Notes:
DWR-BC is included in Current and Proposed Total UDC Rate

San Diego Gas & Electric Company
Application 10-_____
TYPICAL MONTHLY RESIDENTIAL ENERGY CHARGES AT PRESENT AND PROPOSED
(INLAND CUSTOMERS)
Schedule DR (Summer Billing Period)

LINE NO.	ENERGY (KWH) (A)	05/01/10 PRESENT BILL (\$) (B)	2011 PROPOSED BILL (\$) (C)	CHANGE (\$) (D)	CHANGE (%) (E)	LINE NO.
1	25	5.12	5.12	\$0.00	0.0%	1
2	50	6.73	6.73	0.00	0.0%	2
3	75	10.10	10.10	0.00	0.0%	3
4	100	13.45	13.45	0.00	0.0%	4
5	150	20.19	20.19	0.00	0.0%	5
6	200	26.91	26.91	0.00	0.0%	6
7	250	33.65	33.65	0.00	0.0%	7
8	300	40.38	40.38	0.00	0.0%	8
9	350	47.39	47.39	0.00	0.0%	9
10	400	55.17	55.17	0.00	0.0%	10
11	450	64.45	64.43	(0.02)	0.0%	11
12	500	78.07	77.97	(0.10)	-0.1%	12
13	600	105.30	105.04	(0.26)	-0.2%	13
14	700	133.11	132.69	(0.42)	-0.3%	14
15	800	162.35	161.77	(0.58)	-0.4%	15
16	900	191.59	190.86	(0.73)	-0.4%	16
17	1000	220.82	219.93	(0.89)	-0.4%	17
18	1500	367.02	365.33	(1.69)	-0.5%	18
19	2000	513.21	510.73	(2.48)	-0.5%	19
20	3000	805.60	801.53	(4.07)	-0.5%	20

Schedule DR (Winter Billing Period)

LINE NO.	ENERGY (KWH) (A)	05/01/10 PRESENT BILL (\$) (B)	2011 PROPOSED BILL (\$) (C)	CHANGE (\$) (D)	CHANGE (%) (E)	LINE NO.
21						21
22						22
23						23
24						24
25						25
26						26
27						27
28						28
29						29
30						30
31	25	5.12	5.12	0.00	0.0%	31
32	50	6.73	6.73	0.00	0.0%	32
33	75	10.10	10.10	0.00	0.0%	33
34	100	13.45	13.45	0.00	0.0%	34
35	150	20.19	20.19	0.00	0.0%	35
36	200	26.91	26.91	0.00	0.0%	36
37	250	33.65	33.65	0.00	0.0%	37
38	300	40.38	40.38	0.00	0.0%	38
39	350	47.64	47.64	0.00	0.0%	39
40	400	55.42	55.42	0.00	0.0%	40
41	450	66.10	66.05	(0.05)	-0.1%	41
42	500	78.90	78.77	(0.13)	-0.2%	42
43	600	104.49	104.21	(0.28)	-0.3%	43
44	700	131.13	130.69	(0.44)	-0.3%	44
45	800	158.74	158.14	(0.60)	-0.4%	45
46	900	186.34	185.59	(0.75)	-0.4%	46
47	1000	213.94	213.02	(0.92)	-0.4%	47
48	1500	351.94	350.23	(1.71)	-0.5%	48
49	2000	489.94	487.44	(2.50)	-0.5%	49
50	3000	765.94	761.86	(4.08)	-0.5%	50

San Diego Gas & Electric Company
Application 10-_____
TYPICAL MONTHLY RESIDENTIAL ENERGY CHARGES AT PRESENT AND PROPOSED
(COASTAL CUSTOMERS)
Schedule DR (Summer Billing Period)

LINE NO.	ENERGY (KWH) (A)	05/01/10 PRESENT BILL (\$) (B)	2011 PROPOSED BILL (\$) (C)	CHANGE (\$) (D)	CHANGE (%) (E)	LINE NO.
1	25	5.12	5.12	\$0.00	0.0%	1
2	50	6.73	6.73	0.00	0.0%	2
3	75	10.10	10.10	0.00	0.0%	3
4	100	13.45	13.45	0.00	0.0%	4
5	150	20.19	20.19	0.00	0.0%	5
6	200	26.91	26.91	0.00	0.0%	6
7	250	33.65	33.65	0.00	0.0%	7
8	300	40.63	40.63	0.00	0.0%	8
9	350	48.39	48.39	0.00	0.0%	9
10	400	59.21	59.17	(0.04)	-0.1%	10
11	450	72.82	72.70	(0.12)	-0.2%	11
12	500	86.44	86.24	(0.20)	-0.2%	12
13	600	114.15	113.79	(0.36)	-0.3%	13
14	700	143.40	142.88	(0.52)	-0.4%	14
15	800	172.64	171.96	(0.68)	-0.4%	15
16	900	201.88	201.05	(0.83)	-0.4%	16
17	1000	231.12	230.12	(1.00)	-0.4%	17
18	1500	377.31	375.52	(1.79)	-0.5%	18
19	2000	523.51	520.92	(2.59)	-0.5%	19
20	3000	815.90	811.72	(4.18)	-0.5%	20

Schedule DR (Winter Billing Period)

LINE NO.	ENERGY (KWH) (A)	05/01/10 PRESENT BILL (\$) (B)	2011 PROPOSED BILL (\$) (C)	CHANGE (\$) (D)	CHANGE (%) (E)	LINE NO.
21						21
22						22
23						23
24						24
25						25
26						26
27						27
28						28
29						29
30						30
31	25	5.12	5.12	0.00	0.0%	31
32	50	6.73	6.73	0.00	0.0%	32
33	75	10.10	10.10	0.00	0.0%	33
34	100	13.45	13.45	0.00	0.0%	34
35	150	20.19	20.19	0.00	0.0%	35
36	200	26.91	26.91	0.00	0.0%	36
37	250	33.65	33.65	0.00	0.0%	37
38	300	40.38	40.38	0.00	0.0%	38
39	350	48.08	48.08	0.00	0.0%	39
40	400	56.46	56.45	(0.01)	0.0%	40
41	450	69.25	69.17	(0.08)	-0.1%	41
42	500	82.05	81.88	(0.17)	-0.2%	42
43	600	107.64	107.32	(0.32)	-0.3%	43
44	700	135.13	134.65	(0.48)	-0.4%	44
45	800	162.73	162.09	(0.64)	-0.4%	45
46	900	190.34	189.54	(0.80)	-0.4%	46
47	1000	217.93	216.97	(0.96)	-0.4%	47
48	1500	355.93	354.18	(1.75)	-0.5%	48
49	2000	493.93	491.39	(2.54)	-0.5%	49
50	3000	769.93	765.81	(4.12)	-0.5%	50