

Application of San Diego Gas & Electric)
Company (U 902 E) Proposing a Net Surplus)
Compensation Rate Pursuant to Assembly Bill)
920)
_____)

A.10-03-XXX
(Filed March 15, 2010)

PREPARED DIRECT TESTIMONY

OF

LISA C. DAVIDSON

ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

March 15, 2010



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1 **Prepared Direct Testimony**

2 **Of**

3 **Lisa C. Davidson**

4
5 **I. Introduction**

6 The purpose of my testimony is to present San Diego Gas and Electric
7 Company's (SDG&E's) proposal to establish a Net Surplus Compensation Program in
8 compliance with the Assigned Commissioner's Ruling issued on January 15, 2010,
9 directing electric utilities to file applications to implement provisions of Public Utilities
10 (PU) Code Section 2827, enacted by Assembly Bill (AB) 920. This legislation requires
11 electric utilities to compensate eligible net energy metering (NEM) solar or wind
12 customer-generators for any excess electricity generated over a 12-month period
13 beginning on January 1, 2011.

14 A detailed description of the background and legal framework for SDG&E's
15 implementation of AB 920 is provided in the Application. The testimony of SDG&E
16 witness, Christopher Swartz, describes the billing and customer communication aspects
17 of SDG&E's proposed Net Surplus Compensation Program. My testimony:

- 18
- 19 • Provides an overview of the provisions of AB 920 related to providing
20 compensation for net surplus electricity;
 - 21 • Presents SDG&E's proposal to compensate NEM customers for net surplus
22 generation;
 - 23 • Describes tariff changes required to implement the program.

1 **II. Background**

2 Through AB 920, the California legislature amended Section 2827 of the
3 California PU Code to require electric utilities to compensate eligible NEM solar or wind
4 customer-generators for any excess electricity generated over a 12-month period. Under
5 the current NEM law, a customer-generator on a NEM tariff does not have to be
6 compensated with a payment for any energy produced in excess of consumption, but the
7 NEM customer-generator receives credits toward consumption based on the retail energy
8 price. If such credits are not used within a 12-month period, they are forfeited.

9 AB 920 modifies this provision of the current program, requiring compensation
10 including monetary payments for excess energy if the customer so elects, and authorizes
11 the California Public Utilities Commission (CPUC) to set the electricity compensation
12 valuation.

13 The legislation states that:

14 The net surplus electricity compensation valuation shall be
15 established so as to provide the net surplus customer-generator just
16 and reasonable compensation for the value of net surplus electricity,
17 while leaving other ratepayers unaffected. The ratemaking authority
18 shall determine whether the compensation will include, where
19 appropriate justification exists, either or both of the following
20 components:

21 (i) The value of the electricity itself.

22 (ii) The value of the renewable attributes of the electricity.

23
24 (B) In establishing the rate pursuant to subparagraph (A), the
25 ratemaking authority shall ensure that the rate does not result in a
26 shifting of costs between solar customer-generators and other
27 bundled service customers.¹
28
29
30

¹ Section 2827(g,4,A and B).

1 In order to comply with the requirement that other bundled service customers
2 remain indifferent, it is necessary to establish a Net Surplus Compensation Program that
3 compensates NEM customers for the avoided costs associated with purchasing that
4 surplus electricity.

5 In addition, as more fully explained in SDG&E's Application, NEM customers
6 who wish to receive monetary payments for net surplus generation would need to certify
7 as Qualifying Facilities (QFs) with the Federal Energy Regulatory Commission (FERC).
8 Under Federal law, states may not require utilities to purchase power from QFs at rates
9 higher than SDG&E's avoided cost for purchasing the electricity. SDG&E currently has
10 QFs interconnected to its electric grid and purchases energy from many of them.
11 SDG&E pays for this energy at avoided cost prices approved by the CPUC.² The price
12 paid for energy is known as SDG&E's Short Run Avoided Cost (SRAC) energy rate.

13 At year-end 2009, SDG&E had 8637 customers on the NEM tariff of which
14 approximately 99% are solar or wind NEM tariff customers eligible for this program.
15 Based on solar and wind NEM customers with a full 12 months of billing history for
16 2009, it is likely that over 85 percent will not be impacted by this proposal because they
17 generate less power than they consume in a year. Based on 2009 data, the amount of
18 electricity for the group of customers that would be eligible for compensation under AB
19 920 is in the range of 1,600-1,800 megawatt hours.³

² See D.07-09-040.

³ This number is an approximation since SDG&E did not undertake an analysis of each individual customer's true-up date, but looked at the net MWhs exported in 2009 and did not estimate customers with less than full year usage.

1 **III. Proposed Net Surplus Compensation Program**

2 SDG&E took into account the following objectives in developing its net surplus
3 compensation rate proposal: (1) compliance with AB 920 requirements, (2) compliance
4 with applicable Federal laws, (3) ease of customer understanding, (4) transparency in the
5 calculation, and (5) low implementation costs. The sections below cover:

- 6 • Eligibility requirements to receive net surplus compensation
- 7 • The basis for the net surplus compensation rate
- 8 • Calculation of the net surplus compensation payment or credit

9 **A. Eligibility for Net Surplus Compensation**

10 The legislation limits eligibility for net surplus compensation to NEM customers
11 with solar and/or wind generation of less than 1 MW. SDG&E believes that NEM
12 customers who elect to receive net surplus compensation monetary payments would also
13 need to complete the required documentation to certify with the FERC as a Qualifying
14 Facility (QF).⁴ SDG&E will provide customers with information and webpage links to
15 the appropriate form to assist them with completing the certification requirements as
16 described in the testimony of Mr. Swartz.

17 SDG&E proposes that the net surplus compensation would be applicable when a
18 customer has both net surplus kilowatt-hours (kWh) and remaining bill credits at the end
19 of their 12-month true-up period. This is for two reasons. First, the legislation does not
20 provide for compensation unless the customer has excess kWh. Second, if a customer

⁴ The FERC is currently considering whether to exempt from QF certification requirements all generating facilities with net power production capacities of one megawatt or less. It is anticipated that FERC will consider the proposal at its March 18 Committee Meeting, where a decision could be voted out that would exempt all AB 920 eligible customers from QF certification requirements.

1 has already used their remaining bill credits at the end of their 12-month true-up period,
2 that customer would have already received compensation for their generation at the full
3 retail rate (under the basic NEM program).

4 **B. Net Surplus Compensation Rate**

5 **1. Compensation for the Value of the Electricity**

6 SDG&E proposes to use the SRAC energy rate as the basis for the Net Surplus
7 Compensation Rate. Use of the SRAC energy rate comports with AB 920's mandate to
8 establish a net surplus compensation rate that does not result in a shifting of costs
9 between customer-generators and other bundled service customers. Further, it meets the
10 FERC requirements for wholesale rates set by the CPUC. The FERC adopted the
11 measure of "avoided cost" to compensate small power producers for energy delivered to
12 purchasing utilities under the provisions of the Public Utilities Regulatory Policies Act of
13 1978 (PURPA) that maintain ratepayer indifference. In D.07-09-040, the CPUC adopted
14 the current SRAC energy formula that is based in part on electric market prices.⁵ It
15 provides an acceptable measure of energy prices SDG&E would have incurred but for the
16 net surplus energy production of the wind and solar customer-generators.

17 The SRAC rate is well-defined by the CPUC and can be described simply to the
18 customer as the price that the CPUC authorizes SDG&E to pay to all other QF producers
19 of electricity. SDG&E proposes to use a 12-month rolling average of the SRAC energy
20

⁵ The exact formula uses forward electric prices, gas prices and current gas prices to set half the rate, while the other half is set based on an administratively set heat rate and current gas prices. In D.07-09-040, the Commission committed to go to completely market based rates after the California Independent System Operator's new day ahead market was determined to be fully functioning.

1 rate to correspond with the NEM customer's 12-month true-up period. Over the last five
2 years, the 12-month rolling average prices for the non-time-of-use (TOU) SRAC energy
3 rate have ranged from a low of 4.5 cents/kWh to a high of 9.3 cents/kWh. A five-year
4 history of the SRAC and 12-month rolling averages of the SRAC prices are shown in
5 Attachment A.

6 **2. Compensation for the Value of the Renewable Attributes**

7 AB 920 states that the compensation may include the value of the renewable
8 attributes of the electricity. SDG&E proposes to pay for bundled Renewable Energy
9 Credits (RECs) associated with the net surplus generation that are offered by the
10 customer, to the extent the generation is deemed "RPS-eligible" and the RECs can be
11 applied toward SDG&E's Renewable Portfolio Standard (RPS) procurement obligation.⁶
12 Currently, in order to be deemed "RPS-eligible" such that bundled RECs they offer may
13 be used to meet RPS requirements, a generator must certify its facility with the California
14 Energy Commission (CEC) and register with the Western Renewable Energy Generation
15 Information System (WREGIS). SDG&E believes that the utilities should not be
16 required to purchase RECs without assurances that they could be applied to meet the
17 utilities' RPS requirements, and suggests that the CEC and CPUC collaborate with the
18 utilities and any other key stakeholders to develop a streamlined customer-generator
19 certification process for the purposes of allowing customer-generators to provide RPS-
20 eligible RECs, consistent with the intent of the legislation.

21 As SDG&E notes in the Application, the Commission issued a decision on March
22 11, 2010, that permits the use of unbundled RECs for RPS compliance. SDG&E

⁶ In some cases, a third party owns the REC associated with customer generation.

1 supports the development of a robust market for unbundled RECs. It is concerned that
2 action by the CPUC in this proceeding that could potentially have the effect of
3 establishing a target price or reserve price for unbundled RECs might interfere with
4 development of the nascent REC market. Accordingly, as discussed below, the CPUC
5 should use existing administrative mechanisms to set an *interim* REC price rather than
6 creating an entirely new mechanism, and should make clear in doing so that such interim
7 REC price is to be used solely for purposes of administering the Net Surplus
8 Compensation Program. At such time that the CPUC has determined that the REC
9 market in California is sufficiently robust, and the price can be relied upon as
10 competitive, a 12-month rolling average of REC market prices could be added to the 12-
11 month rolling average SRAC price for those customers transferring the REC to the
12 utility.

13 In the meantime, in keeping with the letter and spirit of AB 920, SDG&E does
14 not oppose purchasing bundled RECs under its Net Surplus Compensation Program, on
15 an interim basis, using an alternate price that could be adopted by the CPUC on an annual
16 basis. The interim REC price would be used until the price from a competitive REC
17 market could replace it. SDG&E proposes the interim price be established annually by
18 the CPUC based on the most recent Market Price Referent (MPR) Greenhouse Gas
19 (GHG) Adder. The value for 2010 would be the value described in Resolution E-4298 of
20 \$15 per ton in 2007 dollars, adjusted to \$16.15 per ton in 2010 dollars based on a 2.5
21 percent inflation rate. This value is converted to a dollar per MWh value of \$7.78 per

1 MWh assuming avoided emissions of 0.437 metric tons CO₂/MWh, consistent with the
2 Air Resources Board (ARB) assumptions, and rounded to \$8/MWh.⁷

3 The GHG adder is nominally linked to the renewables market in that a primary
4 benefit of renewables is greenhouse gas reduction. Further, in the Preliminary Draft
5 Regulation of the ARB's proposed Cap and Trade program, voluntary renewable energy
6 is allowed to retire GHG allowances.⁸ It is further noted that \$8 per MWh price is at the
7 high end of the range of prices for 2010 voluntary renewables trading in the WECC, so
8 represents a reasonable interim value to compensate customers for the RECs associated
9 with net surplus electricity.⁹

10 C. Calculation of Net Surplus Compensation or Credit

11 SDG&E proposes to compensate qualifying NEM customers for net surplus
12 generation based on their net surplus kWh and the Net Surplus Compensation Rate. The
13 approach to the net surplus compensation rate will vary by sector and by whether or not
14 the customer sells the REC to SDG&E.

15 1. Compensation for Energy - Residential and non-TOU Commercial and 16 Agricultural Sectors

17 For all residential customers¹⁰ and for commercial or agricultural customers not
18 taking service on a TOU rate, SDG&E proposes to use a 12-month rolling average of the
19 non-TOU SRAC energy rate as the basis to calculate net surplus compensation exclusive

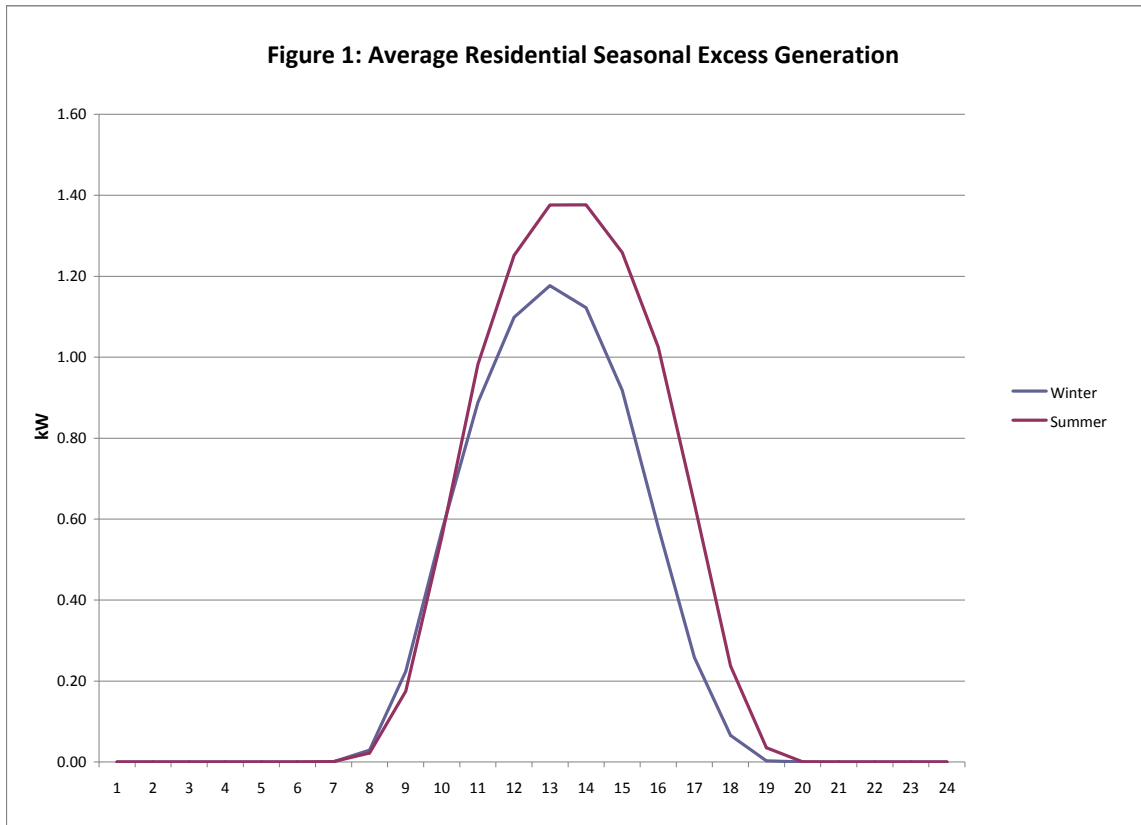
⁷ See Attachment B for the detailed calculation.

⁸ If a viable REC market does not develop until after the cap and trade market goes into effect, the fact that the electric prices will incorporate GHG costs will need to be considered.

⁹ See Evolution Markets website at new.evomarkets.com, renewable energy market updates. From the December update, Green-e Reporting Year 2010 WECC RECs were trading in the \$5.00 to \$8.00 range.

¹⁰ Although a small percentage of residential customers take service on TOU rate schedules, the seasonal and TOU definitions for residential rate schedules are not aligned with those for commercial schedules and SRAC.

1 of the REC. SDG&E proposes to adjust the average non-TOU SRAC energy rate to
2 reflect when the customer was likely to have produced net surplus energy. A profile of
3 excess generation was developed based on SDG&E's residential NEM customer data
4 shown in Figure 1, below.



5
6 Since over 90% of NEM customers with net surplus generation in 2009 were
7 residential, this profile provides a reasonable approximation of time of delivery for small
8 customers and those without TOU data when providing net surplus compensation. An
9 adjustment factor of 1.056 is derived by applying the above profile that reflects when the
10 excess generation occurred to the currently adopted TOU conversion factors used to
11 calculate the SRAC TOU energy prices. Once adopted, the adjustment factor would

1 remain fixed until new SRAC TOU conversion factors are adopted by the CPUC.¹¹ For
2 example, if a residential customer has 100 kWh of net surplus energy remaining, 100
3 kWh would be multiplied by 1.056 times the 12-month average non-TOU SRAC energy
4 rate.

5 2. Compensation for Energy –Commercial and Agricultural TOU customers

6 Commercial and agricultural customers taking service on TOU rate schedules
7 account for less than 2 percent of the NEM customers with surplus energy, but they
8 account for over 10 percent of the surplus kWh. In addition, they have a much more
9 varied consumption profile. Because of their size and more varied excess generation
10 profile, SDG&E proposes a more detailed time-of-use approach. SDG&E proposes to use
11 12-month average TOU SRAC energy rates to calculate the net surplus compensation
12 based on when the net surplus energy was generated. Surplus kWh in on-peak, semi-
13 peak, and off-peak periods will be valued based on the SRAC rate for that time period¹².
14 For example, if a commercial customer has 100 kWh of net surplus energy remaining
15 with 50% generated during on-peak hours and 50% generated during semi-peak hours, 50
16 kWh would be multiplied by the 12-month average on-peak SRAC energy rate and 50
17 kWh would be multiplied by the 12-month average semi-peak SRAC energy rate.

18 Compensating customers for net surplus generation based on the SRAC energy
19 rate provides a reasonable approximation of SDG&E's avoided cost of the electricity
20 commodity over the 12-month period. It does not allow the customer to offset
21 distribution, transmission, or fixed energy and capacity costs at the full retail rate as the

¹¹ D.08-07-048 postponed consideration of new SRAC TOU factors to a future proceeding.

¹² SDG&E calculated a weighted average of the SRAC off-peak and super off-peak energy rates to correspond to the off-peak TOU period defined in commercial and agricultural retail rate Schedules.

1 existing monthly NEM credits do, and therefore ensures that costs are not shifted to other
2 bundled customers. SDG&E's proposal also offers the advantage of recognizing the
3 TOU value of the energy generated when providing net surplus compensation.

4 3. Compensation for Renewable Energy Credits

5 For those customers that choose to transfer the RPS-eligible bundled RECs
6 associated with the net surplus energy to SDG&E, SDG&E proposes to pay an additional
7 amount of 0.8 cents/kWh. This amount would be added to the energy rate to calculate
8 the net surplus compensation rate. The calculation of net surplus compensation would
9 multiply the rate including the REC price times the surplus kWh. The REC price would
10 be updated annually based on the most recent MPR and the interim methodology would
11 eventually be replaced by a 12-month rolling average of REC prices from a liquid
12 market.

13 4. Compensation Mechanism Benefits

14 The customer would have the option to carry over the net surplus compensation to
15 future 12-month periods (SDG&E's preferred "default" option) or could elect a monetary
16 payment (if the customer is a certified QF) as described in the testimony of Christopher
17 Swartz. In either case, the net surplus compensation amount would be calculated in the
18 same manner. Attachment D contains examples of SDG&E's proposal for a residential
19 and a commercial customer.

20 SDG&E's net surplus compensation mechanism is transparent and can be verified
21 by the customer-generator. The SRAC rate is already calculated monthly and made
22 publicly available on the SDG&E website. SDG&E would include the applicable net
23 surplus compensation rate(s) in the customer's annual true-up statement and post the data

1 and the derivation of the 12-month rolling average SRAC energy rates on the SDG&E
2 website (www.SDGE.com). SDG&E witness Christopher Swartz describes the
3 information that qualifying customers would receive with their monthly bill and true-up
4 statement in further detail, as well as other customer support strategies to ensure
5 customer awareness and understanding.

6 This methodology has the benefit of being relatively simple to administer. It
7 employs: (1) the SRAC rates, already used to calculate payments for QFs; (2) a proposed
8 adjustment factor for residential and non-TOU customers that is already calculated; (3) a
9 REC price that is already calculated; and, (4) each customer's net surplus kWh, already
10 tracked in the billing system. Assuming this proposed method is adopted and that the
11 issue of how to ensure RPS-eligibility of customer-generators' bundled RECs is resolved
12 in the near term, SDG&E anticipates the ability to implement this proposal by January 1,
13 2011, without incurring costly programming changes, as described in the testimony of
14 SDG&E witness Christopher Swartz.¹³

15 **IV. Tariff Changes Required to Implement Net Surplus Compensation Program**

16 SDG&E filed Advice Letter ("AL") 2145-E on February 1, 2010, which was
17 approved by the CPUC March 4, 2010 with an effective date of February 1, 2010, to
18 reflect in tariffs the provisions of AB 920 that provide customers with options for

¹³ SDG&E is amenable to changes in this simple framework in the future to make compensation more accurate as NEM, metering system, and billing systems changes occur in the future.

1 modifying their 12-month true-up period in the event they want to opt into the Net
2 Surplus Compensation Program before their current 12-month period is complete.
3 SDG&E proposes additional modifications to the NEM tariff to describe the
4 methodology used to calculate net surplus compensation, as illustrated in Attachment C.

5 In addition, SDG&E has proposed changes to its electric preliminary statement to
6 reflect that any net surplus compensation payments made to eligible customer-generators
7 will be recorded in the Energy Resource Recovery Account (ERRA). It is appropriate to
8 record these costs to the ERRA along with other purchased power costs and payments to
9 QFs for electricity to serve bundled customers.

10 Once the CPUC approves a Net Surplus Compensation Program, SDG&E will
11 file an advice letter to implement the authorized tariff modifications.

12 **V. Conclusion**

13 SDG&E recommends that the CPUC adopt its proposed Net Surplus
14 Compensation Program and associated tariff changes in compliance with AB 920.
15 SDG&E's proposal to compensate customers based on an SRAC energy price (and REC
16 component, as applicable) at the end of 12-months for eligible NEM customers with net
17 surplus generation is transparent, simple to calculate, reasonable in implementation cost,
18 and approximates the avoided cost of the electricity.

19 This concludes my prepared direct testimony.

1 **VI. Witness Qualifications**

2 My name is Lisa Davidson. I am employed by San Diego Gas & Electric Company
3 (SDG&E) as the Electric Rates, Forecasting and Tariffs Manager in the Rates, Revenues and
4 Tariffs department. My business address is 8330 Century Park Court, San Diego, California,
5 92123. My current responsibilities include managing the electric rates, electric demand
6 forecasting, electric load analysis and SDG&E tariff groups. I assumed my current position in
7 January, 2009.

8 I received a Bachelor of Arts degree in Economics from Northwestern University in
9 1997. From 1998 to April 2001, I was employed by Accenture as an Analyst and Consultant. I
10 have been employed by SDG&E and Sempra Energy since 2001, and have held positions of
11 increasing responsibility in the Regulatory Affairs and Finance departments.

12 I have previously testified before this Commission.

Attachment A

ATTACHMENT A

SDG&E SHORT RUN AVOIDED COST ENERGY PRICES													
Time Period	Non-TOU		On-peak		Semi-peak		Off-peak		Super Off-peak		Weighted Average of Off-peak and Super Off-peak		
	Monthly Value	12-mo Average	Monthly Value	12-mo Average	Monthly Value	12-mo Average	Monthly Value	12-mo Average	Monthly Value	12-mo Average	Off-peak Hours	Super Off-peak Hours	Monthly Value
January 2004	6.680	7.410	7.230	6.610	5.500	253	155	6.188					
February 2004	6.630	7.360	7.170	6.560	5.460	247	145	6.153					
March 2004	5.990	6.660	6.490	5.930	4.940	221	155	5.522					
April 2004	6.130	6.800	6.630	6.060	5.050	218	150	5.648					
May 2004	5.880	6.690	6.500	5.620	4.740	269	155	5.298					
June 2004	6.480	7.370	7.150	6.180	5.220	218	150	5.789					
July 2004	6.160	7.010	6.800	5.880	4.960	253	155	5.530					
August 2004	6.230	7.090	6.880	5.950	5.020	237	155	5.582					
September 2004	5.420	6.170	5.980	5.180	4.370	234	150	4.864					
October 2004	6.070	6.740	6.570	6.010	5.000	253	155	5.626					
November 2004	8.650	9.600	9.360	8.560	7.120	250	150	8.020					
December 2004	7.650	8.490	8.280	7.560	6.300	221	155	7.041					
January 2005	7.200	8.000	7.800	7.130	5.930	253	155	6.674					
February 2005	7.070	7.860	7.660	7.000	5.830	228	140	6.555					
March 2005	6.960	7.730	7.540	6.890	5.730	221	155	6.412					
April 2005	8.060	8.950	8.730	7.970	6.640	234	150	7.450					
May 2005	6.990	7.950	7.720	6.680	5.630	253	155	6.281					
June 2005	6.200	7.050	6.850	5.920	4.990	218	150	6.319					
July 2005	6.820	7.760	7.530	6.520	5.500	269	155	6.147					
August 2005	6.800	7.730	7.510	6.490	5.480	221	155	6.074					
September 2005	8.820	10.030	9.740	8.420	7.100	234	150	7.904					
October 2005	11.470	12.730	12.420	11.350	9.440	253	155	10.624					
November 2005	12.560	13.950	13.600	12.430	10.340	250	150	11.646					
December 2005	10.930	12.140	11.840	10.820	9.000	253	155	10.129					
January 2006	10.920	12.120	11.820	10.800	8.990	253	155	10.112					
February 2006	8.550	9.500	9.260	8.460	7.040	228	140	7.906					
March 2006	7.800	8.660	8.450	7.720	6.420	221	155	7.184					
April 2006	7.290	8.090	7.890	7.210	6.000	250	150	6.756					
May 2006	6.670	7.590	7.370	6.370	5.370	237	155	5.975					
June 2006	5.740	6.530	6.340	5.480	4.620	218	150	5.129					
July 2006	5.920	6.740	6.540	5.650	4.770	269	155	5.328					
August 2006	6.790	7.720	7.500	6.480	5.470	221	155	6.064					
September 2006	6.620	7.530	7.310	6.320	5.330	250	150	5.949					
October 2006	5.310	5.900	5.750	5.250	4.370	237	155	4.902					
November 2006	8.480	9.420	9.180	8.390	6.980	234	150	7.839					
December 2006	8.630	9.580	9.350	8.540	7.110	269	155	8.017					

ATTACHMENT A

SDG&E SHORT RUN AVOIDED COST ENERGY PRICES														
Time Period	Non-TOU		On-peak		Semi-peak		Off-peak		Super Off-peak		Weighted Average of Off-peak and Super Off-peak			
	Monthly Value	12-mo Average	Monthly Value	12-mo Average	Monthly Value	12-mo Average	Monthly Value	12-mo Average	Monthly Value	12-mo Average	Off-peak Hours	Super Off-peak Hours	Monthly Value	12-mo Average
January 2007	7.500	7.393	8.330	8.282	8.120	8.063	7.420	7.223	6.180	6.039	237	155	6.930	6.765
February 2007	8.170	7.108	9.070	7.966	8.850	7.755	8.080	6.941	6.730	5.805	228	140	7.566	6.499
March 2007	8.530	7.077	9.470	7.930	9.240	7.721	8.440	6.909	7.020	5.779	237	155	7.879	6.470
April 2007	8.100	7.138	8.990	7.998	8.770	7.787	8.010	6.969	6.670	5.829	234	150	7.487	6.528
May 2007	7.460	7.205	8.490	8.073	8.240	7.860	7.130	7.036	6.010	5.885	237	155	6.687	6.589
June 2007	7.490	7.271	8.520	8.148	8.270	7.933	7.150	7.099	6.030	5.938	234	150	6.713	6.648
July 2007	6.940	7.417	7.890	8.313	7.660	8.093	6.620	7.238	5.590	6.056	253	155	6.229	6.780
August 2007	6.020	7.502	6.850	8.409	6.650	8.187	5.750	7.319	4.850	6.124	221	155	5.379	6.855
September 2007	5.610	7.438	6.380	8.337	6.200	8.116	5.360	7.258	4.520	6.073	266	150	5.057	6.798
October 2007	7.070	7.353	7.850	8.241	7.650	8.023	6.990	7.178	5.820	6.005	221	155	6.508	6.724
November 2007	8.270	7.500	9.180	8.403	8.950	8.182	8.180	7.323	6.810	6.126	250	150	7.666	6.857
December 2007	8.670	7.483	9.630	8.383	9.390	8.163	8.580	7.306	7.140	6.112	269	155	8.054	6.843
January 2008	8.170	7.486	9.080	8.388	8.850	8.166	8.090	7.309	6.730	6.114	237	155	7.552	6.846
February 2008	9.080	7.542	10.080	8.450	9.830	8.227	8.990	7.365	7.480	6.160	231	145	8.408	6.898
March 2008	9.990	7.618	11.090	8.534	10.810	8.308	9.880	7.441	8.220	6.223	253	154	9.252	6.968
April 2008	10.260	7.739	11.390	8.669	11.110	8.439	10.150	7.561	8.450	6.323	218	150	9.457	7.083
May 2008	10.510	7.919	11.960	8.869	11.610	8.634	10.040	7.739	8.470	6.471	253	155	9.444	7.247
June 2008	10.950	8.173	12.460	9.158	12.100	8.915	10.460	7.982	8.820	6.676	234	150	9.819	7.476
July 2008	12.030	8.462	13.690	9.487	13.280	9.234	11.490	8.258	9.690	6.908	237	155	10.778	7.735
August 2008	8.540	8.886	9.710	9.970	9.430	9.703	8.150	8.663	6.880	7.250	253	155	7.668	8.114
September 2008	7.580	9.096	8.620	10.208	8.370	9.934	7.240	8.863	6.100	7.419	234	150	6.795	8.305
October 2008	7.620	9.260	8.470	10.395	8.260	10.115	7.540	9.020	6.280	7.551	221	155	7.021	8.450
November 2008	7.170	9.306	7.970	10.447	7.770	10.166	7.100	9.066	5.910	7.589	282	151	6.685	8.493
December 2008	7.580	9.214	8.420	10.346	8.210	10.068	7.500	8.976	6.250	7.514	237	155	7.006	8.411
January 2009	5.010	9.123	7.780	10.245	7.580	9.969	6.860	8.886	5.940	7.440	253	155	6.510	8.324
February 2009	5.870	8.860	6.520	10.137	6.360	9.863	5.810	8.783	4.830	7.374	228	140	5.437	8.237
March 2009	5.160	8.593	5.730	9.840	5.590	9.574	5.110	8.518	4.250	7.153	237	154	4.771	7.989
April 2009	4.960	8.190	5.510	9.393	5.370	9.139	4.910	8.121	4.090	6.823	218	150	4.576	7.616
May 2009	3.710	7.748	4.220	8.903	4.090	8.661	3.540	7.684	2.990	6.459	269	155	3.339	7.209
June 2009	3.830	7.182	4.360	8.258	4.230	8.034	3.660	7.143	3.090	6.003	218	150	3.428	6.700
July 2009	3.900	6.588	4.440	7.583	4.310	7.378	3.730	6.576	3.140	5.525	221	155	3.487	6.168
August 2009	3.193	5.911	3.640	6.813	3.534	6.631	3.056	5.929	2.578	4.979	253	155	2.874	5.560
September 2009	2.624	5.465	2.984	6.307	2.897	6.139	2.505	5.505	2.113	4.621	234	150	2.352	5.161
October 2009	3.981	5.052	4.414	5.837	4.304	5.683	3.933	5.110	3.274	4.288	237	155	3.672	4.790
November 2009	4.650	4.749	5.183	5.499	5.054	5.354	4.618	4.809	3.844	4.038	266	151	4.338	4.511
December 2009	4.845	4.539	5.372	5.267	5.238	5.127	4.787	4.603	3.984	3.866	237	155	4.469	4.316

Attachment B

ATTACHMENT B

Derivation of Interim Compensation for Renewable Energy Credit (REC)

Line No.

1	GHG Adder per ton of CO2 in \$2007	\$ 15.00
2	Annual Escalation Rate	2.50%
3	GHG Adder per ton of CO2 in \$2010	\$ 16.15
4	tonnes CO2/MWh	0.437
5	tonnes/ton	1.1023
6	\$ MWh = Line 3 * Line 4 * Line 5	\$ 7.78
7	\$ MWh Interim Price (Rounded)	\$ 8.00

Attachment C



SCHEDULE NEM

NET ENERGY METERING

APPLICABILITY

Pursuant to California Public Utilities Code (PU Code) Section 2827, this schedule is applicable to a residential, small commercial (as defined in subdivision (h) of Section 331 of the PU Code), commercial, industrial, or agricultural customer who uses a solar or wind turbine electrical generating facility, or a hybrid system of both, with a capacity of not more than 1,000 kilowatts (kW) that is located on the customer's owned, leased, or rented premises, is interconnected and operates in parallel with the Utility's transmission and distribution systems, and is intended primarily to offset part or all of the customer's own electrical requirements (hereinafter "eligible customer-generator" or "customer"). Certain incremental billing and metering costs set forth in this schedule that are related to net energy metering are applicable to Energy Service Providers (ESPs) serving eligible customer-generators.

This service is not applicable to a Direct Access (DA) customer where the customer's ESP does not offer a net energy metering tariff. In addition, if an eligible customer-generator participates in direct transactions with an electric provider that does not provide distribution service for the direct transactions, the electric provider, and not the Utility, is obligated to provide net energy metering to the customer (also see Special Condition 3.e).

Pursuant to Decision 08-02-002 and notwithstanding all applicable terms and conditions contained herein, to the extent a Community Choice Aggregator offers a net energy metering tariff, Utility shall provide applicable NEM services under this schedule to an eligible CCA customer-generator consistent with services provided to its bundled service eligible customer-generators. As a condition of receiving service under this schedule, the CCA shall be responsible for timely providing the applicable generation-related bill charges or credits for each CCA customer-generator to the utility. Each eligible CCA customer-generator shall look to its CCA for NEM services related to the electric generation charges and credits that result from receiving services under this schedule. The CCA shall also be responsible for the applicable generation-related bill credit structure associated with this service option and providing the CCA customer-generator with the applicable generation-related bill credit.

This schedule shall be available to eligible customer-generators, upon request, on a first-come-first-served basis until the time that the total rated generating capacity used by both NEM and VNM-A eligible customer-generators exceeds 2.5% of SDG&E's aggregate customer peak demand.

Schedule NEM applies also to specified Net Energy Metering eligible (NEM-eligible) generators in a Generating Facility comprised of multiple NEM- and non-NEM-eligible generators, served through the same Point of Common Coupling (PCC), where the NEM-eligible generating capacity is not more than 1 MW. Such facilities will be referred to as Multiple Tariff Facilities, and any group of generators within such a facility that are subject to the same tariff provisions for billing and metering purposes will be referred to as a Constituent Generator Group. In order to be eligible for this rate schedule in a Multiple Tariff Facility, the customer-generator must meet all the requirements of Special Condition 7 for the schedule NEM-eligible generator, and must also meet any other applicable tariffs. Customer-generator must also complete a Generating Facility Interconnection Agreement (Multiple Tariff) (Form 117-2160).

Due to the complexity of Multiple Tariff Facilities NEM-eligible generators interconnecting under the provisions of Special Condition 7 may require additional review and/or interconnection facilities and other equipment, and may incur interconnection costs, as provided for in electric Rule 21.

As of January 1, 2010, a Customer who owns, rents or leases a premises that includes solar and/or wind turbine electrical generating facilities, or a hybrid of both with a capacity of 30kW or less, that were previously approved by SDG&E for NEM interconnection prior to the Customer moving in and/or taking electric service with SDG&E (Change of party Customer) will take service on this tariff as long as the requirements of this section are met.

(Continued)

SCHEDULE NEM
NET ENERGY METERING

Sheet 2

APPLICABILITY (Continued)

To be eligible, the Change of party Customer must: 1) ensure that the generating facility is compliant with all applicable safety and performance standards as delineated in SDG&E's Electric Rule 21 and other applicable tariffs; 2) keep in force the amount of property, commercial general liability and/or personal liability insurance the Change of party Customer has in place at the time they initiate service on this tariff; 3) understand that SDG&E may from time to time release to the California Energy Commission and/or the California Public Utilities Commission, information regarding the Change of party Customer's facility, including Change of party Customer's name and Generating Facility location, capacity and operational characteristics.

Change of party Customers making any modification to previously approved SDG&E NEM solar and/or wind turbine electrical generating facilities are not eligible for this provision and must complete the interconnection process in Special Condition 4 of this tariff.

Change of party Customers also must agree to comply with all rules and requirements of SDG&E's Net Energy Metering tariffs.

When the builder/developer of a subdivision sells a new home during the NEM application process, after the builder/developer completes the Net Energy Metering Application and Interconnection Agreement for Customers with Solar and/or Wind Generating Facilities of 30kW or Less (Form 142-02765) and otherwise meets all of SDG&E's requirements for the NEM interconnection, but prior to SDG&E providing final written approval for Parallel Operation on Schedule NEM, SDG&E may treat the new home owner/Customer as a Change of party Customer, as defined above.

TERRITORY

Within the entire territory served by the Utility.

RATES

All rates charged on this schedule will be in accordance with the eligible customer-generator's otherwise applicable metered rate schedule (OAS). An eligible customer-generator served under this schedule is responsible for all charges from its OAS including monthly billed minimum charges, customer charges, meter charges, facilities charges, energy and demand charges, and excluding any adjustments due to power factor provisions. Applicable demand charges are defined in the OAS.

Customers eligible for service under this schedule are not required to take service under Schedule S, Standby Service, or Schedule S-I, Standby Service-Interruptible, for the qualifying generators. Multiple Tariff Facilities that are interconnected under the terms of Special Condition 7 may be subject to the requirements of Schedule S or S-I. To the extent that charges for transmission and distribution services are recovered through demand charges in any billing period, no standby charges shall apply in that monthly billing cycle, except Multiple Tariff Facilities interconnected under the terms of Special Condition 7 may be subject to the requirements of Schedules S or S-I.

The charges and credits for Multiple Tariff Facilities taking service on this rate schedule under the provisions of Special Condition 7 will be calculated using the OAS identified by the eligible NEM customer-generator in its application for interconnection and its interconnection agreement with SDG&E or as subsequently changed by the eligible NEM customer-generator in accordance with SDG&E's Electric Rule 12.

(Continued)



SCHEDULE NEM

NET ENERGY METERING

RATES (Continued)

Customer-generators with Multiple Tariff Facilities with existing NEM, NEM-BIO and/or NEM-FC eligible generators interconnecting additional generators, will receive a bill true-up prior to taking service under Special Condition 7. This ensures that all NEM accounts have the same Relevant Period, as defined in Special Condition 3, going forward.

All NEM-eligible customer-generators are responsible for Public Purpose Program (PPP) charges based on the net energy delivered by the Utility.

SPECIAL CONDITIONS

1. Definitions: The definitions of terms used in this schedule are either found herein or in Rule 1, Rule 21, or the customer's OAS.
 - a. Wind Energy Co-Metering Facility: Any wind energy generating facility greater than 50 kW, but not exceeding 1,000 kW, where, as determined by the rates set forth in the customer's OAS, only the monthly value of the generation component of the electric energy supplied through the electric grid may be offset by the monthly value of the generation component of the electric energy generated by an eligible customer-generator and fed back to the electric grid over a 12-month period.
 - b. Otherwise Applicable Schedule: The NEM-eligible customer-generator's regularly filed rate schedule under which service is rendered.
2. Metering Equipment: Eligible Wind Energy Co-Metering customer-generators, see Special Condition 6. Multiple Tariff Facilities will be metered under one of the options in Special Condition 7. All other Net Energy Metering shall be accomplished using a single meter capable of registering the flow of electricity in two directions. If the eligible customer-generator's existing electrical meter is not capable of registering the flow of electricity in two directions, the eligible customer-generator shall be responsible for all expenses involved in purchasing and installing a meter that is able to register electricity flow in two directions. An additional meter or meters, installed in a dual meter socket ("dual metering"), to monitor the flow of electricity in each direction, may be installed with the consent of the eligible customer-generator, at the expense of the Utility, and the dual metering shall be used only to provide the information necessary to accurately bill or credit the customer according to the Utility's OAS or to collect solar or wind, or a hybrid system of both, electric generating system performance information for research purposes. The Utility shall determine whether dual metering is required under this provision. If dual metering is installed, the net energy metering calculation (see below) shall yield a result identical to that of a single meter capable of registering the flow of electricity in two directions. The Utility shall not require dual metering except where necessary for billing accuracy. If none of the normal metering options available at the Utility's disposal, which are necessary to render accurate billing, are acceptable to the eligible customer-generator, the Utility shall have the right to refuse interconnection.

(Continued)



SCHEDULE NEM

NET ENERGY METERING

SPECIAL CONDITIONS (Continued)

3. Net Energy Metering and Billing: Eligible Wind Energy Co-Metering customer-generators, see also Special Condition 6 and facilities qualifying under multiple tariffs, see also Special Condition 7. Net energy is defined as measuring the difference between the electric energy supplied by the Utility through the electric grid to the eligible customer-generator and the electric energy generated by an eligible customer generator and fed back into the electric grid over a 12-month period (Relevant Period). At the end of each Relevant Period following the date the eligible customer-generator was first eligible for Schedule NEM, or the date of written authorization for Parallel Operation, whichever is later, and at each anniversary date thereafter, the eligible customer-generator shall be billed for net electric energy used during that period. If an eligible customer-generator terminates service under this rate schedule, or experiences a change in electric service provider prior to the end of any Relevant Period, the Utility shall reconcile the customer's consumption and production of electric energy and bill the customer as described below, as if it were the end of the normal Relevant Period.

In the event the monthly valued energy exported by the eligible customer-generator exceeds the monthly valued energy consumed by eligible customer-generator during the Relevant Period, based on the eligible customer-generator's OAS as set forth below, no payment shall be made for the excess energy delivered to the grid. If the Utility is the electric service provider, this condition may be modified where the customer has signed a contract to sell electric energy to the Utility.

In the event that the monthly valued energy supplied by the Utility during the Relevant Period exceeds the monthly valued energy exported by the eligible customer-generator during the Relevant Period, the eligible customer-generator is a net consumer and the Utility shall bill the eligible customer-generator for the net consumption during the Relevant Period based on the eligible customer-generator's OAS, as set forth below.

Except as provided for in Special Condition 3(h), pursuant to PU Code Section 2827(h)(3), once the true-up is completed at the end of the Relevant Period, any credit for excess energy (kWh) will be retained by the Utility and the net producer will not be owed any compensation for this excess energy. Production and consumption during the twelfth month is already considered in the true-up.

Except as provided in Special Condition 6, the eligible customer-generator's OAS shall apply to the value of any net monthly consumption or production as follows:

- a) Baseline Rates: If the customer is a net consumer over a billing period, the net kWh consumed shall be billed at the applicable baseline rates up to the billing period's baseline allowance, with any excess kWh consumed billed at the applicable non-baseline rates charged other customers in the rate class.

If the customer is a net generator over a billing period, the net kWh generated shall be valued at the applicable baseline rates up to the billing period's baseline allowance, with any excess kWh generated valued at the applicable non-baseline rates charged other customers in the rate class.

(Continued)



SCHEDULE NEM

NET ENERGY METERING

SPECIAL CONDITIONS (Continued)

b) Time-of-Use: If the customer is a net generator during any discrete time-of-use (TOU) period, the net kWh produced shall be valued at the appropriate TOU rates charged other customers under the same OAS. If the customer is a net consumer during any discrete TOU period, the net kWh consumed shall be billed at the appropriate TOU rates charged other customers under the same OAS.

c) Annual and Monthly Billing: If the Utility supplies the eligible customer-generator with electric energy, the Utility shall provide the eligible customer-generator with net energy consumption information with each regular bill. That information shall include the current monetary balance owed to the Utility for the net energy consumed since the last Relevant period ended. Eligible residential and small commercial customer-generators may pay monthly or annually for the net energy consumed. For all other commercial, industrial, and agricultural customers, the net balance of all moneys owed must be paid monthly. The net value of energy exported over a monthly billing cycle shall be carried over to the following billing period and appear as a credit on the eligible customer-generator's account, until the end of the Relevant Period.

For CCA, at the end of each relevant period, the Utility and CCA shall complete an annual true up of all charges and credits calculated monthly, consistent with the provisions set forth under this schedule. Credits and charges related to the CCA's generation services shall be based on the information provided by the CCA to the Utility. Credits and charges related to services provided by the Utility shall be based on the Utility's rates. Any net balance related to generation charges that are collected from an eligible NEM CCA customer-generator will be paid annually by the Utility to the CCA as set forth in Rule 27, Section Q, which describes the payment and collection terms between the Utility and a CCA customer. The charges or credits resulting from a CCA's generation services shall not be co-mingled with charges or credits resulting from services provided by the Utility.

A customer receiving service on this rate schedule shall not be eligible for the Level Pay Plan option set forth in Rule 9.

d) Cost Responsibility Surcharge (CRS): Pursuant to D.03-04-030, eligible customer-generators shall pay the DWR charges and CTC (collectively CRS) on the net energy delivered by the Utility, as set forth in Schedule CGDL-CRS.

e) ESP Charges: The charges for all energy components for eligible customer-generators shall be based exclusively on the eligible customer-generator's net energy consumption over a Relevant Period, without regard to the eligible customer-generator's choice of ESP. If the eligible customer-generator switches its ESP during a Relevant Period, the prior ESP shall reconcile the customer generator's consumption and export of electricity for the applicable part of the current Relevant Period and the new Relevant Period will begin with respect to service provided by the eligible customer-generator's new ESP. The Utility will recover the incremental metering and billing service costs associated with Net Energy Metering from the customer's ESP.

f) CCA Charges: If the eligible customer-generator switches its commodity provider during the Relevant Period, the previous commodity provider shall reconcile the customer generator's consumption and a new relevant period will begin with respect to service provided by the eligible customer-generator's new commodity provider, if applicable.

(Continued)



SCHEDULE NEM

NET ENERGY METERING

SPECIAL CONDITIONS (Continued)

- g) Commencement of Service: The Utility shall start a customer on Schedule NEM effective with the first meter read date prior to the later of (1) customer notice to the Utility of a request for service on Schedule NEM or (2) SDG&E's written authorization for parallel operation of the customer's eligible generating facility.
- h) Assembly Bill 920: Pursuant to Assembly Bill (AB) 920, starting January 1, 2011, a NEM customer with "net surplus electricity" (all electricity generated by an eligible customer measured in kilowatt-hours over a 12-month period that exceeds the amount of electricity consumed by that eligible customer), will be provided with options regarding net surplus compensation, which valuation remains subject to further Commission action. Until then, NEM customers may choose to:
 - (i) Begin the tracking of surplus energy at the end of the customer's current relevant period; or
 - (ii) Begin the tracking of surplus energy immediately, thereby establishing a new relevant period. Under this option, SDG&E will perform the normal reconciliation of the customer's account and the new 12-month relevant period will begin on the next regularly-scheduled meter read date. Under this selection, any surplus electricity available at the time of selecting the new relevant 12-month period will be zeroed out; or
 - (iii) Not receive any true-up net surplus electricity compensation by notifying SDG&E in writing that they do not wish to participate.
- i) Compensation for net surplus energy: Per AB 920, starting January 1, 2011, SDG&E will compensate NEM customers with solar and/or wind generation of less than 1 MW, with both net surplus bill credits and excess kWhs at the end of their true-up period, for both the value of the electricity and, if applicable, the value of the Renewable Energy Credits (RECs):

Net Surplus Compensation = Value of Electricity + Value of RECs (if applicable)

- (i) Value of the Electricity - SDG&E will use the Short Run Avoided Cost (SRAC) energy rate as the basis for the net surplus compensation rate (adopted in D.07-09-040). SRAC represents a measure of energy prices the utility would have incurred but for the net surplus energy production of the customer-generators. This rate is available at www.sdge.com/NEM.

Calculation of Net Surplus Compensation or Credit - SDG&E will compensate qualifying eligible NEM customers for net surplus generation by the following formula:

Value of Electricity = Net surplus kWhs x 12-month rolling average SRAC energy rate

- (a) For commercial and agricultural TOU customers, SDG&E will use 12-month rolling average TOU SRAC energy rates to calculate the net surplus compensation based on the time the net surplus energy was generated
- (b) For residential customers and commercial or agricultural customers *not* on a TOU rate, SDG&E will use the following calculation:

12-month rolling average non-TOU SRAC energy rate x 1.056

* Factor to reflect that customers have solar generation and produce net surplus energy during daylight hours.

(Continued)



SCHEDULE NEM

NET ENERGY METERING

SPECIAL CONDITIONS (Continued)

- (ii) Value of Renewable Energy Credits - Until the price from a competitive REC market is available; the Commission will annually establish a REC price based on the most recent Market Price Referent (MPR) Greenhouse Gas Adder.

For customers that choose to transfer the RECs associated with the net surplus energy to SDG&E that can be applied to the SDG&E Renewable Portfolio Standard (RPS), SDG&E will use the following to assign a value to the REC:

2010 REC value = 0.8 cents/kWh

Eligible customers have the option to carry over net surplus compensation to future 12-month periods or can elect a monetary payment. NEM customers who elect to receive net surplus compensation monetary payments may also need to complete required documentation to certify with the Federal Energy Regulatory Commission as a Qualifying Facility.

4. Interconnection: Prior to Parallel Operation, the eligible customer-generator must execute and comply with the applicable Utility Interconnection Agreement For Net Energy Metering Solar Or Wind Electric Generating Facilities (Form 142-02760) or the Net Energy Metering Application and Interconnection Agreement for Customers with Solar and/or Wind Generating Facilities of 30 kW or Less (Form 142-02765) or for NEM / non-NEM Generating Facility export, Form 117-2160. The eligible customer-generator shall meet all applicable safety and performance standards established by the National Electric Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the CPUC regarding safety and reliability.
5. Customer-Generators Installed on or Before September 30, 2003: Pursuant to Section 2827.7 of the PU Code, eligible customer-generators who have all local and state permits required to commence construction of their generating facilities on or before December 31, 2002, and have completed construction on or before September 30, 2003, are entitled to the Net Energy Metering terms in effect on the date the local and state permits were acquired, for the life of the generating facility, regardless of any change in customer or ownership of the generating facility.
6. Wind-Energy Co-Metering: In accordance with Section 2827.8 of the PU Code, any generating facility comprising eligible wind energy generators greater than 50 kW capacity but not exceeding 1,000 kW taking service under this tariff is required to comply with this section. A generating facility that includes both non-NEM-eligible generators and a wind generator eligible under this schedule is considered a Multiple Tariff Facility and will be interconnected subject to Special Condition 7.

(Continued)

6C0
Advice Ltr. No. 2111-E
Decision No. _____

Issued by
Lee Schavrien
Senior Vice President
Regulatory Affairs

Date Filed Sep 25, 2009
Effective Oct 25, 2009
Resolution No. _____



SCHEDULE NEM

NET ENERGY METERING

SPECIAL CONDITIONS (Continued)

Wind Energy Co-Metering customer-generators are required to take service on a TOU OAS and utilize a TOU meter, or multiple TOU meters, capable of separately measuring the electric energy flowing in both directions, that is the electric energy supplied by the Utility to the customer and the electric energy generated by the customer and fed back to the electric grid. If the customer's existing meter is not a TOU meter or is not capable of separately measuring the flow of electric energy in both directions, the eligible customer-generator is responsible for all expenses involved in purchasing and installing a meter that is both TOU and able to separately measure electric energy flow in both directions.

At the end of each Relevant Period (as described in Special Condition 3), if the value of the generation component of the electric energy fed back to the electric grid by the eligible customer-generator exceeds the value of the generation component of the electric energy supplied to the eligible customer-generator by the Utility, the eligible customer-generator is a Wind Energy Co-Metering producer; (otherwise the eligible customer-generator is a Wind Energy Co-Metering consumer.)

An eligible customer-generator's consumption of electricity, from the Utility for wind energy co-metering, shall be priced in accordance with the eligible customer-generator's OAS in concurrence with the rate structure to which the customer would be assigned if the customer did not use an eligible wind electrical generating facility. The generation of electricity provided to the electric service provider shall result in a credit to the eligible customer-generator and shall be priced in accordance with the generation component of the eligible customer-generator's OAS, excluding surcharges to cover the purchase of power by the Department of Water Resources, to which the customer would be assigned if the customer did not use an eligible wind electrical generating facility.

7. Multiple Tariff Facilities:

Multiple Tariff Facilities have the following additional provisions:

- a) When Net Generation Output Metering (NGOM) is required, such NGOM must conform to the requirements set forth in Electric Rule 21, Section F.
- b) An NEM-eligible Constituent Generator Group is defined as a constituent generator group that is eligible for service under the provisions of either schedule NEM, NEM-BIO or NEM-FC.
- c) A non-NEM-eligible Constituent Generator Group is defined as a constituent generator group that does not take service under the provisions of schedules NEM, NEM-BIO or NEM-FC, but interconnects under the provisions of Electric Rule 21.
- d) All metering for Multiple Tariff Facilities called for in this Special Condition must meet the requirements needed to bill under the customer-generator's OAS. All metering, equipment and nonexport relays necessary to implement the provisions in this section will be provided at the customer-generator's expense.
- e) Any generator(s) eligible for service under Schedule NEM-BIO with aggregated load accounts and any generator(s) eligible for service under Schedule NEM for large wind generators (over 50 kW up to 1000 kW/Energy Co-metering) will be treated as a separate Constituent Generator Group.

(Continued)



SCHEDULE NEM

NET ENERGY METERING

SPECIAL CONDITIONS (Continued)

f) Billing Credits:

- 1) For customer-generators with one NEM-eligible Constituent Generator Group and one or more non-NEM-Eligible Generators without non-export relay, and energy (kWh) is exported to the grid at the PCC, the billing credit will be calculated for each billing period as follows:
 - a) NEM-eligible Export is the lesser of either all exported energy (kWh) as measured at the PCC or the NEM-eligible Constituent Generator Group's production as measured at the NGOM(s)
 - b) Multiply the NEM-eligible export determined in (a) above with the customer-generator's rate per OAS and applicable NEM schedule.
- 2) For customer-generators with multiple NEM-eligible Constituent Generator Groups and with or without one or more non-Eligible Generator's without non-export relay, and energy (kWh) is exported to the grid at the PCC, the billing credit for each NEM-eligible Constituent Generator Group will be calculated for each billing period as follows:
 - a) Sum all NEM-eligible Constituent Generator Groups' production (kWh) as measured at the NGOMs.
 - b) Determine the proportion of energy production (kWh) attributable to each NEM-eligible Constituent Generator Group by dividing the NGOM reading of each by the sum from (a) above.
 - c) NEM-eligible Export for each NEM-eligible Constituent Generator Group is the lesser of either its proportion of attributable energy production determined in (b) above multiplied by the total exported energy (kWh) as measured at the PCC or its energy production (kWh) measured at its NGOM.
 - d) Multiply each NEM-eligible Constituent Generator Group's Export determined in (c) above by the customer-generator's rate per OAS and applicable NEM schedule.

If interval meters are used, this allocation of bill credit will be done on the aggregated intervals over a billing period. If the OAS is a time-of-use (TOU) rate schedule, the allocation will be performed for each aggregated TOU period separately.

Generating facilities including only small wind (50 kW or less) and solar generators are not Multiple Tariff Facilities and the customer will be billed as provided in Special Condition 2 of this tariff.

- 3) Billing credit will be applied consistent with the appropriate NEM tariff as follows:
 - a) First, apply NEM-BIO Generation Rate Component credits (if any) to Generation Rate Component charges on any aggregated accounts served by the Generating Facility.

(Continued)



SCHEDULE NEM

NET ENERGY METERING

SPECIAL CONDITIONS (Continued)

- b) Second, apply remaining NEM-BIO credits from (a) above and Generation Rate Component credits from NEM-FC, and NEM of large wind (>50 kW) generators (if any) as appropriate, to the remainder of generation component charges on the account served by the generating facility (Host Account).
- c) Third, apply NEM solar and small wind (<50 kW) energy (generation and non-generation rate component) credits to energy charges of the accounts served by the generating facility.
- g) Multiple Tariff Facility Configurations and Metering.
 - 1) For two or more of NEM-eligible Constituent Generator Groups and no non-NEM eligible Constituent Generator Groups, the customer-generator must install NGOM on each Constituent Generator Group. In addition, metering is required at the PCC.
 - 2) For both NEM-eligible and non-NEM-eligible Constituent Generator Groups, the customer must select one of the following options:
 - a) Non Export Relay Option: A customer-generator must install a Non-Export relay on their non-NEM Constituent Generator Groups and install metering as follows: 1) If there is only one type of NEM-eligible Constituent Generator Group then metering at the PCC is all that is required and the terms of the appropriate NEM tariff for that group shall apply; 2) If there are two or more types of NEM-eligible Constituent Generator Groups, then metering at the PCC and NGOM metering of each NEM-eligible Constituent Generator Group is required.
 - b) NGOM Option: The customer-generator must install NGOM on each NEM-eligible Constituent Generator Group and metering at the PCC.

For any of the above configurations, if the customer-generator has no Constituent Generator Group eligible for Schedule NEM-BIO with aggregated accounts, but has a Constituent Generator Group eligible for Schedule NEM for small wind (50 kW or less) and/or solar generators, the customer-generator may elect to take service for such under either Schedule NEM for large wind generators or Schedule NEM-BIO or NEM-FC as appropriate to one of the other Constituent Generator Groups.

For the purpose of tariff administration, other metering configurations may be allowed at SDG&E's discretion.

Attachment D

Examples of SDG&E Proposal

Line No.

		On-Peak	Semi-Peak	Off-Peak
1	<u>AL-TOU Commercial Customer</u>			
2	Total Net Surplus kWh			
3	% Generated in Each TOU Period	50%	50%	0%
4	kWhs in Each TOU Period = Line 2 * Line 3	500	500	0
5	12-month average SRAC energy rate (cents/kWh)	5.27	5.13	4.32
6	REC Price (cents/kWh) *	0.8	0.8	0.8
7	Net Surplus Compensation Rate (cents/kWh) = Line 5 + Line 6	6.07	5.93	5.12
8	Compensation each time Period = Line 4 * Line 7 / 100	\$ 30.35	\$ 29.65	\$ -
9	Total Net Surplus Compensation			
				\$ 60.00
10	<u>Residential DR Customer</u>			
11	Total Net Surplus kWh			1000
12	12-month average SRAC energy rate (cents/kWh)			4.54
13	Adjustment Factor			1.056
14	Adjusted average SRAC energy rate = Line 12 * Line 13			4.79
15	REC Price (cents/kWh) *			0.8
16	Net Surplus Compensation Rate (cents/kWh) = Line 14 + Line 15			5.59
17	Total Net Surplus Compensation = Line 11 * Line 16 / 100			\$ 55.94

* Example assumes that customer elects to sell the bundled RECs to SDG&E that can be applied to the RPS

Attachment E



PRELIMINARY STATEMENT

Sheet 1

II. BALANCING ACCOUNTS
ENERGY RESOURCE RECOVERY ACCOUNT (ERRA)

1. Purpose

Pursuant to D.02-10-062 and D.02-12-074, the purpose of the ERRA is to provide full recovery of the Utility's energy procurement costs associated with fuel and purchased power, Utility retained generation (URG), ISO related costs and costs associated with its residual net short procurement requirements to serve its bundled service customers. The ERRA shall include revenues received from the Utility's Electric Energy Commodity Charge (EECC) adjusted to exclude revenues assigned to any state agency, including the California Department of Water Resources (DWR). In addition, the ERRA shall include revenues from Schedule EECC-TBS. The ERRA shall also record the revenue over or under collections associated with the baseline allowance changes as authorized in Commission Decision D.02-04-026, as modified by D.02-05-010, and the provisions of D.04-02-057. Pursuant to D.02-12-074, ongoing transition costs ("above market") associated with qualifying facilities and eligible purchase power contracts should be recorded in the Transition Cost Balancing Account (TCBA). In compliance with Assembly Bill (AB) 920, the ERRA shall record any net surplus compensation payment made to eligible customer-generators in accordance with SDG&E's Net Surplus Compensation Program.

2. Applicability

The ERRA shall be applied only to the Utility's bundled service customers.

3. ERRA Rate

The ERRA rate will be included as part of the Utility's total Schedule EECC rate. The Utility will file its first ERRA application on June 1, 2003 to establish the initial ERRA rate. Until such time that the initial ERRA rate becomes effective, revenues derived from the current and effective Schedule EECC rate, less revenues assigned to DWR, shall be recorded to the ERRA on a monthly basis.

4. Effective Date

This tariff is effective for service rendered on and after January 1, 2003.

5. Accounting Procedure

The Utility shall maintain the ERRA by making entries at the end of each month as follows:

- a. An entry equal to the at or below market costs associated with the Portland General Electric contract.
- b. An entry equal to the at or below market costs associated with the Utility's eligible qualifying facility (QF) contracts.
- c. An entry equal to the costs associated with the Utility's other purchase power, including renewable energy procurement.

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San Diego Gas & Electric Company
San Diego, California

	<u>Original</u>	Cal. P.U.C. Sheet No.	<u>19427-E</u>
	<u>Revised</u>		<u>19123-E*</u>
Canceling	<u>Revised</u>	Cal. P.U.C. Sheet No.	<u>19186-E</u>

PRELIMINARY STATEMENT

Sheet 2

II. BALANCING ACCOUNTS
ENERGY RESOURCE RECOVERY ACCOUNT (ERRA)

5. Accounting Procedure (Continued)

- d. An entry equal to the Utility pro rata share of the net proceeds from sales of surplus Utility and DWR energy.
- e. An entry equal to the costs associated with SONGS and electric generation fuel and fuel-related expenses, including in lieu payments payable to communities where SDG&E-owned power plants are located pursuant to D.05-08-005 or other applicable Commission decisions.
- f. An entry equal to ISO-related costs charged to the Utility.
- g. An entry equal to the costs associated with the Utility's energy procurement commitments and self procured ancillary service costs to fulfill its net short electric requirement.
- h. An entry equal to other energy procurement-related costs not recovered through the Utility's Cost of Service or other cost recovery mechanism.
- i. An entry equal to the revenue billed during the month from the Schedule EECC rate adjusted to exclude revenues assigned to the DWR net of franchise fees and uncollectible accounts expense. The revenue shall be adjusted to credit the revenue shortfall, associated with the Family Electric Rate Assistance (FERA) Program, recorded in the FERA Subaccount in the electric Baseline Balancing Account (BBA) as authorized in Commission D.04-02-057.
- j. An entry equal to the revenue billed during the month from the Electric Energy Commodity Cost – Transitional Bundled Service Schedule (Schedule EECC-TBS), net of franchise fees and uncollectible accounts expense.
- k. An entry equal to the revenue received from the CCA Cost Responsibility Surcharge, net of the revenue assigned to DWR.
- l. An entry equal to the shortfall associated with the baseline allowance changes as authorized in Commission D.02-04-026 and as modified by D.02-05-010, until a decision is issued in Phase 2 of OIR 01-05-047.
- m. An entry to reflect any transfers from other regulatory accounts as authorized by the Commission.
- n. A debit entry equal to incentive payments to customers participating in the Statewide Pricing Pilot (SPP) Program authorized in the Phase 1 decision of the advanced metering, demand response, and dynamic pricing proceeding.
- o. An entry, as applicable, to reflect the ratepayer portion of the electric generator refunds as directed in Resolution E-3893.

(Continued)

2C0	Issued by	Date Filed	<u>Aug 15, 2006</u>
Advice Ltr. No. <u>1820-E</u>	Lee Schavrien	Effective	<u>Sep 14, 2006</u>
Decision No. _____	Vice President Regulatory Affairs	Resolution No.	_____



PRELIMINARY STATEMENT

**II. BALANCING ACCOUNTS
ENERGY RESOURCE RECOVERY ACCOUNT (ERRA)**

5. Accounting Procedure (Continued)

- p. A debit entry equal to energy incentive payments for applicable programs adopted in D.05-01-056.
- q. An entry to reflect any rewards or penalties associated with the adopted heat rate incentive authorized in D. 04-06-011 for the Palomar Energy Center.
- r. A debit entry to record the fees associated with participation in the Western Renewable Energy Generation Information System (WREGIS).
- s. An entry to reflect the revenues or costs associated with procurement transactions for Congestion Revenue Rights (CRRs).
- t. A debit entry equal to Peak Time Rebate (PTR) incentive payments made to residential and small commercial customers as authorized in D.08-02-034.
- ~~t.u.~~ A debit entry equal to net surplus compensation payments made to eligible customer-generators for the Net Surplus Compensation Program in compliance with AB 920.
- ~~t.v.~~ Interest shall be calculated on the average of the balance at the beginning of the month and the balance after entries 5.a. through 5.t. at a rate equal to one-twelfth of the interest rate on three-month Commercial Paper for the previous month, as reported in the Federal Reserve Statistical Release, H.15. or its successor.

6. Trigger Mechanism

In accordance with Assembly Bill (AB) 57, a trigger mechanism will be in place that will consider the relationship between the cumulative balance in the ERRA and the prior year recorded generation revenues excluding revenues collected for DWR. Recorded generation revenues for 2008, excluding revenues collected for DWR, were \$1,030 million. Pursuant to D. 07-05-008, in any month when the balance in the ERRA reaches 4% (\$41.2 million) of the prior year recorded electric commodity revenues excluding DWR revenue, the Utility will notify the Commission through advice letter filing, instead of expedited application, that no rate change will be necessary if the Utility forecasts that the ERRA balance will self-correct below the trigger within 120 days of filing. The Utility shall include the necessary documentation to support this advice letter filing. The Utility shall continue to file an expedited application during those instances where the ERRA balance exceeds the trigger point and rate changes are necessary to amortize the balance. In those instances where the Commission rejects an advice letter filing, the Utility shall file an application within 15 days after rejection. The application will include a projected account balance in 60 days or more from the date of filing depending on when the balance will reach the 5% (\$51.5 million) threshold. The application will also propose an amortization period for the five percent of not less than 90 days to ensure timely recovery of the projected ERRA balance. The application should also include allocation of the amortized balance among customers based on the existing allocation methodology recognized by the Commission. The AB 57 trigger mechanism application should not be used to refund overcollections until it has been in operation for a full 12 months (D.02-10-062, Conclusion of Law 18).

7. Filing and Update Process

The ERRA will follow a semiannual update process as described in D.02-10-062 and D.02-12-074. The Utility will file applications on June 1 and October 1 of each year. The June 1 application will address the review of the balancing account, contract administration, energy resources expenses and energy dispatch. The October 1 application will propose an energy resource forecast for the upcoming 12 months and a new ERRA rate based on that forecast.

8. Baseline Shortfall Subaccount (BSS)

- a. Purpose: Pursuant to D. 04-02-057, the purpose of the Baseline Shortfall Subaccount (BSS) is to record the commodity shortfall to maintain revenue neutrality resulting from 1) amortization of the Baseline Balancing Account (BBA) in the electric distribution rate, and 2) the adjustment to the Distribution and CTC rates to eliminate the ongoing shortfall related to the baseline allowance

(Continued)

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PRELIMINARY STATEMENT

Sheet 4

**II. BALANCING ACCOUNTS
ENERGY RESOURCE RECOVERY ACCOUNT (ERRA)**

changes to utility distribution company (UDC) rates made pursuant to D.02-04-026.

8. Baseline Shortfall Subaccount (BSS) (Continued)

b. Accounting Procedure

The Utility shall maintain the BSS by making entries at the end of each month as follows:

1. An entry equal to the BBA amortization shortfall described in 8.a above, as calculated by multiplying the BBA amortization rate by the applicable residential sales volumes.
2. An entry equal to the ongoing baseline allowance shortfall described in 8.a above, as calculated by multiplying the rate change needed to eliminate the ongoing baseline shortfalls by the applicable residential sales volumes.
3. An entry equal to interest on the average balance in the account at the beginning of the month and the balance after the entries from b.1 and b.2 above at a rate equal to one-twelfth of the interest rate on three-month Commercial Paper for the previous month, as reported in the Federal Reserve Statistical Release, H.15, or its successor publication.

c. Disposition

Disposition of the balance in this subaccount shall be determined in an appropriate proceeding authorized by the Commission.

9. AB 1X Shortfall Account (ASA)

a. Purpose

Pursuant to D. 04-02-057, the purpose of the AB 1X Shortfall Account (ASA) is to record the shortfall caused by reduced commodity rates contained in Schedule EECC for usage up to 130% of baseline, which were designed to make the rates equal to February 1, 2001 levels. Pursuant to Resolution E-3907, AB 1X protection is expanded to include non-residential CARE (Schedule E-LI) customers. The ASA is separated into two subaccounts: an ASA applicable to residential customers and an ASA applicable to non-residential customers under Schedule E-LI.

b. Accounting Procedure

The Utility shall maintain the ASA by making entries at the end of each month as follows:

1. An entry equal to the AB 1X shortfall described in 9.a. above, as calculated by multiplying the rate changes required to maintain AB 1X rate levels for 130% of baseline usage by the applicable residential sales volumes.

(Continued)



PRELIMINARY STATEMENT

Sheet 5

**II. BALANCING ACCOUNTS
ENERGY RESOURCE RECOVERY ACCOUNT (ERRA)**

9. AB 1X Shortfall Account (ASA) (Continued)

b. Accounting Procedure: (Continued)

2. An entry equal to the AB 1X shortfall described in 9.a above, as calculated by multiplying the rate changes required to maintain AB 1X rate levels for Schedule E-LI customers.

3. An entry equal to interest on the average balance in the account at the beginning of the month and the balance after the entry from b.1 above at a rate equal to one-twelfth of the interest rate on three-month Commercial Paper for the previous month, as reported in the Federal Reserve Statistical Release, H.15, or its successor publication.

c. Disposition

Disposition of the balance in this subaccount shall be determined in an appropriate proceeding authorized by the Commission.

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Advice Ltr. No. 1820-E

Decision No. _____

Issued by
Lee Schavrien
Vice President
Regulatory Affairs

Date Filed Aug 15, 2006

Effective Sep 14, 2006

Resolution No. _____