

Application No: A.10-03-xxx
Exhibit No. SCE-1
Witnesses: M. Ulrich
M. Bushey
J. Schichtl



SOUTHERN CALIFORNIA
EDISON

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(U 338-E)

***Prepared Testimony Supporting Application
Proposing a Net Surplus Compensation Rate Pursuant
to Assembly Bill 920***

Before the

Public Utilities Commission of the State of California

March 15, 2010
Rosemead, California

***Testimony Supporting
Application Proposing a Net Surplus Compensation Rate
Pursuant to Assembly Bill 920***

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1 I.

2 **INTRODUCTION TO ASSEMBLY BILL 920 AND NET SURPLUS COMPENSATION**

3 Assembly Bill (AB) 920¹ requires that the California Public Utilities Commission (Commission
4 or CPUC) establish a Net Surplus Compensation Program to compensate net energy metering (NEM)
5 customers for electricity produced in excess of their on-site load at the end of each 12-month period. On
6 January 15, 2010, Commission President Peevey issued the Assigned Commissioner’s Ruling Directing
7 Electric Utilities to File Applications Proposing a Net Surplus Compensation Rate Pursuant to Assembly
8 Bill 920 (ACR), in CPUC Rulemaking (R.)08-03-008. The ACR directed Pacific Gas and Electric
9 Company, Southern California Edison Company (SCE), and San Diego Gas & Electric Company to file
10 applications no later than March 1, 2010, proposing a Net Surplus Compensation Rate (NSCR), as well
11 as other program implementation details pursuant to AB 920. In an email dated February 24, 2010,
12 Administrative Law Judge Duda granted an extension to file the applications until March 15, 2010.

13 In addition to directing the submission of the compensation rate proposals, the ACR poses
14 questions regarding the proposed compensation rate as well as policy questions related to AB 920. In
15 this Testimony, SCE proposes a compensation methodology, addresses questions regarding the proposed
16 compensation rate, such as consideration of alternative prices, and provides its responses to the policy
17 questions posed in the ACR. Appendix A presents the list of issues and the location in the Testimony
18 where SCE’s responses can be found.

19 Because AB 920 is intended to complement the current NEM program, to the extent possible the
20 two programs should be coordinated. SCE proposes to maintain all aspects of the current NEM
21 program’s metering and billing, modified only to comply with the requirements of AB 920 and the
22 revised California Public Utilities Code (PUC). Maintaining the current structure of the NEM program
23 has two benefits. First, it retains the process with which customers are familiar. Second, it allows for
24 the addition of the net surplus compensation option while minimizing administrative costs.

¹ Assembly Bill 920 (Huffman) Stats. 2009, ch. 376, which amends Section 2827 of the California Public Utilities Code ,
was signed by Governor Schwarzenegger on October 11, 2009.

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II.

BACKGROUND

Under PUC Section 2827 before passage of AB 920, each electric utility was required to offer NEM tariffs to eligible customer-generators who own and operate small renewable generation systems. Under NEM tariffs, customers realize the benefit of their generation in two ways. First, generator output offsets some portion, or all, of a customer’s contemporaneous load. Second, if over the course of a billing cycle the customer-generator produces more energy than is used by the customer over the same period, this net production is valued at the full retail energy rate and the resulting credit is carried forward to the next billing period.² This monthly netting and crediting (in cases of net production) continues for a 12-month period, referred to as the “relevant period.” For those NEM customers eligible for annual billing³ the sum total of monthly bill debits and credits are then reconciled over the relevant period and a consolidated bill is issued for the relevant period. Prior to AB 920, for both monthly and annually billed customers, any bill credit remaining at the conclusion of a relevant period was forfeited and the next relevant period began. It should be noted that under the current Commission-authorized NEM tariff, net consumption or production is converted to a dollar energy charge or credit every month. Credits not used to offset charges in the same billing period are carried forward to the next cycle. Energy measured in kilowatt-hours (kWhs) is not carried forward to offset energy consumption in the next billing period. As a result, if net production occurs during periods when retail energy rates are particularly high, it is possible to accumulate net billing credits over the course of a year without fully offsetting the customer’s annual electricity consumption.

AB 920 requires that the CPUC establish a net surplus compensation option to compensate participating NEM customers for electricity produced in excess of their on-site load at the end of each 12-month period. Upon an affirmative election to participate in the new option, customers may choose between either: (1) compensation at the end of each 12-month period; or (2) a credit for excess kWhs that can be rolled over into the next 12-month period. **A utility will not owe compensation for surplus**

² Monthly billed customers pay their current charges in each billing cycle.

³ Residential and Small Commercial NEM customers are not required to pay charges on a monthly basis.

1 kWhs to any customer that does not notify the utility of a desire to receive compensation or a credit
2 rollover, and the utility can retain any excess kWhs generated during the 12-month period to the benefit
3 of its remaining customers.⁴ A necessary prerequisite for participation in the new option is that the
4 customer has net generation for the relevant period, that is, that the customer has produced more than
5 consumed in the relevant period. The modification to the NEM statute enacted by AB 920 is intended to
6 provide compensation for surplus generation which prior to passage of AB 920 was forfeited at the
7 conclusion of the relevant period. The statute requires that net surplus compensation be provided in
8 such a way as to maintain the indifference of non-participating customers. Furthermore, AB 920
9 specifies that the utility retains all renewable energy credits (RECs) associated with net surplus
10 electricity purchased from customer-generators, and the electricity counts towards the utility's
11 renewables portfolio standard (RPS) annual procurement targets.

12 III.

13 NET SURPLUS COMPENSATION RATE

14 A. Proposed Compensation Rate

15 SCE proposes an NSCR that is the sum of: (1) the California Independent System Operator
16 (CAISO) Market Redesign and Technology Upgrade (MRTU) Integrated Forward Market (IFM) South
17 of Path 15 (SP 15) Generation Hub price,⁵ and (2) the United States Department of Energy (DOE)
18 renewable attribute price.⁶ SCE proposes that the price inputs used reflect the relevant period over
19 which the net surplus generation occurred.

20 AB 920 requires the Commission establish a rate for compensation that is “just and reasonable
21 for the customer-generator but that leaves other customers unaffected.” The Commission is prohibited
22 from setting a rate that shifts costs between customer-generators and other customers.⁷ In order to
23 satisfy these criteria, the price paid for such net surplus energy must be based on a market metric, which

⁴ PUC Section 2827(h)(c)(3).

⁵ CAISO MRTU IFM SP15 GenHub prices published daily for each hour.

⁶ <http://www.eere.energy.gov/greenpower/markets/pricing.shtml?page=1>


⁷ PUC Section 2827(h)(4).

1 includes both energy and renewable components. If SCE were to pay any price above market (including
2 the full retail rate), non-NEM customers will essentially pay more for the energy and related benefits
3 than what they would otherwise face in a fair market. In other words, to hold customers indifferent,
4 utilities should only be required to purchase renewable energy from NEM customers at a proxy for the
5 market price of this resource.

6 Market sources are reliable, fair, reflect current price movement, and are hard to manipulate.
7 Markets are driven by competition and a fair price that is set to reflect the willingness of parties to buy
8 and sell. As such, to the extent possible, the price that NEM customers receive under AB 920 should
9 reflect fair market prices. The MRTU IFM represents a transparent California market price of
10 electricity, and is the price that utilities would otherwise pay to procure electricity. However, since the
11 MRTU price does not encapsulate the renewable nature of the surplus energy delivered by net
12 generators, SCE looks to another source for that valuation. The DOE updates and publishes renewable
13 premiums used by various utilities across United States in voluntary green energy programs. As a proxy
14 for the value of renewable energy, SCE proposes to use the average of 88 data points from utilities
15 within the Western Electric Coordinating Council (WECC).⁸

16 **B. Compensation Form**

17 SCE proposes that net surplus compensation be provided to eligible customers either as (1) direct
18 payment to the customer or (2) a bill credit against future energy charges in the next relevant period.
19 Although AB 920 describes a rolling over of generation (*i.e.*, kWhs) to be credited against consumption
20 in the next relevant period, SCE's proposal to value the net energy and roll forward the dollar credit is
21 equivalent, and is consistent with current NEM practice within the relevant period. SCE's proposed
22 market-based credit values net production based on when it is generated, whereas carrying forward
23 kWhs to be credited against future consumption necessarily values the energy at the time energy is
24 consumed in the next relevant period. In addition, offsetting future kWh consumption with "banked"

⁸ Only 11 California utilities report prices to the DOE. 

1 kWhs would value the net surplus production at the full retail rate which, as discussed in more detail
2 below, violates the statutory requirement of indifference for non-participants.

3 The price used to calculate the amount of either form of net surplus compensation (*i.e.*, direct
4 payment or bill credit) must be the same in order that non-NEM customer indifference is preserved.
5 Non-NEM customers are indifferent to NEM customers receiving compensation for delivered renewable
6 electricity at avoided cost only, and therefore the price underlying both payment methods must be the
7 same. This approach also serves to simplify the treatment of bill credits that are rolled over to
8 subsequent relevant periods and never “spent” (*e.g.*, in instances where the NEM customer consistently
9 net generates). These credits can be maintained and used across multiple relevant periods in SCE’s
10 billing system, or any amount remaining (the amount not used to offset any subsequent energy charges)
11 may be paid directly to the customer at the customer’s request.

12 **C. Consideration of Alternative Price options**

13 The ACR requires that alternative compensation rates, identified in the ACR, be evaluated
14 against the rate included in the utility’s proposal. SCE’s proposed NSCR, based on a market value
15 calculation, is the most appropriate among the various options on the basis of non-participating customer
16 indifference.

17 Cost shifting to non-participating customers, which is prohibited by PUC Section 2827(h)(4)(B),
18 is minimized or eliminated in two ways by SCE’s proposal. First, SCE’s proposed compensation for
19 energy delivered to the grid by participating customer-generators approximates the market cost of
20 renewable energy that SCE would otherwise purchase. The additional premium for renewable energy,
21 based on the average reported by representative utilities in the WECC, represents a reasonable estimate
22 of the incremental value of delivered renewable energy. By compensating customers for delivered
23 renewable energy at a price comparable to the cost to SCE of the same energy from other sources, SCE
24 maintains the indifference of non-participating customers to the new compensation option.

25 A second consideration in terms of non-participating customer indifference is limiting the
26 administrative and operational cost of implementing the requirements of AB 920. SCE’s proposal
27 strikes a balance between providing a reasonable compensation rate (without subsidy) and the cost of

1 implementing this new NEM tariff option. A more complicated pricing mechanism, while possibly
2 more desirable from an individual participating customer perspective, would have an impact on
3 implementation costs. In SCE's proposal, SCE is not proposing to recover the implementation costs
4 from participating customers to keep the remaining customers indifferent, but would reserve the right to
5 propose such recovery if the cost of implementing a more complicated pricing mechanism warrants.

6 SCE discusses in more detail below the other pricing options listed in the ACR.

7 **1. Full Retail Rate**

8 Providing compensation at the full retail rate violates non-participating customer indifference
9 because utilities would essentially procure energy from NEM customers at a price above avoided cost
10 that also includes transmission and distribution and other non-avoidable costs. A comparable option,
11 payment of the bill credits remaining on an NEM customer's bill at the conclusion of the relevant
12 period, which reflect the full retail rate, would also violate the indifference requirement.

13 **2. Generation-Only Rate**

14 This option does not maintain customer indifference. The generation-only rate is a retail
15 electricity price that includes the value of capacity, however, utilities do not receive capacity benefits
16 from NEM customer-generators. In addition, the energy component of the generation-only rate reflects
17 the average cost of procurement, not the marginal cost to procure. The market cost metric necessary to
18 maintain customer indifference is necessarily based on the cost of the marginal electricity that would
19 otherwise be purchased to replace surplus NEM generation. Furthermore, through the generation rate, a
20 utility would be compensating NEM customers for the utility's above-market procurement costs. As
21 described above, setting the net surplus price at the generation-only rate would result in utilities *paying*
22 customer-generators surcharges that are normally *received* from customers choosing other generation
23 suppliers to recover their stranded costs.

24 **3. Market Price Referent (MPR) – Energy Only**

25 The MPR is a metric for the price reasonableness for renewable generation, not the marginal cost
26 to procure renewable energy. Because of generous assumptions used in its calculation, SCE believes
27 that the MPR is above-market and therefore would not maintain customer indifference if used as a price

1 proxy. Utilities should be able to, and often do, procure renewable energy at below MPR. MPR
2 includes payment for capacity, which would need to be excluded from the NSCR due to the nature of the
3 customer-generated product. Even without the capacity payment, the energy and renewable attribute
4 portion of delivered renewable energy would still be priced above that at which SCE can procure
5 renewable energy in the markets. Lastly, MPR is a levelized price based on the contract length and
6 delivery start date of a renewable facility. Use of MPR would not only violate customer indifference,
7 but would also be operationally complex to implement for the purpose of AB 920.

8 IV.

9 IMPLEMENTATION METHODOLOGY

10 Utilizing the information within SCE's billing system for NEM customers at the conclusion of
11 each customer's relevant period, there are two implementation methodologies for net surplus
12 compensation using SCE's proposed NSCR. Both have merit and potential complications. SCE
13 proposes a cents-on-the-dollar conversion of surplus bill credits, based on the avoided cost plus
14 renewable premium price. Alternatively, the same price could be used to value net surplus kWhs at the
15 end of the relevant period. The following sections will outline the issues and benefits of each method.
16 As discussed previously, the operation of NEM during the relevant period, where net generation is
17 converted to dollar credits based on the retail rate and used to offset charges for consumption,
18 complicates the subsequent application of a price for net surplus kWhs at the end of the relevant period.
19 The crux of the issue is the discrepancy between the remaining bill credits and the value of surplus
20 electricity, due to the time-value of electricity generation and consumption.

21 A. Bill Credit Based Compensation

22 SCE proposes to compensate eligible net surplus generators by "discounting" any bill credit
23 remaining at the conclusion of the relevant period. Eligible customers must have both net surplus
24 generation (as defined by statute) and a net bill credit remaining at the conclusion of their relevant
25 period to be compensated under SCE's proposal. A class weighted average MRTU price for the
26 applicable relevant period, plus the average premium for delivered renewable energy in the WECC, is
27 divided by the average retail price for the individual NEM customer's rate group, to produce a "Payout

1 Percentage.” As described above, a qualifying NEM customer’s net credit remaining at the end of the
2 relevant period is a function of production and the retail energy price applicable at the time of
3 generation, net of energy charges for consumption during the relevant period. SCE proposes to multiply
4 the eligible customer’s NEM credit by the payout percentage to determine the compensation to the
5 customer. This essentially “discounts” the full retail credit under NEM to an estimated market-based
6 credit which includes a premium for delivered renewable energy. The Payout Percentage is to be
7 calculated in the following manner:

$$\text{Payout Percentage} = \frac{\text{Class Average IFM SP15 Price} + \text{DOE WECC Renewables Premium Average}}{\text{Class Average Retail Rate}}$$

8 Applied as such:

$$\text{Net Surplus Compensation} = \text{Payout Percentage} \times \text{Remaining Bill Credit}$$

9 SCE will calculate a new net surplus compensation factor monthly for each rate group, to coincide with
10 billing at the end of each 12-month relevant period and to reflect the most current 12 months of market
11 data. For example, an eligible customer whose relevant period ends January 31, 2011, will receive
12 payment equal to the December Payout Percentage multiplied by the customer’s remaining bill credit.
13 This December Payout Percentage will be based on the 12-month strip of historical 2010 IFM prices, the
14 Class Average Retail Rate for 2010, and the most recent publication of the renewable attribute price.

15 SCE’s discounted bill credit has the following benefits: (1) greater granularity on the value of
16 electricity generated, (2) provides a price hedge in order to maintain non-participating customers’
17 indifference under AB 920, (3) limits the cost of systems implementation, and (4) transparency to NEM
18 customers. A Payout Percentage of the remaining bill credit values electricity over the horizon of
19 production (as opposed to a single electricity value at the end of the relevant period). Under NEM, bill
20 credits value net electricity monthly or for time-of-use customers more frequently so customers receive
21 net surplus compensation consistent with the value of energy at the time it was produced.

1 Remaining bill credits reflect, at most, the full retail value of net production during the relevant
2 period. The Payout Percentage (*e.g.*, 40%), reduces the bill credit to reflect avoided cost of delivered
3 renewable energy so that the total amount paid for every kWh generated by the customer-generator
4 under NEM and AB 920 will never be lower than the utility's avoided cost and never greater than the
5 full retail rate. This provides a price hedge for the utilities that must purchase electricity from customer-
6 generators and thereby reduces non-NEM customers' cost exposure to the NEM program and AB 920.
7 However, as the result of the interaction of credits and debits during the relevant period, the payout
8 percentage may appear to "overpay" for excess energy. To the extent that excess kWhs and credits are
9 consistent (*i.e.*, they reflect the average retail rate), the two methods discussed here provide substantially
10 the same result. However, in some circumstances, the effective rate—the customer's remaining bill credit
11 divided by net surplus energy can be very high or very low relative to the average retail rate. In these
12 instances, the payout percentage method results in a rate for the delivered energy that appears similarly
13 high or low. For example, an NEM customer who net produces when rates are high and net consumes
14 when rates are low may have a substantial bill credit remaining at the end of the relevant period but very
15 few net surplus kWhs. This produces an effective rate for the remaining energy that is high relative to
16 the average retail rate and thus, after the payout percentage, also high relative to avoided cost. The
17 opposite (high surplus energy but low credit) may occur for NEM customers who consume in high rate
18 periods and produce in low rate periods.

19 SCE believes that NEM customers should be responsible for the cost of system upgrades and
20 implementation costs associated with AB 920. However, if the cost to implement the program is
21 *de minimus*, it would be reasonable to not charge such costs to NEM customers. SCE's proposal
22 leverages its existing billing system that tracks NEM customers' credit balance. The Payout Percentage
23 would be calculated once a month based on easily accessible market data for the relevant period and
24 multiplied by the credit balance at the end of each eligible customer's relevant period (already available
25 in the system) to determine compensation.

26 Finally, this methodology is transparent and simple from the customer's perspective. NEM
27 customers will be paid a percentage of their bill credit at the end of the relevant period in the form of

1 either a direct payment or a rollover credit. Currently, customers see only the dollar amount of
2 remaining bill credits on their statement, excess kWhs are not displayed. Under SCE's proposal,
3 customers will see the remaining bill credit amount and receive a percentage payout at the end of the
4 relevant period.

5 **B. Delivered Energy Based Compensation**

6 Alternatively, SCE could provide compensation to customers with net surplus energy (*i.e.*,
7 excess kWhs) at the end of their relevant period by applying the class average MRTU plus renewable
8 premium price on a \$/kWh basis. A \$/kWh calculation for net surplus compensation at the end of the
9 relevant period has the benefit of avoiding the appearance of over- or under-payment for surplus
10 electricity. Whereas the effective rate for delivered renewable energy (the net surplus kWhs) can vary
11 for some NEM customers as described above, the rate paid under the \$/kWh method is always the same.
12 However, this option also presents issues, again stemming from the crediting process within the relevant
13 period.

14 Double payment for net generation may result under a \$/kWh compensation rate. Customers
15 currently receive value for net generated electricity every month and carry the value forward within the
16 true-up period in the form of a credit. Similar to the situation described for the payout percentage
17 method, the \$/kWh payment approach produces potentially anomalous results in instances in which
18 credits and kWhs are not consistent at the end of the relevant period. For example, over the course of a
19 year a customer may produce a large net surplus energy and a very small remaining bill credit. The
20 minimal bill credit indicates that the customer received full retail value for all electricity produced in the
21 relevant period, including the net surplus energy. Payment of any amount for surplus energy in these
22 instances, even at the avoided cost rate, constitutes double payment for the same energy and violates the
23 indifference requirements of AB 920. Conversely, in instances in which a customer displays a high
24 remaining bill credit and very little surplus energy, a \$/kWh payment may present insufficient
25 compensation from the customer's perspective when compared to the bill credit displayed on the
26 customer's final bill.

1 Finally, for SCE the \$/kWh approach may entail more significant billing system changes than
2 those required under the payout percentage method. Whereas currently surplus energy is converted to a
3 dollar value every bill period, surplus electricity would need to be tracked over the relevant period to be
4 used in the compensation calculation if payment is made based on surplus kWhs. If a simple pricing
5 structure were to be adopted (*e.g.*, a single price for the relevant period), SCE would not expect this to
6 be problematic or for the cost to be prohibitive.⁹ However, a more complicated pricing scheme would
7 require significant changes to SCE’s automated NEM billing system at a substantial cost.

8 **C. Proposed Schedule NEM Net Surplus Compensation Option**

9 As discussed in more detail below, NEM customers were notified of the changes resulting from
10 AB 920, that the provisions and conditions of the new compensation option were to be resolved in 2010,
11 and that any payment under the new option would begin with the conclusion of relevant periods in 2011.
12 Subsequently, SCE filed Advice 2432-E on February 3, 2010, to modify Schedule NEM to include
13 similar information regarding the new tariff option.¹⁰ SCE anticipates systems readiness and the
14 capability to handle net surplus compensation beginning January 1, 2011, assuming a decision
15 approving SCE’s proposal is adopted by September 2010. However, if a final Commission decision
16 regarding the price and implementation of AB 920 is not adopted until late 2010 or if the final
17 Commission decision adopts an approach significantly different than SCE’s proposal, SCE may be
18 unable to calculate and provide payment by January 2011, due to long system lead times. If necessary,
19 SCE would instead implement the adopted methodology as expeditiously as possible and provide
20 retroactive payment if necessary.

21 SCE proposes to include all provisions of the net surplus compensation option within Schedule
22 NEM as a special condition. No contract will be required for participation on the new option under
23 SCE’s proposal. Because compensation factors will be updated monthly, SCE will maintain the
24 currently effective, rate group specific compensation factors on SCE’s website. This is similar to how

⁹ At a minimum, SCE intends to modify it’s current system to track total net surplus energy, for purposes of determining customer eligibility and accounting for delivered renewable energy.

¹⁰ SCE also included a new enrollment form, “Establishment of the Net Energy Metering (NEM) Surplus Electricity Compensation Selection Form (Form 14-721).”

1 Transitional Bundled Service prices, which are also based on MRTU data and updated regularly, are
2 made available to participating customers. NEM customers may change compensation options (e.g.,
3 payment versus bill credit) or elect to cease participation every 12 months, with the start of a new
4 relevant period, consistent with SCE’s Rule 12. A draft Schedule NEM incorporating SCE’s net surplus
5 compensation option is attached as Appendix B.

6 **D. Eligibility To Receive Payment**

7 Under SCE’s proposal, net surplus compensation will only be made in the form of payment or
8 credit if: (1) the eligible customer has net surplus electricity in the form of kWhs; and (2) the customer
9 has a surplus bill credit at the end of the relevant period. The rate under PUC Section 2827(b) is a per
10 kWh for surplus electricity, and as such, only customers with excess generation will receive payment
11 under AB 920. When a customer has surplus kWhs but no bill credit, it can be concluded that payment
12 at the full retail rate has already been made for those kWhs in the form of bill credits, and no further
13 compensation should be made. Moreover, the ratepayer indifference requirement would preclude any
14 additional payment.

15 As required by statute, in order to receive compensation as either payment or credit, customers
16 must affirmatively elect to participate in the net surplus compensation option and consent to give the
17 purchasing utility their surplus electricity as *delivered renewable energy*. This ensures that renewable
18 credits can be properly accounted for, since there must be proof of purchase.

19 **E. Ownership Of Renewable Attributes**

20 As the ACR explains, “AB 920 specifies that the utility shall retain all renewable energy credits
21 (RECs) associated with net surplus electricity purchased from customer-generators.”¹¹ The surplus
22 electricity should transfer to the utility as *delivered renewable energy* when a customer receives
23 payment for excess kWhs. Under this option, SCE provides payment for the energy and renewable
24 attribute and the utility receives the energy and renewable attribute. If the Commission decides that the

¹¹ ACR at p. 4. See also PUC section 2827(h)(5)(A).

1 renewable attributes from customers who elect to rollover their credits do not transfer to the utility, those
2 who elect to rollover credits cannot be paid a price that values the renewable attribute.

3 **F. Communication**

4 Currently, only a small percentage of NEM customers would qualify for net surplus
5 compensation, and SCE does not foresee a significant increase in the number of NEM customers
6 qualifying for such compensation in the near future. The reason for this is that: (1) customers' systems
7 must be sized to load under the California Solar Initiative Program rules; and (2) PUC Section
8 2827(b)(4) limits NEM participation to customer-generators having a capacity of 1 MW or less. This
9 could change if and when Zero Net Energy buildings become widespread or the 1 MW limit is expanded
10 or lifted through legislation or Commission decision. SCE expects that many NEM customers that are
11 eligible to receive compensation will opt for a bill credit, rather than for receiving a physical check —
12 especially when the amount is small. If the eligible customer elects to receive a physical check, then
13 SCE will generate a check regardless of the amount, even if the amount is *de minimus*. This is
14 consistent with SCE's current practice to return any credit balance when requested by a customer.

15 SCE plans to communicate the details of the new NEM option to customers in several ways. In
16 January 2010, pursuant to AB 920, SCE notified all eligible existing NEM customers of the changes
17 made to PUC Section 2827 and the new net surplus compensation option. Each customers was provided
18 a form to allow the customer to sign up for the new option immediately, with the understanding that
19 doing so restarts the customer's relevant period, or to sign up at the regular start of the customer's
20 relevant period.¹² In SCE's notification letter, customers also were informed that they could change or
21 cancel their selection once every 12 months. If a customer chooses to participate, the customer may
22 elect to enroll in the new tariff immediately¹³ or at the end of the customer's current relevant period.

¹² In order to ensure that no existing NEM customer misses the opportunity to participate in net surplus compensation, SCE plans to enroll any customer that does not otherwise respond to the provided customer notices.

¹³ Customers were informed that the choice to end the current relevant period immediately would mean that the new relevant period would actually begin on the next regularly-scheduled meter read date after SCE's receipt of the customer's selection form.

1 In order to ensure that existing NEM customers have the opportunity to participate in the new
2 tariff option, SCE automatically enrolled existing customers who do not respond to the initial customer
3 notice that was mailed before January 31, 2010, in accordance with the ACR.¹⁴ However, SCE will
4 require customers to affirmatively elect to participate before providing compensation at the end of their
5 relevant periods. SCE also notified customers that the choice to end the current relevant period early
6 would result in the normal account reconciliation for that period, a new relevant period would begin, and
7 the customers lose their energy credits by exercising this option.

8 Additionally, as provided in its initial notice, customers will have the opportunity to select
9 whether to receive payment of surplus electricity or to receive an electricity credit toward the customer's
10 energy usage in the customer's next relevant period. SCE will again notify customers of this selection
11 opportunity after the Commission adopts a final decision in this proceeding.

12 SCE also developed and distributed a Fact Sheet to customers with the notice, which contains
13 typical customer questions and answers regarding the changes to NEM. Fact Sheet topics include:
14 (1) how the new statute changes the way surplus energy is handled; (2) whether compensation is
15 automatic; (3) the determination of future compensation; (4) relevant period impacts; (5) future
16 customer notifications and communications; and 6) the NEM tariff as a customer reference.

17 Customers will be able to find details of the net surplus compensation option, including the
18 tariffed compensation rate available to them (when applicable), in SCE's online tariffs. The NEM
19 Surplus Metering Compensation Selection Form and Fact Sheet will also be available at SCE's website.
20 Further, as the new NEM option is implemented, SCE will integrate program details, including details
21 on compensation rate changes, consistent with its regular mailings to customers and standard rate
22 notification requirements.

¹⁴ ACR, Ruling No. 5, p.9.

Appendix A

SUMMARY OF ISSUES AND SCE'S POSITIONS

Issue/ACR Reference	SCE's Position and Location in Testimony
<p>Application(s) should propose a Net Surplus Compensation rate and should include the work papers and methodology used to calculate this proposed rate. The application(s) should also include a sample tariff sheet applying to the new rate or a standard contract for purchase by the utility of net surplus generation from the net surplus customer generator. ACR pp. 4-5.</p>	<p>SCE proposes a compensation rate based on the MRTU market prices and a proxy premium for renewable energy. Page 3, line 15 – page 4, line 15. Workpapers and sample tariff are included in appendices.</p>
<p>Application(s) should describe whether the proposed rate includes: (1) the value of the electricity, and (2) the renewable attributes of the electricity. If the Net Surplus Compensation rate includes either of those components, the application(s) and work papers should describe the method used to calculate the value of those components. ACR p. 5.</p>	<p>SCE's proposed rate reflects both the value of energy and the renewable attributes. Page 3, line 15 – page 4, line 15. Workpapers and sample tariff are included in appendices.</p>
<p>Application(s) and workpapers should indicate how the proposed Net Surplus Compensation rate complies with the requirement in AB 920 that all other customers are held indifferent. ACR p. 5.</p>	<p>SCE's proposal to determine the value of energy and renewable attributes based on available market sources ensures ratepayer indifference. Page 5, line 17 – page 6, line 5.</p>
<p>How will Net Surplus Compensation rate be determined? Options include payment of the full retail rate, the generation-only rate, the most current RPS Market Price Referent rate adjusted for time-of-delivery, an up-front avoided cost calculation, simple payout of customer bill credits, or some other method of valuation. For whatever rate is chosen, please discuss why the other rate options discussed above were not selected as the preferred method of compensation. ACR pp. 5-6.</p>	<p>SCE proposes to reflect market prices for the relevant period as available in the MRTU and from the DOE. SCE includes a discussion of the merits of other options identified in the ACR. Page 3, line 15 – page 7, line 7.</p>
<p>Will the rate be fixed as of the online date of the generation (similar to RPS contracting) or change over time (along with other rates)? ACR p. 6.</p>	<p>The proposed compensation rate will reflect the applicable relevant period. Page 4, lines 21 – 24.</p>
<p>How will the rate offered for Net Surplus Compensation interact with the rate offered for net generation on a monthly basis (<i>i.e.</i>, the full retail rate)? ACR p. 6.</p>	<p>SCE's proposed compensation "discounts" the retail rate reflected in any remaining bill credit at the end of the relevant period. Page 7, line 22 – page 8, line 14.</p>

Issue/ACR Reference	SCE's Position and Location in Testimony
How will all non-participating customers be held indifferent to the Net Surplus Compensation rate of payment? ACR p. 6.	SCE's proposal to use market-based compensation and minimize administrative costs will maintain customer indifference. Page 5, line 17 – page 6, line 5.
If the Customer will be receiving Net Surplus Compensation based on a generation-only rate, will a customer receive the generation rate applicable at the time the excess generation was generated or the generation rate in effect at the time of the 12 month assessment? ACR p. 6.	SCE's proposal to compensate producers for the value of energy and renewable attributes only reflects the relevant period over which net production occurs. Page 4, lines 21 – 24.
Should the administrative cost of calculating Net Surplus Compensation and applying it to customer-generators' bills be considered when calculating a rate, to avoid shifting costs between customer-generators and other bundled service customers? ACR p. 6.	Yes, minimizing administrative costs is essential to maintaining customer indifference given the anticipated size of annual credits. Page 5, line 25 – page 6, line 5..
Is it possible to simply pay eligible customer generators the amount they have in surplus bill credits at the end of the true-up period? ACR p. 6.	No, not if non-participating customer indifference is to be maintained. Surplus bill credits exceed the avoided cost of the delivered energy. Page 6, lines 8 – 12.
Will the new tariff created by AB 920 replace the customer's existing NEM tariff, or would it coexist alongside that tariff? Will some customers remain on basic NEM, and others opt into Net Surplus Compensation NEM? Will customers on the new tariff be compensated monthly for their monthly bill credits at the full retail rate? ACR p. 6.	SCE proposes to implement Net Surplus Compensation as an option in the existing NEM tariff. Page 11, line 12 – page 12, line 5.
Is it possible that a customer could use all the bill credits created by surplus generation over a 12-month period and still have surplus kilowatt-hours? Should the Net Surplus Compensation Program restrict a customer's ability to receive and consume full retail bill credits on a monthly basis and receive payment for surplus kilowatt-hours? ACR pp. 6-7.	Yes, it is possible. Changes pursuant to AB 920 should be made in such a way as to not impact existing NEM provisions. Page 12, lines 7 – 18.
Will customers be allowed to switch from the compensation option to the rollover option or vice versa, and if so, at what point will switching be allowed? ACR p. 7.	Switching among tariff options is permitted every 12 months under Rule 12. SCE's proposal for compensation makes participating customers generally indifferent to the selection of either option. Page 12, lines 2 – 4.

Issue/ACR Reference	SCE’s Position and Location in Testimony
<p>Will surplus electricity be rolled over in the form of bill credits or kilowatt-hours?</p> <p>a) Will customers be compensated when they have surplus bill credits but not surplus kilowatt-hours?</p> <p>b) Will customers be compensated when they have surplus kilowatt-hours but not surplus bill credits? ACR p. 7.</p>	<p>Operation of the NEM tariff and the indifference provision require that surplus compensation be rolled over as bill credits. SCE proposes to compensate only those customers having both net kilowatt hours and surplus credits at the conclusion of the relevant period.</p> <p>Page 12, lines 7 – 14.</p>
<p>In order to qualify for RPS compliance, a generator must be certified as eligible by the California Energy Commission (CEC), and the REC...</p> <p>a) Will the REC belong to the utility if the customer chooses the roll-over option, where a credit for net surplus generation is rolled over into the next 12-month true-up period, or only if the customer chooses a payment for net surplus generation?</p> <p>b) Will the REC belong to the utility for any net surplus generation if the customer does not elect either option? ACR p. 7.</p>	<p>SCE proposes that RECs should be owned by the utility if the customer elects payment for net surplus generation.</p> <p>Page 12, lines 20 – 24.</p>
<p>Will customers be permitted to roll excess kilowatt-hours over into subsequent 12-month periods indefinitely, or will the excess kilowatt-hours “expire” after a certain period of time? ACR p. 8.</p>	<p>SCE’s proposal would permit customers to maintain credits indefinitely.</p> <p>Page 5, lines 7 – 11.</p>
<p>Will the utility be required to cut a physical check to every customer that opts for Net Surplus Compensation, even if the amount owed would be below a de minimus threshold (for instance, if the customer is owed \$1.00)? If not, how should the de minimus threshold be determined? ACR p. 8.</p>	<p>SCE does not propose to modify its current practice of providing payment to a customer of any amount.</p> <p>Page 13, lines 12 – 14.</p>
<p>Given the potential new layer of complexity that Net Surplus Compensation may add to the existing NEM program, how will the utility communicate the NEM-related rate and program offerings to customers and how will it communicate the financial implications of the new Net Surplus Compensation program? Will customers be able to “look up” what rate is being offered to them? If the rate is the generation-only rate, how will customers be notified if and when that rate changes, as it may multiple times throughout the year? ACR p. 8.</p>	<p>SCE has begun customer communication, which will be expanded as the Commission determines the specifics of the new compensation option. SCE’s proposal would provide regular updates to the compensation rate on the SCE website.</p> <p>Page 13, line 15 – page 14, line 22.</p>

Issue/ACR Reference	SCE's Position and Location in Testimony
<p>AB 920 requires the electric utilities to notify their customer-generators by January 31, 2010 that they are eligible to receive net surplus electricity compensation. If all Commission-jurisdictional electric utilities have not already performed this notification, they should do so by the statutory deadline. The utilities may find it useful to cite this ruling and its requirement that electric utilities file application(s) to propose a net surplus compensation rate. ACR p. 8.</p>	<p>Customer notification and enrollment forms were sent to all existing NEM customers prior to January 31, 2010. Page 13, lines 15 - 22.</p>

Appendix B



Schedule NEM
NET ENERGY METERING

Sheet 1

APPLICABILITY

Applicable to Eligible Customer-Generators (Customers) and Eligible Customer-Generators Utilizing Wind Energy Co-Metering (Wind Customers), as defined in Special Condition 6.a and 6.b, respectively, pursuant to Public Utilities (PU) Code Sections 2827 and 2827.8, where the total NEM Eligible Generator(s) capacity does not exceed 1 MW at a single Premises.

This Schedule is closed once the total combined nameplate rated generating capacity, of all Customers/Wind Customers NEM Eligible Generators served under this Schedule, and customers served under Schedule MASH-VNM exceed two and one-half percent of Southern California Edison's (SCE) aggregated peak demand.

If a Customer/Wind Customer participates in Direct Access (DA) with an Energy Service Provider (ESP) that does not provide distribution services for the direct transactions, the ESP and not SCE, is obligated to provide NEM to the Customer/Wind Customer.

This Schedule is also applicable to a Customer/Wind Customer whose generating facility meets the definition of a Multiple Tariff Generating Facility, as defined in Special Condition 6.g of this Schedule, and shall additionally be subject to the provisions of Special Condition 5 of this Schedule.

Except for Customers/Wind Customers utilizing a Multiple Tariff Generating Facility that includes one or more Non-NEM Eligible Generators, Customers/Wind Customers eligible for service under this Schedule are exempt from: (1) any new or additional charges not included in their Otherwise Applicable Tariff (OAT), and (2) Standby Charges (Schedule S).

Customers/Wind Customers utilizing a Multiple Tariff Generating Facility may be subject to Standby Charges, pursuant to the provisions of Schedule S, Special Condition 2.b, as well as other applicable charges included in their OAT (e.g., Schedule CGDL-CRS and Schedule DL-NBC).

Pursuant to Decision 08-02-002 and notwithstanding all applicable terms and conditions contained herein, to the extent a CCA offers net energy metering service, SCE shall provide applicable NEM services under this schedule to an eligible CCA Service 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 Service customer-generator to SCE. Each eligible CCA Service customer-generators 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 Service customer-generator with the applicable generation-related bill credit.

A Customer/Wind Customer whose generating facility meets the definition of a Combined Technology Generating Facility, as defined in Special Condition 6.g of this Schedule, shall be subject to the provisions of Special Condition 5 of this Schedule.

TERRITORY

Within the entire territory served.

(Continued)

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Schedule NEM
NET ENERGY METERING

Sheet 2

(Continued)

RATES

As determined in each billing period, when a Customer/Wind Customer, is a net consumer of energy, E_s is greater than E_F , where E_s is energy supplied by SCE and E_F is energy generated by the customers' Eligible Customer-Generator/Eligible Customer-Generator Utilizing Wind Energy Co-Metering facility and exported into SCE's electrical system, the resulting net consumed energy will be used in the calculation of all applicable energy charges, calculated by multiplying the customer's net consumed by the applicable energy rate components of the customer's OAT, in each Time-Of-Use (TOU) period, when applicable.

As determined in each billing period, when a Customer is a net producer of energy, E_F is greater than E_s , where E_s is energy supplied by SCE and E_F is energy generated by the customer's Eligible Customer-Generator facility, the resulting net produced energy will be used in the calculation of energy credits, calculated by 1) multiplying the customer's net produced kWh by the applicable energy rate components of the customer's OAT, in each TOU period, when applicable for Bundled Service Customers, or 2) multiplying the customer's net produced kWh by the applicable Delivery Service rate components of the customer's OAT, in each TOU period, when applicable and multiplying the customer's net produced kWh by the applicable CCA generation rate components for CCA Service Customers.

As determined in each billing period, when a Wind Customer is a net producer of energy, E_F is greater than E_s , where E_s is energy supplied by SCE and E_F is energy generated by the customer's Eligible Customer-Generator facility, the resulting net produced energy will be used in the calculation of generation energy credits, calculated by 1) multiplying the Wind Customer's net produced kWh by the applicable Utility Retained Generation (URG) rate component of the customer's OAT, in each TOU period for Bundled Service Customers, or 2) multiplying the customer's net produced kWh by the applicable CCA generation components for CCA Service Customers.

For CCA Service Customers, generation credits, if any, do not reduce the charges owed to SCE for energy supplied to such customer, and Delivery Service credits, if any, do not reduce the charges owed to the CCA for energy supplied to such customer.

For all customers served under this Schedule, Special Condition 3.h shall apply to any remaining energy credits at the end of each Relevant Period.

(Continued)

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Schedule NEM
NET ENERGY METERING

Sheet 3

(Continued)

SPECIAL CONDITIONS

1. Required Application and Contract: An executed Application For A Net Energy Metering And Generating Facility Interconnection Agreement (Form 14-753), and an executed Net Energy Metering And Interconnection Agreement (Form 16-344), are required prior to receiving service under this Schedule. For Multiple Tariff Generating Facilities a Generating Facility Interconnection Application (Form 14-732) is also required. An executed Net Energy Metering (NEM) Surplus Generation Selection Form (Form 14-721) is required for eligible customers electing Net Surplus Compensation as provided in Special Condition 3.h.3.
2. Metering Requirements for all Customer/Wind Customers Served Under This Schedule, Except Those Utilizing a Multiple Tariff Generating Facility Under Special Condition 5:
 - a. For customers whose OAT does not require a TOU meter, net energy shall be measured (metered) using a single meter capable of registering the flow of energy in two directions. If the customer's existing meter is not capable of measuring the flow of energy in two directions, an appropriate meter shall be provided at the expense of the customer. SCE may elect to install an additional meter or meters, at SCE's expense, with the Customer's consent. Such additional metering shall be used only to provide the information necessary to accurately bill or credit the Customer.
 - b. For Customers whose OAT requires a TOU meter, as well as all Wind Customers, net energy shall be measured (metered) using a single TOU meter capable of registering the flow of energy in two directions. If the Customer's/Wind Customer's existing meter is not a TOU meter capable of measuring the flow of energy in two directions, an appropriate TOU meter shall be provided at the expense of the Customer/Wind Customer. SCE may elect to install an additional meter or meters, at SCE's expense, with the Customer's/Wind Customer's consent. Such additional metering shall be used only to provide the information necessary to accurately bill or credit the Customer/Wind Customer.
 - c. Where additional meters are required to accurately bill and/or credit the Customer/Wind Customer, if authorization is not granted by the Customer/Wind Customer, SCE shall have the right to refuse interconnection.
 - d. Where SCE chooses to provide metering and billing for an ESP's NEM Customer/Wind Customer, the ESP shall be responsible for the applicable charges for such services, as set forth in Schedule ESP-DSF.
3. Billing:
 - a. SCE shall provide all Customers/Wind Customers served under this Schedule with net energy consumption information and/or net energy export information with each monthly bill. For CCA Service Customers, the CCA is responsible for providing SCE the billing CCA generation charges or credits applicable to NEM CCA Service Customers/Wind Customers.
 - b. For all Customers/Wind Customers served under this Schedule, all applicable Monthly Customer Charges, Minimum Charges, Demand Charges, and/or other non-energy related charges, excluding any adjustments due to power factor provisions, as defined in the Customer's/Wind Customer's OAT, shall apply, when applicable, regardless of the Customer's/Wind Customer's monthly net energy consumption or export.

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Schedule NEM
NET ENERGY METERING

Sheet 4

(Continued)

SPECIAL CONDITIONS (Continued)

3. Billing: (Continued)

- c. For all Customers who meet the definition of a Residential or Small Commercial Customer (as defined in SCE's Rule 1), the monthly valued energy related charges and credits are accumulated until the end of a Relevant Period. However, upon a Customer's request, SCE shall permit a Residential or Small Commercial Customer to pay all applicable energy charges monthly. For CCA Service Customers, SCE will provide the Delivery Service charges or credits, as applicable, to eligible CCA Service Customers, and the CCA will provide the generation charges or credits, as applicable, to CCA Service Customers. The request must be made by the Customer upon initiation of service under this Schedule or upon written notice to SCE no later than thirty (30) days prior to the end of a Relevant Period, whichever applies.
- d. For all Wind Customers, and all Customers who do not meet the definition of a Residential or Small Commercial Customer, it is mandatory to pay all applicable charges, both energy and non-energy related, on a monthly basis, in accordance with the Customer's/Wind Customer's OAT.
- e. For all Customers who meet the definition of a Residential or Small Commercial Customer, the monthly bills shall show the accrued energy charges owed to SCE, or accrued energy credits for net energy exported, whichever applies, until the end of a Relevant Period.
- f. For all Customers served under this Schedule, except Wind Customers, the value of energy credits will be used to offset other time or TOU periods' and/or subsequent billing periods' energy related charges when they exist. However, at no time will energy credits be applied towards any non-energy related charges, and such credits cannot be carried over to a new Relevant Period except as provided in Special Condition 3.h.3.
- g. For all Wind Customers, only the value of the applicable OAT's generation component of the energy credits will be used to offset other time or TOU periods' and/or subsequent billing periods' generation-related energy charges when they exist. Such credits cannot be carried over to a new Relevant Period except as provided in Special Condition 3.h.3. For CCA Service Customers, the CCA is responsible for providing applicable CCA generation charges or credits to CCA Service Customers.

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Schedule NEM
NET ENERGY METERING

Sheet 5

(Continued)

SPECIAL CONDITIONS (Continued)

3. Billing: (Continued)

h. At the end of each Relevant Period (as defined in Special Condition 6.f of this Schedule) following the Date of Parallel Operation of the Customer's/Wind Customer's generator(s) with SCE's electrical system, SCE shall proceed as follows:

- 1) For all Customers who meet the definition of a Residential or Small Commercial Customer who did not choose to be billed monthly for their energy related charges, SCE will 1) subtract all monthly valued accrued energy credits from all accrued energy charges from Bundled Service Customers, or 2) subtract all accrued Delivery Service energy credits from all accrued Delivery Service energy charges from CCA Service Customers. If this calculation results in monies owed to SCE, such energy charges shall be due and payable in accordance with the Customer's OAT. However, if this calculation results in an excess energy credit, SCE shall neither pay the Customer for any unused energy credit nor carry forward any unused energy credit. The unused energy credit shall be zeroed out and a new Relevant Period shall commence. Customers electing Net Surplus Compensation as provided for in part h.3 of this Special Condition may receive additional credit or compensation. For CCA Service Customers, SCE 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 SCE. Any net balance related to generation charges that are collected from an eligible NEM CCA Service customer-generator will be paid annually by SCE to the CCA as set forth in Rule 23, Section Q, which describes the payment and collection terms between the SCE and a CCA Service customer.

- 2) For all Wind Customers, all Customers who do not meet the definition of a Residential or Small Commercial customer, and all Residential and Small Commercial Customers who meet the definition of a Residential or Small Commercial Customer but choose to be billed monthly for their energy related charges, any unused energy credits, and/or generation energy credits, shall not be carried forward to the start of a new Relevant Period, rather the unused energy credits, and/or generation energy credits, shall be zeroed out and a new Relevant Period shall commence. Customers electing net Surplus Compensation as provided for in part h.3 of this Special Condition may receive additional credit or compensation. For CCA Service Customers, SCE 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 SCE. Any net balance related to generation charges that are collected from an eligible NEM CCA Service customer-generator will be paid annually by SCE to the CCA as set forth in Rule 23, Section Q, which describes the payment and collection terms between the SCE and a CCA Service customer.

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Schedule NEM
NET ENERGY METERING

Sheet 6 (N)

(Continued)

3. Billing: (Continued)

h. (Continued)

3) Effective January 1, 2010, eligible customers who qualify as Net Surplus Generators, (as defined in Special Condition 6) may be eligible for compensation for Net Surplus Energy produced during a Relevant Period commencing in 2010 or thereafter. Net Surplus Generators must elect compensation by executing a Net Energy Metering (NEM) Surplus Generation Selection Form (Form 14-721). The Relevant Period used for purposes of measuring Net Surplus Energy commences with the election by the Customer of Net Surplus Energy compensation.

(i) The Customer may elect to begin Net Surplus Energy compensation with the start of their next Relevant Period. SCE will perform the bill reconciliation as described above, and any unused energy credits and/or generation energy credits remaining shall be zeroed out prior to the commencement of the new Relevant Period; or

(ii) The Customer may establish a new Relevant Period, commencing with the next regularly scheduled meter read date following the execution of a Surplus Generation Selection Form. SCE will perform the bill reconciliation, as described in section i above, and any unused energy credits and/or generation energy credits remaining shall be zeroed out prior to the commencement of the new Relevant Period.

Customers electing to receive compensation for Net Surplus Energy may begin receiving such compensation beginning with the conclusion of the Customer's Relevant Period in 2011. Customers electing Net Surplus Energy compensation will continue to receive such compensation for each Relevant Period following the execution of such election, unless the Customer affirmatively elects to end Net Surplus Energy compensation. Customers are eligible to revise their Net Surplus Energy elections, annually, as provide under Rule 12.

In order to receive compensation pursuant to this Special Condition, eligible Net Surplus Generators who elect compensation must, at the conclusion of their relevant period, have a net credit remaining on their final billing statement following the reconciliation described above in this section. Qualifying customers may elect to receive net surplus compensation as either:

- (i) Direct payment in the form of a check from SCE, or
- (ii) Credit applied to the first billing statement issued in the next relevant period.

The amount of compensation provided, as either direct payment or bill credit, will equal the eligible customer's remaining bill credit following reconciliation at the conclusion of the relevant multiplied by a payout percentage which coincides with the applicable relevant period. The payout percentage is updated monthly, and reflects the appropriate rate group consistent with the eligible customer's otherwise applicable tariff for retail service.

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Schedule NEM
NET ENERGY METERING

(Continued)

The payout percentage equals the rate group weighted average market price for energy for the applicable relevant period, plus an average premium for delivered renewable energy in the Western Electric Coordinating Council (WECC), divided by the average retail rate for the applicable rate group.

The market price for energy equals the California Independent System Operator (CAISO) Market Redesign and Technology Upgrade (MRTU) Integrated Forward Market (IFM) South of Path 15 (SP 15) Generation Hub price, and is weight-average using the load profile of the applicable rate group for the relevant period. The average premium for delivered renewable energy reflects renewable premiums reported to the Department of Energy (DOE) by utilities within the WECC.

The applicable payout percentage is calculated by rate group and relevant period and is provided on SCE's public website at www.sce.com. The applicable relevant period is identified by the month in which the eligible customer's relevant period ends.

- i. If any Customer terminates service under this Schedule prior to the end of a Relevant Period, SCE shall reconcile the customer's consumption and production of electricity and bill the customer for positive Net Energy charges, if any, as provided in Special Condition 3.h. An eligible customer-generator switching from CCA Service to Bundled Service or from Bundled Service to CCA Service during the Relevant Period shall be deemed as terminating service under this Schedule prior to the end of the Relevant Period, and SCE shall reconcile the customer's consumption and production of electricity and bill the customer for positive Net Energy charges, if any, as provided in Special Condition 3.h. Upon switching, the customer shall begin a new Relevant Period.

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Schedule NEM
NET ENERGY METERING

Sheet 7 (T)

(Continued)

SPECIAL CONDITIONS (Continued)

3. Billing: (Continued)

j. If interval meters are employed, the total energy of the aggregated intervals over a billing period is valued before offsetting energy charges with energy credits, in each aggregated TOU period separately, when applicable.

4. Grandfathered Generating Facilities: Customer/Wind Customers, served under this Schedule who have all local and state permits required to commence construction of their NEM Eligible Generator(s) on or before December 31, 2002, and have completed construction on or before September 30, 2003, shall be 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/Wind Customer or change in ownership of the generating facility.

5. Customers/Wind Customers with a Multiple Tariff Generating Facility: Where a Customer/Wind Customer utilizes a Multiple Tariff Generating Facility (defined in Special Condition 6.g), the applicable provisions of this Special Condition (5) shall apply. Additionally, where this Special Condition conflicts with any other Special Condition within this Schedule, the provisions contained in this Special Condition shall prevail.

a. A Customer/Wind Customer utilizing a Multiple Tariff Generating Facility consisting of all NEM Eligible Generators, where at least one NEM Eligible Generator is served under this Schedule shall adhere to the following:

1. Where a Customer/Wind Customer chooses not to install separate Net Generation Output Metering (NGOM) on each group of NEM Eligible Generators (as defined in Special Condition 6), all energy exported to SCE's system from any group of NEM Eligible Generators shall receive only the generation component (URG and DWR) energy credits per the Customer's/Wind Customer's OAT. The NEM credits will not include any portion of the Delivery Service energy rate components, or any other component of the Customer's/Wind Customer's OAT, unless separate NGOMs are installed on each group of NEM Eligible Generators.

2. Where a Customer/Wind Customer chooses to install NGOM on a group of NEM Eligible Generators, the NGOM must conform to the requirements set forth in SCE's Rule 21, Section F. The total energy exported to SCE's system, as determined at the point of common coupling meter (SCE billing meter) will be allocated to each group based on its NGOM reading to the total of all NGOM readings. As an example, if the SCE billing meter registered 900 kWh of energy exported to SCE's system, and during that same time period a group of NEM Eligible Generators (group 1) had an NGOM registration of 2,000 kWh, while another group of NEM Eligible Generators (group 2) had an NGOM registration of 4,000 kWh, then group 1 would be allocated 300 kWh, and group 2 would be allocated 600 kWh, for NEM crediting purpose

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Schedule NEM
NET ENERGY METERING

Sheet 8 (T)

(Continued)

SPECIAL CONDITIONS (Continued)

5. A Customer/Wind Customer with a Multiple Tariff Generating Facility: (Continued)

b. A Customer/Wind Customer with a Multiple Tariff Generating Facility consisting of one or more NEM Eligible Generators served under this Schedule, and one or more Non-NEM Eligible Generators (defined in Special Condition 6.i), shall adhere to the following:

1. Where all Non-NEM Eligible Generators have a non-export relay (Reverse or minimum power protection), per tariff Rule 21, Section I.3.b, Screen 2 (option 1 or 2), thus assuring no export to SCE's system from any Non-NEM Eligible Generator, the Customer/Wind Customer is not required to install NGOM on their NEM Eligible Generator(s). However, where a Customer's Multiple Tariff Generating Facility includes more than one group of NEM Eligible Generators, NGOM in accordance with Special Condition 5.a.2 above, must be installed to determine what percentage of the measured excess energy exported to SCE's system will receive NEM energy credits at the full bundled rate (Delivery Service plus Generation) and what percentage of the measured excess energy exported to SCE's system will receive NEM generation energy credits at the generation rate components only (URG and DWR). Otherwise, unallocated NEM-eligible excess energy exported to SCE's system will be subject to the provisions of Special Condition 5.a.1 above.

2. Where one or more of the Customer's/Wind Customer's Non-NEM Eligible Generators does not have a non-export relay, and where each group of the NEM Eligible Generators does not have NGOM installed in accordance with Special Condition 5.a.2 above, NEM credits will only be applicable on the NEM Eligible Generators that do have NGOM.

Monthly valued NEM credits for each of the NEM-eligible generator groups with NGOM will be the lesser of its proportion of the NGOM reading to the total of all NEM-eligible generators' NGOM readings multiplied at the PCC, or its NGOM readings

3. The value of energy credit will be applied consistent with the appropriate NEM tariff as follows:

I) First, apply BG-NEM generation rate component credits (if any) to generation rate component charges on any aggregated account served by the Generating Facility.

II) Second, apply any remaining BG-NEM credits from (I) above and FC-NEM generation rate component credits (if any), and Wind NEM (>50 kW) generation rate component credits (if any) to the remainder of generation rate component charges on the account served by the Generating Facility.

III) Third, apply NEM solar and small wind (<50 kW) energy (generation and delivery service rate component) credits to energy charges of the accounts that are served by the Generating Facility.

4. For purposes of tariff administration, other metering configurations may be allowed at SCE's discretion.

(Continued)

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Schedule NEM
NET ENERGY METERING

Sheet 9 (T)

(Continued)

SPECIAL CONDITIONS (Continued)

6. Definitions: The following definitions are applicable to service provided under this Schedule.
- a. **Eligible Customer-Generator:** A Residential, Small Commercial (as defined in SCE's Rule 1), commercial, industrial, or agricultural customer who uses a solar or wind turbine electrical generating facility, or a hybrid system of both, with a total capacity of not more than 1 MW, and where the wind turbine electrical generating nameplate capacity is not greater than 50 kW, that is located on the customer's Premises, that is interconnected and operates in parallel with SCE's electric system, intended primarily to offset part or all of the Customer's own electrical requirements, and that meets all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the Public Utilities Commission regarding safety and reliability. A Customer with an electrical generating facility meets these standards and rules shall not be required to install additional controls, perform or pay for additional tests, or purchase additional liability insurance.
 - b. **Eligible Customer-Generator Utilizing Wind Energy Co-Metering:** A customer who uses a wind energy electrical generating facility with a generating nameplate capacity greater than 50 kW, but not exceeding 1 MW, including solar and wind hybrid systems where the wind turbine electrical generating nameplate capacity is greater than 50 kW, that is located on the eligible customer's premises, that is interconnected and operates in parallel with SCE's electric system, and that is intended primarily to offset part or all of the Wind Customer's own electrical requirements, and that meets all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the Public Utilities Commission regarding safety and reliability. A Wind Customer with an electrical generating facility meets those standards and rules shall not be required to install additional controls, perform or pay for additional tests, or purchase additional liability insurance.
 - c. **Date of Parallel Operation.** The date SCE provides the Customer/Wind Customer with SCE's written approval to commence parallel operation of the generating facility.
 - d. **Net Energy:** The difference between the electric energy supplied and/or delivered through SCE, and the electric energy produced by the Customer/Wind Customer and exported into SCE's electric system, measured over the Relevant Period. Thus, where E_S is energy supplied and/or delivered by SCE, and E_F is energy generated by the customer and fed back into SCE's system:
$$\text{Net Energy} = E_S \text{ minus } E_F$$
 - e. **Otherwise Applicable Tariff:** The customer's regularly filed rate schedule under which service is rendered.

(Continued)

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Schedule NEM
NET ENERGY METERING

Sheet 10 (T)

(Continued)

SPECIAL CONDITIONS (Continued)

6. Definitions: The following definitions are applicable to service provided under this Schedule.
(Continued)
- f. Relevant Period: A twelve-month period, or portion thereof, commencing on the anniversary Date of Final Interconnection of the customer's generator to SCE's electric system and on every subsequent anniversary thereof. If an eligible customer-generator terminates service, or experiences a change from SCE bundled service to CCA Service or from CCA Service to SCE bundled service prior to the end of the 12-month period, the Relevant Period will consist of that period from the anniversary date until the effective date of the termination or change in service.
 - g. Multiple Tariff Generating Facility: A Generating Facility consisting of one or more NEM Eligible Generators served under this Schedule and one or more NEM Eligible Generators eligible for service under Schedule BG-NEM and/or Schedule FC-NEM, or consisting of one or more NEM Eligible Generators served under this Schedule, and one or more Non-NEM Eligible Generators.
 - h. NEM Eligible Generator: An electrical generator fueled by solar, wind, hybrid of solar and wind, biogas, or fuel cell, where the total nameplate generating capacity at a single Premise does not exceed 1 MW, except where one or more biogas digester electrical generators, each with a nameplate generating capacity greater than 1 MW, but no greater than 10 MW, may be defined as an NEM Eligible Generator if such digester electrical generating facility meets the applicable provisions of PU Code 2827.9(b)(2)(A&B).
 - i. Non-NEM Eligible Generator: An electrical generator that does not meet the definition of Special Condition 6.h above.
 - j. Group of NEM-eligible generators: Generators meeting the definition of Special Condition 6.h. above qualifying under the same NEM tariff provisions. Thus, solar generators and wind generators up to 50 kW would form one group, wind generators over 50 kW, biogas generators without aggregated accounts and fuel cell generators would form a second group, while biogas generators with aggregated accounts would form a third group.
 - k. Net Surplus Energy: All electricity generated by an eligible customer-generator measured in kilowatthours over a 12-month period that exceeds the amount of electricity consumed by that eligible customer-generator.
 - l. Net Surplus Generator: An eligible customer-generator that generates more electricity during a 12-month period than is supplied by the electric utility to the eligible customer-generator during the same 12-month period.

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