



**SCHEDULE NEM-BIO**

Sheet 1

NET ENERGY METERING FOR BIOGAS CUSTOMER-GENERATORS

(Closed Schedule)

APPLICABILITY

Except as otherwise provided herein, this schedule is applicable to bundled service customers who are served under a Time-of-Use (TOU) rate schedule, and who by December 31, 2009 (1) interconnect and operate in parallel with the Utility's electrical system using an Eligible Biogas Digester Electrical Generating Facility, as defined below pursuant to California Public Utilities Code (PU Code) Section 2827.9, with a generating capacity no greater than 1,000 kW, located on or adjacent to the customer's premises as a source of customer's generation, intended to offset part or all of the customer's electrical requirements, and (2) are the recipient of local, state, or federal funds, or who self-finance projects designed to encourage the development of Biogas Digester Electrical Generating Facilities (hereinafter "eligible biogas customer-generator" or "customer"). This schedule is also applicable up to a total of three biogas generators, in the territories of the three largest Investor Owned Utilities, with a capacity of more than one megawatt and not more than 10 megawatts that otherwise meet the criteria of this schedule.

Customers eligible for service under this schedule are exempt from any new or additional charges not included in their Otherwise Applicable Schedules (OAS).

Pursuant to PU Code Section 2827.9, this Schedule is available on a first-come, first-served basis for the operating life of the Eligible Biogas Digester Electrical Generating Facility. This schedule is closed to new customers once the combined statewide cumulative rated generating capacity used by eligible biogas customer-generators in the service territories of the three largest electric Investor Owned Utilities reaches 50 megawatts.

An eligible biogas customer-generator that is subject to the best available control technology (BACT) requirements shall be eligible for this schedule if the eligible biogas customer-generator has installed the BACT as required by the regional Air Pollution Control District at the time of installation as required by PU Code Section 2827.9.

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 for biogas customer-generators, the 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 CAA 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.

Schedule NEM-BIO 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 megawatt. Such facilities will be referred to as Multiple Tariff Facilities, and any group of generators within such a facility that is 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 must meet all the requirements of Special Condition 8 for the Schedule NEM-BIO, and must also meet all other applicable tariffs. Customer must also complete a Generating Facility Interconnection Agreement (Multiple Tariff) (Form 117-2160).

Due to the complexity of Multiple Tariff Facilities, NEM-BIO generators interconnecting under the provisions of Special Condition 8 may require additional review and/or interconnection facilities and other equipment, and may incur interconnection costs, as provided for in electric Rule 21.

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**SCHEDULE NEM-BIO**

Sheet 2

NET ENERGY METERING FOR BIOGAS CUSTOMER-GENERATORS

TERRITORY

Within the entire territory served by the Utility.

RATES

Only the Generation Rate Component of the energy charge of the eligible biogas customer-generator's OAS, less generation surcharges (such as the DWR Bond Charge shown on Schedule DWR-BC) or any successor rate schedule, if any, shall be used in the calculation of credits when the eligible biogas customer-generator is a net energy producer, on a monthly basis, for any TOU period. Only the Generation Rate Component of the eligible biogas customer-generator's OAS, including all generation surcharges, shall be used to calculate the charge for generation when the eligible biogas customer-generator is a net energy consumer on a monthly basis, for any TOU period. All other charges, including but not limited to, Transmission Charges, Distribution Charges, Public Goods Charges, Nuclear Decommissioning Charges, Monthly Basic Service Fees, Minimum Charges, Demand Charges, and non-energy related charges, shall be calculated according to the eligible biogas customer-generator's OAS prior to the netting of energy consumed and exported.

Pursuant to CPUC D.03-04-030, eligible biogas customer-generator shall not pay the departing load cost responsibility surcharge shown on Schedule DL-CRS.

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 generation. Eligible customers shall be permitted to take standby service for non-eligible generation on the same meter as the eligible generation.

The charges and credits for Multiple Tariff Facilities taking service on this rate schedule under the provisions of Special Condition 8 will be calculated using the OAS identified by the eligible biogas customer-generator in its application for interconnection and its interconnection agreement with SDG&E or as subsequently changed by the eligible biogas customer-generator in accordance with SDG&E's Electric Rule 12.

Customers with Multiple Tariff Facilities with existing NEM, NEM-BIO and/or NEM-FC eligible generators interconnecting additional generators, will receive a bill trueup, prior to taking service under Special Condition 8. This ensures that all NEM accounts have the same Relevant Period, as defined in Special Condition 1.d, going forward.

SPECIAL CONDITIONS

1. Definitions: The definition of terms used in this schedule are either found herein or in Rule 1, Rule 21 or the customer's OAS.
  - a. Eligible Biogas Digester Electrical Generating Facility: A Generating Facility used to produce electricity by a manure methane production project or as a byproduct of the anaerobic digestion of bio-solids and animal waste, 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.

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**SCHEDULE NEM-BIO**

Sheet 3

NET ENERGY METERING FOR BIOGAS CUSTOMER-GENERATORS

SPECIAL CONDITIONS (Continued)

1. Definitions (Continued):

- b. Date of Final Interconnection: The date the Utility provides the eligible biogas customer-generator with the Utility's written approval to commence parallel operation of the Eligible Biogas Digester Electrical Generating Facility for purposes of participating in Schedule NEM-BIO.
- c. Otherwise Applicable Schedule (OAS): The eligible biogas customer-generator's regular rate schedule under which service is rendered.
- d. Relevant Period: Twelve monthly billing cycles commencing on the anniversary Date of Final Interconnection or pursuant to Special Condition 5.b, or a portion thereof in the event service under this tariff terminates.
- e. Eligible Metered Service Account: A TOU metered service account serving an Eligible Biogas Digester Electrical Generating Facility and all TOU metered service account(s) serving dairy operations that are located on property adjacent, or contiguous, to the Eligible Biogas Digester Electrical Generating Facility, including but not limited to accounts associated with the milking operations, milk refrigeration, or water pumping. If a dairy operation has more than one Eligible Metered Service Account, all such metered service accounts must be under the same ownership and have the eligible biogas customer-generator's name as the account serving the Eligible Biogas Digester Electrical Generating Facility to qualify for the provisions of Special Condition 3.
- f. Annual Reconciliation: The Utility will total the monthly valued generation rate component of the energy (kWh) supplied by the Utility to the eligible biogas customer-generator and the monthly valued generation rate component of the energy (kWh) fed back to the Utility's Distribution System by the eligible biogas customer-generator during the Relevant Period. If the total generation rate component value of the energy supplied by the Utility is greater than the total generation rate component value of energy fed back to the Utility Distribution System, then the eligible biogas customer-generator is a net consumer. Otherwise, the eligible biogas customer-generator is a net producer.

For non-dairy operations, only the account serving the Eligible Biogas Digester Generating Facility is used to determine if the eligible biogas customer-generator is a net producer or a net consumer.

In the case of a dairy operation, an aggregate of usage from all the Eligible Metered Service Accounts is used to determine if the eligible biogas customer-generator is a net producer or net consumer.

For dairy operations with Load Aggregation as defined in Special Condition 3, each eligible Service Account will be billed for Generation Rate Component charges, based on the rate schedule for the particular service account, at the end of the Relevant Period, or sooner if the account closes or is no longer eligible for Load Aggregation.

As part of the Annual Reconciliation, net consumers and net producers will receive a bill for energy usage that totals 1) all generation charges; 2) all Eligible Generation Credits; and 3) all other charges incurred during that billing cycle.

The balance of all monies owed by net consumers and net producers shall be paid in accordance with the eligible customer-generator's OAS. Production and consumption during the twelfth month is already considered in the true-up.

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**SCHEDULE NEM-BIO**

Sheet 4

NET ENERGY METERING FOR BIOGAS CUSTOMER-GENERATORS

SPECIAL CONDITIONS (Continued)

1. Definitions (Continued):

For CCA, at the end of each relevant period, the 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. 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. 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.

- g. Eligible Generation Credit: The Eligible Generation Credit for net consumers equals the lesser of 1) all net generation charges for the Relevant Period, including in the case of a dairy operation the generation charges associated with accounts eligible for Special Condition 3; or 2) the absolute value of all net generation credits for the Relevant Period.
- h. Net Energy: The difference between the energy (kWh) supplied by the Utility to the eligible biogas customer-generator, and the energy (kWh) generated by the eligible biogas customer-generator and fed back into the Utility's Distribution System, measured over a given period.
- i. Generation Charges: The generation rate component (under Schedule EECC or any other applicable generation related charge, which includes, but is not limited to optional commodity pricing that may be available) of the energy charge of the eligible biogas customer-generator's OAS for the accounts(s).

2. Required Contract: An Interconnection Agreement is required for service under this Schedule.

3. Load Aggregation: For purposes of determining whether the eligible biogas customer-generator was a net consumer or a net producer, as defined in Special Condition 1.f above, the Utility shall aggregate the load of residential and non-residential metered TOU service accounts that meet the requirements of Special Condition 1.e for dairy operations.

4. Metering:

- a. Biogas digester Net Energy Metering shall be accomplished using a TOU meter capable of separately registering the flow of electricity in two directions. If the Biogas Customer-Generator's existing meter is not capable of separately measuring the flow of electricity in two directions, the Biogas Customer-Generator shall be responsible for all expenses involved in purchasing and installing a meter that is able to separately measure electricity flow in two directions. If dual metering is installed, the Net Energy Metering calculation shall yield a result identical to that of a single meter capable of separately measuring the flow of electricity in two directions.
- b. If none of the normal metering options at the Utility's disposal that are necessary to render accurate billing are acceptable to the Biogas Customer-Generator, the Utility shall have the right to refuse interconnection under this schedule.
- c. Dairy operations with service accounts that qualify for Special Condition 3 are required to meet the provisions of Special Conditions 4.a and 4.b for the account serving the Eligible Biogas Digester Electrical Generating Facility only; all other service accounts are only required to have the metering specified in the TOU rate schedule on which it is billed.

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**SCHEDULE NEM-BIO**

NET ENERGY METERING FOR BIOGAS CUSTOMER-GENERATORS

SPECIAL CONDITIONS (Continued)

4. Metering (Continued)

d. Multiple Tariff Facilities will be metered under one of the options described in Special Condition 8.

5. Billing: Eligible biogas customer-generator will be billed monthly for all charges other than the Generation Rate Component on all Eligible Aggregated Metered Service Accounts. With each monthly billing statement, the Utility shall provide the eligible biogas customer-generator with information regarding energy (kWh) consumption and any energy (kWh) exported to the grid.

The Utility shall start a customer on Schedule NEM-BIO effective with the first meter read date to the later of (1) customer notice to the Utility of a request for service on Schedule NEM-BIO or (2) SDG&E's written authorization for parallel operation of the customer's eligible generating facility.

At the end of each Relevant Period, as defined in Special Condition 1.d, following the Date of Final Interconnection, the Utility shall proceed as follows:

- a. The Utility will complete an Annual Reconciliation per Special Condition 1.f.
- b. Any remaining Generation credit greater than the Eligible Generation Credit calculated per Special Condition 1.g will be reduced to zero and the eligible biogas customer-generator shall not be entitled to compensation for such credit, and a new Relevant Period shall commence.

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. Customer-generators with Multiple Tariff Facilities with existing NEM, NEM-BIO and/or NEM-FC eligible generators interconnecting additional generators, will receive a bill reconciliation prior to taking service under Special Condition 8. This ensures that all NEM accounts have the same Relevant Period going forward.

6. Standby Charges: Consistent with electric Rate Schedules S or SI, 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 8 may be subject to the requirements of Schedules S or SI.

7. Interconnection: Prior to Parallel Operation, the eligible biogas customer-generator must execute and comply with the applicable Utility Interconnection Agreement (Form 142-0761 or, for NEM / non-NEM Generating Facility export, Form 117-2160). The eligible biogas 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.

8. 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 group of generators that is eligible for service under the provisions of either schedule NEM, NEM-BIO or NEM-FC.

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**SCHEDULE NEM-BIO**

Sheet 6

NET ENERGY METERING FOR BIOGAS CUSTOMER-GENERATORS

SPECIAL CONDITIONS (Continued)

8. Multiple Tariff Facilities: (Continued)

- c. A non-NEM-eligible Constituent Generator Group is defined as a group of generators 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 Non Export 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.
- 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 Constitute 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.

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**SCHEDULE NEM-BIO**

NET ENERGY METERING FOR BIOGAS CUSTOMER-GENERATORS

SPECIAL CONDITIONS (Continued)

8. Multiple Tariff Facilities: (Continued)

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.

- 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.
  - 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.

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San Diego Gas & Electric Company  
San Diego, California

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**SCHEDULE NEM-BIO**

Sheet 8

NET ENERGY METERING FOR BIOGAS CUSTOMER-GENERATORS

SPECIAL CONDITIONS (Continued)

8. Multiple Tariff Facilities: (Continued)

g. Multiple Tariff Facility Configurations and Metering (Continued)

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.

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Issued by  
**Lee Schavrien**  
Senior Vice President  
Regulatory Affairs

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