

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



May 2, 2007

Advice Letter 2888-E-A

Rose de la Torre
Pacific Gas & Electric
77 Beale Street, Room 1088
Mail Code B10C
San Francisco, CA 94105

Subject: Supplement – Net Energy Metering Compliance Filing Pursuant to Resolution E-3992

Dear Ms. de la Torre:

Advice Letter 2888-E-A is effective August 21, 2006. This supplement supersedes Advice Letter 2888-E and 2793-E. Copies of these three advice letters are returned herewith for your records.

If you have any questions regarding this approval letter, please contact the assigned analyst, Werner Blumer at (415) 703-1421 or via e-mail at wmb@cpuc.ca.gov.

Sincerely,

Sean H. Gallagher, Director
Energy Division

REGULATORY RELATIONS	
M Brown Tariffs Section	D Poster
R Deia Torre	M Hughes
B Lam	
MAY 7 2007	
Return to _____	Records File _____
cc to _____	



Brian K. Cherry
Director
Regulatory Relations

77 Beale Street, Room 1087
San Francisco, CA 94105

Mailing Address
Mail Code B10C
Pacific Gas and Electric Company
P.O. Box 770000
San Francisco, CA 94177

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February 27, 2006

Advice 2793-E

(Pacific Gas and Electric Company ID U 39 E)

**Subject: Electric Rate Schedule NEMCT - Net Energy Metering Combined
Technology (NEMCT) Service**

Public Utilities Commission of the State of California

Pacific Gas and Electric Company (PG&E) hereby submits for filing to its electric tariffs a new rate schedule: Electric Rate Schedule NEMCT – *Net Energy Metering Combined Technology Service*. The proposed tariff sheets are listed on the enclosed Attachment I.

Purpose

In compliance with Ordering Paragraph 2 of Decision (D.) 05-08-013, PG&E submits new electric rate schedule NEMCT – *Net Energy Metering Combined Technology Service*. This rate schedule is for customers seeking to interconnect multiple generators at a single point of common coupling (PCC), all of which would not normally be subject to the same rate treatment, and at least one of which is eligible for a net energy metering tariff.

Background

Net energy metering (NEM) customers receive many benefits under PG&E's Commission approved net-energy-metering rate schedules: NEM, NEMBIO, and NEMFC. However, Public Utilities Code Section 2827, et seq., does not address a customer who installs an eligible NEM generator with other generators that do not qualify for net energy metering (non-NEM). It also does not address how generators eligible for different net energy metering tariffs are to be combined. The Commission originally addressed this issue in principle in D.03-02-068 by noting, "nor do we believe integrated use of nonrenewable energy sources excludes eligible renewable generation connected to the same service account from net metering." The Commission further noted, "the ineligible generator does not become eligible for net metering due to the combined configuration." To

ensure that non-NEM generation does not receive the same treatment as NEM generation, the Commission stated that the use of a reverse power relay to ensure that power is not fed back into the utility grid could provide adequate assurance that a nonrenewable generation system, even when connected to the same service account as the eligible renewable generator, would not export electricity.

Subsequently, the Rule 21 Working Group discussed these issues and on February 16, 2005, issued its *Recommended Changes to Interconnected Rules Report*. The report noted: "It is technically feasible to provide adequate protection and metering for all scenarios of eligible and non-eligible generators. As it exists Rule 21 allows all interconnections of multiple tariffs to be evaluated." However, the working group report sought policy guidance from the Commission on the question, "...is the CPUC policy in D.03-02-068 appropriate for interconnecting and metering combinations of an NEM generator with a non-NEM generator with multiple tariffs?" Regarding the issue of how to sort the treatment of the export from a NEM and a non-NEM generator, the report recommended: "...any methodology preventing export from the NEM generator while the non-NEM generator is operating is inappropriate. Doing so potentially reduces the economic benefit the customer might otherwise enjoy under the NEM tariff, potentially reduces the efficiency at which the non-NEM generator operates, and runs counter to the state's need for additional generation."

The Commission on August 25, 2005, as part of Rulemaking (R.) 04-03-017, issued D.05-08-013 – *Interim Opinion Adopting Changes In Interconnecting Rules for Distributed Generation*. In that decision, the Commission notes, "We will adopt the CEC's recommendation with three protections proposed by SCE designed to assure the policy protects utility ratepayers while furthering the state's general goal of promoting renewable energy technologies." Ordering paragraph 2 of D. 05-08-013 requires the utilities to incorporate the three protections into its tariffs as follows:

"With regard to DG facilities that include an NEM-eligible generator and a generator that does not qualify for net energy metering (non-NEM): (1) any energy generated by the renewable DG that exceeds the customer's annual energy usage will not be compensated as renewable DG; (2) in no event will non-net metering generators receive credits designed for NEM projects; and (3) any DG owner operating under two tariffs must install at its cost individual meters for the separate generators or breakers that prevent export from the non-net metering generator. Otherwise, for DG facilities that operate under two tariffs applicable to different technologies, utility tariffs should prohibit any provision or methodology that prevents export from an NEM generator even if the non-NEM generator is operating;"

Tariff Additions and Revisions

- 1) **Schedule NEMCT** – PG&E herein offers the new Rate Schedule NEMCT – *Net Energy Metering Combined Technology (NEMCT) Service* tariff that incorporates the three Commission requirements (stated above) and describes scenarios to cover all the various arrangements of NEM and non-NEM generators. Included in NEMCT are options where a non-export relay (or breaker) may be used to prevent export from the non-NEM generator. Additionally, metering is used to assure that non-NEM generators do not receive credits designed for NEM generators when a relay option is not selected by the customer. Finally, although not extensively discussed in the Commission's decision, PG&E includes options to cover multiple NEM generators, each of which is eligible for different NEM rate treatment.

The NEMCT tariff describes 3 basic scenarios. (Please refer to diagrams in Appendix A to see examples of these arrangements.)

- a) Non-exporting, non-NEM generator and a single eligible NEM generator: When there is non-NEM eligible generation and a single tariff NEM eligible generation, customers may choose to install a non-export relay or breaker to limit the export from the non-NEM eligible generation. Since in such a situation the only export measured at the PCC would be that of the single type of NEM eligible generation, the PCC metering normally required for the specific type of NEM-eligible generation is adequate to ensure NEM benefits apply only to the NEM generation. This is described in Special Condition 2.a of the NEMCT tariff. (See diagram 1 on Appendix A to this Advice Letter.)
- b) Non-exporting, non-NEM generator and multiple eligible NEM generators: When there is non-NEM eligible generation and multiple tariff NEM-eligible generators that would by themselves receive rate treatment under different NEM tariffs or NEM tariff options, customers may choose to install a non-export relay or breaker to limit the export from the non-NEM eligible generation as in the example above. However, in order to provide appropriate rate treatment to the output of each type of NEM-eligible generation, Net Generation Output Metering (NGOM) capable of providing 15-minute interval reads will be required for each NEM-eligible generator. PCC metering with the same 15-minute interval capability will also be required. This is described in Special Condition 2.b of the NEMCT tariff. (See diagram 2 on Appendix A to this Advice Letter.)
- c) Exporting non-NEM generator and single eligible NEM generator: When there is non-NEM eligible generation and NEM-eligible generation and the customer does not opt to install a non-export relay or breaker on the non-NEM eligible generation, the customer will be required to install NGOM capable of providing 15-minute interval reads on every generator and PCC metering with the same 15-minute interval capability. This is

described in Special Condition 3 of the NEMCT tariff. (See diagram 3 on Appendix A to this Advice Letter.)

The tariff provisions that apply to generation, both the various NEM rates as well as rates that apply to non-NEM generators that would otherwise apply to each type of generator, continue to provide all the specific requirements such as eligibility, billing calculations, program limits and so forth, except as specifically modified in NEMCT (such as the relay and/or metering requirements described above). Customers must sign the application(s) for interconnection and interconnection agreement(s) required by PG&E prior to receiving service under this Schedule NEMCT.

- 2) **Schedule S** – This filing also includes changes to Schedule S – *Standby Service*, to accommodate combined technologies (multiple tariff generation combinations). In brief, standby exemption will be granted only to qualifying generators in accordance with the Public Utilities Code. The standby reservation capacity will be set not to exceed the rated nominal capacity of the non-eligible NEM generator(s), thereby only allowing qualifying generators to receive standby exemption.
- 3) **Schedule NEMFC** – This filing removes the following language from rate schedule NEMFC – *Net Energy Metering Service for Fuel Cell Customer-Generators*, regarding restrictions on NEMFC and NEM generators:

A customer's NEMFC account is not eligible for service under Schedule NEM.

- 4) **Schedule NEMBIO** – This filing removes the following language from rate schedule NEMBIO – *Net Energy Metering Service for Biogas Customer-Generators*, regarding restrictions on NEMBIO and NEM generators:

A customer's NEMBIO account is not eligible for NEM and NEM accounts are not eligible under Special Condition 2.

This filing also adds the following language to Schedule NEMBIO:

Any NEM accounts eligible for this rate under Special Condition 2 will receive an annual true-up in accordance with their current applicable NEM tariff prior to taking service on this rate schedule NEMBIO. This ensures that all NEM accounts on this rate have the same annual true-up date going forward.

- 5) **Schedule NEM** – This filing removes the following language from rate schedule NEM – *Net Energy Metering Service*, regarding restrictions on combinations of NEMW option (wind-energy co-metering eligible generation) and other NEM generators:

This definition includes eligible customer-generators with a hybrid system including a solar generating facility where the size of the wind energy generating facility component exceeds 50 kW and total generating facility size is less than 1,000 kW.

Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, by facsimile or electronically, any of which must be received no later than 20 days after the date of this filing, which is **March 19, 2006**. Protests should be mailed to:

CPUC Energy Division
Attention: Tariff Unit, 4th Floor
505 Van Ness Avenue
San Francisco, California 94102
Facsimile: (415) 703-2200
E-mail: jjr@cpuc.ca.gov and ijn@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest also should be sent via U.S. mail (and by facsimile and electronically, if possible) to PG&E at the address shown below on the same date it is mailed or delivered to the Commission:

Pacific Gas and Electric Company
Attention: Brian Cherry
Director, Regulatory Relations
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177
Facsimile: (415) 973-7226
E-mail: PGETariffs@pge.com

Effective Date

PG&E requests that this advice filing become effective **March 29, 2006**, which is thirty calendar days from the date of filing.

Notice

In accordance with General Order 96-A, Section III, Paragraph G, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service list for R.04-03-017. Address changes

should be directed to Rose de la Torre at (415) 973-4716. Advice letter filings can also be accessed electronically at:

<http://www.pge.com/tariffs>

A handwritten signature in black ink that reads "Brian K. Cheng". The signature is written in a cursive style and is positioned above the printed name.

Director, Regulatory Relations

Attachments

cc: Service List R. 04-03-017

**Appendix A – Advice Letter 2793-E
(Typical Configurations)**

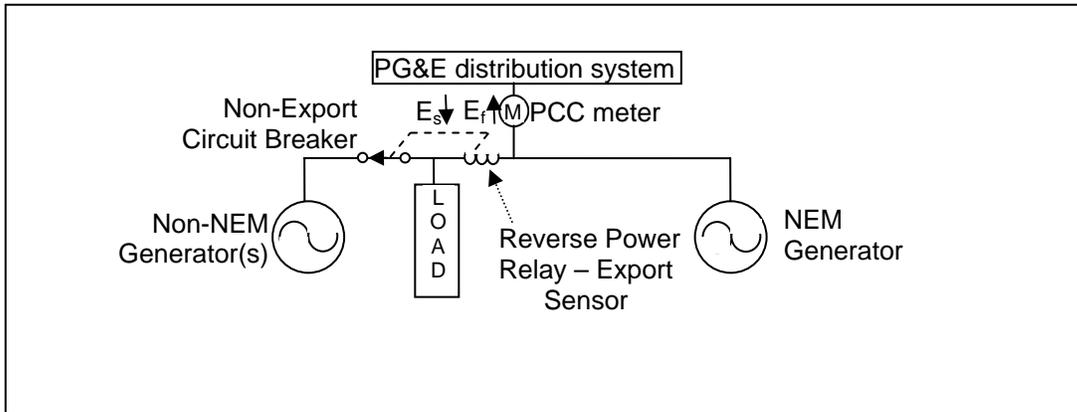


Diagram 1 – Special Condition 2a – Example of metering with non-export breakers installed and a single eligible NEM generator.

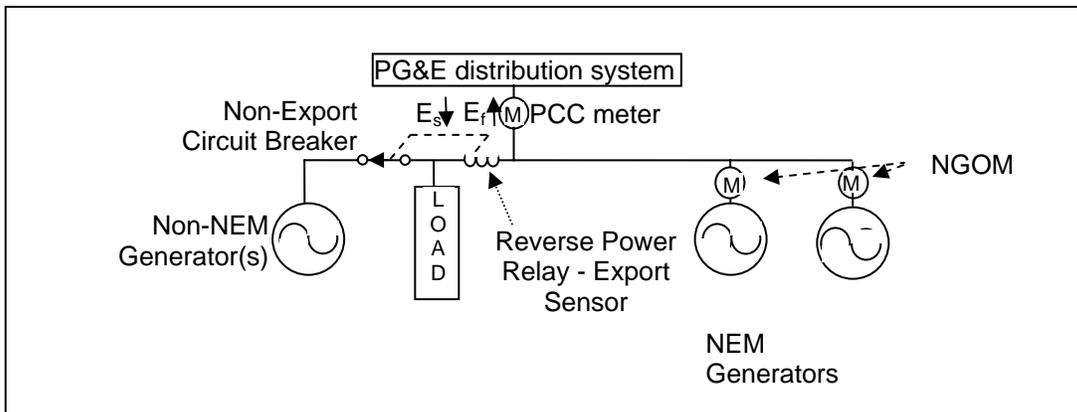


Diagram 2 – Special Condition 2b – Example of metering with non-export breakers installed and multiple eligible NEM generators. PCC and NGOM Metering must have 15 minute interval capability.

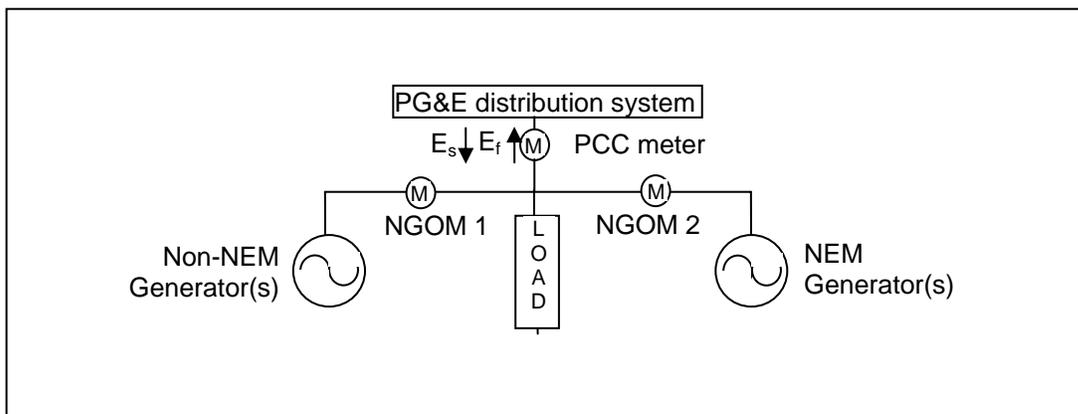


Diagram 3 – Special Condition 3 – Example of metering for a customer that does not install non-export breakers. PCC and NGOM Metering must have 15 minute interval capability.

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. Pacific Gas and Electric Company U39M

Utility type:

ELC

GAS

PLC

HEAT

WATER

Contact Person: Shilpa Ramaiya

Phone #: (415) 973-3186

E-mail: srrd@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric

GAS = Gas

PLC = Pipeline

HEAT = Heat

WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: **2793-E**

Subject of AL: Electric Rate Schedule NEMCT - Net Energy Metering Combined Technology (NEMCT) Service

Keywords (choose from CPUC listing): Condition of Service

AL filing type: Monthly Quarterly Annual One-Time Other _____

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution: D.05-08-013

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL _____

Summarize differences between the AL and the prior withdrawn or rejected AL¹: _____

Resolution Required? Yes No

Requested effective date: **3-29-2006**

No. of tariff sheets: 12

Estimated system annual revenue effect: (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: See Attachment 1

Service affected and changes proposed¹: New schedule as permitted by D.05-08-013

Pending advice letters that revise the same tariff sheets: N/A

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division

Attention: Tariff Unit

505 Van Ness Ave.,

San Francisco, CA 94102

jjr@cpuc.ca.gov and jnj@cpuc.ca.gov

Utility Info (including e-mail)

Attn: Brian K. Cherry

Director, Regulatory Relations

77 Beale Street, Mail Code B10C

P.O. Box 770000

San Francisco, CA 94177

E-mail: PGETariffs@pge.com

¹ Discuss in AL if more space is needed.

**ATTACHMENT 1
Advice 2793-E**

Cal P.U.C. Sheet No.	Title of Sheet	Cancelling Cal P.U.C. Sheet No.
24604-E	Schedule S--Standby Service	19220-E
24605-E	Schedule S (Cont.)	24211-E
24606-E	Schedule NEM--Net Energy Metering Service	22685-E
24607-E	Schedule NEMFC--Net Energy Metering Service For Fuel Cell Customer-Generators	24065-E
24608-E	Schedule NEMBIO--Net Energy Metering Service for Biogas Customer-Generators	24060-E
24609-E	Schedule NEMCT--Net Energy Metering Combined Technology Service	New
24610-E	Schedule NEMCT (Cont.)	New
24611-E	Schedule NEMCT (Cont.)	New
24612-E	Schedule NEMCT (Cont.)	New
24613-E	Schedule NEMCT (Cont.)	New
24614-E	Table of Contents -- Rate Schedules	24069-E
24615-E	Table of Contents -- Rate Schedules	24603-E



SCHEDULE S—STANDBY SERVICE
(Continued)

SPECIAL
CONDITIONS:
(Cont'd.)

10. NON-TIME-OF-USE METERING: In those cases where PG&E deems it is not cost-effective to install a time-of-use (TOU) meter, PG&E will estimate the customer's kWh usage for each TOU period, and apply all TOU charges to the estimated kWh usage by TOU period. PG&E will estimate the customer's total kWh usage in the billing period to kWh usage within each TOU period based on a percentage breakdown using the ratio of the number of hours in each TOU period to total hours in the billing period.

11. DISTRIBUTED ENERGY RESOURCES EXEMPTION: Public Utilities (PU) Code Sections 353.1 and 353.3, provide for certain exemptions of standby reservation charges for qualifying "distributed energy resources." See Electric Rule 1 for definition of Distributed Energy Resources. Customers qualifying for an exemption from standby charges under PU Code Sections 353.1 and 353.3, as described above, must take service on a time-of-use (TOU) schedule in order to receive this exemption until a real-time pricing program, as described in PU Code 353.3, is made available. Once available, customers qualifying for the distributed energy resources exemption must participate in the real-time program referred to above. Qualification for and receipt of this distributed energy resources exemption does not exempt the customer from metering charges applicable to time-of-use (TOU) and real-time pricing, or exempt the customer from reasonable interconnection charges, non-bypassable charges as required in Preliminary Statement BB - *Competition Transition Charge Responsibility for All Customers and CTC Procurement*, or obligations determined by the Commission to result from participation in the purchase of power through the California Department of Water Resources, as provided in PU Code Section 353.7.

12. MULTIPLE TECHNOLOGIES: Customers with generating facilities that are comprised of multiple generating units that include either Distributed Energy Resources (DER, see Electric Rule 1 for the definition of DER), and/or at least one generating unit that qualifies for a PG&E net energy metering tariff, and where all of the generating units are served through the same Point of Common Coupling as defined in PG&E's Rule 21, may be eligible for standby exemption for a portion of their standby requirement. Such exemption will be granted only for the duration allowed by the applicable tariff schedule and in accordance with the California Public Utilities Code. The customer will be billed under its otherwise-applicable rate schedule, and Special Conditions 1 through 7 of this Schedule S will not apply to the eligible DER portion qualifying for standby exemption. For DER not qualifying for standby exemption, Special Conditions 1 through 7 of Schedule S will apply. The Standby reservation capacity will be set at a level not to exceed the nominal rated capacity of the non-eligible generating unit(s). Qualification for and receipt of this exemption does not exempt customers with multiple technologies from metering charges applicable to Time Of Use (TOU) and real-time pricing, or exempt the customer from reasonable interconnection charges, non-bypassable charges and other applicable tariff obligations.

(T)
(T)

(N)

(N)

(Continued)



SCHEDULE S—STANDBY SERVICE
(Continued)

SPECIAL
CONDITIONS:
(Cont'd.)

13. BILLING: A customer's bill is calculated based on the option applicable to the customer. (T)

Bundled Service Customers receive supply and delivery service solely from PG&E. The customer's bill is based on the Total Rates and Conditions set forth in this schedule.

Transitional Bundled Service Customers take transitional bundled service as prescribed in Rules 22.1 and 23.1, or take bundled service prior to the end of the six (6) month advance notice period required to elect bundled portfolio service as prescribed in Rules 22.1 and 23.1. These customers shall pay charges for transmission, transmission rate adjustments, reliability services, distribution, nuclear decommissioning, public purpose programs, the FTA (where applicable), the RRBMA (where applicable), the applicable Cost Responsibility Surcharge (CRS) pursuant to Schedule DA CRS or Schedule CCA CRS, and short-term commodity prices as set forth in Schedule TBCC.

Direct Access (DA) and Community Choice Aggregation (CCA) Customers purchase energy from their non-utility provider and continue receiving delivery services from PG&E. Bills are equal to the sum of charges for transmission, transmission rate adjustments, reliability services, distribution, public purpose programs, nuclear decommissioning, the FTA (where applicable), the RRBMA (where applicable), the franchise fee surcharge, and the applicable CRS. The CRS is equal to the sum of the individual charges set forth below. Exemptions to the CRS are set forth in Schedules DA CRS and CCA CRS.

	<u>DA CRS</u>	<u>CCA CRS</u>
Energy Cost Recovery Amount Charge (per kWh)	\$0.00437	\$0.00437
DWR Power Charge (per kWh)	\$0.01546	\$0.01768
DWR Bond Charge (per kWh)	\$0.00485	\$0.00485
CTC Charge (per kWh)	\$0.00232	\$0.00232
Total CRS (per kWh)	\$0.02700	\$0.02922

14. DWR BOND CHARGE: The Department of Water Resources (DWR) Bond Charge was imposed by California Public Utilities Commission Decision 02-10-063, as modified by Decision 02-12-082, and is property of DWR for all purposes under California law. The Bond Charge applies to all retail sales, excluding CARE and Medical Baseline sales. The DWR Bond Charge (where applicable) is included in customers' total billed amounts. (T)



SCHEDULE NEM—NET ENERGY METERING SERVICE
(Continued)

SPECIAL
CONDITIONS:
(Cont'd.)

3. INTERCONNECTION: (Cont'd.)

The eligible customer-generator must meet 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 California Public Utilities Commission regarding safety and reliability.

4. EXEMPTIONS FROM CERTAIN CHARGES: Per Section 2728.7 of the California Public Utilities Code, eligible customer-generators who have all local and state permits required to commence construction of their generating facilities on or before December 31, 2002, and have completed construction on or before September 30, 2003, shall not be required to pay non-bypassable charges on Departing Load including Public Purpose Program charges and 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 or ownership of the generating facility.

5. WIND ENERGY CO-METERING: In accordance with Section 2827.8 of the California Public Utilities Code, any customer-generator with wind energy generating facilities greater than 50 kW but not exceeding 1,000 kW taking service under this tariff is required to do so pursuant to this section.

(T)

Wind Energy Co-Metering customer-generators are required to take service on a time-of-use (TOU) otherwise-applicable rate schedule. In addition, the customer-generator must utilize a TOU meter, or multiple TOU meters, capable of separately measuring the electricity in both directions, that is, the electricity supplied by PG&E to the customer and the electricity generated by the customer and fed back to the electric grid. If the customer's existing meter is not a TOU meter or is not capable of separately measuring the flow of electricity in both directions, the eligible customer-generator is responsible for all expenses involved in purchasing and installing a meter that is both TOU and able to separately measure electricity flow in both directions.

Subject to Special Condition 2, the generation of electricity provided to PG&E by a Wind Energy Co-Metering customer-generator shall result in a credit to the eligible customer-generator priced in accordance with the generation component of the energy charge of the eligible customer-generator's otherwise-applicable rate schedule, including generation surcharges from Schedule E-EPS or any successor rate schedule. All electricity supplied to the Wind Energy Co-Metering customer-generator by PG&E shall be priced in accordance with the customer-generator's otherwise-applicable rate schedule.

(Continued)



SCHEDULE NEMFC—NET ENERGY METERING SERVICE FOR FUEL CELL CUSTOMER-GENERATORS

APPLICABILITY: This schedule is applicable to Bundled Service Customers who are served under a Time-of-Use (TOU) rate schedule, and who (1) interconnect and operate in parallel with PG&E's electrical system an Eligible Fuel Cell Electrical Generating Facility, as defined in Special Condition 5.a below pursuant to California Public Utilities Code Section 2827.10 (PU Code Section 2827.10), with a generating capacity no greater than 1,000 kW, located on or adjacent to the customers' owned, leased or rented premises as the sole source of customer generation, is interconnected and operates in parallel with PG&E grid while the grid is operational, and is sized to offset part or all of the Customers' electrical requirements, (2) are the recipient of local, state, or federal funds, or who self-finance projects designed to encourage the development of Eligible Fuel Cell Electrical Generating Facilities, and (3) use technology that meets the definition of an "ultra-clean and low-emission distributed generation," pursuant to California Public Utilities Code Section 353.2 (PU Code Section 353.2). Such a customer will be referred to hereafter as a "Fuel Cell Customer-Generator." Customers eligible for service under this schedule are exempt from any new or additional charges not included in their Otherwise Applicable Schedule (OAS).

Customers with Eligible Fuel Cell Electrical Generating Facilities requesting interconnections in portions of San Francisco and Oakland where PG&E has a network grid must contact PG&E about generation export limitations.

Pursuant to PU Code Section 2827.10, this schedule is available on a first-come, first-serve basis and will be closed to new customers once 45 MW of cumulative rated generating capacity is served under this schedule.

Customers seeking preference for eligibility under this rate shall file an application with the CPUC to establish that their facilities are located in a community with significant exposure to air contaminants, or localized air contaminants, or both, including but not limited to communities of minority populations or low-income populations, or both, based on the ambient air quality standards established pursuant to Section 39607 of Health and Safety Code. The CPUC shall determine how such preference shall be implemented. In no event shall such an application, if granted, cause the cumulative rated generating capacity served by PG&E under this schedule to exceed 45 MW.

(D)

A fuel cell electrical generating facility shall not be eligible for participation in the NEMFC tariff unless it commenced operation before **January 1, 2010**. A fuel cell customer-generator shall be eligible for the tariff established herein only for the operating life of the Eligible Fuel Cell Electrical Generating Facility.

TERRITORY: The entire territory served.

RATES: Only the Generation Rate Component of the Fuel Cell Customer-Generator's OAS, including generation surcharges such as those from Schedule E-EPS or any successor rate schedule, if any, shall be used in the calculation of credits when the Fuel Cell Customer-Generator is a net energy producer, on a monthly basis, for any TOU period. Only the Generation Rate Component of the Fuel Cell Customer-Generator's OAS, including any and all generation surcharges, if any, shall be used to calculate the charge for generation when the Fuel Cell 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, Monthly Customer Charges, Minimum Charges, Demand Charges, and non-energy related charges, shall be calculated according to the Fuel Cell Customer-Generator's OAS prior to the netting of energy supplied or produced, for all energy supplied.

(Continued)



SCHEDULE NEMBIO—NET ENERGY METERING SERVICE FOR BIOGAS CUSTOMER-GENERATORS

APPLICABILITY: This schedule is applicable to Bundled Service Customers who are served under a Time-of-Use (TOU) rate schedule, and who (1) interconnect and operate in parallel with PG&E's electrical system an Eligible Biogas Digester Electrical Generating Facility, as defined below pursuant to California Public Utilities Code Section 2827.9 (PU Code Section 2827.9), with a generating capacity no greater than 1,000 kW, located on or adjacent to the Biogas Customer-Generators' premises as the sole source of Biogas Customer-Generators' generation, intended to offset part or all of the Biogas Customer-Generators' 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 (Biogas Customer-Generator). Customers eligible for service under this Schedule are exempt from any new or additional charges not included in their Otherwise Applicable Schedule (OAS). Pursuant to PU Code Section 2827.9, this Schedule is available on a first-come, first-serve basis and will be closed to new customers once the combined statewide cumulative rated generating capacity used by the eligible biogas digester customer-generators in the service territories of the three largest electrical corporations in the state reaches 50,000 kW. No Biogas Customer-Generator shall be eligible for participation on NEMBIO that has not commenced operation by December 31, 2009. A biogas digester customer-generator shall be eligible for the tariff established pursuant to this section, only for the operating life of the Biogas Customer-Generator.

Notwithstanding the generating capacity limit of up to 1,000 kW, in the service territories of the three largest electrical corporations in the state, up to three large Biogas Customer-Generators with a generating capacity of more than 1,000 kW and not more than 10,000 kW, otherwise meeting the criteria above, shall be eligible for NEMBIO.

Customers with Biogas Customer-Generators requesting interconnections in portions of San Francisco and Oakland where PG&E has a network grid must contact PG&E about generation export limitations.

As required by PU Code Section 2827.9, no Biogas Customer-Generator that is subject to the best available control technology (BACT) requirements shall be eligible for participation in NEMBIO unless the Biogas Customer-Generator has installed the best available control technology as required by the regional air pollution control district at the time of installation to ensure the maximum feasible reductions in toxic and criteria pollutants.

Any NEM accounts eligible for this rate under Special Condition 2 will receive an annual true-up in accordance with their current applicable NEM tariff prior to taking service on this rate schedule NEMBIO. This ensures that all NEM accounts on this rate have the same annual true-up date going forward.

(D)
(N)
—
(N)

TERRITORY: The entire territory served.

RATES: Only the Generation Rate Component of the Biogas Customer-Generator's OAS, including generation surcharges such as those from Schedule E-EPS or any successor rate schedule, if any, shall be used in the calculation of credits when the Biogas Customer-Generator is a net energy producer, on a monthly basis, for any TOU period. Only the Generation Rate Component of the Biogas Customer-Generator's OAS, including all generation surcharges, if any, shall be used to calculate the charge for generation when the 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, Monthly Customer Charges, Minimum Charges, Demand Charges, and non-energy related charges, shall be calculated according to the Customer-Generator's OAS prior to the netting of energy supplied or produced, for all energy supplied.

RATE OPTIONS: Eligible Customer-Generators will be placed on Rate Schedule NEMBIO, unless they are applying for service under the provisions of Special Condition 2—LOAD AGGREGATION below, in which case they will be placed on Rate Schedule Option NEMBIOA.

(Continued)



SCHEDULE NEMCT—NET ENERGY METERING COMBINED TECHNOLOGY SERVICE

APPLICABILITY: Applicable to a customer with multiple generators with at least one generator that is eligible to be served on a net energy metering rate schedule pursuant to California Public Utilities (PU) Code Sections 2827 (relating to schedule NEM), 2827.8 (relating to Wind Energy Co-metering provisions of schedule NEM), 2827.9 (relating to schedule NEMBIO) or 2827.10 (relating to schedule NEMFC), where all generators are served through the same Point of Common Coupling (PCC) Metering. In order to be eligible for this Schedule NEMCT, the customer-generator must meet all the requirements of one of the following tariffs: NEM, NEMFC, or NEMBIO, including falling within any specified cap or size limit as provided in the applicable tariff(s).

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Due to the additional complexity of these arrangements, NEMCT generating facilities may require additional review and/or interconnection facilities and other equipment as provided for in Electric Tariff Rule 21. In addition, customers seeking interconnections in portions of San Francisco and Oakland where PG&E has a network grid must contact PG&E about generation export limitations.

TERRITORY: The entire territory served.

RATES: Customer charges and credits for Eligible NEM Exports and usage will be calculated as provided herein and in the applicable net energy metering tariff(s) using the otherwise applicable rate schedule identified by the customer in its application for interconnection and its interconnection agreement with PG&E.

Customers moving to this NEMCT from another NEM tariff will receive an annual true-up, in accordance with their currently applicable NEM tariff, prior to taking service on this Schedule NEMCT. This would also apply for any aggregated accounts taking service under NEMBIOA. This ensures that all NEM accounts on this rate have the same annual true-up date going forward.

Customer charges for the non-NEM Eligible Generator will be calculated as provided in all applicable tariffs.

Any energy generated by the NEM-Eligible Generator that exceeds the customer's annual energy usage will not be compensated.

In no event will the non-NEM Eligible Generator receive credits designed for the net energy metering eligible generator.

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SCHEDULE NEMCT—NET ENERGY METERING COMBINED TECHNOLOGY SERVICE
(Continued)

METERING:

The customer is responsible for all costs for PG&E to install, own, and maintain any Net Generation Output Metering (NGOM) and associated metering transformers required to bill the Eligible Combined Technology Generating Facility. For NGOM, the customer will provide, install, own and maintain all equipment necessary to accommodate the installation of the PG&E NGOM, including meter sockets and enclosures, metering transformer cabinets, and switchboard service sections intended for utility use. PG&E will provide, install, own, and maintain all NGOM and associated metering transformers that are required under this Schedule NEMCT.

In addition, the customer is responsible for the cost of any changes to the PCC Metering needed to accommodate billing under this Schedule NEMCT.

See Special Conditions 2 and 3 for the metering requirements for the different types of Eligible Combined Technology Generating Facilities.

If none of the normal metering options available at PG&E's disposal that are necessary to render accurate billing are acceptable to the customer, PG&E will have the right to refuse interconnection under this Schedule NEMCT.

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SCHEDULE NEMCT—NET ENERGY METERING COMBINED TECHNOLOGY SERVICE
(Continued)

SPECIAL
CONDITIONS:
(Cont'd)

1. Required Contract: Customers must sign the application(s) for interconnection and interconnection agreement(s) required by PG&E prior to receiving service under this Schedule NEMCT.
2. Metering For Customers Who Install Non-Export Breakers: Where a customer chooses to install, at the customer's expense, non-export breakers (relays) that prevent the export of energy to PG&E's electrical system for ALL Non-NEM Eligible Generators, and:
 - a. the Eligible Combined Technology Generating Facility includes only one NEM generator, then:
 - i. The meter(s) at the PCC must be capable of meeting all requirements of the applicable net energy metering tariff(s); or
 - b. the Eligible Combined Technology Generating Facility includes more than one NEM Eligible Generator, then:
 - i. NGOM(s) as provided in the Metering Section of this Schedule NEMCT capable of measuring generation in fifteen (15) minute intervals is required on all the NEM Eligible Generators.
 - ii. In addition, the meter(s) at the PCC must be capable of meeting all requirements of the applicable net energy metering tariff(s) and provide data on exports or usage in fifteen (15) minute intervals
3. Metering for customers with an Eligible Combined Technology Generating Facility that do not install non-export breakers on ALL non-NEM eligible generators as provided in Special Condition 2:
 - a. PG&E-owned NGOM capable of measuring generation in fifteen (15) minute intervals is required on all NEM Eligible Generators AND Non-NEM Eligible Generators as provided in the Metering section of this Schedule NEMCT.
 - b. In addition, the meter(s) at the PCC must be capable of meeting all requirements of the applicable net energy metering tariff(s) and provide data on exports or usage in fifteen (15) minute intervals.

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SCHEDULE NEMCT—NET ENERGY METERING COMBINED TECHNOLOGY SERVICE
(Continued)

SPECIAL
CONDITIONS:
(Cont'd)

4. Eligible NEM Exports: In the case of 2.a above, E_f is the Eligible NEM Export. In all other cases, as determined in each 15 minute interval, when the PCC meter indicates E_f is greater than E_s , then the following calculation will determine the amount of Eligible NEM Exports, if any:

(N)

- a. When the NGOM serving the NEM Eligible Generator(s) records zero output during that 15-minute interval, the Eligible NEM Export is zero.
- b. When the the NGOM on any NEM Eligible Generator records output of greater than zero during any 15-minute interval, and the output of the Non-NEM Eligible Generator(s) is zero, then all exports recorded for that interval at the PCC are Eligible NEM Exports.
- c. When the NGOM on the NEM Eligible Generator(s) records output of greater than zero during that 15-minute interval and the out put of the Non-NEM Eligible Generator is greater than zero, the Eligible NEM Export equals:

$$E_f \times \left[\frac{\text{NEM Eligible Generation}}{\text{(NEM Eligible Generation + Non-NEM Eligible Generation)}} \right]$$

- d. For customers with more than one type of NEM Eligible Generator, Eligible NEM Export will be allocated to each NEM Eligible Generator according to its relative contribution to E_f during each 15 minute interval as determined by the following:

$$E_f \times \left[\frac{\text{NEM Eligible Generation (from a single NEM generator)}}{\text{(Total NEM Eligible Generation + Non-NEM Eligible Generation)}} \right]$$

where NEM Eligible Generation is read from its utility installed NGOM required under this Schedule NEMCT for each NEM Eligible Generator.

- 5. Application of NEM Eligible Generation to usage when two or more NEM Eligible Generators are involved will be completed under the terms of the applicable NEM tariff in the following order: NEM (Rate Option NEMS), NEM (Rate Option NEMEXP), NEM (Rate Option NEMEXPM), NEMBIO (Rate Option NEMBIOA) , NEMBIO, NEM (Rate Option NEMW), NEMFC. There will be no credits for NEM Eligible Generation that exceeds usage under the applicable NEM tariffs.
- 6. Billing: Eligible NEM Exports and all customer usage will be totaled at the end of each monthly billing cycle pursuant to the customer's otherwise applicable rate schedule and will be credited or charged as provided in the customer's applicable NEM tariff(s).

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SCHEDULE NEMCT—NET ENERGY METERING COMBINED TECHNOLOGY SERVICE
(Continued)

SPECIAL
CONDITIONS:
(Cont'd)

7. Definitions: (Capitalized terms not included in this section are as defined in Electric Tariff Rule 21.)
 - a. Eligible Combined Technology Generating Facility – includes all NEM Eligible Generator(s) and Non-NEM Eligible Generator(s) a customer interconnects on their side of PCC.
 - b. E_f – Energy exported to PG&E's grid as measured at the Point of Common Coupling.
 - c. E_s – Energy supplied by PG&E as measured at the Point of Common Coupling.
 - d. NEM Eligible Generator – Any generator eligible for one of PG&E's net energy metering tariffs (NEM, NEMBIO or NEMFC) and seeking rate treatment under that tariff.
 - e. Non-NEM Eligible Generator – Any generator not seeking rate treatment under one of PG&E's Net Energy Metering Tariffs (NEM, NEMFC or NEMBIO)
 - f. NEM Eligible Generation – As provided in Special Condition 4, the output of any one of the NEM generators in the customer's combined technology arrangement as measured at its NGOM as required by this Schedule NEMCT.
 - g. Non-NEM Eligible Generation – As provided in Special Condition 4, the output of all non-NEM generators in the customer's combined technology arrangement as measured at its NGOM(s) as required by this Schedule NEMCT.
 - h. Eligible NEM Exports – As provided in Special Condition 4.
 - i. Total NEM Eligible Generation – Sum of all NEM Eligible Generation for a particular customer.

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ABAG Power Pool	Douglass & Liddell	Palo Alto Muni Utilities
Accent Energy	Downey, Brand, Seymour & Rohwer	PG&E National Energy Group
Aglet Consumer Alliance	Duke Energy	Pinnacle CNG Company
Agnews Developmental Center	Duke Energy North America	PITCO
Ahmed, Ali	Duncan, Virgil E.	Plurimi, Inc.
Alcantar & Elsesser	Dutcher, John	PPL EnergyPlus, LLC
Anderson Donovan & Poole P.C.	Dynergy Inc.	Praxair, Inc.
Applied Power Technologies	Ellison Schneider	Price, Roy
APS Energy Services Co Inc	Energy Law Group LLP	Product Development Dept
Arter & Hadden LLP	Energy Management Services, LLC	R. M. Hairston & Company
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Blue Ridge Gas	Foster, Wheeler, Martinez	Sacramento Municipal Utility District
Bohannon Development Co	Franciscan Mobilehome	SCD Energy Solutions
BP Energy Company	Future Resources Associates, Inc	Seattle City Light
Braun & Associates	G. A. Krause & Assoc	Sempra
C & H Sugar Co.	Gas Transmission Northwest Corporation	Sempra Energy
CA Bldg Industry Association	GLJ Energy Publications	Sequoia Union HS Dist
CA Cotton Ginners & Growers Assoc.	Goodin, MacBride, Squeri, Schlotz &	SESCO
CA League of Food Processors	Hanna & Morton	Sierra Pacific Power Company
CA Water Service Group	Heeg, Peggy A.	Silicon Valley Power
California Energy Commission	Hitachi Global Storage Technologies	Smurfit Stone Container Corp
California Farm Bureau Federation	Hogan Manufacturing, Inc	Southern California Edison
California Gas Acquisition Svcs	House, Lon	SPURR
California ISO	Imperial Irrigation District	St. Paul Assoc
Calpine	Integrated Utility Consulting Group	Stanford University
Calpine Corp	International Power Technology	Sutherland, Asbill & Brennan
Calpine Gilroy Cogen	Interstate Gas Services, Inc.	Tabors Caramanis & Associates
Cambridge Energy Research Assoc	IUCG/Sunshine Design LLC	Tansev and Associates
Cameron McKenna	J. R. Wood, Inc	Tecogen, Inc
Cardinal Cogen	JTM, Inc	TFS Energy
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Chevron USA Production Co.	Manatt, Phelps & Phillips	U S Borax, Inc
Childress, David A.	Marcus, David	United Cogen Inc.
City of Glendale	Masonite Corporation	URM Groups
City of Healdsburg	Matthew V. Brady & Associates	Utility Cost Management LLC
City of Palo Alto	Maynor, Donald H.	Utility Resource Network
City of Redding	McKenzie & Assoc	Wellhead Electric Company
CLECA Law Office	McKenzie & Associates	Western Hub Properties, LLC
Commerce Energy	Meek, Daniel W.	White & Case
Constellation New Energy	Mirant California, LLC	WMA
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Crossborder Inc	Morse Richard Weisenmiller & Assoc.	
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Davis, Wright, Tremaine LLP	New United Motor Mfg, Inc	
Defense Fuel Support Center	Norris & Wong Associates	
Department of the Army	North Coast Solar Resources	
Department of Water & Power City	Northern California Power Agency	
DGS Natural Gas Services	Office of Energy Assessments	